ACCESSORY DWEI OPTION

500 SQ. FT. MODEL (53 W/ ADAPTABLE FEA

1-BEDROOM / 1-B COVERED POR



OWNER: ADDRESS: TEL. NO.:

PROJECT INFORMATION



<u>PROJECT OF:</u> THE COUNTY OF FRESNO DEPARTMENT OF PUBLIC WORKS AND PLANNING

Capital Projects Division 2220 Tulare St., Ste. 720, Fresno, CA. 93721 Phone: (559) 262-4212 Fax: (559) 262-4879

SCOPE OF WORK: PROPOSED ONE (1) STORY ACCESSORY DWELLING UNIT (ADU)

FLOOR AREA (CONDITIONED SPACE)	532 SF
COVERED PORCH	106 SF
TOTAL	638 SF

BUILDING DATA: OCCUPANCY CLASSIFICATION: R3 GROUP USE : (R-3) SINGLE FAMILY RESIDENCE

TYPE OF CONSTRUCTION: VB SPRINKLERED: YES

12

STRUCTURAL DESIGN CRITERIA: ROOF DEAD LOAD = 20 PSF

LIVE LOAD = 20 PSF WIND SPEED = 110 MPH (ALLOWABLE STRESS) / EXPOSURE C, LOW-RISE BUILDING SEISMIC DESIGN CATOGORY: D SS = 0.531 SDS = .060 Fa = 1.375 SNOW LOAD = NONE ALLOWABLE SOIL PRESSURE: 1500 PSF PER CBC 2022 CONCRETE DESIGN STRENGTH OF 2500 PSI PER CRC TABLE R402.2

DEFERRED SUBMITTAL ITEMS

THE OWNER / APPLICANT IS RESPONSIBLE FOR PREPARING DOCUMENTATIONS, APPLICATIONS, PROCESSING THROUGH THE AUTHORITY HAVING JURISDICTION AND PAYING ALL APPLICABLE FEE FOR THE DEFERRED SUBMITTALS. REFER TO "RIGHTS AND LIMITATIONS OF USING PRE-APPRO PLANS" FOR ADDITIONAL INFORMATION.

- . ROOF TRUSSES . FIRE SPRINKLERS
- SOLAR PV MINIMUM 2.0 kW DC per TITLE 24
 HVAC (DUCTLESS MINI-SPLIT HEAT PUMP V MINIMUM HEATING EFFICIENCY - 8.5 HSPF, COOLING EFFICIENCY - 15 SEER 9 EER) WIT PERMANENTLY INSTALLED WALL MOUNTED THERMOSTATAT @ LIVING ROOM.

REQUIREMENTS

FIRE DEPARTMENT APPROVAL MUST BE OBTAINED. PROVIDE EVIDENCE OF FIRE PROTECTION DISTRICT APPROVAL TO MAT B. LOPEZ, PLANS EXAMINER AT (559) 600-4324 OR E-MAIL,mattlopez@fresnocountyca.gov.

FOR QUESTIONS REGARDING ZONING REQUIREMENTS, CONT ZONING, AT (559) 600-4540 OR E-MAIL: zoningenforcement2 @fresnocountyca.gov

FOR QUESTIONS REGARDING GRADING REQUIREMENTS, CON DANA RITSCHEL, AT (559) 600-4212 OR EMAIL: dritschel@fresnocountyca.gov

FOR QUESTIONS REGARDING CODE ENFORCEMENT COMMENTS, CONTACT: Elisania Harrison at (559) 600-2519 or e-mail, eharrison@fresnocountyca.gov

8 7 6 5	ADDITIONAL REQUIREMENTS
LLING UNIT	1. STATE LAW REQUIRES THIS PROJECT COMPLY WITH THE CURRENT EDITION OF THE CALIFORNIA FIRE CODE. CONTACT THE FOLLOWING FIRE PROTECTION DISTRICT AND OBTAIN APPROVALS PRIOR TO OBTAINING THE PERMITS FROM THE COUNTY OF FRESNO, VERIFY THE SITE ADDRESS WITH THE CORRECT JURISDICTION BELOW:
# 3	FRESNO COUNTY FIRE PROTECTION DISTRICT 1700 JENSEN AVENUE SUITE 103 SANGER, CA. 93657 PHONE: (559) 319-0400
	CITY OF FRESNO FIRE DEPARTMENT 911 H ST. FRESNO, CA. 93721 PHONE: (559) 621-4000
532 SQ.FT.) ATURES	THE COUNTY OF FRESNO DEPARTMENT OF PUBLIC WORKS AND PLANNING DEVELOPMENT SERVICES 2220 TULARE ST. STREET LEVEL. FRESNO, CA. 93721 PHONE (559) 600-4219
BATH	NORTH CENTRAL FIRE DEPARTMENT 15850 W. KEARNEY BLVD. KERMAN, CA. 93630 PHONE (559) 275-5531
RCH	CSA 50 – AUBERRY VOLUNTEER FIRE DEPARTMENT PO BOX 191 AUBERRY, CA. 93602 559-855-2777
	SHAVER LAKE FIRE DISTRICT 41795 TOLLHOUSE SHAVER LAKE, CA. 93664 559-841-8136
	ORANGE COVE FIRE DEPARTMENT 550 CENTER STREET ORANGE COVE, CA. 93646 559-626-7758
	 PROVIDE A COMPLETE SITE PLAN AS PART OF THE PLANS, DRAWN TO SCALE, ON A FULL-SIZE SHEET WITH THE FOLLOWING INFORMATION: PROVIDE PROPERTY LINE DIMENSIONS. INDICATE A NORTH ARROW. DIMENSION DISTANCES TO ALL PROPERTY LINES AND ADJACENT BUILDINGS. LOCATE THE FOLLOWING:
	 FOLLOWING: A. SHOW THE DRAINAGE AWAY FROM THE PROPOSED CONSTRUCTION. "PROVIDE A TWO PERCENT SLOPE AWAY FROM THE PROPOSED BUILDING FOR A MINIMUM OF FIVE FEET." [FCOC 15.08.020 O], B. SHOW DRAINAGE PATTERNS TO THE STREET OR AN APPROVED DRAINAGE FACILITY. C. PROVIDE ACTUAL/RELATIVE ELEVATIONS FOR THE BUILDING PAD, LOT CORNERS AND CROWN OF ADJACENT STREETS. "FINISH FLOOR ELEVATION IS TO BE ABOVE THE CROWN OF THE STREET." D. DELINEATE THE EXTENT OF THE BUILDING PAD WITH DIMENSIONS FROM THE BUILDING TO THE EDGE OF THE PAD. B. FOR ALL FOOTHILL AND MOUNTAIN PARCELS WITH SLOPED GRADES, ADDRESS THE FOLLOWING:
	 A. SHOW THE DRAINAGE AWAY FROM THE PROPOSED CONSTRUCTION. "PROVIDE A TWO PERCENT SLOPE AWAY FROM THE PROPOSED BUILDING FOR A MINIMUM OF FIVE FEET." [FCOC 15.08.020 O], B. SHOW DRAINAGE PATTERNS TO THE STREET OR AN
PUBLIC WORKS AND	APPROVED DRAINAGE FACILITY (EXISTING AND PROPOSED CONTOURS) INCLUDING: • TERRACING. • SWALES. • RETAINING WALLS. • ROOF RAINWATER RUNOFF. SHOW GUTTERS AND DOWNSPOUT DISCHARGE LOCATIONS.
COUNTY OF FF	 C. DELINEATE THE EXTENT OF THE BUILDING PAD WITH DIMENSIONS FROM THE BUILDING TO THE EDGE OF THE PAD. D. CUT AND FILL AREAS (WITH QUANTITIES IN CUBIC YARDS) ON BOTH PLAN AND SCHEMATIC (SECTION) VIEWS IN BOTH
A-100 COVER SHEET S, G-101 GENERAL NOTES	DIRECTIONS. E. DRIVEWAYS AND PRIVATE ROADS SHALL HAVE A MAXIMUM SLOPE OF 12%. THE GRADE MAY BE INCREASED TO A MAXIMUM OF 20% FOR PAVED SURFACES." [FCOC 15.60.505].
NG G-102 GENERAL NOTES EES A-201 PROPOSED FLOOR PLAN & ROOF PLAN A-301 ELEVATIONS & SECTIONS ROVED A-501 ENLARGED ADAPTABLE KITCHEN & DETAILS	ADD THE FOLLOWING NOTES ON THE SITE OR DRAINAGE PLANS: A. "FINISH FLOOR ELEVATION IS TO BE ABOVE THE CROWN OF THE STREET." B. "PROVIDE A TWO PERCENT SLOPE AWAY FROM THE
A-502 ADAPTABLE BATHROOM DETAILS A-601 OPENING SCHEDULE A-801 ARCHITECTURAL DETAILS A-802 ARCHITECTURAL DETAILS A-803 WALL SIDING TYPICAL DETAILS	PROPOSED BUILDING FOR A MINIMUM OF FIVE FEET." [FCOC 15.08.020 O]. C. "DRIVEWAYS AND PRIVATE ROADS SHALL HAVE A MAXIMUM SLOPE OF 12%. THE GRADE MAY BE INCREASED TO A MAXIMUM OF 20% FOR PAVED SURFACES." [FCOC 15.60.505].
24 A-804 CLOTHES DRYER EXHAUST DETAILS GBC-1 GREEN BUILDING MANDATORY MEASURES 1 F / GBC-2 GREEN BUILDING MANDATORY MEASURES 2 ITH S-101 TYPICAL WOOD FRAMING DETAILS ED S-102 STRUCTURAL DETAILS S-103 FASTENING SCHEDULE (RESIDENTIAL)	APPLICABLE CODE
S-201 STRUCTURAL PLANS S-301 STRUCTURAL DETAILS E-101 ELECTRICAL PLAN, SCHEDULE, NOTES & LEGENDS T24-1 TITLE 24 ENERGY COMPLIANCE	2022 CALIFORNIA BUILDING CODE 2022 CALIFORNIA PLUMBING CODE 2022 CALIFORNIA MECHANICAL CODE 2022 CALIFORNIA ELECTRICAL CODE 2022 CALIFORNIA FIRE CODE
ATTHEW MM-1 TITLE 24 MANDATORY MEASURES 8.5" x 11" ATTACHMENTS: STRUCTURAL ANALYSIS TITLE 24 DOCUMENTATIONS	2022 CALIFORNIA RESIDENTIAL CODE 2022 CALIFORNIA ENERGY CODE 2022 CALIFORNIA GREEN BUILDING CODE 2022 CALIFORNIA REFERENCE STANDARDS CODE FRESNO COUNTY ORDINANCE TITLE 15
NTACT:	REFER TO <u>G-101</u> , <u>G-102</u> FOR ADDITIONAL INFORMATION.
ONTACT:	
ENTS	

GENERAL NOTES:

 CONSTRUCTION WASTE MANAGEMENT PLAN MUST BE FINALIZED PRIOR TO OCCUPANCY.
 INSTALL STREET ADDRESS NUMERALS, AT LEAST FOUR INCHES HIGH WITH MINIMUM 1/2-INCH STROKE, MOUNTED ON A CONTRASTING BACKGROUND CLEARLY VISIBLE FROM THE STREET.
 PRIOR TO PERMIT ISSUANCE, PROVIDE AN ADDITIONAL FLOOR PLAN AND SITE PLAN FOR USE BY THE ASSESSOR'S OFFICE.

RIGHTS AND LIMITATIONS IN USING PRE-APPROVED PLANS

RIGHTS OF THE OWNER / BUILDER:

- A. THE OWNER / BUILDER HAS THE RIGHT TO UTILIZE THE PRE-APPROVED PLANS FOR THEIR INTENDED CONSTRUCTION PROJECT, SUBJECT TO COMPLIANCE WITH APPLICABLE REGULATIONS AND GUIDELINES.
- RESPONSIBILITY OF THE OWNER / BUILDER
- A. THE OWNER / BUILDER IS RESPONSIBLE FOR SUBMITTING ALL ITEMS LISTED UNDER THE DEFERRED SUBMITTAL AS REQUIRED BY THE RELEVANT AUTHORITIES. THIS INCLUDES ANY ADDITIONAL DOCUMENTS, PERMITS, OR INFORMATION THAT WERE NOT INCLUDED IN THE PRE-APPROVED PLANS.
- B. THE OWNER / BUILDER MUST ENSURE THAT THE CONSTRUCTION PROJECT ADHERES TO ALL RELEVANT BUILDING CODES, ZONING REGULATIONS, AND OTHER APPLICABLE LAWS.
 C. IT IS THE RESPONSIBILITY OF THE OWNER / BUILDER TO SECURE APPROVAL FROM THE ZONING DEPARTMENT FOR SITE-SPECIFIC LOCATIONS. THE PRE-APPROVED PLANS DO NOT INCLUDE SUCH SITE-SPECIFIC DETAILS, AND THE OWNER / BUILDER MUST OBTAIN NECESSARY PERMITS OR VARIANCES AS REQUIRED.
- LIMITATIONS ON SITE-SPECIFIC LOCATIONS: A. THE PRE-APPROVED PLANS DO NOT PROVIDE SITE-SPECIFIC INFORMATION OR DETAILS REGARDING THE CONSTRUCTION SITE. THE OWNER / BUILDER MUST CONSULT WITH THE APPROPRIATE AUTHORITIES, SUCH AS THE ZONING DEPARTMENT, TO OBTAIN THE NECESSARY APPROVALS FOR THE SPECIFIC LOCATION OF THE CONSTRUCTION PROJECT.
- B. THE OWNER / BUILDER MUST COMPLY WITH ALL ZONING REGULATIONS, SETBACK REQUIREMENTS, ENVIRONMENTAL CONSIDERATIONS, AND ANY OTHER SITE-SPECIFIC RESTRICTIONS IMPOSED BY THE RELEVANT AUTHORITIES.
- COMPLIANCE WITH BUILDING CODES AND REGULATIONS:
 A. THE OWNER / BUILDER MUST ENSURE THAT THE CONSTRUCTION PROJECT COMPLIES WITH ALL APPLICABLE BUILDING CODES, REGULATIONS, AND STANDARDS, EVEN IF THE PRE-APPROVED PLANS WERE UTILIZED.
- B. THE USE OF PRE-APPROVED PLANS DOES NOT EXEMPT THE OWNER / BUILDER FROM FULFILLING THEIR OBLIGATIONS TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS AS REQUIRED BY LOCAL, STATE, AND FEDERAL REGULATIONS. LIABILITY AND INDEMNIFICATION:
- A. THE OWNER / BUILDER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE CONSTRUCTION PROJECT, INCLUDING ANY CONSEQUENCES ARISING FROM THE USE OF THE PRE-APPROVED PLANS.
- B. THE OWNER / BUILDER AGREES TO INDEMNIFY AND HOLD HARMLESS THE RELEVANT AUTHORITIES, ARCHITECTS, ENGINEERS, AND ANY OTHER PARTIES INVOLVED IN THE APPROVAL PROCESS, FROM ANY CLAIMS, DAMAGES, OR LIABILITIES ARISING OUT OF THE USE OF THE PRE-APPROVED PLANS OR THE CONSTRUCTION PROJECT. GEOGRAPHIC LIMITATIONS:
- A. THE PRE-APPROVED PLANS ARE NOT INTENDED FOR AREAS SUBJECT TO SNOW LOAD,
- WILDFIRE RISK, FLOOD ZONES, OR OTHER SPECIFIC GEOGRAPHIC CONDITIONS.
 B. THE OWNER / BUILDER ACKNOWLEDGES AND UNDERSTANDS THAT THE PRE-APPROVED PLANS MAY NOT ACCOUNT FOR UNIQUE SITE CONDITIONS.
- SITE-SPECIFIC CONSIDERATIONS:
 A. THE OWNER / BUILDER MUST ASSESS AND ADDRESS ANY SITE-SPECIFIC FACTORS THAT ARE NOT COVERED BY THE PRE-APPROVED PLANS, INCLUDING BUT NOT LIMITED TO SOIL CONDITIONS, TOPOGRAPHY, DRAINAGE, AND OTHER ENVIRONMENTAL CONSIDERATIONS.
 B. IT IS THE RESPONSIBILITY OF THE OWNER / BUILDER TO ENGAGE THE NECESSARY
- PROFESSIONALS, SUCH AS GEOTECHNICAL ENGINEERS OR ENVIRONMENTAL CONSULTANTS, TO EVALUATE AND MITIGATE ANY SITE-SPECIFIC RISKS OR CHALLENGES. COMPLIANCE WITH LOCAL REGULATIONS: A. THE OWNER / BUILDER MUST COMPLY WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS
- THAT APPLY TO THEIR SPECIFIC GEOGRAPHIC AREA, INCLUDING BUT NOT LIMITED TO BUILDING CODES, ZONING ORDINANCES, FIRE CODES, AND ENVIRONMENTAL REGULATIONS.
 B. THE USE OF THE PRE-APPROVED PLANS DOES NOT EXEMPT THE OWNER / BUILDER FROM FULFILLING THEIR OBLIGATIONS TO ADHERE TO THESE LOCAL REGULATIONS AND OBTAIN ANY
- NECESSARY PERMITS OR APPROVALS. MODIFICATION RESTRICTIONS: A. THE OWNER / BUILDER SHOULD BE AWARE THAT MODIFICATIONS TO THE PRE-APPROVED
- PLANS MAY BE REQUIRED TO ADDRESS SPECIFIC SITE CONDITIONS OR MEET LOCAL
 REGULATIONS. ANY SUCH MODIFICATIONS MUST BE CARRIED OUT IN COMPLIANCE WITH THE
 APPLICABLE LAWS AND REGULATIONS.
 B. THE OWNER / BUILDER MAY NEED TO ENGAGE DESIGN PROFESSIONALS, SUCH AS ARCHITECTS
- OR ENGINEERS, TO REVIEW AND REVISE THE PRE-APPROVED PLANS AS NECESSARY TO ENSURE COMPLIANCE WITH LOCAL REQUIREMENTS. RELIANCE AND VERIFICATION:
- A. THE OWNER / BUILDER ACKNOWLEDGES THAT THE USE OF PRE-APPROVED PLANS IS BASED ON THE ASSUMPTION THAT THEY ARE ACCURATE, COMPLETE, AND COMPLIANT WITH RELEVANT REGULATIONS.
- B. HOWEVER, THE OWNER / BUILDER ALSO UNDERSTANDS THAT IT IS THEIR RESPONSIBILITY TO VERIFY THE SUITABILITY AND APPLICABILITY OF THE PRE-APPROVED PLANS FOR THEIR SPECIFIC PROJECT AND SITE CONDITIONS. THEY SHOULD EXERCISE DUE DILIGENCE IN CONFIRMING THE PLANS' ADEQUACY BEFORE PROCEEDING WITH CONSTRUCTION.

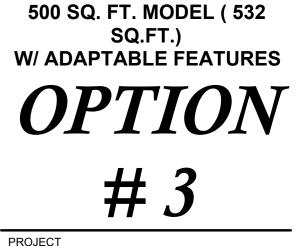
AGING-IN-PLACE DESIGN AND FALL PROTECTION

THE BATHROOM SHALL BE PROVIDED WITH REINFORCEMENT INSTALLED IN ACCORDANCE WITH THIS SECTION. WHERE THERE IS NO BATHROOM ON THE ENTRY LEVEL, AT LEAST ONE BATHROOM ON THE SECOND OR THIRD FLOOR OF THE DWELLING SHALL COMPLY WITH THIS SECTION, [CRC R327.1.1]

- REINFORCEMENT SHALL BE SOLID LUMBER OR OTHER CONSTRUCTION MATERIALS APPROVED BY THE ENFORCING AGENCY. [CRC R327.1.1(1)]
 REINFORCEMENT SHALL NOT BE LESS THAN 2 INCHES BY 8-INCH NOMINAL LUMBER (1-1/2 INCH BY 7-1/4-INCH ACTUAL DIMENSION) OR OTHER CONSTRUCTION MATERIAL PROVIDING EQUAL HEIGHT AND LOAD CAPACITY. REINFORCEMENT SHALL BE LOCATED BETWEEN 32 INCHES AND 39-1/4 INCHES ABOVE THE FINISH FLOOR FLUSH WITH WALL FRAMING [CRC R327.1.1(2)]
- WATER CLOSET REINFORCEMENT SHALL BE INSTALLED ON BOTH SIDE WALLS OF THE FIXTURE OR ONE SIDE WALL AND BACK WALL. [CRC R327.1.1(3)] SHOWER REINFORCEMENT SHALL BE CONTINUOUS WHERE WALL FRAMING IS PROVIDED. [CRC R327.1.1(4)]
- BATHTUB AND COMBINATION BATHTUB/SHOWER REINFORCEMENT SHALL BE CONTINUOUS ON EACH END OF THE BATHTUB AND THE BACK WALL. ADDITIONALLY, BACK WALL REINFORCEMENT FOR A LOWER GRAB BAR SHALL BE PROVIDED WITH THE BOTTOM EDGE
- LOCATED NO MORE THAN 6 INCHES ABOVE THE BATHTUB RIM [CRC R327.1.1(5)] A. WHERE THE WATER CLOSET IS NOT PLACED ADJACENT TO A SIDEWALL CAPABLE OF ACCOMMODATING A GRAB BAR, THE BATHROOM SHALL HAVE PROVISIONS FOR INSTALLATION OF FLOOR-MOUNTED, FOLD-AWAY, OR SIMILAR ALTERNATE GRAB BAR
- REINFORCEMENTS APPROVED THE ENFORCING AGENCY [CRC R327.1.1 EXCEPTION 1] B. REINFORCEMENT SHALL NOT BE REQUIRED IN WALL FRAMING FOR PREFABRICATED SHOWER ENCLOSURES AND BATHTUB WALL PANELS WITH INTEGRAL FACTORY INSTALLED GRAB BARS OR WHEN FACTORY INSTALLED REINFORCEMENT FOR GRAB BARS IS PROVIDED. [CRC R327.1.1 EXCEPTION 2]
- C. SHOWER ENCLOSURES THAT DO NOT PERMIT INSTALLATION OF REINFORCEMENT AND OR GRAB BARS SHALL BE PERMITTED, PROVIDED REINFORCEMENT FOR INSTALLATION OF FLOOR MOUNTED GRAB BARS OR AN ALTERNATE METHOD IS APPROVED BY THE ENFORCING AGENCY. [CRC R327.1.1 EXCEPTION 3]
- D. BATHTUBS WITH NO SURROUNDING WALLS, OR WHERE WALL PANELS DO NOT PERMIT THE INSTALLATION OF REINFORCEMENT SHALL BE PERMITTED, PROVIDED REINFORCEMENT FOR INSTALLATION OF FLOOR MOUNTED GRAB BARS ADJACENT TO THE BATHTUB OR AN ALTERNATE METHOD IS APPROVED BY THE ENFORCING AGENCY. [CRC R327.1.1 EXCEPTION 4]

E. REINFORCEMENT OF FLOORS SHALL NOT BE REQUIRED FOR BATHTUBS AND WATER CLOSETS INSTALLED ON CONCRETE SLABS. [CRC R327.1.1 EXCEPTION 5] DOORBELL BUTTONS OR CONTROLS, WHEN INSTALLED SHALL NOT EXCEED 48 INCHES ABOVE EXTERIOR FLOOR OR LANDING, MEASURED FROM THE TOP OF THE DOORBELL BUTTON ASSEMBLY. WHERE DOORBELL BUTTONS INTEGRATED WITH OTHER FEATURES ARE REQUIRED TO BE INSTALLED ABOVE 48 INCHES MEASURED FROM THE EXTERIOR FLOOR OR LANDING, A STANDARD DOORBELL BUTTON OR CONTROL SHALL ALSO BE PROVIDED AT A HEIGHT NOT EXCEEDING 48 INCHES ABOVE EXTERIOR FLOOR OR LANDING, MEASURED FROM THE TOP OF THE DOORBELL CONTROL [CRC R327.1.4]

- R327.1.2 ELECTRICAL RECEPTACLE OUTLET, SWITCH AND CONTROL HEIGHTS. ELECTRICAL RECEPTACLE OUTLETS, SWITCHES, AND CONTROLS (INCLUDING CONTROLS FOR HEATING, VENTILATION, AND AIR CONDITIONING) INTENDED TO BE USED BY OCCUPANTS, SHALL BE LOCATED NO MORE THAN 48 INCHES (1219.2 MM) MEASURED FROM THE TOP OF THE OUTLET BOX AND NOT LESS THAN 15 INCHES (381 MM) MEASURED FROM THE BOTTOM OF THE OUTLET BOX ABOVE THE FINISH FLOOR. EXCEPTIONS:
- A. DEDICATED RECEPTACLE OUTLETS; FLOOR RECEPTACLE OUTLETS; CONTROLS MOUNTED ON CEILING FANS AND CEILING LIGHTS; AND CONTROLS LOCATED ON APPLIANCES.
 B. RECEPTACLE OUTLETS REQUIRED BY THE CALIFORNIA ELECTRICAL CODE ON A WALL SPACE WHERE THE DISTANCE BETWEEN THE FINISHED FLOOR AND A BUILT-IN FEATURE ABOVE THE FINISH FLOOR, SUCH AS A WINDOW, IS LESS THAN 15 INCHES.



ACCESSORY DWELLING UNIT

PWP23-003

DEPARTMENT OF PUBLIC WORKS AND PLANNING



CAPITAL PROJECTS DIVISION

2220 Tulare St., Ste. 720, Fresno, CA. 93721 Phone: (559) 262-4212 Fax: (559) 262-4879



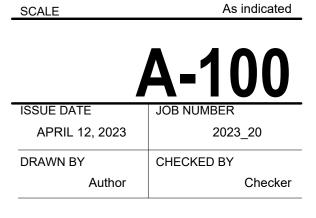
UPDATE

JULY 10, 2023

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE ARCHITECT AND SHALL NOT BE USED ON ANY OTHER PROJECT OR

LOCATIONS EXCEPT AS DESCRIBED ON THE DRAWINGS WITHOUT WRITTEN AGREEMENT WITH THE ARCHITECT.

COVER SHEET



PROTECTION OF UTILITIES:

03 -CONCRETE WORK

ACCORDANCE WITH PER G 318-14.

R404.1.3.3.6

R404 1 3 3 7 1

<u>04 -MASONRY</u>

OWNER

- 8. DISCONNECTION OF UTILITIES: SCOPE OF WORK SHALL BE CONSTRUCTED ACCORDING TO THESE WORKING DRAWINGS AS AGREED UPON BETWEEN OWNER AND CONTRACTOR. THE WORD "CONTRACTOR" REFERS TO THE GENERAL CONTRACTOR. "SUBCONTRACTOR" REFERS TO ONE HAVING DIRECT CONTACT WITH THE CONTRACTOR 2. CONTRACTOR'S RESPONSIBILITIES: A. CONTRACTOR AND SUBCONTRACTORS SHALL VISIT THE JOB SITE BEFORE THEIR BID IS SUBMITTED TO FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS. B. THE GENERAL CONTRACTOR SHALL READ, EXAMINE AND BE THOROUGHLY FAMILIAR WITH THESE DRAWINGS AND WITH THE EXISTING SITE CONDITIONS PRIOR TO THE START OF WORK. IN THE EVENT THERE ARE DISCREPANCIES OR OMISSIONS WITHIN THE DRAWINGS AND/OR SPECIFICATIONS, THE GENERAL CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY. C. CONTRACTOR SHALL INVESTIGATE SITE DURING CLEARING AND EARTHWORK OPERATIONS FOR FILLED EXCAVATIONS OR BURIED STRUCTURES SUCH AS CESSPOOLS, CISTERNS, FOUNDATION, ETC., AND BURIED ARTIFACTS SUCH AS INDIAN OR DINOSAUR BONES. IF ANY SUCH ITEMS ARE FOUND THE ARCHITECT, CIVIL ENGINEER, AND SOILS ENGINEER SHALL BE NOTIFIED IMMEDIATELY. D. NO DRAWINGS, DETAILS, NOTES ETC., SHALL BE INTERPRETED TO ALLOW FOR A VIOLATION OF THE LOCAL BUILDING CODE, STATE BUILDING CODE AND OTHER APPLICABLE CODES AND GOOD CONSTRUCTION PRACTICES. THE GENERAL CONTRACTOR SHALL REVIEW ALL GRADE ELEVATIONS PRIOR TO CONSTRUCTION. CONTRACTORS SHALL VERIFY ALL DIMENSIONS, CONSTRUCTION METHODS, MATERIALS, SIZE OF MEMBERS, ETC., PRIOR TO ON-SITE DELIVERY. CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO FULLY PROTECT ADJACENT PROPERTIES. H. JOB SHALL BE COMPLETED WITH AS MUCH SPEED AS POSSIBLE WHEN WORK BEGINS. INSPECTIONS: THE CONTRACTOR SHALL OBTAIN ALL REQUIRED INSPECTIONS FOR HIS WORK AND GIVE THE OWNER TIMELY NOTICE OF HIS INTENT TO HAVE INSPECTION. THE GENERAL CONTRACTOR SHALL COORDINATE AND VERIFY WITH THE PLUMBING, MECHANICAL AND ELECTRICAL CONTRACTORS, THE SIZE AND LOCATION OF ALL PIPING, DUCTWORK, TRENCHES, SLEEVES, SPECIAL BOLTING FOR EQUIPMENT CONDUITS, ETC. K. THE DESIGN, ADEQUACY AND SAFETY OF ERECTION, BRACING, SHORING, TEMPORARY SUPPORTS, ETC., IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR, AND HAS NOT BEEN CONSIDERED BY THE STRUCTURAL ENGINEER AND ARCHITECT. THE CONTRACTOR SHALL PROVIDE ALL RISK INSURANCE. REFER TO PROJECT MANUAL FOR MINIMUM LIABILITY AND PROJECT DAMAGE COVERAGE. M. THE GENERAL CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY SANITARY FACILITY ENCLOSURES. LOCATE AS DIRECTED BY OWNER. N. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL COMPLY WITH ALL APPLICABLE LAWS AND CODE REGULATIONS. THESE CODES INCLUDE BUT NOT LIMITED TO THE FOLLOWING: 2022 CALIFORNIA ADMINISTRATIVE CODE 2022 CALIFORNIA BUILDING CODE 2022 CALIFORNIA PLUMBING CODE 2022 CALIFORNIA MECHANICAL CODE 2022 CALIFORNIA ELECTRICAL CODE 2022 CALIFORNIA FIRE CODE 2022 CALIFORNIA RESIDENTIAL CODE 2022 CALIFORNIA ENERGY CODE 2022 CALIFORNIA GREEN BUILDING CODE 2022 CALIFORNIA REFERENCE STANDARDS CODE FRESNO COUNTY ORDINANCE TITLE 15 CONTRACTOR SHALL TAKE FIELD MEASUREMENTS, VERIFY FIELD CONDITIONS, AND CAREFULLY COMPARE WITH THE CONSTRUCTION DOCUMENTS SUCH FIELD MEASUREMENTS, CONDITIONS, AND OTHER INFORMATION KNOWN TO CONTRACTOR BEFORE COMMENCING THE WORK. ERRORS, INCONSISTENCIES, OR OMISSIONS DISCOVERED AT ANY TIME SHALL BE PROMPTLY REPORTED IN WRITING TO THE OWNER / BUILDER. CONTRACTOR SHALL PROMPTLY NOTIFY OWNER'S REPRESENTATIVE IF CONTRACTOR BECOMES AWARE DURING THE PERFORMANCE OF THE WORK THAT THE CONSTRUCTION DOCUMENTS ARE NOT IN COMPLIANCE WITH APPLICABLE CODE REQUIREMENTS. BY SUBMITTAL OF BID, CONTRACTOR WARRANTS TO OWNER / BUILDER THAT ALL MATERIALS AND EQUIPMENT TO BE FURNISHED ARE NEW UNLESS NOTED OTHERWISE AND ALL WORK WILL BE OF GOOD QUALITY AND FREE FROM FAULTS AND DEFECTS. SUBCONTRACTORS SHALL INSURE THAT ALL WORK IS DONE IN A PROFESSIONAL WORKMANLIKE MANNER BY SKILLED MECHANICS AND SHALL BE REPLACE ANY MATERIALS OR ITEMS DAMAGED BY SUB-CONTRACTOR'S PERFORMANCE. SUBCONTRACTORS AND SUPPLIERS ARE HEREBY NOTIFIED THAT THEY ARE TO CONFER AND COOPERATE FULLY WITH EACH OTHER DURING THE COURSE OF CONSTRUCTION TO DETERMINE THE EXACT EXTENT AND OVERLAP OF EACH OTHER'S WORK AND TO SUCCESSFULLY COMPLETE THE EXECUTION OF THE WORK, ALL SUBCONTRACTOR WORKMANSHIP SHALL BE OF QUALITY TO PASS INSPECTIONS BY LOCAL AUTHORITIES, LENDING INSTITUTIONS, ARCHITECT OR BUILDER. ANY ONE OR ALL OF THE ABOVE MENTIONED INSPECTORS MAY INSPECT WORKMANSHIP AT ANY TIME, AND CORRECTIONS NEEDED TO ENHANCE THE QUALITY OF BUILDING WILL BE DONE IMMEDIATELY. EACH SUBCONTRACTOR, UNLESS SPECIFICALLY EXEMPTED BY THE TERMS OF HIS / HERS SUBCONTRACT AGREEMENT, SHALL BE RESPONSIBLE FOR CLEANING UP AND REMOVING FROM THE JOB SITE ALL TRASH AND DEBRIS NOT LEFT BY OTHER SUBCONTRACTORS. OWNER / BUILDER WILL DETERMINE HOW SOON AFTER SUBCONTRACTOR COMPLETES EACH PHASE OF HIS / HER WORK THAT TRASH AND DEBRIS WILL BE REMOVED FROM THE SITE. S. APPROVAL BY THE BUILDING INSPECTOR DOES NOT MEAN APPROVAL OR ALLOWABLE FAILURE TO COMPLY WITH THE PLANS AND SPECIFICATIONS. ANY DESIGN WHICH FAILS TO BE CLEAR OR IS AMBIGUOUS MUST BE REFERRED TO THE ARCHITECT OR ENGINEER FOR INTERPRETATION OR CLARIFICATION. ALL EQUIPMENT AND MATERIALS FURNISHED AND INSTALLED UNDER THESE PLANS SHALL BE GUARANTEED BY THE CONTRACTOR FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE OF THE WORK BY OWNER / BUILDER UNLESS STIPULATED OTHERWISE. ALL TRADE NAMES AND BRAND NAMES CONTAINED HEREIN ESTABLISH QUALITY STANDARDS. SUBSTITUTIONS ARE PERMITTED, WITH PRIOR APPROVAL B THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL SUBMIT FOR THE ARCHITECT'S AND BUILDERS APPROVAL ALL MATERIALS OR EQUIPMENT WHICH IS CONSIDERED "OR EQUAL" TO THAT SPECIFIED. CONSTRUCTION DOCUMENTS IDENTIFIED A "NOT FOR CONSTRUCTION" WATERMARK ON ANY OR ALL SHEETS MAY BE SUBJECT TO REVIEW. THIS REVIEW MAY RESULT IN CHANGES WHICH MAY BE MADE TO THE PLANS PRIOR TO THE ISSUANCE OF THE FINAL CONSTRUCTION SET WHICH WILL CONTAIN NO WATERMARK DESIGNATIONS. CONSTRUCTION DOCUMENTS IDENTIFIED WITH A WATERMARK ARE NOT TO BE CONSTRUED AS BEING THE COMPLETED OR FINAL DRAWINGS AND THEY SHOULD NOT IN ANY WAY BE USED AS SUCH. W. ALL STANDARD NOTES CONTAINED HEREIN ARE TYPICAL UNLESS NOTED OTHERWISE TYPICAL DETAILS AND SPECIFICATIONS ARE MINIMUM REQUIREMENTS TO BE USED WHEN CONDITIONS ARE NOT SHOWN OTHERWISE. SPECIFIC NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT THE CONSTRUCTION DOCUMENTS AND ALL COPIES THEREOF FURNISHED TO CONTRACTOR ARE THE PROPERTY OF THE COUNTY OF FRESNO AND ARE NOT TO BE USED ON OTHER WORK 3. ERRORS AND OMISSIONS: IF ANY ERRORS OR OMISSIONS APPEAR IN THESE DRAWINGS, OR OTHER CONTRACT DOCUMENTS, THE GENERAL CONTRACTOR AND SUBCONTRACTORS AFFECTED SHALL NOTIFY THE OWNER / BUILDER IN WRITING OF SUCH ERROR OR OMISSION. IN THE EVENT OF FAILING TO GIVE SUCH WRITTEN NOTICE BEFORE CONSTRUCTION AND/OR FABRICATION OF THE WORK, HE WILL BE HELD RESPONSIBLE FOR THE RESULT OF THE ANY SUCH ERRORS OR OMISSIONS AND THE COST FOR RECTIFYING THE SAME. 4. GUARANTEES: CONTRACTOR SHALL GUARANTEE THE WORK IN GENERAL FOR ONE YEAR AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR LEAVING THE BUILDING FREE FROM DEFECTS OF MATERIALS AND POOR WORKMANSHIP FROM DATE OF COMPLETION. THE CONTRACTOR SHALL FURNISHED A WRITTEN GUARANTEE STATING THAT ALL WORK EXECUTED BY HIM WILL BE FREE FROM DEFECTS OF THE MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR (UNLESS OTHERWISE SPECIFIED) FROM DATE OF ACCEPTANCE OF HIS WORK, THAT HE WILL REPAIR AND REPLACE ALL SUCH DEFECTIVE WORK AND ALL OTHER WORK DAMAGE WITHOUT COST TO THE OWNER. 5. ASSURING THAT PLANS ARE BEING FOLLOWED, IT DOES NOT RELIEVE THE CONTRACTOR OR ANY SUBCONTRACTORS FROM ANY RESPONSIBILITY FOR WORK WHICH MAY PROVE FAULTY. JOB CONDITIONS: DUST CONTROL: USE ALL MEANS NECESSARY TO PREVENT THE SPREAD OF DUST DURING THE PERFORMANCE OF SITE WORK. THOROUGHLY MOISTEN ALL EXTERIOR SURFACES AS REQUIRED TO PREVENT DUST FROM BEING A NUISANCE TO THE PUBLIC, NEIGHBORS AND CONCURRENT PERFORMANCE OF OTHER WORK ON THE SITE. PROTECTION: USE ALL MEANS NECESSARY TO PROTECT EXISTING OBJECTS TO REMAIN AND IN THE
 - - WITH SECTION R606.2.8.1., R606.2.8.2 AND R606.2.8.3 (CRC SECTION R606.2.8) PERMITTED TO BE USED AS GROUT (CRC SEC R606.2.12) CEMENT SHALL BE PORTLAND CEMENT CONFORMING TO ASTM C150-12
 - PATTERN.
 - R703.8.4.2) MANUFACTURER'S INSTRUCTIONS. (CRC SECTION R703.12)
 - REQUIREMENT (CRC SECTION R703.8.5) FLASHING. (CRC SECTION R703.8.6)

<u>05 -METALS</u>

- REINFORCING STEEL SPECIFICATIONS
- AISI S220 AND ASTM C645, SEC. 10 AND AISI S230 CONTINUOUS FOUNDATION
- SHALL BE ANCHORED TO THE FOUNDATION IN ACCORDANCE TO CRC SECTION R403.1.6

06 -WOOD, PLASTIC & COMPOSITES

- OF THE FOLLOWING SECTION CRC SECTION R302.1, R602.1, R802.1
- TREATED WOOD. CRC SECTION R317.2
- ALL LUMBER SIZES NOTED AND SPECIFIED ON PLANS ARE NOMINAL SIZES UNLESS SPECIFICALLY INDICATED AS NET SIZE

WORK LOCATE ALL EXISTING UTILITY LINES AND EQUIPMENT. DETERMINE WHICH UTILITIES MUST BE REMOVED AND WHICH ARE TO REMAIN AS WELL AS ALL REQUIREMENTS FOR DISCONNECTING OR CAPPING. DAMAGE TO EXISTING WORK: EXISTING WORK DAMAGE IN THAT EXECUTION OF THIS WORK SHALL BE REPAIRED OR RESTORED TO THE ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.

12

DISCONNECTING OR CAPPING.

7. PREPARATION:

D.

C. SITE INSPECTION:

•

PROTECTIVE WORKS:

EVENT OF DAMAGE, IMMEDIATELY MAKE ALL REPAIRS AND REPLACEMENTS NECESSARY TO THE

FILLED EXCAVATIONS OR BURIED STRUCTURES SUCH AS CESSPOOLS, CISTERNS, FOUNDATION, ETC.

AND BURIED ARTIFACTS SUCH AS INDIAN OR DINOSAUR BONES. IF ANY SUCH ITEMS ARE FOUND THE

PRIOR TO ANY DEMOLITION, CAREFULLY INSPECT THE ENTIRE SITE & ALL OBJECTS

BE REMOVED AND WHICH ARE TO REMAIN AS WELL AS ALL REQUIREMENTS FOR

LOCATE ALL EXISTING UTILITY LINES AND EQUIPMENT. DETERMINE WHICH UTILITIES MUST

DEMOLITION SHALL NOT PROCEED UNTIL SUCH PROTECTIVE WORKS ARE PLACED AS ARE

REQUIRED TO PROTECT THE PROPERTY AND PERSONNEL FROM THAT HAZARDS OF THE

NOTIFICATION: THE CONTRACTOR SHALL INFORM THE OWNER AND ARCHITECT OF THE DATE FOR

CONTRACTOR SHALL INVESTIGATE SITE DURING CLEARING AND EARTHWORK OPERATIONS FOR

SATISFACTION OF THE ARCHITECT AND AT NO ADDITIONAL COST TO THE OWNER.

ARCHITECT, CIVIL ENGINEER, AND SOILS ENGINEER SHALL BE NOTIFIED IMMEDIATELY.

START OF SITE WORK. THE DATE SHALL BE ACCEPTABLE TO ALL PARTIES.

DESIGNATED TO BE REMOVED & TO REMAIN.

 PRESERVE IN OPERATING CONDITION ALL ACTIVE UTILITIES REMAINING 10. USE OF THE PREMISES: THE CONTRACTOR SHALL CONFINE HIS WORKMEN, AND THE PARKING OF

WORKMEN'S VEHICLES TO LIMITS INDICATED BY LAW, ORDINANCE, PERMITS OR DIRECTION OF THE

11. MATERIALS AND EMPLOYEES: UNLESS OTHERWISE DIRECTED BY THE OWNER, THE CONTRACTOR AND/OR SUBCONTRACTOR SHALL PROVIDE AND PAY FOR ALL MATERIALS, LABOR, TOOLS, EQUIPMENT, TELEPHONE, AND GAS TRANSPORTATION. MATERIALS SHALL BE OF GOOD QUALITY. 12. CLEANING UP: THE CONTRACTOR AND SUBCONTRACTORS SHALL AT ALL TIMES KEEP THE PREMISES FREE OF ACCUMULATIONS OF WASTE MATERIALS AND RUBBISH CAUSED BY HIS EMPLOYEES AND WORK. AT THE COMPLETION OF THE WORK, HE SHALL REMOVE ALL HIS RUBBISH, ALL OF HIS TOOLS, SCAFFOLDING AND SURPLUS MATERIALS FROM AND ABOUT THE BUILDING AND SHALL LEAVE HIS WORK IN A BROOM CLEAN CONDITION. THE SITE AND BUILDING AREA SHALL BE KEPT CLEAN AND PICKED UP OF DEBRIS AND SCRAPS AT ALL TIMES DURING CONSTRUCTION, PARTICULARLY AT THE END OF EACH WORK WEEK. THE CONTRACTOR SHALL INSURE THAT ALL GLASSES, TILES, TOILET FIXTURES, EQUIPMENT, PAINTED SURFACES, FLOORS, ETC., ARE THOROUGHLY PROTECTED DURING

ALL CONDITIONS FOR ACCEPTANCE BY THE OWNER. 13. INTENT OF DRAWINGS: PLANS ARE INTENDED TO SHOW DETAILS FOR A COMPLETE PROJECT. PARTS AND DETAILS NOT FULLY SHOWN SHALL BE DETAILED AND EXECUTED ACCORDING TO STANDARD FIRST CLASS PRACTICE AND IN SIMILAR MANNER AND SPIRIT OF DETAILS WHICH ARE SHOWN. IF THE CONTRACTOR FINDS DETAILS WHICH IN HIS OPINION ARE UNSOUND OR NOT STANDARDS, IT IS HIS DUTY TO NOTIFY THE ARCHITECT OF THIS FACT. IF HE PERFORMS THE WORK AS DETAILED WITHOUT SAID NOTIFICATIONS, THEN IT SHALL BE ASSUMED THAT HE DOES NOT OBJECT TO DETAIL. REFER TO

RELATED NOTE BELOW FOR ERRORS AND OMISSION. 14. CLARIFICATION ON DRAWINGS: NOTE THAT DRAWINGS DO NOT SUPPORT TO SHOW ALL OBJECTS EXISTING ON THE JOB. BEFORE COMMENCING ANY DEMOLITION, VERIFY ALL OBJECTS TO BE REMOVED AND ALL OBJECTS TO BE PRESERVED.

15. DIMENSIONS: FIGURED DIMENSIONS SHALL BE FOLLOWED IN PREFERENCE TO SMALL SCALE DRAWINGS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD BEFORE ANY WORK IS CONSTRUCTED AND/ OR FABRICATED. THE SPECIFICATION AND/OR SCHEDULES ON THE DRAWINGS SHALL HAVE WRITTEN NOTES AND OR BE FOLLOWED IN PREFERENCE TO INFORMATION FURNISHED IN THE FORM OF LINES ON DRAWINGS. DETAILED CLARIFICATION DRAWINGS FURNISHED DURING CONSTRUCTION OR APPROVED BY THE ARCHITECT ARE TO BE CONSIDERED EXPLANATORY AND NOT AS MODIFICATIONS OF THESE PLANS AS SHALL BE CALLED CLARIFICATION DRAWINGS. ALL NOTES, FIGURES AND DETAIL DRAWINGS SHALL BE FOLLOWED AND EXECUTED AS PART OF THESE NOTES. 16. ALL WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS. DIMENSION LINES

ARE TO FACE OF STUD UNLESS NOTED OTHERWISE (U.N.O.) 17. PLEASE NOTE THAT ALL SPECIFIED MATERIALS ARE SUBJECT TO CHANGE UPON APPROVAL BY ALL PARTIES WITH AN EQUAL AND COMPARABLE ALTERNATE.

REFER TO STRUCTURAL ENGINEERING CALCULATIONS AND THE MOST CURRENT SOILS REPORT FOR THE PERFORMANCE REQUIREMENTS FOR CONCRETE FOUNDATIONS. CONCRETE STRENGTH SHALL BE PER CRC SECTION R402.2 AND TABLE R402.2 REFER TO STRUCTURAL ENGINEERING CALCULATIONS FOR ADDITIONAL INFORMATION.

CONCRETE SHALL BE MIXED IN ACCORDANCE WITH CRC SECTION R404.1.3.3.2. CONCRETE PROPORTION SHALL BE PLACED IN ACCORDANCE WITH CRC SECTION R404.1.3.3.4. CONCRETE SHALL BE CURED IN ACCORDANCE WITH CRC CHAPTER 44 D 318-14

ALL FORM WORK SHALL BE DESIGNED, CONSTRUCTED, UTILIZED, AND REMOVED PER CRC SECTION CONDUIT, PIPES, OR SLEEVES MAY PENETRATE OR BE EMBEDDED IN CONCRETE ONLY IN

CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CRC SECTION R404.1.3.3.7.8 ALL STEEL REINFORCING OF CONCRETE SHALL BE DONE IN ACCORDANCE WITH CRC SECTION

10. TOP OF CONCRETE SLABS TO BE MINIMUM 6" (8" HUD) ABOVE FINISH GRADE. CRC SECTION R404.1.6 11. FOUNDATION WIDTHS, DEPTHS, AND REINFORCING, AS SHOWN ON PLANS, ARE SUPERCEDED BY ANY LOCAL CODES OR ORDINANCES WHICH REQUIRES INCREASES OF THE SAME. 12. ALL REINFORCEMENT, CONDUIT, OUTLET BOXES, ANCHORS, HANGERS, SLEEVES, BOLTS OR OTHER

EMBEDDED MATERIALS AND ITEMS MUST BE SECURED AND APPROPRIATELY FASTENED IN THEIR PROPER LOCATIONS PRIOR TO THE PLACEMENT OF CONCRETE. SUB-CONTRACTOR SHALL VERIFY INSTALLATION OF HOLD-DOWNS. ANCHOR BOLTS, PA STRAPS, AND OTHER ANCHORAGE MATERIALS AND ITEMS PRIOR TO PLACEMENT OF CONCRETE.

1. ANY AND ALL MATERIALS USED FOR THE CONSTRUCTION AND / OR INSTALLATION OF STONE OR MASONRY VENEER SHALL MEET THE QUALITY STANDARDS AS SET FORTH IN CRC SECTION R703.8 2. ALL MORTAR AND GROUT USED FOR THE CONSTRUCTION AND/OR INSTALLATION OF STONE OR MASONRY VENEER SHALL MEET THE REQUIREMENTS OF CRC SECTION R606.2.8 & R606.3.5 WATER USED IN MORTAR OR GROUT SHALL BE CLEAN AND FREE OF DELETERIOUS AMOUNTS OF

ACID, ALKALIS, OR ORGANIC MATERIAL OR OTHER HARMFUL SUBSTANCES EXCEPT FOR MORTARS LISTED IN SECTION SR606.2.8. R606.2.9 AND R606.2.10, MORTAR FOR USE IN MASONRY CONSTRUCTION SHALL MEET THE PROPORTION SPECIFICATIONS OF TABLE R606.2.8. OR THE PROPERTY SPECIFICATION OF ASTM C270. THE TYPE OF MORTAR SHALL BE IN ACCORDANCE

GROUT SHALL CONSIST OF CEMENTITIOUS MATERIAL AND AGGREGATE IN ACCORDANCE WITH ASTM C 476 OR THE PROPORTION SPECIFICATIONS OF TABLE R606.2.12 TYPE M OR TYPE S MORTAR TO WHICH SUFFICIENT WATER HAS BEEN ADDED TO PRODUCE POURING CONSISTENCY SHALL BE

ALL BRICK SHALL CONFORM TO ASTM C1088-13 FOR SOLID UNITS OF THIN VENEER BRICK 8. UNLESS SPECIFICALLY SHOWN OTHERWISE ALL BRICK SHALL BE LAID IN A RUNNING BOND

MASONRY VENEER SHALL BE ANCHORED TO THE SUPPORTING WALL STUDS WITH CORROSION-RESISTANT METAL TIES EMBEDDED IN MORTAR OR GROUT AND EXTENDING INTO THE VENEER A MINIMUM OF 1 1/2 INCHES, WITH NOT LESS THAN 5/8 INCH MORTAR OR GROUT COVER TO OUTSIDE FACE. MASONRY VENEER SHALL CONFORM TO TABLE R703.8.4(I) (Circa SECTION R703.8.4) AS AN ALTERNATIVE TO THE AIRSPACE REQUIRED BY TABLE R703.8.4, GROUT SHALL BE PERMITTED TO FILL THE AIRSPACE. WHERE THE AIRSPACE IS FILLED WITH GROUT, A WATER-RESISTIVE BARRIER IS REQUIRED OVER STUDS OR SHEATHING. WHERE THE AIRSPACE IS FILLED. REPLACING THE SHEATHING AND WATER-RESISTIVE BARRIER WITH WIRE MESH AND APPROVED WATER RESISTIVE BARRIER-BACKED REINFORCEMENT ATTACHED DIRECTLY TO STUD IS PERMITTED. (CRC SECTION

 ADHERED MASONRY VENEER SHALL COMPLY WITH THE REQUIREMENTS OF SECTION R703.7.3 AND THE REQUIREMENTS IN SECTION 12.1 AND 12.3 OF MS 402. ADHERED MASONRY VENEER SHALL BE INSTALLED IN ACCORDANCE WITH SECTION R703.7.1, ARTICLE 3.3C OF TOMS 602 OR THE

FLASHING SHALL BE LOCATED BENEATH THE FIRST COURSE OF MASONRY ABOVE FINISHED GROUND LEVEL ABOVE THE FOUNDATION WALL OR SLAB AND AT OTHER POINTS OF SUPPORT INCLUDING STRUCTURAL FLOORS, SHELF, ANGLES AND LINTELS WHERE THE MASONRY VENEERS ARE DESIGNED IN ACCORDANCE WITH SECTION R703.8. SEE SECTION R703.4 FOR ADDITIONAL

WEEPHOLES SHALL BE PROVIDED IN THE OUTSIDE WYTHE OF MASONRY WALLS AT A MAXIMUM SPACING OF 33 INCHES ON CENTER. WEEPHOLES SHALL BE LOCATED IMMEDIATELY ABOVE THE

REFER TO STRUCTURAL NOTES AND SPECIFICATIONS FOR STRUCTURAL STEEL AND METAL AND ALL STRUCTURAL STEEL SHALL CONFORM TO 2022 CRC; ANSI S100, AISI S200 AND ASTM C955 SEC. 8,

FOUNDATION ANCHORAGE, WOOD SILL PLATES AND WOOD WALLS SUPPORTED DIRECTLY ON

FASTENERS FOR ALL PRESERVATIVE TREATED WOOD INCLUDING NUTS AND WASHERS SHALL BE OF HOT-DIPPED ZINC COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER.

WOOD AND WOOD-BASE PRODUCTS USED FOR LOAD-SUPPORTING PURPOSES SHALL CONFORM TO BE APPLICABLE PROVISIONS OF CRC SECTION R302. SAWN LUMBER SHALL BE IDENTIFIED BY A GRADE MARK OF AN ACCREDITED LUMBER GRADING OR INSPECTION AGENCY AND HAVE DESIGN VALUES CERTIFIED BY AN ACCREDITATION BODY THAT COMPLIES WITH DOC PS20. IN LIEU OF A GRADE MARK, A CERTIFICATE OF INSPECTION ISSUED BY A LUMBER GRADING OR INSPECTION AGENCY MEETING THAT REQUIREMENTS

ALL PRESERVATIVE TREATED WOOD REQUIRED TO BE TREATED UNDER CRC SECTION R318.1 SHALL BEAR THE QUALITY MARK OF AN INSPECTION AGENCY WHICH HAS BEEN ACCREDITED BY AN ACCREDITATION BODY THAT COMPLIES WITH THE REQUIREMENTS OF THE AMERICAN LUMBER STANDARDS TREATED WOOD PROGRAM OR EQUIVALENT. THE QUALITY MARK SHALL BE ON A STAMPED OR LABEL AFFIXED TO THE PRESERVATIVE-

STRUCTURAL GLUE LAMINATED TIMBERS SHALL BE MANUFACTURED AND IDENTIFIED AS REQUIRED IN ANSI A190.1, ANSI 117 AND ASTM D 3737. (CRC SECTIONS R502.1.3 R602.1.3 AND R802.12) REFER TO THE STRUCTURAL ENGINEER'S CURRENT NOTES, CALCULATIONS AND SPECIFICATIONS PROTECTION AGAINST DECAY & TERMITE ALL WOOD IN CONTACT WITH GROUND, EMBEDDED IN CONCRETE IN DIRECT CONTACT WITH THE GROUND OR EMBEDDED IN CONCRETE EXPOSED TO THE OCCUPANCY TO BE PROTECTION OF WOOD OR WOOD BASED PRODUCTS FROM DECAY SHALL BE PROVIDED IN THE LOCATIONS

MANUAL BY THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION

GLUE LAMINATED LUMBER

SPECIFIED IN SECTIONS R317.1 SHALL BE NATURALLY DURABLE WOOD OR PRESERVATIVE-TREATED IN ACCORDANCE WITH AWPA UI FOR SPECIES, PRODUCT, PRESERVATIVE AND END USE PRESERVATIVES SHALL BE LISTED IN SECTION 4 OF AWPA UI-14. WOOD JOIST OR THE BOTTOM OF WOOD STRUCTURAL FLOOR WHEN CLOSER THAN 18 INCHES, OR WOOD GIRDERS ARE CLOSER THAN 12 INCHES TO THE EXPOSED GROUND IN CRAWL SPACES OR

ALL GLUE LAMINATED TIMBER SHALL MEET THE STANDARDS OF QUALITY AND WORKMANSHIP AS

STATED IN CRC SECTION R317.1 AND THE CURRENT EDITION OF THE TIMBER CONSTRUCTION

UNEXCAVATED AREAS LOCATED WITHIN THE PERIPHERY OF THE BUILDING FOUNDATION. (CRC SECTION R317.1 (I)). WOOD FRAMING MEMBERS THAT REST ON CONCRETE OR MASONRY EXTERIOR FOUNDATION

- WALLS AND ARE LESS THAN 8 INCHES FROM EXPOSED GROUND. (SEC R317.1 (2)). SILL AND SLEEPERS ON CONCRETE OR MASONRY SLAB THAT IS IN DIRECT CONTACT WITH GROUND UNLESS SEPARATED FROM SUCH SLAB BY AN IMPERVIOUS MOISTURE BARRIER. (C.R..C. SEC R317.1 (3)). END OF WOOD GIRDERS ENTERING EXTERIOR MASONRY OR CONCRETE WALLS HAVING
- CLEARANCES OF LESS THAN 1/2 INCH ON TOPS, SIDES, AND ENDS. (SECTIONS R317.1 (4)). WOOD SIDING, SHEATHINGS AND WALL FRAMING ON THE EXTERIOR OF A BUILDING HAVING CLEARANCES OF LESS THAN 6 INCHES FROM THE GROUND OR LESS THAN 2 INCHES MEASURED VERTICALLY FROM CONCRETE STRESS, PORCH SLABS, PATIO SLABS, AND SIMILAR HORIZONTAL
- SURFACES EXPOSED TO WEATHER. (CRC SEC R317 (5)). WOOD STRUCTURAL MEMBERS SUPPORTING MOISTURE-PERMEABLE FLOORS OR ROOFS THAT ARE EXPOSED TO THE WEATHER, SUCH AS CONCRETE OR MASONRY SLABS, UNLESS SEPARATED FROM WHICH FLOORS OR ROOFS BY AN IMPERVIOUS MOISTURE BARRIER. (SEC R317.1 (6))/ WOOD FURRING STRIPS OR OTHER WOOD FRAMING MEMBERS ATTACHED DIRECTLY TO THE INTERIOR OF EXTERIOR MASONRY OR CONCRETE WALLS BELOW GRADE EXCEPT WHERE AN APPROVED VAPOR RETARDER IS APPLIED BETWEEN THE WALL AND THE FURRING STRIPS OR FRAMING MEMBERS (SEC R317.7 (7)).
- IN GEOGRAPHICAL AREAS WHERE EXPERIENCE HAS DEMONSTRATED A SPECIFIC NEED, APPROVED NATURALLY DURABLE OR PRESSURE-PRESERVATIVE-TREATED WOOD SHALL BE USED FOR THOSE PORTIONS OF WOOD MEMBERS THAT FORM THE STRUCTURAL SUPPORTS OF BUILDINGS, BALCONIES, PORCHES OR SIMILAR PERMANENT BUILDING APPURTENANCES WHEN THOSE MEMBERS ARE EXPOSED TO THE WEATHER WITHOUT ADEQUATE PROTECTION FROM A ROOF, EAVE, OVERHANG OR OTHER COVERING THAT WOULD PREVENT MOISTURE OR WATER ACCUMULATION ON THE SURFACE OR AT JOINTS BETWEEN MEMBERS. MAY INCLUDE SUCH MEMBERS
- HORIZONTAL MEMBERS SUCH AS GIRDERS, JOIST AND DECKING
- VERTICAL MEMBERS SUCH AS POSTS, POLES, AND COLUMNS BOTH HORIZONTAL AND VERTICAL MEMBERS
- WOOD COLUMNS SHALL BE APPROVED WOOD OF NATURAL DECAY RESISTANCE OR APPROVED PRESSURE PRESERVATIVE TREATED WOOD. (CRC SECTION R317.1.4) SHEATHING
- WOOD STRUCTURAL PANEL WALL SHEATHING SHALL CONFORM TO DOS PS I OR DOC PS 2 OR ANSI/APA PRP 210 CSA 0437 OR CSA 0325. PANELS SHALL BE IDENTIFIED BY A GRADE MARK OR CERTIFICATE OF INSPECTION ISSUED BY AN APPROVED AGENCY (SEC R604.1)
- WOOD STRUCTURAL PANEL USED AS ROOF SHEATHING SHALL CONFORM TO REQUIREMENTS OF CRC SECTION 803.2 REFER TO THE STRUCTURAL ENGINEER'S CURRENT SPECIFICATIONS CALCULATIONS AND PLANS FOR
- REQUIRED STRENGTH, GRADE, AND THICKNESS FOR WOOD STRUCTURAL PANEL ROOF SHEATHING AND FOR DIAPHRAGM NAILING. **REFER TO THE STRUCTURAL ENGINEER'S CURRENT SPECIFICATIONS, CALCULATIONS AND PLANS FOR**
- REQUIRED STRENGTH, GRADE, AND THICKNESS FOR THICKNESS FOR PLYWOOD FLOOR SHEATHING PANELS AND FOR DIAPHRAGM NAILING AND ADHESIVE REQUIREMENTS WHERE APPLICABLE, REFER TO THE SHEAR WALL SCHEDULE FOR REQUIRED STRENGTH, GRADE, AND THICKNESS OF PLYWOOD SHEAR PANELS AND FOR REQUIRED SHEAR WALL NAILING SCHEDULE

FLOOR FRAMING

REFER TO THE STRUCTURAL ENGINEER'S CURRENT PLAN & CALCULATIONS FOR SIZE, SPACING AND ANCHORAGE OF ALL FLOOR JOISTS; SIZE, LOCATION, AND ANCHORAGE OF ALL FLOOR BEANS AND HEADERS, AND ALL RELATED FRAMING ISSUES THE PLACEMENT OF HOLES IN FLOOR JOIST WEBS SHALL BE PER MANUFACTURER'S SPECIFICATIONS

THE NOTCHING OR CUTTING OF FLOOR JOIST FLANGES IS NOT ALLOWED.

ROOF FRAMING

- ROOF FRAMING SHALL BE PRE-MANUFACTURED ROOF TRUSSES SPACED AT 24 INCHES ON CENTER UNLESS NOTED OTHERWISE. THE MANUFACTURER SHALL SUPPLY TO THE ARCHITECT AND BUILDER CALCULATIONS AND SHOP
- DRAWINGS FOR APPROVAL OF DESIGN LOADS CONFIGURATION (2 OR 3 POINT BEARING). VOLUME CEILING OPTIONS, AND SHEAR TRANSFER, PRIOR TO FABRICATION
- ALL CALCULATIONS AND SHOP DRAWINGS SHALL BE SIGNED BY PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHEREIN THE PROJECT IS TO BE BUILT MANUFACTURER IS TO SECURE BUILDING DEPARTMENT APPROVAL OF CALCULATIONS AND SHOP
- DRAWINGS PROPER TO FABRICATION TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE LATEST BUILDING CODE FOR ALL LOADS IMPOSED, INCLUDING LATERAL LOADS AND MECHANICAL EQUIPMENT LOADS.
- 5. ALL CONNECTORS SHALL BE ICC APPROVED AND OF ADEQUATE STRENGTH TO RESIST ALL DESIGN LOADS AN ATTIC ACCESS MINIMUM OPENING ALLOWED IS 22" X 30", PROVIDED THE LARGEST PIECE OF
- EQUIPMENT CAN BE REMOVED THROUGH THE OPENING. (2022 CALIFORNIA MECHANICAL CODE -SECTION 904.10) ATTIC ACCESS BE PROVIDED AND LOCATED IN A CORRIDOR, HALLWAY OR OTHER READILY ACCESSIBLE LOCATION. THIRTY-INCH-MINIMUM UNOBSTRUCTED HEADROOM IN THE ATTIC. SPACE SHALL BE PROVIDED AT SOME POINT ABOVE THE ACCESS MEASURED VERTICALLY FROM THE BOTTOM OF CEILING FRAMING MEMBERS (CRC SEC R807).

<u>WALL FRAMING</u>

- ROOF FRAMING SHALL BE PRE-MANUFACTURED ROOF TRUSSES SPACED AT 24 INCHES ON CENTER UNLESS NOTED OTHERWISE. THE MANUFACTURER SHALL SUPPLY TO THE ARCHITECT AND BUILDER CALCULATIONS AND SHOP DRAWINGS FOR APPROVAL OF DESIGN LOADS CONFIGURATION (2 OR 3 POINT BEARING), VOLUME
- CEILING OPTIONS, AND SHEAR TRANSFER, PRIOR TO FABRICATION ALL CALCULATIONS AND SHOP DRAWINGS SHALL BE SIGNED BY PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHEREIN THE PROJECT IS TO BE BUILT
- MANUFACTURER IS TO SECURE BUILDING DEPARTMENT APPROVAL OF CALCULATIONS AND SHOP DRAWINGS PROPER TO FABRICATION
- TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE LATEST BUILDING CODE FOR ALL LOADS IMPOSED, INCLUDING LATERAL LOADS AND MECHANICAL EQUIPMENT LOADS. ALL CONNECTORS SHALL BE ICC APPROVED AND OF ADEQUATE STRENGTH TO RESIST ALL DESIGN LOADS
- AN ATTIC ACCESS MINIMUM OPENING ALLOWED IS 22" X 30", PROVIDED THE LARGEST PIECE OF EQUIPMENT CAN BE REMOVED THROUGH THE OPENING. (2022 CALIFORNIA MECHANICAL CODE -SECTION 904.10) ATTIC ACCESS BE PROVIDED AND LOCATED IN A CORRIDOR, HALLWAY OR OTHER READILY ACCESSIBLE LOCATION. THIRTY-INCH-MINIMUM UNOBSTRUCTED HEADROOM IN THE ATTIC SPACE SHALL BE PROVIDED AT SOME POINT ABOVE THE ACCESS MEASURED VERTICALLY FROM THE BOTTOM OF CEILING FRAMING MEMBERS (CRC SEC R807).

FIRE BLOCKING

- IN COMBUSTIBLE CONSTRUCTION, FIRE BLOCKING SHALL BE PROVIDED TO CUT OFF BOTH VERTICAL AND HORIZONTAL CONCEALED DRAFT OPENINGS AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND THE ROOF SPACE. FIREBLOCKING SHALL BE PROVIDED IN A WOOD-FRAMED CONSTRUCTIONS IN THE LOCATIONS SPECIFIED IN CRC SECTIONS. FIREBLOCKING SHALL BE PROVIDED IN THE FOLLOWING LOCATIONS:
- IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AND PARALLEL ROWS AND STUDS OR STAGGERED STUDS, AS FOLLOWS: a. VERTICALLY AT THE CEILING AND FLOOR LEVELS
- b. HORIZONTALLY AT INTERVALS NOT EXCEEDING 10 FEET
- AT INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS AND COVE CEILINGS IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN.
- ENCLOSED SPACES UNDER STAIRS SHALL ALSO COMPLY WITH CRC SECTION R302.7 AT OPENINGS AROUND VENTS, PIPES, DUCTS, CABLES, AND WIRES AT CEILING & FLOOR LEVELS, WITH AN APPROVED MATERIAL TO RESIST FREE PASSAGE OF FLAME AND PRODUCTS OF COMBUSTION. THE MATERIAL FILLING THIS ANNULAR SPACE SHALL NOT BE REQUIRED TO MEET THE ASTM E 136 REQUIREMENTS
- E. FOR THE FIREBLOCKING AT CHIMNEYS AND FIREPLACES, SEE SECTION R1003.19 3. FIREBLOCKING OF CORNICES OF A TWO-FAMILY DWELLING IS REQUIRED AT THE LINE OF DWELLING UNIT SEPARATION. (CRC SECTION R302.11).
- FIRE BLOCKING SHALL CONSIST OF 2 INCHES NOMINAL LUMBER OR TWO THICKNESS OF 1-INCH NOMINAL LUMBER WITH BROKEN LAP JOINTS OR ONE THICKNESS OF 28/32-INCH WOOD STRUCTURAL PANELS WITH JOINTS BACKED BY 23/32-INCH WOOD STRUCTURAL PANELS OR ONE THICKNESS OF 3/4 -INCH PARTICLEBOARD WITH JOINTS BACKED BY 3/4-INCH PARTICLEBOARD OR ONE-HALF-INCH GYPSUM BOARD OR ONE-QUARTER-INCH CEMENT-BASED MILLBOARD OR BATTS OR BLANKETS OF MINERAL WOOL OR GLASS FIBER OR OTHER APPROVED MATERIALS INSTALLED IN SUCH A MANNER AS TO BE SECURELY RETAINED IN PLACE OR CELLULOSE INSULATION INSTALLED AS TESTED IN ACCORDANCE WITH ASTM E119 OR UL 263 FOR SPECIFIED APPLICATIONS. (CRC SEC R302.11.1)
- WALLS CONSTRUCTED USING PARALLEL OR STAGGERED STUDS FOR SOUND TRANSMISSION CONTROL SHALL HAVE FIRE BLOCKS OF BATTS OR BLANKETS OF MINERAL OR GLASS FIBER OR OTHER APPROVED NONRIGID MATERIALS SHALL BE PERMITTED FOR COMPLIANCE WITH 10-FOOT HORIZONTAL FIREBLOCKING (CRC SEC R302.11.1.1)

5. IN COMBUSTIBLE CONSTRUCTION WHERE THERE IS USABLE SPACE BOTH ABOVE AND BELOW THE CONCEALED SPACE OF FLOOR-CEILING ASSEMBLY, DRAFTSTOPS SHALL BE INSTALLED SO THAT THE AREA OF THE CONCEALED SPACE DOES NOT EXCEED 1000 SQUARE FEET. DRAFT-STOPPING SHALL DIVIDE THE CONCEALED SPACE INTO APPROXIMATELY EQUAL AREAS WHERE THE ASSEMBLY IS ENCLOSED BY A FLOOR MEMBRANE ABOVE AND A CEILING MEMBRANE BELOW, DRAFTSTOPPING SHALL BE PROVIDED IN FLOOR-CEILING ASSEMBLIES UNDER THE FOLLOWING CIRCUMSTANCES:

A. CEILING IS SUSPENDED UNDER THE FLOOR FRAMING B. FLOOR FRAMING IS CONSTRUCTED OF TRUSS-TYPE OPEN-WEB OR PERFORATED MEMBERS (CRC SECTION R302.12)

DRAFTSTOPPING MATERIALS SHALL NOT BE LESS THAN 1/2-INCH GYPSUM BOARD, 3/8-INCH WOOD STRUCTURAL PANELS OR OTHER APPROVED MATERIALS ADEQUATELY SUPPORTED. DRAFTSTOPPING SHALL BE INSTALLED PARALLEL TO THE FLOOR FRAMING MEMBERS UNLESS OTHERWISE APPROVED BY THE BUILDING OFFICIAL. INTEGRITY OF THE DRAFTSTOPS SHALL BE MAINTAINED. (CRC SEC R302.12.1)

07 -THERMAL & MOISTURE PROTECTION

PROVIDE ALL FLASHING. COUNTER-FLASHING. BITUMEN. MEMBRANE WATERPROOFING. SHEET METAL, CAULKING, SEALANTS, ELECTROMERIC WALKING SURFACES, AND RAIN GUTTERS AND/OR DIVERTERS WHERE REQUIRED, TO MAKE WORK COMPLETELY WATERPROOF THE TERMS "CORROSION RESISTANT" OR "NON-CORROSIVE" THE ABILITY OF A MATERIAL TO WITHSTAND DETERIORATION OF ITS SURFACE OR ITS PROPERTIES WHEN EXPOSED TO ITS ENVIRONMENT. (CRC SEC 202). WHEN AN ELEMENT IS REQUIRED TO BE CORROSION RESISTANT OR NON-CORROSIVE, ALL OF ITS PARTS, SUCH AS SCREWS, NAILS, WIRE, DOWELS, BOLTS, NUTS, WASHERS, SHIMS, ANCHORS, TIES AND ATTACHMENTS, SHALL BE CORROSION RESISTANT MATERIALS USED FOR CONSTRUCTION OF EXTERIOR WALLS SHALL COMPLY WITH THE PROVISIONS OF SECTION R703. THE EXTERIOR WALL ENVELOPE SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT PREVENTS THE ACCUMULATION OF WATER WITHIN THE WALL ASSEMBLY BY PROVIDING WATER RESISTIVE BARRIER WHICH IS A MINIMUM OF ONE LAYER OF NO. 15 ASPHALT FELT COMPLYING WITH ASTM D226 FOR TYPE I FELT OR OTHER APPROVED WATER-RESISTIVE BARRIER SHALL BE APPLIED OVER STUDS OR SHEATHING OF ALL EXTERIOR WALLS, AS DESCRIBED IN SEC R703.2 PROTECTION AGAINST CONDENSATION IN THE EXTERIOR WALL ASSEMBLY SHALL BE PROVIDED IN ACCORDANCE WITH THE CALIFORNIA ENERGY CODE (CRC SECTION R703.1.1) EXTERIOR WALLS SHALL PROVIDE THE BUILDING WITH WEATHER RESISTANT EXTERIOR WALL ENVELOPE. THE EXTERIOR WALL ENVELOPE SHALL INCLUDE FLASHING AS DESCRIBED IN SECTION

R703.4 (CRC SECTION R703.1)

APPROVED CORROSION RESISTANT FLASHING SHALL BE APPLIED SHINGLE FASHION IN A MANNER TO PREVENT ENTRY OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER TO BUILDING STRUCTURAL FRAMING COMPONENTS SELF-ADHERED MEMBRANES USED AS FLASHING SHALL AAMA 711. FLUID-APPLIED MEMBRANES USED AS FLASHING IN EXTERIOR WALLS SHALL COMPLY WITH AAMA 714. THE FLASHING SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH. APPROVED CORROSION RESISTANT FLASHING SHALL BE INSTALLED AT THE FOLLOWING LOCATIONS:

A. FLASHING AT EXTERIOR WINDOW AND DOOR OPENINGS SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH OR TO THE WATER RESISTIVE BARRIER FOR SUBSEQUENT DRAINAGE

- AT THE INTERSECTION OF CHIMNEYS OR OTHER MASONRY CONSTRUCTION WITH FRAME OR STUCCO WALLS, WITH PROJECTING LIPS ON BOTH SIDES UNDER STUCCO COPINGS. UNDER AND THE ENDS OF MASONRY, WOOD, OR METAL COPINGS AND SILLS
- CONTINUOUSLY ABOVE ALL PROJECTING WOOD TRIMS
- WHERE EXTERIOR PORCHES, DECKS OR STAIRS ATTACH TO A WALL OR
- FLOOR ASSEMBLY OF WOOD-FRAME CONSTRUCTION
- AT WALL AND ROOF INTERSECTIONS AT BUILT-IN GUTTERS

BALCONIES, LANDINGS, EXTERIOR STAIRWAYS, OCCUPIED ROOFS AND SIMILAR SURFACES EXPOSED TO THE WEATHER AND SEALED UNDERNEATH SHALL BE AND SLOPED A MINIMUM OF 1/4 UNIT VERTICAL IN 12 UNITS HORIZONTALLY (2% SLOPE) FOR DRAINAGE (CRC SECTION R311.3) PROVIDE A MINIMUM 2 INCH DROP FROM FINISHED INTERIOR FLOOR ELEVATIONS TO THE HIGHEST FLOOR ELEVATION OF ANY ADJOINING DECK OR BALCONY. PROVIDED THAT THE DOOR DOES NOT SWING OVER THE LANDING OR FLOOR. (CRC SECTION R311.3.1) ELASTOMERIC OR MEMBRANE DECK COATINGS SHALL BE INSTALLED PER MANUFACTURER'S

SPECIFICATIONS AT DECKS AND BALCONIES. COLOR FINISH AND DETAILING SHALL BE APPROVED BY OWNER / BUILDER AND ARCHITECT.

UNLESS DESIGNED TO DRAIN OVER DECK EDGES, DRAINS, AND OVER-FLOWS ADEQUATE SIZE SHALL BE INSTALLED AT THE LOW POINTS OF DECK OR BALCONY. ALL SHEET METAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE RECOMMENDATIONS AND STANDARDS OF THE SHEET METAL AND AIR CONDITIONING CONTRACTOR'S NATIONAL ASSOCIATION (S.M.A.C.N.A.). THE ARCHITECTURAL SHEET METAL MANUAL, AND SEALANT, WATERPROOFING AND RESTORATION INSTITUTE'S (S.W.R.I.) GUIDE - "SEALANT'S: THE

PROFESSIONAL'S GUIDE". 11. SHEET METAL SHALL BE STEEL, HOT-DIPPED, TIGHT COATED IN GALVANIZED, CONFORMING TO ASTM A525 AND SHALL BE A NUMBER 24 SHEET METAL GAGE UNLESS OTHERWISE NOTED IN THESE NOTES, PLANS, OR MANUFACTURER'S SPECIFICATIONS. 12. SHEET ALUMINUM SHALL CONFORM WITH FEDERAL SPECIFICATIONS QQ-A-359 AND ASTM B209

ALLOY 3003. 13. FLASHING FOR ASPHALT SHINGLES SHALL COMPLY WITH SECTION R905.2.8. FABRICATE SHEET METAL WITH FLAT LOCK SEAMS AND SOLDER WITH TYPE AND FLUX RECOMMENDED BY MANUFACTURER. SEAL ALUMINUM SEAMS WITH EPOXY METAL SEAM CEMENT. WHERE REQUIRED

FOR STRENGTH, RIVET, SEAMS, AND JOINTS. 14. SHOP FABRICATE TO THE GREATEST EXTENT POSSIBLE IN ACCORDANCE WITH APPLICABLE STANDARDS TO PROVIDE A PERMANENTLY WATER-PROOF, WEATHER RESISTANT INSTALLATION 15. BASE AND CAP FLASHING SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. BASE FLASHING SHALL BE EITHER CORROSION RESISTANT METAL OF MINIMUM NOMINAL 0.019-INCH THICKNESS OR MINERAL SURFACE ROLL ROOFING WEIGHING A MINIMUM OF 77 POUNDS PER 100 SQUARE FEET. CAP FLASHING SHALL BE CORROSION-RESISTANT METAL OF MINIMUM NOMINAL 0.019-INCH THICKNESS. (CRC SECTION R905.2.8.1) ROOF VALLEY LININGS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S

INSTRUCTIONS BEFORE APPLYING SHINGLES. VALLEY LINING OF THE FOLLOWING TYPES SHALL BE PERMITTED

FOR OPEN VALLEYS (VALLEY LINING EXPOSED) LINED WITH METAL, THE VALLEY LINING SHALL BE NOT LESS THAN 24 INCHES WIDE AND OF ANY OF THE CORROSION-RESISTANT METALS IN TABLE R905.2.8.2.

FOR OPEN VALLEYS, VALLEY LINING OF TWO PLIES OF MINERAL-SURFACED ROLL ROOFING COMPLYING WITH ASTM D 3909 OR ASTM D 6380 CLASS M, SHALL BE PERMITTED. THE BOTTOM LAYER SHALL BE 18 INCHES AND THE TOP LAYER A MINIMUM OF 36 INCHES WIDE. FOR CLOSED VALLEYS (VALLEYS COVERED WITH SHINGLES), VALLEY LINING OF ONE PLY OF SMOOTH ROLL ROOFING COMPLYING WITH ASTM D 6380 AND AT LEAST 36 INCHES WIDE OR VALLEY LINING AS DESCRIBED IN ITEM 1 OR 2 ABOVE SHALL BE PERMITTED. SELF-ADHERING

POLYMER MODIFIED BITUMEN UNDERLAYMENT COMPLYING WITH ASTM D1970 SHALL BE PERMITTED IN LIEU OF THE LINING MATERIAL. (CRC SECTION R905.2.8.2) 17. BASE FLASHING AGAINST A VERTICAL SIDEWALL SHALL BE CONTINUOUS OR STEP FLASHING SHALL NOT BE LESS THAN 4 INCHES IN HEIGHT AND 4 INCHES IN WIDTH AND SHALL DIRECT WATER AWAY FROM THE VERTICAL SIDEWALL ONTO THE ROOF OR GUTTER. (CRC SECTION R905.2.8.3). FLASHING ONTO THE ROOF OR GUTTER. (CRC SECTION R905.2.8.3). FLASHING AGAINST VERTICAL FRONT WALL. AS WELL AS SOIL STACK, VENT PIPE AND CHIMNEY FLASHING, SHALL BE APPLIED IN ACCORDANCE WITH THE ASPHALT SHINGLE MANUFACTURER'S PRINTED INSTRUCTIONS (CRC SECTION R905.2.8.4)

ASPHALT SHINGLES ROOF MATERIAL) 18. AT THE JUNCTURE OF ROOF VERTICAL SURFACES, FLASHING, AND COUNTER-FLASHING SHALL BE PROVIDED IN ACCORDANCE WITH CHAPTER 9 AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND, WHERE OF METAL, - SHALL NOT BE LESS THAN 0.019 INCH (NO. 26 GALVANIZED SHEET GAGE) CORROSION-RESISTANT METAL. THE VALLEY FLASHING SHALL EXTEND AT LEAST 11 INCHES FROM THE CENTERLINE EACH WAY AND HAVE A SPLASH DIVERTER RIB NOT LESS THAN 1 INCH HEIGHT AT THE FLOW LINE FORMED AS PART OF THE FLASHING. SECTIONS OF FLASHING SHALL HAVE AN END LAP OF NOT LESS THAN 4 INCHES. FOR ROOF SLOPES OF THREE UNITS VERTICAL IN 12 UNITS HORIZONTAL (25-PERCENT SLOPE) AND GREATER, VALLEY FLASHING SHALL HAVE A 36-INCHES WIDE UNDERLAYMENT OF ONE LAYER OF TYPE 1 UNDERLAYMENT RUNNING THE FULL LENGTH OF THE VALLEY. IN ADDITION TO THE OTHER REQUIRED UNDERLAYMENT. IN AREAS WHERE THE AVERAGE DAILY TEMPERATURE IN JANUARY IS 25 DEGREES F OR LESS, METAL VALLEY FLASHING UNDERLAYMENT SHALL BE SOLID-CEMENT TO THE ROOFING UNDERLAYMENT OR SLOPES LESS THAN SEVEN UNITS VERTICAL IN 12 UNITS HORIZONTAL (58-PERCENT SLOPE) OR BE OF SELF

EXTERIOR WALL COVERINGS

SEE FINISHES IN THESE GENERAL NOTES FOR EXTERIOR PLASTER

ADHERING POLYMER MODIFIED BITUMEN SHEET. (CRC SEC R905.3.8)

ALL EXTERIOR MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT EDITION THE CALIFORNIA BUILDING CODE AND ALL STATE AND LOCAL CODES WATER-RESISTIVE BARRIERS SHALL BE INSTALLED AS REQUIRED PER CRC SECTION R703.2 AND WHEN APPLIED OVER WOOD BASE SHEATHING, SHALL INCLUDE TWO LAYERS OF GRADE 'D' PAPER (CRC SECTION R703.7.3)

FIBER-CEMENT PANELS SHALL COMPLY WITH THE REQUIREMENTS OF ASTM C1186 TYPE A, MINIMUM GRADE 11 OR ISO 8338, CATEGORY A, MINIMUM CLASS 2. PANELS SHALL BE INSTALLED WITH LONG DIMENSIONS EITHER PARALLEL OR PERPENDICULAR TO FRAMING, VERTICAL AND HORIZONTAL JOINTS SHALL OCCUR OVER FRAMING MEMBERS AND SHALL BE PROTECTED WITH CAULKING, OR WITH BATTENS OR FLASHING OR BE VERTICAL OR HORIZONTAL SHIPLAP OR OTHERWISE DESIGNED TO COMPLY WITH SECTION R703.1. PANEL SIDING SHALL BE INSTALLED WITH FASTENERS IN ACCORDANCE WITH TABLE R703.3 (1) OR APPROVED MANUFACTURERS' INSTRUCTIONS. (CRC SECTION R703.10.1) FIBER-CEMENT LAP SIDING HAVING A MAXIMUM WIDTH OF 12 INCHES SHALL COMPLY WITH THE REQUIREMENTS OF ASTM C1186, TYPE A, MINIMUM GRADE II OR ISO 8336, CATEGORY A, MINIMUM CLASS 2. LAP SIDING SHALL BE LAPPED A MINIMUM OF 1 1/4 INCHES AND LAP SIDING NOT HAVING TOUNGE-AND-GROVE END JOINTS SHALL HAVE THE END PROTECTED WITH CAULKING. COVERED WITH AN H-SECTION JOINT COVER LOCATED OVER A STRIP OF FLASHING OR SHALL BE DESIGNED TO COMPLY WITH SECTION R703.1. LAP SIDING COURSES SHALL BE INSTALLED WITH THE FASTENER HEADS EXPOSED OR CONCEALED, IN ACCORDANCE WITH TABLE R703.3(1) OR APPROVED MANUFACTURERS' INSTRUCTIONS (CRC R703.10.2)



ACCESSORY DWELLING UNIT

PWP23-003

PROJECT

DEPARTMENT OF PUBLIC WORKS AND PLANNING



CAPITAL PROJECTS DIVISION

2220 Tulare St., Ste. 720, Fresno, CA. 93721 Phone: (559) 262-4212 Fax: (559) 262-4879



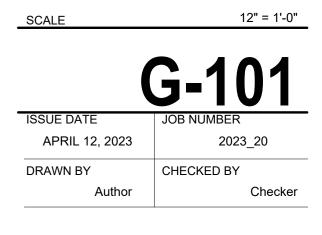
UPDATE

JULY 10, 2023

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE ARCHITECT AND SHALL NOT BE USED ON ANY OTHER PROJECT OR LOCATIONS EXCEPT AS DESCRIBED ON THE DRAWINGS WITHOUT WRITTEN

AGREEMENT WITH THE ARCHITECT

GENERAL NOTES



GLAZING (CONT.)

- GLAZING IN STORM DOORS
- WHERE PLUMBING FIXTURES ARE INSTALLED FOR PRIVATE USE HOT WATER SHALL BE REQUIRED FOR GLAZING IN ALL UNFRAMED SWINGING DOORS BATHING, WASHING, LAUNDRY, COOKING PURPOSES, DISHWASHING OR MAINTENANCE (CPC SECTION 601.2) PORTABLE WATER OUTLETS WITH HOSE ATTACHMENT. OTHER THAN WATER HEATER DRAINS AND (CRC SECTION R309.4) SEE SECTION FOR EXCEPTIONS CLOTHES WASHER CONNECTIONS SHALL BE PROTECTED BY A LISTED NON-REMOVAL HOSE BIB TYPE GLAZING IN WARDROBE DOOR SHALL MEET THE IMPACT TEST REQUIREMENTS FOR SAFETY GLAZING AS SET BACKFLOW. PREVENTER, NON-REMOVABLE, HOSE BIB TYPE VACUUM BREAKER, OR AN ATMOSPHERIC FORTH IN THE CRC TABLES R308.1(1) AND OUR 308.3.1(2) PLASTIC GLAZING SHALL MEET THE WEATHERING VACUUM BREAKER INSTALLED NOT LESS THAN 6 INCHES ABOVE HIGHEST POINT OF USAGE LOCATED ON REQUIREMENTS OF ANSI Z97.1 DISCHARGE SIDE OF THE LAST VALVE IN CLIMATES WHERE FREEZING TEMPERATURES OCCUR. A LISTED MIRROR SHALL BE A MINIMUM OF 3/16 INCH POLISHED PLATE GLASS SELF-DRAINING, FROST-PROOF HOSE BIB WITH AN INTEGRAL BACKFLOW PREVENTER OR VACUUM BREAKER SHALL BE USED (CPC SECTION 603.5.7)
- REGULAR, FLOAT, WIRED AND PATTERN GLASS IN JALOUSIES AND LOUVERED WINDOW SHALL BE, NOT LESS THAN NOMINAL 3/16 INCH AND NOT MORE THAN 48 INCH IN LENGTH. EXPOSED GLASS EDGES SHALL BE SMOOTH. (CRC SECTION R308.2) GLAZING SUPPORT AND FRAMING SHALL COMPLY WITH CBC SECTIONS 2403.2 AND 2403.3
- HINGED SHOWER DOOR SHALL OPEN OUTWARD GLAZING SHALL BE IN ACCORDANCE WITH ENERGY COMPLIANCE CALCULATIONS, CALIFORNIA ENERGY CODE (TITLE 24).

09 -FINISHES

<u>GYPSUM BOARD</u>

- REQUIREMENT SHALL GOVERN.
- GYPSUM WALLBOARD SHALL NOT BE INSTALLED UNTIL WEATHER PROTECTION FOR THE INSTALLATION IS WILL NOT BE SUBJECT TO UNDER STRAINS OR STRESSORS AND PROVISION SHALL BE MADE FOR PROVIDED. EXTERIOR SHEATING SHALL BE DRY BEFORE APPLYING EXTERIOR COVER. (CRC SECTION R701.2) EXPANSION, CONTRACTION, AND STRUCTURAL SETTLEMENT. NO PLUMBING PIPING SHALL BE DIRECTLY ALL EDGES AND ENDS OF GYPSUM WALLBOARD SHALL OCCUR ON THE FRAMING MEMBERS, EXCEPT THOSE EMBEDDED IN CONCRETE OR MASONRY. NO STRUCTURAL MEMBERS SHALL BE SERIOUSLY WEEKEND OR EDGES AND ENDS THAT ARE PERPENDICULAR TO THE FRAMING MEMBERS (CRC SECTION R702.3.5) IMPAIRED BY CUTTING NOTCHING OR OTHERWISE (CPC SECTION 312.2 GYPSUM BOARD AND GYPSUM PANEL PRODUCTS SHALL BE INSTALLED PERPENDICULAR TO CEILING PROTECTIVELY, COATED PIPE, OR TUBING SHALL BE INSPECTED AND TESTED, AND ANY VISIBLE VOID
- FRAMING MEMBERS. END JOINTS OF ADJACENT COURSES OF BOARD AND PANELS SHALL NOT OCCUR ON THE SAME JOIST. (CRC SECTION R702.3.6) FASTENERS SHALL BE SPACED, NOT MORE THAN 7 INCHES ON CENTER AT ALL SUPPORTS, INCLUDING 5
- PERIMETER, BLOCKING, AND NOT LESS THAN 3/8 INCH FROM THE EDGES AND ENDS OF THE GYPSUM BOARD (CRC SECTION R702.3.6 (D)) SCREWS FOR ATTACHING GYPSUM BOARD AND GYPSUM PANEL PRODUCTS TO WOOD FOR FRAMING SHALL
- BE TYPE W OR TYPE S IN ACCORDANCE WITH ASTM C1002 AND SHALL PENETRATE THE WOOD NOT LESS THAN 5/8 INCH (CRC SECTION R702.3.5.1) SUPPORTS AND FASTENERS USED TO ATTACH GYPSUM BOARD AND GYPSUM PANEL PRODUCT SHALL
- COMPLY WITH TABLE R702.3.5. (CRC SECTION R702.3.5) WHERE TWO LAYERS OF GYPSUM WALLBOARD ARE REQUIRED, THE BASE LAYER OF GYPSUM WALLBOARD SHALL BE APPLIED WITH FASTENERS OF THE TYPE AND SIZE AS REQUIRED FOR THE NON-ADHESIVE
- APPLICATION OF SINGLE PLY GYPSUM WALLBOARD MATERIALS USED AS BACKERS FOR WALL TILE IN TUB AND SHOWER AREA AND WALL PANELS IN SHOWER AREA. SHALL BE OF MATERIAL LISTED IN THE TABLE R702.4.2 AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. (CRC SECTION R702.4.2) WATER RESISTANT GYPSUM BACKING BOARD USED ON BASE OR BACKER FOR ADHESIVE APPLICATION OF
- RECOMMENDED BY MANUFACTURER (CRC SECTION R702.3.7).
- WATER RESISTANT GYPSUM, WALLBOARD SHALL NOT BE USED IN FOLLOWING LOCATIONS: A. OVER A CLASS I OR II VAPOR RETARDER IN SHOWER OR TUB COMPARTMENT B. IN AREAS WHERE THERE WILL BE DIRECT EXPOSURE TO WATER, OR AN AIR IS SUBJECT TO CONTINUOUS HUMIDITY. (CRC SECTION R702.3.7 & R702.3.7.1)

<u>METAL LATH</u>

- ALL LATH AND LATH ATTACHMENTS SHALL BE OF CORROSION RESISTANT MATERIAL BACKING OR A LATH SHALL PROVIDE SUFFICIENT RIGIDITY TO PERMIT PLASTER APPLICATION ALL LATH AND LATH ATTACHMENTS SHALL BE OF CORROSION RESISTANT MATERIALS. EXPANDED METAL OR - 18 WOVEN WIRE LATCH SHALL BE ATTACHED WITH 1 1/2 INCH LONG, II GAGE NAILS HAVING A 7/16 INCH HEAD OR 7/8 INCH LONG, 16 GAGE STAPLES, SPACED NO MORE THAN 6 INCHES OR AS OTHERWISE (CRC SECTION R703.7.1)
- GYPSUM LATH OR GYPSUM BOARD SHALL NOT BE USED AS BACKING, EXCEPT THAT ON HORIZONTAL SUPPORTS OF CEILING OR ROOF SOFFITS. IT MAY BE USED AS BACKING FOR METAL LATH, OR WIRE, FABRIC LATH AND CEMENT PLASTER.
- METAL LATH OR WIRE FABRIC LATH SHALL BE APPLIED WITH A LONG DIMENSION OF THE SHEETS PERPENDICULAR TO SUPPORTS.
- WHERE END LAPS OF SHEET DO NOT OCCUR OVER SUPPORTS, THEY SHOULD BE SECURELY TIED TOGETHER WITH NOT LESS THAN 0.049 INCH. (NO. 18 BW GAGE) WIRE . CORNERITE SHALL BE INSTALLED IN ALL THE INTERNAL CORNERS TO RETAIN POSITION DURING PLASTERING. CORNERITE MAY BE OMITTED WHEN LATH IS CONTINUOUS OR WHEN PLASTER IS NOT
- CONTINUOUS FROM ONE PLANE TO AN ADJACENT PLANE. THE APPLICATION OF METAL LATH OR WOVEN WIRE LATH SHALL BE AS SPECIFIED AND CRC SECTION R703.7.1. WHERE NO EXTERNAL CORNER OF REINFORCEMENT IS USED, LATH SHALL BE FURRED OUT AND CARRIED
- AROUND CORNERS AT LEAST ONE SUPPORT ON FRAME CONSTRUCTION .
- LATH SHALL COVER AND TERMINATE ON THE ATTACHMENT FLANGE OF WEEP SCREED (CRC SEC R703.7.2.1).

CEMENT PLASTERING

- MASONRY, CONCRETE OR GYPSUM BACKING AS SPECIFIED (CRC SEC R703.7.2
- C926, AND ASTM C1063. (CRC SEC R703.7) EXCEED THAT SET FORTH IN ASTM C926. (CRC SEC R702.1 (3)) GYPSUM PLASTER SHALL NOT BE USED ON EXTERIOR SURFACES.
- SHALL BE A SET FORTH IN ASTM C926 AND TABLE R702.1(3) CEMENT PLASTER MATERIALS SHALL CONFORM TO ASTM C91. (TYPE M, S OR N), C150 (TYPE I. II AND III) C595
- SHALL BE APPLIED IN ONE COAT NOT TO ACCEPT 3/16 INCH THICKNESS PROVIDED THE TOTAL THICKNESS IS IN ACCORDANCE WITH TABLE OR R702.1(1) (CRC SEC R702.2.2 / R702.2.1) APPLICATIONS INSTALLED IN ACCORDANCE WITH ASTM C926. EACH COAT SHALL BE KEPT MOIST CONDITION FOR AT LEAST 48 HOURS PRIOR TO APPLICATION OF THE NEXT COAT. (CRC SEC R703.7.4) THE FINISH COAT FOR TWO-COAT CEMENT PLASTER SHALL NOT BE APPLIED SOONER THAN SEVEN DAYS AFTER APPLICATION OF THE FIRST COAT. FOR THREE-COAT CEMENT PLASTER, THE SECOND COAT SHALL
- NOT BE APPLIED SOONER THAN 48 HOURS AFTER APPLICATION OF THE FIRST COAT. THE FINISH COAT FOR THREE-COAT CEMENT PLASTER SHALL NOT BE APPLIED SOONER THAN SEVEN DAYS AFTER APPLICATION OF THE SECOND COAT. (CRC SEC R703.7.3)
- COLOR AND FINISH TO BE SELECTED AND APPROVED BY OWNER / BUILDER. 10. A ONE-COAT EXTERIOR PLASTER SYSTEM "OMEGA DIAMOND WALL" AND DIAMOND WALL INSULATING EXTERIOR STUCCO SYSTEM ICC NO. ESR-1194 OR APPROVED OR EQUAL MAY BE USED IN LIEU OF THE 3-
- COAT EXTERIOR PLASTER SYSTEM
- FOAM INSULATION BOARD USED IN ONE-COAT EXTERIOR PLASTER SYSTEM SHALL CONFORM TO THE 11 **REQUIREMENTS CRC CHAPTER 7.** THE EXTERIOR OF THE BUILDING SHALL BE SEPARATED FROM THE FOAM PLASTIC INSULATION BY AN APPROVED THERMAL BARRIER. WATER-RESISTIVE BARRIER SHALL COMPLY WITH R703.2 ASTM E2570 (CRC R703.9.2(4). INSTALLATION OF WATER RESISTIVE BARRIER SHALL BE APPLIED BETWEEN THE EIFS AND THE WALL SHEATHING. (CRC R703.9.2(5)

21 -FIRE SEPARATION

- WALLS SHALL COMPLY WITH SECTION R302.5 ATTACHMENT OF GYPSUM BOARD SHALL COMPLY WITH TABLE R702.3.5. (CRC SECTION R302.6)
- PROVIDE ONE LAYER OF 5/8 INCH 'X' GYPSUM WALLBOARD AT GARAGE CEILING, SIDE, AND BENEATH ALL HABITABLE ROOMS AND STRUCTURAL SUPPORTING FRAMING MEMBERS (CRC SECTION R702.3.7) ENCLOSED ACCESSIBLE SPACE UNDER STAIRS SHALL HAVE WALLS, UNDER STAIRS SURFACE AND ANY SOFFITS PROTECTED ON ENCLOSED SIDE, 1/2" GYPSUM BOARD (CRC SECTION R302.7)

22 -PLUMBING

- ALL MATERIALS AND EQUIPMENT, INSTALLATION AND CONSTRUCTION METHODS SHALL COMPLY WITH THE MOST CURRENT ADOPTED EDITION OF THE CALIFORNIA PLUMBING CODE, OR THE CURRENT LOCALLY
- SERVED ARE NOT IN USE (CMC SECTION 504.1.1) ADOPTED PLUMBING CODE. 11. DUCTS USED FOR DOMESTIC KITCHEN RANGE OR COOKTOP VENTILATION SHALL BE OF METAL AND SHALL NO PLUMBING FIXTURE, DEVICE, OR CONSTRUCTION SHALL BE INSTALLED OR MAINTAINED OR SHALL BE CONNECTED TO ANY DOMESTIC WATER SUPPLY WHEN SUCH INSTALLATION OR CONNECTION MAY PROVIDE HAVE SMOOTH INTERIOR SURFACES. 12. REFER TO CMC SECTION 504.3 EXCEPTION FOR THE VENTING OF DOMESTIC KITCHEN DOWNDRAFT A POSSIBILITY OF POLLUTING SUCH WATER SUPPLY OR MAY PROVIDE A CROSS-CONNECTION BETWEEN A GRILLE-RANGES. DISTRIBUTING SYSTEM OF WATER FOR DRINKING AND DOMESTIC PURPOSES AND WATER WHICH MAY 13. FLOOR MOUNTED OR BUILT-IN HOUSEHOLD COOKING APPLIANCE SHALL HAVE A VERTICAL CLEARANCE BECOME CONTAMINATED BY SUCH PLUMBING FIXTURES, DEVICE, OR CONSTRUCTION, UNLESS THERE IS ABOUT COOKING TOP OF NOT LESS THAN 30 INCHES TO COMBUSTIBLE MATERIAL OR METAL CABINETS. A PROVIDED A BACKFLOW PREVENTION DEVICE APPROVED FOR THE POTENTIAL HAZARD (CPC SECTION CLEARANCE NOT LESS THAN 24 INCHES IS PERMITTED TO A METAL VENTILATING HOOD (C.M.C. SECTION 602.3) 920.4.2(1))

- **INSULATION MATERIALS, INCLUDING FACINGS, SUCH AS VAPOR RETARDERS AND VAPOR-PERMEABLE** MEMBRANES INSTALLED WITHIN FLOOR-CEILINGS ASSEMBLIES, ROOF CEILING ASSEMBLIES, WALL ASSEMBLIES, CRAWL SPACES, AND ATTICS SHALL HAVE A FLAME SPREAD INDEX NOT TO EXCEED 25 WITH AN ACCOMPANYING SMOKE-DEVELOPED INDEX NOT TO EXCEED 150 WHERE TESTED IN ACCORDANCE WITH ASTM E84 OR UL 723. EXCEPTIONS: WHEN SUCH MATERIALS ARE INSTALLED IN CONCEALED SPACES, THE FLAME SPREAD INDEX AND SMOKE-DEVELOPED INDEX LIMITATIONS DO NOT APPLY TO THE FACINGS, PROVIDED THAT THE FACING IS INSTALLED IN SUBSTANTIAL CONTACT WITH UNEXPOSED SURFACE OF THE CEILING, FLOOR OR WALL FINISH (CRC SEC R302.10.1 EXCP) DUCT INSULATION AND INSULATION IN PLENUMS SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT CALIFORNIA MECHANICAL CODE
- BATTS OR BLANKETS OF MINERAL OR GLASS FIBER OTHER APPROVED NON-RIGID MATERIAL SHALL BE PERMITTED FOR COMPLIANCE WITH 10 FOOT HORIZONTAL FIRE BLOCKING IN WALLS CONSTRUCTED USING
- PARALLEL ROWS OF STUDS OR STAGGERED STANCE. (CRC SECTION ARE 302.1 1.1.1) FOR PROJECTS WITHIN CALIFORNIA TO ENERGY EFFICIENCY REQUIREMENTS, INCLUDING BUT NOT LIMITED TO INSULATION "R" VALUES, PERCENTAGE OF GLAZING, GLAZING "U" VALUES, ETC. SHALL BE DETERMINED BY THE CALIFORNIA ENERGY CODE. A PART OF TITLE 24 AND LOCATED IN THE PLANS ON THE ENERGY COMPLIANCE SHEETS(S) (CFI – R). ENERGY CALCULATIONS PREPARED IN ACCORDANCE WITH STATE CODES ARE ALSO
- REQUIRED AS PART OF THE BUILDING DEPARTMENT SUBMITTAL FOR PROJECTS WITHIN CALIFORNIA BUILDER AND INSULATION INSTALLER MUST PROVIDE A CERTIFICATE OF INSULATION AND POST IT IN CONSPICUOUS LOCATION FOR CALIFORNIA STATE ENERGY CODE
- THE ENERGY REQUIREMENTS FOR PROJECTS OUTSIDE OF CALIFORNIA SHALL BE BASED ON MODEL, ENERGY CODE OR INTERNATIONAL ENERGY CONSERVATION CODE. REFER TO LOCAL JURISDICTION. THE FOLLOWING OPENINGS IN THE BUILDING ENVELOPE MUST BE CAULKED SEALED OR WEATHERSTRIP TO
- PROTECT AGAINST COLD AIR, INFILTRATION OR HEAT LOSS: A. EXTERIOR JOINTS AROUND WINDOW AND DOOR FRAMES, BETWEEN WALL PANELS, WALL, WALL SOLE PLATES AND FLOORS
- AND INTERIOR WALLS, CEILINGS AND FLOORS; OPENINGS FOR PLUMBING, ELECTRICAL AND GAS LINES IN EXTERIOR OPENINGS IN THE ATTIC FLOOR, (SUCH AS WERE CEILING, PANELS ME INTERIOR AND EXTERIOR WALLS)
- C. ALL OTHER SUCH OPENINGS IN THE BUILDING ENVELOPE.

ROOFING MATERIALS

- ROOFING MATERIAL SHALL BE CLASS "A" UNLESS OTHERWISE APPROVED BY OWNER / BUILDER THE QUALITY AND DESIGN OF ROOFING MATERIALS AND THEIR FASTENINGS SHALL CONFORM TO THE
- APPLICABLE STANDARDS LISTED IN CRC SECTION R905.3 (FOR CLAY & CONCRETE TILE)
- CLAY OR CONCRETE TILE SHALL COMPLY WITH CRC STANDARD R905.3.5 ALL MATERIAL SHALL BE DELIVERED IN PACKAGES BEARING THE MANUFACTURER'S LABEL OR IDENTIFYING MARK. (CRC SECTION R904.4) COMPOSITION ROOFING SHINGLES SHALL BE OF ASPHALT OR APPROVED RELATED MATERIALS AND MEET THE 8.
- REQUIREMENTS OF CRC SECTION R905.2 ASPHALT SHALL BE DELIVERED IN CARTONS BEARING THE NAME OF THE MANUFACTURER'S IDENTIFYING MARKS AND APPROVED TESTING AGENCY LABELS REQUIRED. BULK SHIPMENTS SHALL BE ACCOMPANIED BY THE SAME INFORMATION ISSUED IN THE FORM OF A CERTIFICATE OR ON A BILL OF LADING BY THE MANUFACTURER (CRC SECTION R904.4)
- ASPHALT SHINGLES SHALL BE FASTENED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS, BUT NOT LESS THAN FOUR FASTENERS PER STRIP SHINGLE OR TWO FASTENERS PER INDIVIDUAL SHINGLE (CRC **SECTION R905.2.6**
- CLAY OR CONCRETE ROOF TILES INSTALLATION SHALL COMPLY WITH THE PROVISIONS OF CRC SECTION R905.3. UNDERLAYMENT SHALL COMPLY WITH SECTION 905.1.1. AND TYPE AND CLASSIFICATION INDICATED ON TABLE R905.1.1(1). UNDER-LAYMENT SHALL BE APPLIED PER TABLE R905.1.1(2) AND ATTACHED PER TABLE 905.1.1(3) 8. TYPE, COLOR, AND PROFILE OF ALL ROOFING TILES SHALL BE APPROVED BY OWNER / /BUILDER AND
- ARCHITECT
- BUILT-UP ROOFING FLY MATERIALS SHALL BEAR THE LABEL OF AN APPROVED AGENCY HAVING A SERVICE FOR THE INSPECTION OF MATERIAL AND FINISHED PRODUCTS DURING MANUFACTURE. (CRC SECTION R904.4) 10. BUILT-UP ROOFING SHALL BE INSTALLED ACCORDING TO SECTION R905.9 AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND (CRC SECTION R905.9.3).

08 -OPENINGS

- SEE OPENING SCHEDULE FOR SIZES AND TYPES OF DOOR AND WINDOWS, AND FOR ANY DIVIDED LITE PATTERNS. COLORS SHALL BE APPROVED BY THE OWNER/BUILDER. EGRESS DOOR SHALL BE SIDE HINGE SWINGING, AND SHALL PROVIDE A CLEAR WIDTH NO LESS THAN 32 INCHES AND SHOULD OPEN DIRECTLY INTO A PUBLIC WAY, OR YARD OR COURT THAT OPENS TO A PUBLIC WAY.
- EXCEPTION: PRIVATE GARAGE AND DOORS WITHIN OR SERVING A SINGLE DWELLING UNIT IN GROUPS R –2 AND 5 R-3.(CRC SECTION R311.) THE DOOR FROM THE GARAGE TO THE HOUSE SHALL BE SOLID WOOD DOORS NO LESS THAN 1 3/8 INCHES AND THICKNESS, SOLID OR HONEYCOMB CORE STEEL. DOORS NO LESS THAN 1 3/8 INCHES THICK OR 20 MINUTES
- FIRE RATED DOORS. EQUIPPED WITH A SELF CLOSING OR AUTOMATIC CLOSING AND SELF LATCHING DEVICE. (CRC SECTION R302.5.1.) PROVIDE SECURITY HARDWARE FOR ALL DOORS AND WINDOWS IN CONFORMANCE WITH ALL STATE AND LOCAL CODE REQUIREMENTS.
- ALL AUTOMATIC GARAGE DOOR OPENERS IF PROVIDED, SHALL BE LISTED IN ACCORDANCE WITH YOU UL325. SEE HEALTH AND SAFETY CODE SECTION 19890 AND 19891 FOR ADDITIONAL PROVISIONS FOR RESIDENTIAL GARAGE DOOR OPENERS.(CRC SECTION R309.4.)
- ALL SLIDING OR SWINGING DOORS AND WINDOWS OPENING TO THE EXTERIOR OR TO UNCONDITIONAL AREA SHALL BE FULLY WEATHER-STRIPPED, GASKETED, OR OTHERWISE TREATED TO LIMIT AIR INFILTRATION. ALL MANUFACTURED WINDOWS AND SLIDING GLASS DOORS SHALL MEET AIR INFILTRATION STANDARDS OF
- THE CURRENT AMERICAN NATIONAL STANDARDS INSTITUTE, ASTM. E283-73 WITH A PRESSURE DIFFERENTIAL OF 1.57 POUNDS PER SQUARE FOOT, AND SHALL BE CERTIFIED AND LABELED ESCAPE OR RESCUE WINDOW SHALL HAVE A NET CLEAR OPENING NOT LESS THAN 5.7 SQUARE FEET. THE NET CLEAR HEIGHT OPENING SHALL NOT BE LESS THAN 24 INCHES AND THE NET CLEAR WITH NO LESS THAN 20
- INCHES. THE NET CLEAR OPENING DIMENSIONS REQUIRED TO BE OBTAINED BY THE NORMAL OPERATION OF THE EMERGENCY ESCAPE AND RESCUE OPENING FROM THE INSIDE THE WINDOW SHALL HAVE THE BOTTOM OF THE CLEAR OPENING NOT GREATER THAN 44 INCHES MEASURED FROM THE FLOOR. (CRC SECTIONS R310.2.1, R310.2.2) BARS, GRILLES, COVERS, SCREENS OR SIMILAR DEVICES ARE PERMITTED TO BE PLACED OVER EMERGENCY
- ESCAPE AND RESCUE OPENINGS, BULKHEAD, ENCLOSURES, OR WINDOW WELLS THAT SERVES SUCH OPENINGS, PROVIDED THE MINIMUM NET CLEAR OPENING SIZE COMPLIES WITH SECTION R310.1.1 AND SUCH DEVICES SHALL BE RELEASABLE OR R310.2.3 REMOVABLE FROM THE INSIDE WITHOUT THE USE OF A KEY. TOOL, SPECIAL KNOWLEDGE, OR FORCE, GREATER THAN THAT WHICH IS REQUIRED FOR NORMAL OPERATION OF THE ESCAPE AND RESCUE OPENING. THE RELEASE MECHANISM FOR NORMAL OPERATION OF THE ESCAPE AND RESCUE OPENINGS. THE RELEASE MECHANISM SHALL BE MAINTAINED OPERABLE AT ALL TIMES. A. SUCH BARS, GRILLS, GRATES, OR ANY SIMILAR DEVICES SHALL BE EQUIPPED WITH AN APPROVED EXTERIOR RELEASE DEVICE FOR USE BY THE FIRE DEPARTMENT ONLY WHEN REQUIRED BY AUTHORITY
 - JURISDICTION WHERE SECURITY BARS, (BURGLAR BARS) ARE INSTALLED ON EMERGENCY EGRESS AND RESCUE WINDOWS OR DOOR SUCH DEVICES SHALL COMPLY WITH CALIFORNIA BUILDING STANDARDS, CODE, PART
- 12. CHAPTER 12–3. AND OTHER APPLICABLE PROVISIONS OF THIS CODE (CRC SECTION R310.4) 10. ALL HABITABLE ROOM, SHALL HAVE AN AGGREGATED GLAZING AREA OF NOT LESS THAN 8 PERCENT OF THE FLOOR AREA OF SUCH ROOMS. NATURAL VENTILATION, SHALL BE THROUGH WINDOWS, DOORS, LOUVERS, OR OTHER APPROVED OPENINGS TO THE OUTDOOR AIR. SUCH OPENING SHALL BE PROVIDED READY ACCESS, OR SHALL OTHERWISE BE READILY CONTROLLED BY THE BUILDING OCCUPANTS. (CRC SEC. R303.1)
- 11. ALL HABITABLE ROOMS MINIMUM OPENABLE AREA TO THE OUTDOOR SHOWER BE 4 PERCENT OF THE FLOOR AREA BEING VENTLESS. (CRC SECTION R303.1.) THE GLAZED AREAS NEED NOT BE OPENABLE WHERE THE OPENINGS IS NOT REQUIRED BY SECTION R310 AND A WHOLE HOUSE MECHANICAL VENTILATION SYSTEM IS INSTALLED IN ACCORDANCE WITH THE CALIFORNIA MECHANICAL CODE CRC SECTION R303.1 EXCEPTION 1. 12. BATHROOMS, WATER CLOSET, COMPARTMENTS, AND OTHER SIMILAR ROOMS BE PROVIDED WITH AGGREGATED GLAZING AREAS IN WINDOWS OF NOT LESS THAN 3 SQUARE FEET ONE-HALF OF WHICH MUST BE
- OPENABLE (CRC SECTION R303.3.) 13. SEE THE MECHANICAL AND PLUMBING SECTION OF THESE NOTES FOR MECHANICAL ALTERNATIVES TO THE NATURAL VENTILATION REQUIREMENTS OF CRC SECTION R303
- <u>GLAZING</u>
- GLAZING SUBJECT TO HUMAN IMPACT SHALL COMPLY WITH CRC SECTION R308
- EXCEPT AS INDICATED IN SECTION R308.1.1 EACH PANE OF GLAZING INSTALLED IN HAZARDOUS LOCATION AS DEFINED IN SECTION R308.4 SHALL BE PROVIDED WITH THE MANUFACTURES DESIGNATION SPECIFYING WHO APPLIED THE DESIGNATION, DESIGNATING THE TYPE OF GLASS, AND THE SAFETY GLAZING^{9.} STANDARD WITH WHICH IT COMPLIES, WHICH IS VISIBLE IN THE FINAL INSTALLATION. THE DESIGNATION TYPE SHALL BE OF A TYPE WHICH ONCE APPLIED CANNOT BE REMOVED WITHOUT BEING DESTROYED. A LABEL SHALL BE PERMITTED IN LIEU OF MANUFACTURES DESIGNATION (CRC SECTION R308.1.)
- THE FOLLOWING SHALL BE CONSIDERED SPECIFIC HAZARDOUS LOCATIONS FOR THE PURPOSES OF GLAZING: A. GLAZING IN FIX AN OPERABLE PANELS OF SWINGING, SLIDING AND BIFOLD DOORS, EXCEPT LOUVERED WINDOWS AND JALOUSIES PER SECTION R308.3 EXCEPTION 1.
- GLAZING IN FIXED, OR OPERABLE PANELS ADJACENT TO A DOOR SHALL BE CONSIDERED HAZARDOUS LOCATION WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE THE FLOOR, OR WALKING SURFACE AND MEETS THE FOLLOWING CONDITIONS: a. GLAZING IS WITHIN 24 INCHES OF EITHER SIDE OF THE DOOR IN THE PLANE OF THE DOOR IN A CLOSED POSITION
- WHERE THE GLAZING IS ON THE WALL LESS THAN 180 DEGREES FROM THE PLANE OF THE DOOR IN A CLOSED POSITION AND WITHIN 24 INCHES OF THE HINGE SIDE OF IN SWINGING DOOR C. GLAZING IN FIXED OR OPERABLE PANEL THAT MEETS ALL CONDITIONS:
- EXPOSED AREA OF AN INDIVIDUAL PANE GREATER THAN 9 SQ. FT.
- EXPOSED BOTTOM EDGE LESS THAN 18 INCHES ABOVE THE FLOOR EXPOSED TOP EDGE, GREATER THAN 36 INCHES ABOVE THE FLOOR
- ONE OR MORE WALKING SERVICES WITHIN 36 INCHES MEASURED HORIZONTALLY AND IN A STRAIGHT LINE OF GLAZING D. GLAZING IN GUARDS AND RAILINGS, INCLUDING STRUCTURAL BALUSTER, PANELS, AND NONSTRUCTURAL
- INFILL PANELS, REGARDLESS OF AREA OR HEIGHT ABOVE A WALKING SURFACE. GLAZING IN WALLS, ENCLOSURES OR FENCES CONTAINING OR FACING HOT TUBS, SPA, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS, SHOWERS INDOORS OR OUTDOOR SWIMMING POOLS WHERE THE
- BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE. GLAZING ADJACENT TO THE STAIRWAYS AND RAMPS WHERE THE BOTTOM EXPOSED EDGE OF THE
- GLAZING IS LESS THAN 36 INCHES ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE OF STAIRWAYS, LANDINGS BETWEEN FLIGHTS OF STAIRS AND RAMPS. G. GLAZING ADJACENT TO THE LANDING AT THE BOTTOM OF THE STAIRWAY WHERE THE GLAZING IS LESS
 - THAN 36 INCHES ABOVE THE LANDING AND WITHIN 60 INCHES HORIZONTAL ARC LESS THAN 180 DEGREES FROM THE BOTTOM TREAD NOSING.

GYPSUM WALLBOARD SHALL BE INSTALLED IN CONFORMANCE WITH THE CURRENT EDITION OF THE CALIFORNIA BUILDING CODE AND ALL STATE AND LOCAL BUILDING CODES. THE MOST STRINGENT

CERAMIC TILE OR OTHER REQUIRED NONABSORBENT FINISH MATERIAL SHALL CONFIRM TO ASTM C1396. C1178, OR C1278. USE OF WATER RESISTANT GYPSUM, BACKING BOARD SHALL BE PERMITTED ON CEILINGS. CUT OR EXPOSED EDGES, INCLUDING THOSE AT WALL INTERSECTIONS SHALL BE SEALED AS

- WEEP SCREED, A MINIMUM 0.019 INCH (NO. 26 GALVANIZED SHEET GAGE) CORROSION RESISTANT WEEP SCREED WITH A MINIMUM VERTICAL ATTACHMENT FLANGE OF 3 1/2 INCHES SHALL BE PROVIDED AT OR BELOW THE FOUNDATION PLATE LINE ON ALL EXTERIOR STUD WALLS IN ACCORDANCE WITH ASTM C926 THE WEEP SCREED SHALL BE PLACED NOT LESS THAN 4 INCHES ABOVE THE EARTH, OR 2 INCHES ABOVE PAVED AREA IS AND SHALL BE OF A TYPE THAT WILL ALLOW TRAPPED WATER TO DRAIN THE EXTERIOR OF THE BUILDING. THE WEATHER RESISTANT BARRIER SHALL LAP THE ATTACHMENT FLANGE. THE EXTERIOR
- PLASTERING WITH PORTLAND CEMENT PLASTER SHALL NOT BE LESS THAN THREE COATS WHEN APPLIED OVER METAL LATH OR WIRE LATH, AND SHALL NOT BE LESS THAN TWO COATS WHEN APPLIED OVER
- ON WOOD FRAME OR STEEL STUD CONSTRUCTION WITH AN ON-GRADE CONCRETE FLOOR SLAB SYSTEM EXTERIOR PLASTER SHALL BE APPLIED TO COVER. BUT NOT EXTEND BELOW, LATH, PAPER, AND SCREED. PAPER THE APPLICATION OF LATH, PAPER AND FLASHING OR DRIP SCREEDS SHALL COMPLY WITH ASTM
- ONLY APPROVED PLASTICITY AGENTS AND APPROVED AMOUNTS THEREOF MAY BE ADDED TO PORTLAND CEMENT. WHEN PLASTIC CEMENT OR MASONRY CEMENT IS USED, NO ADDITIONAL LIME OR PLASTICISER SHALL BE ADDED. HYDRATED LIME, OR THE EQUIVALENT AMOUNT OF LINE PUTTY USED AS PLASTICISER IS PERMITTED TO BE ADDED TO CEMENT, PLASTER OR CEMENT IN LIME PLASTER IN AN AMOUNT NOT TO
- THE PROPORTION OF AGGREGATED TO CEMENTITIOUS MATERIALS FOR BASE COAT OF EXTERIOR PLASTER
- (TYPE IP, I (PM), IS AND I (SM), C847, C897, C926, C1032, C1047, AND C1328, AND SHALL BE INSTALLED OR APPLIED IN CONFORMANCE WITH ASTM C1063. GYPSUM LATH SHALL CONFORMS TO ASTM C1396. PLASTER SHALL NOT BE LESS THAN THREE COATS WHERE APPLIED OVER METAL LATH AND NOT LESS THAN TWO COATS WHERE APPLIED OVER OTHER BASES PERMITTED BY THIS SECTION, EXCEPT THAT VENEER PLASTER

PRIVATE GARAGE SHALL BE SEPARATED FROM THE DWELLING UNIT AND IT 'S ATTIC AREA BY MEANS OF A MINIMUM 1/2 INCH GYPSUM BOARD APPLIED TO THE GARAGE SIDE FOR TABLE R302.6. OPENINGS IN GARAGE

- COPPER OR COPPER ALLOY TUBE FOR WATER PIPING SHALL HAVE WEIGHT, NOT LESS THAN TYPE L. EXCEPTION: TYPE M COPPER OR COPPER ALLOY TUBING SHALL BE PERMITTED TO BE USED FOR WATER PIPING WHERE PIPING IS ABOVEGROUND IN OR ON A BUILDING OR UNDERGROUND OUTSIDE OF STRUCTURES (CPC SECTION 604.3)
- APPROVED PLASTIC MATERIALS SHALL BE PERMITTED TO BE USED IN BUILDING SUPPLY PIPING, PROVIDED THAT WHERE METAL BUILDING SUPPLY PIPING IS USED FOR ELECTRICAL GROUNDING PURPOSES, REPLACEMENT PIPING THERE OF SHALL BE OF LIKE MATERIALS. (CPC SECTION 604.3)
- PIPING PASSING UNDER OR THROUGH WALLS SHALL BE PROTECTED FROM BREAKAGE PIPING, PASSING THROUGH OR UNDER CINDERS OR OTHER CORROSIVE MATERIALS SHALL BE PROTECTED FROM EXTERNAL CORROSION IN ANY APPROVED MATTER. APPROVED PROVISION SHALL BE MADE FOR EXPANSION OF HOT WATER PIPING. VOIDS AROUND CONCRETE FLOORS ON THE GROUND SHALL BE APPROPRIATELY SEALED (CPC SECTION 312.1) PIPING IN CONNECTION WITH PLUMBING SYSTEM SHALL BE INSTALLED SO THAT PIPING OR CONNECTION
- DAMAGE OR IMPERFECTION TO THE PIPE COATING SHALL BE REPAIRED IN AN APPROVED MANNER NO WATER, SOIL, OR WASTE PIPE SHALL BE INSTALLED OR PERMITTED OTHERWISE OF A BUILDING, AN ATTIC OR CRAWL SPACES, OR IN AN EXTERIOR WALL, UNLESS WERE NECESSARY ADEQUATE PROVISION IS 2. MADE TO PROTECT SUCH PIPE FROM FREEZING (CPC SECTION 312.6)
- ALL PIPING PENETRATIONS OF FIRE RESISTANCE RATED WALLS, PARTITIONS, FLOORS, FLOOR/CEILING, ASSEMBLIES, ROOF/CEILING, ASSEMBLIES, OR SHAFT REQUIREMENTS SHALL BE PROTECTED IN ACCORDANCE WITH THE REQUIREMENTS OF CALIFORNIA BUILDING CODE IN CALIFORNIA RESIDENTIAL CODE (CPC SECTION 312.7)
- MATERIALS FOR DRAINAGE PIPING SHALL BE IN ACCORDANCE WITH ONE OF THE REFERENCED STANDARDS IN TABLE 701.2 (CPC SEC 701.2) ABS AND PVC DMV PIPING INSTALLATIONS SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE STANDARD REFERENCED IN TABLE 1701.2 AND THE FIRESTOP PROTECTION REQUIREMENTS IN CALIFORNIA BUILDING CODE.ABS AND PVC INSTALLATIONS ARE LIMITED TO NOT MORE THAN TWO STORIES OF AREAS OF RESIDENTIAL ACCOMMODATION (CPC SECTIONS 701.2(2) AND
- 701.2(2)(A)) MATERIALS FOR DRAINAGE FITTINGS SHALL BE IN ACCORDANCE WITH THE APPLICABLE STANDARDS REFERENCED IN TABLE 701.2 OF THE SAME DIAMETER AS THE PIPING SERVED AND SUCH FITTINGS SHALL BE COMPATIBLE WITH THE TYPE OF PIPE USED. (CPC SECTION 701.3)
- WEAR WAIST LINE DROPS OCCUR IN A LOCATION WHERE THE SOUND OF FLUSH TOILET MAY BE UNDESIRABLE, SUCH AS IN WALLS ARE PARTITIONS ADJACENT TO EATING ROOMS, USE CAST IRON TYPING OR SIMILAR APPROVED, HARD OR DENSE PIPING AND/OR INSULATE STUD BAY IN CLOSING PIPE TO MITIGATE SOUND
- PROVIDE CLEAN OUTS WERE REQUIRED BY THE CALIFORNIA PLUMBING CODE SECTION 707 AND 719 16. ALL GAS PIPING SHALL BE SUPPORTED BY METAL STRAPS OR HOOKS AND INTERVALS NOT EXCEED THOSE SHOWN IN TABLE 1210.2.4.1. (CPC SECTION 313.7)
- 17. SHOWERS AND TUB SHOWERS COMBINATION SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE, THERMOSTATIC, OR COMBINATION PRESSURE, BALANCE/THERMOSTATIC MIXING VALVE TYPE THAT PROVIDE SCALD AND THERMAL SHOCK PROTECTION FOR THE RATED FLOW RATE OF THE INSTALLED SHOWER HEAD. THESE VALVES SHALL BE INSTALLED AT THE POINT OF USE AND COMPLY WITH ASSE 1016/ASME A112.1016/CSA B125.16 OR ASME A112.18.1/CSA B125.1 (CPC SECTION 408.3)
- WATER HEATER LOCATED IN RESIDENTIAL GARAGE AND IN ADJACENT SPACES THAT OPEN IN GARAGE AND ARE NOT PART OF THE LIVING. SPACE OF A DWELLING UNIT SHALL BE INSTALLED SO THAT ALL BURNERS AND BURNER IGNITION DEVICES ARE LOCATED NOT LESS THAN 18 INCHES ABOVE THE FLOOR UNLESS LISTED AS FLAMMABLE VAPOR IGNITION RESISTANT (CPC SEC 507.13) 19. ALL WATER HEATERS INSTALLED IN GARAGES, WAREHOUSES, OR OTHER AREAS SUBJECT TO MECHANICAL
- DAMAGE SHALL BE GUARDED AGAINST SUCH DAMAGE BY BEING INSTALLED BEHIND PROTECTIVE BARRIERS, OR BY BEING ELEVATED OR LOCATED OUT OF THE NORMAL PATH OF VEHICLES. (CPC SEC 307.13.1)
- 20. WHEN A WATER HEATER IS LOCATED IN AN ATTIC IN OR ON AN ATTIC CEILING, ASSEMBLY, FLOOR-CEILING, ASSEMBLY OR FLOOR-SUBFLOOR ASSEMBLY OR DAMAGE MAY RESULT FROM A LEAKING WATER HEATER, A WATER TYPE PAN OF CORROSION RESISTANT MATERIALS SHALL BE INSTALLED BENEATH THE WATER HEATER WITH NOT LESS THAN THREE-QUARTERS (3/4) OF AN INCH DIAMETER DRAIN TO AN APPROVED LOCATION. SUCH PAN SHALL BE NOT LESS THAN 1 1/2 INCH IN DEPTH. (CPC SEC 507.5) WATER HEATER SHALL BE PROVIDED WITH AN APPROVED, LISTED, ADEQUATELY SIZED COMBINATION,
- TEMPERATURE AND PRESSURE RELIEF VALVE, INSTALLED PER MANUFACTURER'S INSTRUCTION, AND SHALL BE PROVIDED WITH A DRAIN TO THE OUTSIDE OF THE BUILDING AS REQUIRED ON SECTION 608.5. (CPC SECTION 608.3)
- NO DOMETIC DISHWASHING MACHINE SHALL BE DIRECTLY CONNECTED TO DRAINAGE SYSTEM OR FOOD WASTE DISPOSER WITHOUT THE USE OF AN APPROVED DISHWASHER AIR GAP FITTING ON A DISHCHARGE SIDE OF DISHWASHING MACHINE. LISTED AIR GAPS SHALL BE INSTALLED WITH THE FLOOD LEVEL (FL) MARKING AT OR ABOVE THE FLOOD LEVEL OF THE SINK OR DRA AIR GAPS SHALL BE INSTALLED WITH THE FLOOD LEVEL MARQUEE AT OR ABOVE THE FLOOD LEVEL OF THE SINK OR DRAIN BOARD WHICHEVER IS HIGHER. (CPC SECTION 807.3)
- 23. THE MINIMUM CAPACITY FOR WATER HEATERS SHALL BE IN ACCORDANCE WITH THE FIRST HOUR RATING LISTED IN TABLE 501.1(2) OF THE 2022 CPC

2 to 2.5

2 3 4 5

49 62 62 74

3 to 3.5

62 74 74 74

D

3 4 5

TABLE 501.1(2) FIRST HOUR RATING¹

- Number of Bathrooms
- Number of Bedrooms First Hour Rating,² Gallons
- 1 The first-hour rating is found on the "Energy Guide" label.

1 to 1.5

38 49 49

1 2 3

- Solar water heaters shall be sized to meet the appropriate first-hour rating as shown in the table. LAVATORY FAUCETS SHALL BE DESIGNED AND MANUFACTURES SO THAT THEY WILL NOT EXCEED A WATER FLOW RATE OF 1.2 GALLONS PER MINUTE AT 60 PSI. THE MINIMUM FLOW RATE OF RESIDENTIAL LAVATORY FAUCETS SHALL NOT BE LESS THAN 0.8 GALLONS PER MINUTE AT 20 PSI.(CPC SECTION 407.2.2) FAUCETS FOR KITCHEN, WET BARS, LAUNDRY SINK OR OTHER SIMILAR USE FIXTURES SHALL BE DESIGNED AND MANUFACTURED SO THAT THEY SHALL NOT EXCEED MAXIMUM FLOW RATE OF 1.8 GALLONS PER
- MINUTE AT 60 PSI. KITCHEN FAUCET MY TEMPORARY INCREASE THE FLOW ABOVE THE MAXIMUM RATE. BUT NOT EXCEED 2.2 GALLONS PER MINUTE AT 60 PSI AND MUST DEFAULT TO A MAXIMUM FLOW RATE OF .8 GALLONS PER MINUTE AT 60 PSI (CPC SECTION 420.2.2). SHOWERHEADS DESIGNED AND MANUFACTURED SHALL HAVE A MAXIMUM WATER SUPPLY FLOW RATE OF
- B GALLONS PER MINUTE AT 80 PSI AND MUST COMPLY WITH DIVISION 4.3 OF CALGREEN (CPC SEC 408.2). WHERE LOCAL STATIC WATER PRESSURE IN THE WATER SUPPLY PIPING IS EXCEEDED 80 PSI AND APPROVED TYPE PRESSURE REGULATOR PRECEDED BY AN ADEQUATE STRAINER SHALL BE INSTALLED AND THE STATIC PRESSURE REDUCED TO 80 PSI OR LESS. PRESSURE REGULATOR(S) IS EQUAL TO OR EXCEEDING 1 1/2 INCHES SHALL NOT REQUIRE A STRAINER. SUCH REGULATORS SHALL CONTROL THE
- PRESSURE TO WATER OUTLET IN BUILDING, UNLESS OTHERWISE APPROVED BY AUTHORITY HAVING JURISDICTION. EACH SEARCH REGULATOR STRAINER SHALL BE ACCESSIBLY LOCATED ABOVE GROUND AND SHALL HAVE THE STRAINER READILY ACCESSIBLE FOR CLEANING WITHOUT REMOVING THE REGULATOR OR STRAINER BODY OR DISCONNECTING THE SUPPLY PIPING. PIPE SIZE DETERMINATION SHALL BE BASED ON 80 PERCENT OF THE REDUCED PRESSURE WHEN USING TABLE 610.4. (CPC SECTION

23 -HEATING VENTILATING & AIR CONDITIONING

- 1. ALL MATERIALS AND CONSTRUCTION METHODS SHALL BE IN CONFORMANCE WITH THE 2022 EDITION OF THE CALIFORNIA MECHANICAL CODE
- ALL EQUIPMENT INSTALLED IN THIS PROJECT SHALL BE IN COMPLIANCE WITH THE STANDARDS LISTED IN THE CALIFORNIA MECHANICAL CODE CONTRACTORS OF DESIGN ENTIRE HVAC SYSTEM AND SUBMIT DRAWINGS FOR OWNER / BUILDERS
- APPROVAL PRIOR TO ORDERING MATERIALS OR EQUIPMENT WHERE AIR CONDITIONING IS AN OPTIONAL FEATURE, HEATING SYSTEMS MUST BE DESIRED AND DUCT
- WORK SIZED TO ACCOMMODATE FUTURE AIR CONDITIONING NEEDS. ANCHORAGE OF APPLIANCES DESIGNED TO BE FIXED IN THE POSITION SHALL BE SECURELY FASTENED IN PLACE ACCORDANCE WITH THE MANUFACTURES INSTALLATION INSTRUCTIONS. SUPPORT FOR
- APPLIANCES SHALL BE DESIGNED AND CONSTRUCTED TO SUSTAIN VERTICAL AND HORIZONTAL LOAD WITH THE STRESS LIMITATION SPECIFIED IN THE BUILDING CODE (CMC SECTION 303.4.) COMBUSTION AIR SHALL BE PROVIDED FOR FORCED AIR UNITS IN ACCORDANCE WITH CHAPTER 7 OF THE
- CALIFORNIA MECHANICAL CODE ALL DUCTWORK SHALL CONFORM TO THE REQUIREMENTS OF CHAPTER 6 OF THE CALIFORNIA MECHANICAL CODE.
- CONTRACTOR TO PROVIDE BOOT IN DUCTWORK WHEN OPTIONAL "HONEYWELL" OR "CARRIER" ELECTRONIC AIR CLEANER IS PROVIDED.
- 9. DUCTS IN THE GARAGE AND DUCTS PENETRATING THE WALLS OR CEILINGS SEPARATING THE DWELLING UNIT FROM THE GARAGE SHALL BE CONSTRUCTED OF MINIMUM NO.26 GAUGE SHEET STEEL OR OTHER APPROVED MATERIAL AND SHALL HAVE NO OPENINGS INTO THE GARAGE (CRC SECTION R302.5.2) 10. EXHAUST DUCTS SHALL TERMINATE OUTSIDE THE BUILDING AND SHALL BE EQUIPPED WITH BACKDRAFT
- DAMPERS OR WITH MOTORIZED DAMPER THAT AUTOMATICALLY SHUT WHERE THE SYSTEM OR SPACES

14. DOMESTIC CLOTHES DRYER EXHAUST DUCTS, SHALL BE OF RIGID METAL AND SHALL HAVE SMOOTH INTERIOR SURFACES. THE DIAMETER SHALL BE NOT LESS THAN 4 INCHES NOMINAL AND THE THICKNESS SHALL BE NOT LESS THAN 0.016 OF AN INCH (CMC SECTION 504.4.2.) LISTED CLOTHES DRYER TRANSITION DUCTS NOT MORE THAN 6 FEET IN LENGTH SHALL BE PERMITTED TO BE USED TO CONNECT TYPE 1 DRYER TO EXHAUST DUCTS. TRANSITION DUCTS AND FLEXIBLE CLOTHES DRYER, TRANSITION DUCTS SHALL NOT BE CONCEALED WITHIN CONSTRUCTION AND SHALL BE NSTALLED PER MANUFACTURERS INSTRUCTIONS (C.M.C. SECTION 504.4.2.2).

15. CLOTHES DRYER EXHAUST DUCT SHALL TERMINATE OUTSIDE THE BUILDING IN ACCORDANCE WITH SECTION 502.2.1 NOT LESS THAN 3 FEET FROM THE PROPERTY LINE, 10 FEET FROM A FORCED AIR INLET, AND 3 FEET FROM OPENING OF BUILDING ASND SHALL BE EQUIPPED WITH A BACKDRAFT DAMPER. SCREEN SHALL NOT BE INSTALLED AT THE DUCKS TERMINATION. (CMC SECTION 504.4)

UNLESS OTHERWISE PERMITTED OR REQUIRED BY THE DRYER MANUFACTURE'S INSTRUCTION AND APPROVED BY THE AUTHORITY HAVING JURISDICTION, DOMESTIC DRYER MOISTURE EXHAUST DUCTS SHALL NOT EXCEED A TOTAL COMBINED HORIZONTAL AND VERTICAL LENGTH OF 14 FEET, INCLUDING TWO 90 DEGREE ELBOWS. A LENGTH OF 2 FEET SHALL BE DEDUCTED FOR EACH 90 DEGREE ELBOWS IN EXCESS OF TWO. (CMC SECTION 504.4.2.1)

WHEN A CLOSET IS DESIGNED FOR THE INSTALLATION OF CLOTHES DRYER, AN OPENING OF NOT LESS THAN 100 SQUARE INCHES FOR MAKE UP AIR SHALL BE PROVIDED IN THE DOOR OR BY OTHER APPROVED MEANS (CMC 22 SECTION 504.4.1(1))

DOMESTIC WATER HEATERS UNLESS SPECIFIED OTHERWISE BY THE MANUFACTURES INSTALLATION INSTRUCTION, SHALL BE VENTED TO THE OUTSIDE AIR BY A TYPE "B" (CMC 802.2) WHEN USING A TYPE "B" VENT TO USE A STRAIGHT PIPE BETWEEN THE OUTSIDE TERMINATION POINT AND THE AND THE SPACE WHERE THE WATER HEATER IS INSTALLED (CEC 150.0 (N)IB)

19. TYPE "B" SHALL COMPLY WITH THE REQUIREMENTS FOR GRAVITY, VENTING IN THE CMC SECTION 802.6.3. 20. TYPE "B" EVENTS SHALL TERMINATE IN ACCORDANCE WITH CMC SECTION 802.6 AND CMC FIGURE 802.6.1.

<u>26 -ELECTRICAL</u>

1. ALL MATERIALS AND APPLIANCES, INSTALLATION AND CONSTRUCTION METHODS SHALL COMPLY WITH THE CURRENT CALIFORNIA ELECTRICAL CODE ALL ELECTRICAL SYSTEMS, CIRCUITS FIXTURES, AND EQUIPMENT SHALL BE GROUNDED IN A MANNER

COMPLYING WITH ARTICLE 250 OF THE CALIFORNIA ELECTORAL CODE ALL WIRING SHALL BE INSTALLED THAT, WHEN COMPLETED, THE SYSTEM WILL BE FREE FROM SHORT CIRCUIT AND FROM GROUND FAULT, OR ANY CONNECTIONS TO GROUND OTHER THAN REQUIRED OR PERMITTED ON CEC ARTICLE 250 (CEC ARTICLE 110.7)

ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN NEAT AND WORKMANLIKE MANNER (CEC ARTICLE 110.12) RECEPTACLE OUTLET SHALL BE LOCATED IN BRANCH CIRCUIT IN ACCORDANCE WITH PART III OF ARTICLE 210. (CEC ARTICLE 210.4 (A)) WHERE CONNECTED TO A BRANCH CIRCUIT SUPPLYING TWO OR MORE RECEPTACLES OR OUTLETS.

A RECEPTACLE SHALL NOT SUPPLY A TOTAL CORD-AND-PLUG-CONNECTED LOAD IN EXCESS OF THE MAXIMUM SPECIFIED IN TABLE 210.21(B)2. RECEPTACLE RATINGS SHALL CONFORM TO THE VALUES IN TABLE 210.21(B)3, OR WHERE LARGER THAN 50 AMPERES, THE RECEPTACLE RATING SHALL NOT BE LESS THAN BRANCH-CIRCUIT RATINGS. (CEC ARTICLE 210.21(B) RECEPTACLES (2) AND (3)

ALL 125-VOLT, SINGLE-PHASE, 15- AND 20-AMPERE RECEPTACLES INSTALLED IN THE LOCATIONS SPECIFIED BELOW SHALL HAVE GROUND FAULT CIRCUITS-INTERRUPTER PROTECTION FOR PERSONNEL. a. **BATHROOMS**

GARAGES OUTDOORS

CRAWLSPACES WHERE THE CRAWLSPACE IS AT OR BELOW GRADE LEVEL UNFINISHED PORTIONS OR AREAS OF THE BASEMENT NOT INTENDED AS HABITABLE ROOMS KITCHENS. WHERE THE RECEPTACLES ARE INSTALLED TO SERVE THE COUNTERTOP SERVICES SINKS. WHERE THE RECEPTACLES ARE INSTALLED WITHIN 6 FEET FROM THE TOP INSIDE EDGE OF THE

BOWL OF THE SINK BATHTUB OR SHOWER STALLS, WHERE THE RECEPTACLES ARE INSTALLED WITHIN 6 FEET OF THE OUTSIDE EDGE OF THE BATHTUB OR SHOWER STALLS LAUNDRY AREAS

APPLIANCES RECEPTACLE OUTLETS INSTALLED IN A DWELLING UNIT FOR SPECIFICS OF APPLIANCES, SUCH AS LAUNDRY EQUIPMENT, SHALL BE INSTALLED WITHIN 6 FEET OF THE INTENDED LOCATION OF THE APPLIANCE (CEC ARTICLE 210-50 (C))

IN EVERY KITCHEN, FAMILY ROOM, DINING ROOM, LIVING ROOM, PARLOR, LIBRARY, DEN, SUNROOM, BEDROOM, RECREATION ROOM, OR SIMILAR ROOM OR AREA OF DWELLING UNITS, RECEPTACLE OUTLET SHALL BE INSTALLED SUCH THAT NO POINT MEASURED HORIZONTALLY ALONG THE FLOOR LINE IN ANY WALL SPACE IS MORE THAN 6 FEET FROM A RECEPTACLE OUTLETS. WALL SPACE 2 FEET OR MORE IN WIDTH AND WALL SPACE (INCLUDING SPACE MEASURED AROUND CORNERS) AND UNBROKEN ALONG THE FLOOR LINE BY DOORWAYS, AND SIMILAR OPENINGS, FIREPLACE AND FIXED CABINETS THAT DO NOT HAVE COUNTERTOPS OR SIMILAR WORK SURFACES. THE SPACE OCCUPIED BY FIXED PANELS IN WALLS EXCLUDING SLIDING PANELS. THE SPACE AFFORDED BY FIXED ROOM DIVIDERS. SUCH AS FREESTANDING

BAR-TYPE COUNTERS OR RAILINGS (CEC ARTICLE 210.52(A)) 10. IN THE KITCHENS, PANTRY, BREAKFAST ROOM, DINING ROOM, OR SIMILAR AREAS OF DWELLING UNIT, THE TWO OR MORE 20-AMPERE OR SMALL APPLIANCE BRANCH CIRCUITS REQUIRED BY ARTICLE 210.11(C)(I) SHALL SERVE ALL WALL AND FLOOR RECEPTACLE OUTLETS COVERED BY 210.52 (A), ALL COUNTERTOP OUTLETS COVERED BY 210.5(C) AND RECEPTACLE OUTLETS FOR REFRIGERATION EQUIPMENT (CEC ARTICLES 210.52 (B)(I)

11. AT LEAST ONE ADDITIONAL 20 AMPERE BRANCH CIRCUIT SHALL BE PROVIDED TO SUPPLY THE LAUNDRY RECEPTACLE OUTLET(S) REQUIRED BY ART 210-52 (F). THIS CIRCUIT SHALL HAVE NO OTHER OUTLETS. (CEC ART 210.11(C)(2))

12. IN KITCHENS, PANTRIES, BREAKFAST ROOM, DINING ROOMS AND SIMILAR AREAS OF DWELLING UNITS, RECEPTACLE OUTLETS FOR COUNTERTOPS AND WORK SURFACES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING:

RECEPTACLE OUTLET SHALL BE INSTALLED AT EACH WALL COUNTERTOP AND WORK SURFACE THAT IS 2 INCHES OR WIDER. RECEPTACLE OUTLET SHALL BE INSTALLED SO THAT NO POINT ALONG THE WALL LINE IS MORE THAN 24 INCHES MEASURED HORIZONTALLY FROM A RECEPTACLE OUTLET IN THAT SPACE. EXCEPTION: RECEPTACLE OUTLET SHOULD NOT BE REQUIRED ON THE WALL DIRECTLY BEHIND A RANGE, COUNTER-MOUNTED COOKING UNIT, OR SINK IN THE INSULATION. DESCRIBE IN FIGURE 210.52(C)(I)

AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED AT EACH ISLAND COUNTERTOP SPACE WITH LONG DIMENSION OF 24 INCHES OR GREATER AND A SHORT DIMENSION OF 12 INCHES OR GREATER. AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED AT EACH PENINSULAR COUNTERTOP LONG DIMENSION SPACE WITH THE LONG DIMENSION OF 24 INCHES OR GRADER AND A SHORT DIMENSION OF 12 INCHES OR GREATER, A PENINSULA COUNTERTOP IS MEASURED FROM CONNECTED PERPENDICULAR WALL

COUNTERTOP SPACES, SEPARATED BY RAIN STOPS, REFRIGERATORS, OR SING, SHALL BE CONSIDERED SEPARATE COUNTERTOP SPACE IN APPLYING THE REQUIREMENTS OF ARTICLE, 210.52. RECEPTACLE OUTLETS SHALL BE LOCATED ON OR ABOVE NOT MORE THAN 20 INCHES ABOVE THE COUNTERTOP OR WORK SURFACE. RECEPTACLE OUTLETS, ASSEMBLIES LISTED FOR USE IN COUNTERTOPS OR WORK SURFACES SHALL BE PERMITTED TO BE INSTALLED IN COUNTERTOPS OR WORK SURFACES. RECEPTACLE OUTLETS RENDERED NOT READILY ACCESSIBLE BY APPLIANCES FASTENED IN PLACE, APPLIANCES, GARAGES, SINKS, OR RANGE TOP AS COVERED IN ART 210.52 (C) (I). EXCEPTION, OR APPLIANCES OCCUPYING DEDICATED SPACE SHALL NOT BE CONSIDERED AS REQUIRED OUTLETS. (CEC ARTICLE 210-52 (C) (I) THROUGH (50 SEE ARTICLE FOR EXCEPTION(S)

AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED IN BATHROOMS WITHIN 3-FEET OF THE OUTSIDE EDGE OF EACH BASIN. RECEPTACLE OUTLET SHALL BE LOCATED ON A WALL OR PARTITION THAT IS ADJACENT TO THE BASIN OR BASIN COUNTERTOP. LOCATED ON THE COUNTERTOP, OR INSTALLED ON THE SIDE OR FACE OF THE BASIN CABINET. IN NO CASE SHALL THE RECEPTACLE BE LOCATED MORE THAN 12 INCHES BELOW THE TOP OF THE BASIN OR BASIN COUNTERTOP. AT LEAST ONE 120-VOLT, 20-AMPERE BRANCH CIRCUIT SHALL BE PROVIDED TO SUPPLY THE BATHROOM(S) RECEPTACLE OUTLET(S). SUCH CIRCUIT SHALL HAVE NO OTHER OUTLETS. (CEC ARTICLES 210.52(D) & 210.11 (C) (3))

ARC-FAULT CIRCUIT-INTERRUPTER PROTECTION SHALL BE PROVIDED AS REQUIRED SHALL BE INSTALLED IN READILY ACCESSIBLE LOCATIONS. ALL 120-VOLT, SINGLE PHASE, 15- AND 20- AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS OR DEVICES INSTALLED IN DWELLING UNIT KITCHENS, FAMILY, SUN-ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS, OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY ANY OF THE MEANS DESCRIBED IN CEC ARTICLE 210.12 (A) (1) THROUGH (6). (CEC ARTICLE 210.12 (A)). AT LEAST ONE ADDITIONAL 20-AMPERE BRANCH CIRCUIT SHALL BE INSTALLED TO SUPPLY RECEPTACLE

OUTLETS IN ATTACHED GARAGES AND IN DETACHED GARAGES WITH ELECTRICAL POWER. THIS CIRCUIT SHALL HAVE NO OTHER OUTLETS. THIS CIRCUIT SHALL BE PERMITTED TO SUPPLY READILY ACCESSIBLE OUTDOOR RECEPTACLE OUTLETS (CEC ART 210.11 (C) (4)) EACH OUTLET INSTALLED FOR THE PURPOSE OF CHARGING ELECTRIC VEHICLES SHALL BE SUPPLIED BY AN

INDIVIDUAL BRANCH CIRCUIT. EACH CIRCUIT SHALL HAVE NO OTHER OUTLETS (CEC ARTICLE 625.40). ALL CONDUCTORS CLOSER THAN 1 ¼ INCH TO THE EDGE OF FRAMING MEMBERS SHALL BE PROTECTED WITH A STEEL PLATE AT LEAST 1/16 INCH THICKNESS. (CEC ARTICLE 330.17 & 300.4 (A). ALL LIGHT FIXTURES INSTALLED IN WET OR DAMP LOCATIONS SHALL MEET THE REQUIREMENTS OF CEC

ARTICLE 410.10 (A). 19. LIGHT FIXTURES WITHIN CLOTHES SHALL BE INSTALLED IN ACCORDANCE WITH CEC ARTICLE 410.16

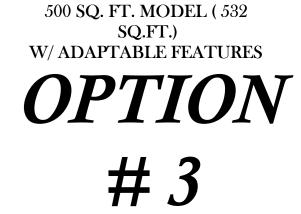
MISCELLANEOUS

COMPLY WITH THE ENTIRE GENERAL REQUIREMENTS AS APPLICABLE FOR THE PROJECT, UNLESS MORE RESTRICTIVE REQUIREMENTS ARE SPECIFIED ON THE PLANS.

GARAGES SHALL HAVE NO OPENINGS INTO ROOMS FOR SLEEPING PURPOSES (CRC SEC R302.5.1) WATER CLOSET SHALL NOT BE SET CLOSER THAN 15 INCHES FROM ITS CENTER TO A SIDE WALL OR OBSTRUCTION NOR CLOSER THAN 30 INCHES CENTER TO CENTER TO A SIMILAR FIXTURE. THE CLEAR SPACE IN FRONT OF A WATER CLOSET SHALL BE NOT LESS THAN 24 INCHES (CPC SECTION 402.5) GUARDRAILS SHALL BE IN CONFORMANCE WITH SECTION R312 OF THE CALIFORNIA RESIDENTIAL CODE . GUARDS ON THE OPEN SIDE OF THE STAIRS SHALL NOT HAVE OPENINGS WHICH ALLOW PASSAGE OF SPHERE 4 % INCHES IN DIAMETER (CRC SECTION R312.1.3 EXCEPTION 2). THE TRIANGULAR OPENINGS AT THE OPEN SIDE OF THE STAIR, FORMED BY THE RISER, TREAD, AND BOTTOM

RAIL OF A GUARD, SHALL NOT ALLOW PASSAGE OF A SPHERE 6 INCHES IN DIAMETER. (CRC SECTION R312.1.3 EXCEPTION 1). HANDRAILS SHALL BE IN CONFORMANCE WITH SECTION R311.7.8 OF THE CALIFORNIA RESIDENTIAL CODE

BUILDINGS SHALL BE PROVIDED WITH APPROVED ADDRESS IDENTIFICATION. THE ADDRESS IDENTIFICATION SHALL BE LEGIBLE AND PLACED IN A POSITION THAT IS VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY, ADDRESS IDENTIFICATION CHARACTERS SHALL CONTRAST WITH THEIR BACKGROUND, ADDRESS NUMBERS SHALL BE ARABIC NUMBERS OR ALPHABETICAL LETTERS. NUMBERS SHALL NOT BE SPELLED OUT EACH CHARACTER SHALL BE NOT LESS THAN 4 INCHES (102 MM) IN HEIGHT WITH A STROKE WIDTH OF NOT LESS THAN 0.5 INCH (12.7 MM) OF A CONTRASTING TO THE BACKGROUND (CRC SECTION 319.1) ROOF GUTTERS SHALL BE PROVIDED WITH THE MEANS TO PREVENT THE ACCUMULATION OF LEAVES AND DEBRIS IN THE GUTTER (CRC SECTION R337.5.4)



ACCESSORY DWELLING UNIT

PWP23-003

PROJECT

DEPARTMENT OF PUBLIC WORKS AND PLANNING



CAPITAL PROJECTS DIVISION

2220 Tulare St., Ste. 720, Fresno, CA. 93721 Phone: (559) 262-4212 Fax: (559) 262-4879



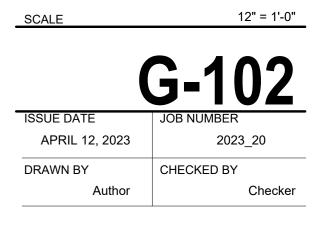
UPDATE

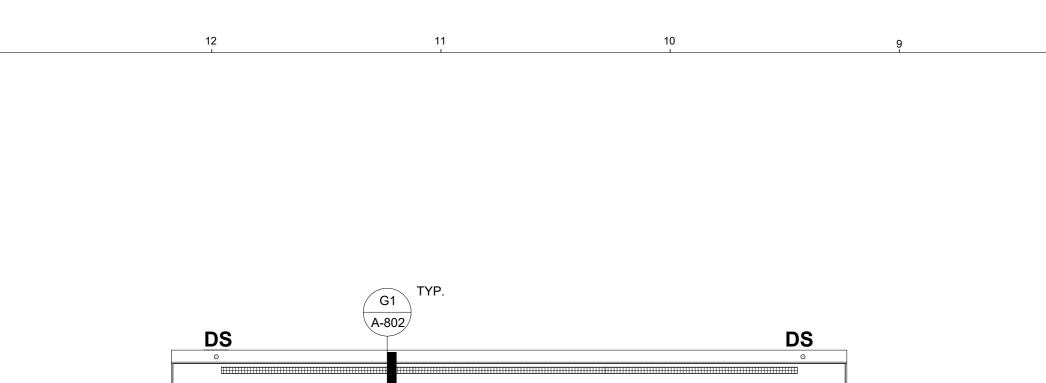
JULY 10, 2023

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE ARCHITECT AND SHALL NOT BE USED ON ANY OTHER PROJECT OR LOCATIONS EXCEPT AS DESCRIBED ON

THE DRAWINGS WITHOUT WRITTEN AGREEMENT WITH THE ARCHITECT

GENERAL NOTES





V = 15'

4" / 1' - 0"

4" / 1' - 0"



INSTALL SOLAR PV SO THAT THE AZIMUTH SHALL BE BETWEEN 90 DEGREES AND 300 DEGREES OF TRUE NORTH

DS

ATTIC VENTILATION CALCULATION

532 SF / 150 = 3.54 SQ. FT. = 510.72 SQ. IN.

510.72 SQ. IN. @ 50% UPPER AND LOWER NFVA = 255.36 SQ. IN.

RIDGE VENT:

USE OMNI RIDGE PRO VENT (PRO4-N) MANUFACTURER'S DATA: NFVA = 18 SQ. IN. / L.F.

255.36 SQ.IN.-L.F. / 18 SQ. IN.

= 14.18 L.F. (REQUIRED)

<u>PROVIDE = 15 L.F.</u> <u>= 270 NFVA</u>

SOFFIT VENT:

LOMANCO MODEL 105 CONTINUOUS VINYL SOFFIT VENT MANUFACTURER'S SIZE = 2.75" X 8' N.F.V. = 72 SQ. IN. / 8' FT. 9 SQ.IN./L.F.

REQUIRED: 255.36 IN² - LF / 9 IN² = 28.37 L.F.

PROVIDE: (4) 2.75" X 8' = 32 L.F.@ 9 SQ.IN./L.F. <u>= 288 NFVA</u>

V =

- NOTES: AIR SPACE REQUIRED FOR VENTILATION IS ≥ 1" BETWEEN
- THE INSULATION AND THE ROOF SHEATING. PROVIDE VAPOR RETARDER WITH A TRANSMISSION RATE
- $OF \leq 1 PERM$ PLACE RETARDER ON WARM SIDE OF THE ATTIC
- INSULATION. PROVIDE 1/4" MESH AT ALL VENTS, INCLUDING 4
- CONTINUOUS VENTS.

ROOF PLAN LEGEND

 ROOF VENT. SEE ATTIC VENTILATION CALCULATION FOR ADDITIONAL INFORMATION
INLET BALANCING VENT. SEE ATTIC VENTILATION CALCULATION FOR ADDITIONAL INFORMATION.

12

2" x 3" POWDER COATED - 24GA. DS DOWNSPOUT w/ STRAP @ 60" O.C. MAX.

PROPOSED SOLAR ZONE AREA ~~~~~ 264 SQ.FT. POTENTIAL SOLAR ZONE AREA. 264

SQ.FT. ROOF AREA @ 15% = 39.6 PROVIDE MINIMUM 250 SQ.FT. SOLAR ZONE AREA FOR FUTURE SOLAR INSTALLATION

ROOF PLAN GENERAL NOTES

1. Azimuth range. All sections of the solar zone located on steep-sloped roofs shall have an azimuth range between 90 degrees and 300 degrees of true north. Shading

No obstructions, including but not limited to, vents, chimneys, architectural features and roof mounted equipment, shall be located in the solar zone. Any obstruction, located on the roof or any other part of the building that projects above a solar zone shall be located at least twice the distance, measured in the

° DS

′ G1 `

A-802

horizontal plane, of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane.

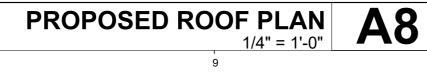
Exception to Section 110.10(b)3: Any roof obstruction, located on the roof or any other part of the building, that is oriented north of all points on the solar zone.

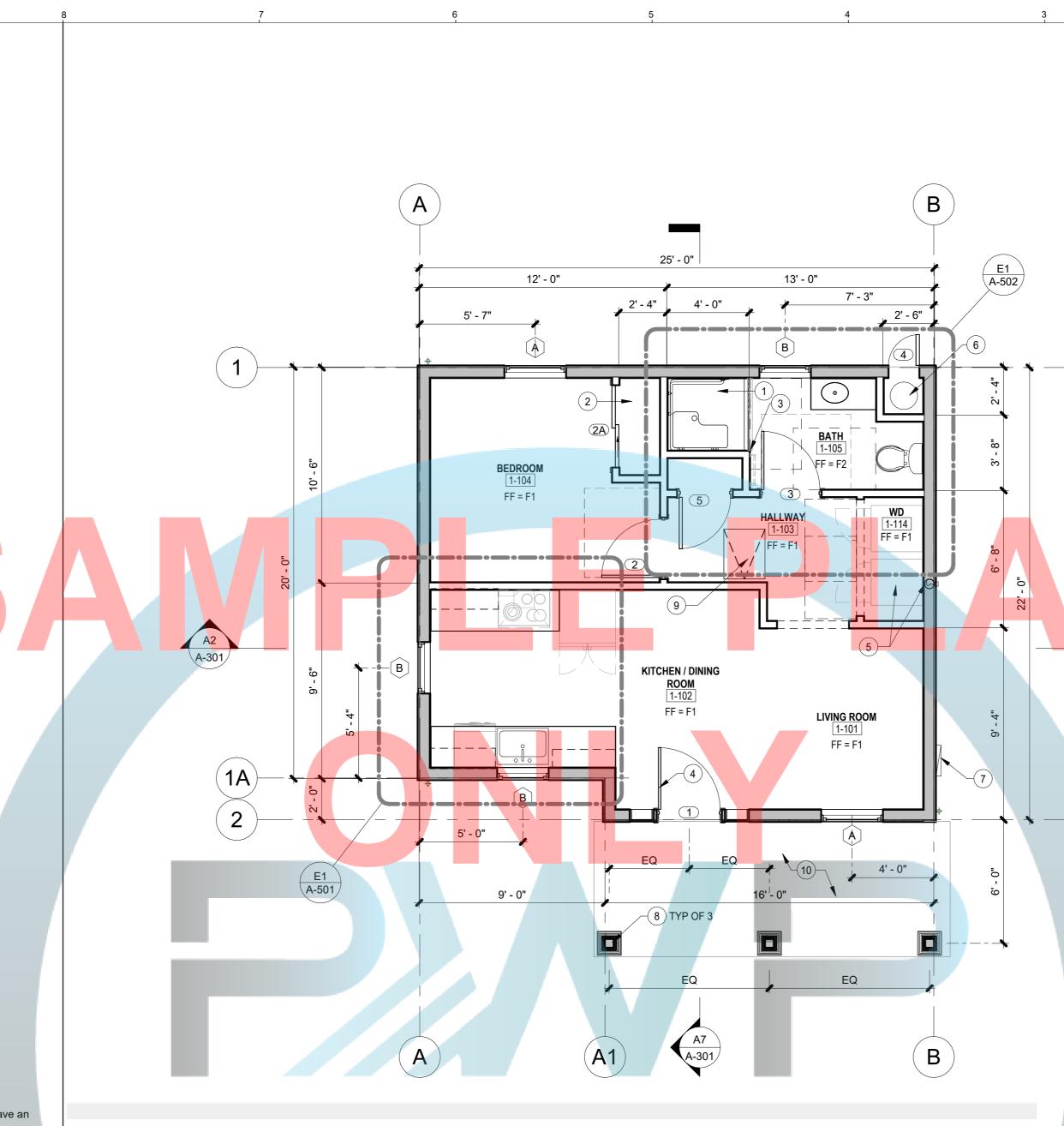
Structural design loads on construction documents. For areas of the roof designated as solar zone, the structural design loads for roof dead load and roof live load shall be clearly indicated on the construction documents.

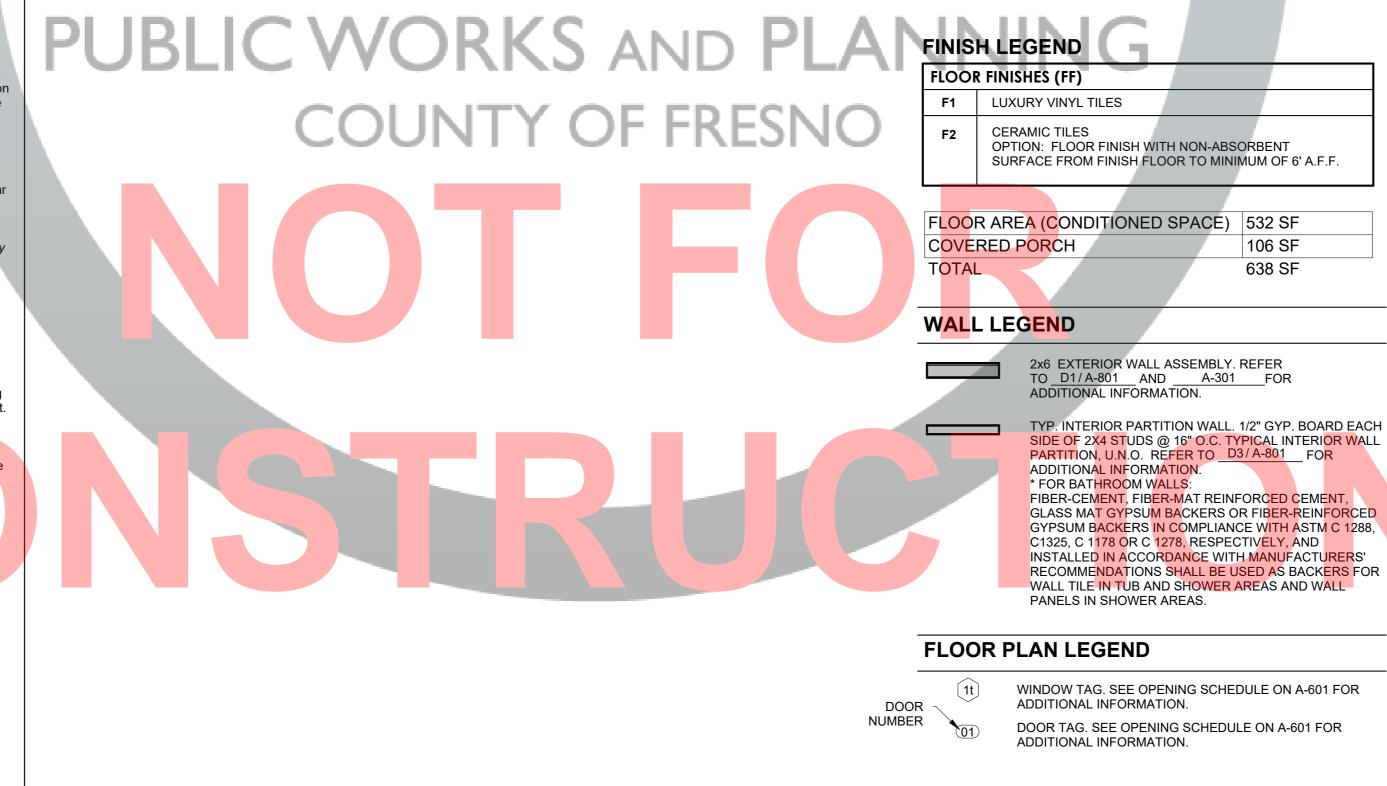
Note: Section 110.10(b)4 does not require the inclusion of any collateral loads for future solar energy systems.

Interconnection pathways.

- The construction documents shall indicate a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service.
- For single-family residences and central water-heating systems, the construction documents shall indicate a pathway for routing of plumbing from the solar zone to the water-heating system.
- Documentation. A copy of the construction documents or a comparable document indicating 5. the information from Sections 110.10(b) through 110.10(c) shall be provided to the occupant. Main electrical service panel.
- The main electrical service panel shall have a minimum busbar rating of 200 amps. The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space shall be permanently marked as "For Future Solar Electric".
- 7. Solar zone. Minimum solar zone area. The solar <mark>zone s</mark>hall have a minimum total area as Α. described below. The solar zone shall comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other Parts of Title 24 or in any requirements adopted by a local jurisdiction. The solar zone total area shall be comprised of areas that have no dimension less than five feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas greater than 10,000 square feet.
 - A. Single-family residences. The solar zone shall be located on the roof or overhang of the building and have a total area no less than 250 square feet.









- ADAPTABLE ROLL-IN SHOWER. MAINTAIN A 2% MAXIMUM SLOPE IN ALL DIRECTIONS. TYPICAL ON ALL SHOWER AND BATHROOMS. REFER TOA6/A-502 FOR ADDITIONAL INFORMATION. BUILT-IN CLOSET/DRAWERS WITH CLOTHES ROD. PROVIDE 50% OF STORAGE AT 48" HIGH MAX. FROM FINISH FLOOR.
- ALIGN WITH EDGE OF WALL FOR A SMOOTH AND FLUSHED FINISHED. PROVIDE PEEP HOLE OR VISION PANEL AT 1 PEEPHOLE AT 43" MAX. (OPTIONS PEEPHOLE @ MAX. 60" O.C. AFF). PROVIDE STEEL
- PLATE AT THE DEAD BOLT STRIKER. SOLID SHIM 6" ABOVE & BELOW WITH 2/8 BY 2" SCREWS. WASHING MACHINES AND CLOTHES DRYERS. DRYER SHALL HAVE
- 4" VENT DUCT TO EXTERIOR WITH MAXIMUM RUN OF 14' INCLUDING 2-90° ELBOWS. TWO FEET SHALL BE DEDUCTED FOR EACH 90 DEGREE ELBOW IN EXCESS OF TWO. NOTE: WASHING MACHINES AND CLOTHES DRYERS SHALL BE FRONT LOADING. THE BOTTOM OF THE OPENING TO THE LAUNDRY COMPARTMENT SHALL BE LOCATED 15 INCHES
- MINIMUM AND 36 INCHES MAXIMUM ABOVE THE FINISH FLOOR. 2022 CBC 1127A.10.4. REFER TO <u>E5/A-804</u> FOR ADDITIONAL INFORMATION. 40 GAL. HEAT PUMP WATER HEATER (MINIMUM OF 3.1 UEF PER
- TITLE 24). INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. NEW SERVICE PANEL. COORDINATE WITH POWER AND GAS
- COMPANY PROVIDER PRIOR TO COMMENCING WORK. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION. POST WITH OPTIONAL 2X POST WRAP. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION. MIN. 24" X 36" ATTIC ACCESS PANEL.
- CONCRETE PATIO/LANDING. SLOPED AT 2% MAXIMUM AWAY FROM THE BUILDING. REFER TO _____A1/A-801___FOR ADDITIONAL INFORMATION.

FLOOR PLAN GENERAL NOTES:

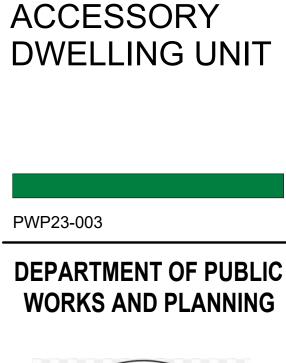
-(1

- VERIFY ALL DIMENSIONS, GRADES, AND OTHER CONDITIONS AT JOB SITE BEFORE COMMENCING WORK. DIMENSIONS SHOWN ON THESE PLANS ARE FROM FACE OF FINISH, UNLESS OTHERWISE NOTED.
- WEATHER-STRIP ALL EXTERIOR DOORS AND WINDOWS CERTIFIED ACCORDING TO SECTION 2-555 OF STANDARD FOR DOORS AND WINDOWS.
- ALL OPENINGS AROUND DUCTING. GAS VENTS, PIPES, CHIMNEYS AT THE CEILING SHALL BE FIRE BLOCKED PER CBC AND CRC. ALL WINDOWS AND DOORS SHALL MEET THE AIR INFILTRATION
- STANDARDS OF THE 2022 CALIFORNIA RESIDENTIAL AND ENERGY CODES SHALL BE CERTIFIED AND LABELED. INTERIOR WALL COVERING TO BE 1/2" THK. GYP. BRD., UNLESS
- OTHERWISE NOTED. (FLAME SPREAD CLASS 111) 6. ALL WINDOW GLAZING ARE TO BE DUAL-GLAZED AND PROVIDE SOLAR SCREENS.
- GLASS DOORS AND WINDOWS IMMEDIATELY TO OR LESS THAN 18" FROM FLOOR OR IN DOOR SHALL BE TEMPERED. THE FOLLOWING SHALL BE CAULKED OR OTHERWISE SEALED
- TO LIMIT AIR INFILTRATION: A. EXTERIOR JOINTS AROUND WINDOWS AND DOOR FRAMES, BETWEEN WALLS SOLE PLATES AND FLOORS AND
- BETWEEN WALL PANELS OPENING FOR PLUMBING, ELECTRICITY, AND GAS LINES IN WALLS, CEILINGS AND FLOORS.
- OPENINGS IN THE ATTIC FLOOR (SUCH AS WHERE CEILING C. PANELS MEET INTERIOR AND EXTERIOR WALLS AND MASONRY FIREPLACES.) PROVIDE 2x SOLID BLOCKING BEHIND ALL TOILET FIXTURES,
- CABINETS, WATER HEATER, CEILING LIGHT FIXTURES (FUTURE FAN LOCATION) AND WHEREVER DIRECTED BY THE OWNER, INSPECTOR OR ARCHITECT.
- 10. DUCT CONSTRUCTED, INSTALLED AND INSULATED PER CURRENT CODE AND TITLE 24. 1. MECHANICAL VENTILATION SYSTEMS MUST SUPPLY 5 CHANGES
- PER HOUR IN BATHROOMS AND LAUNDRY ROOMS: 2 AIR CHANGES PER HOUR IN OTHER HABITABLE ROOMS PROVIDE 1-1/2" DUCT INSULATION (TYPICAL).
- 13. VERIFY ALL APPLIANCE SPECIFICATIONS. SIZES AND OWNER'S REQUIREMENT FOR BUILT-IN ASSEMBLY PRIOR TO PRODUCTION OF CASEWORKS. ADJUST DIMENSIONS OF BUILT IN CASEWORK WITH APPLIANCE DIMENSION.
- 14. CONSTRUCT PATIO SLABS WITH 4" THK. CONCRETE X 12" DP. SHOVEL (1 #4 BAR) FOOTING AT PERIMETER. SLABS ARE TO BE BROOM FINISH. PROVIDE 6x6x10 /10 WWM IN MIDDLE OF SLABS. 15. THE ENERGY CERTIFICATION OF COMPLIANCE MUST BE
- SUBMITTED AFTER INSTALLATION OF THE REQUIRED EQUIPMENT AND/OR MATERIAL AND PRIOR TO REQUEST OF FINAL INSPECTION.
- 16. PROVIDE 115V OUTLET (W.P., GFI) WITHIN 25 FEET OF ROOF MOUNTED EQUIPMENT. 7. AFTER INSTALLING INSULATION, THE INSTALLER SHALL POST IN
- A CONSPICUOUS LOCATION IN THE BUILDING A CERTIFICATE SIGNED BY THE INSTALLER AND THE BUILDER STATING THAT THE INSTALLATION CONFORM WITH THE REQUIREMENTS FOR TITLE 24 PART 2, CHAPTER 2-53 AND THAT THE MATERIALS INSTALLED CONFORM WITH THE REQUIREMENTS OF TITLE 20, CHAPTER 2 SUB-CHAPTER 4, ARTICLE 3, THE CERTIFICATE SHALL STATE THE MANUFACTURER'S NAME AND MATERIAL IDENTIFICATION, THE INSTALLED "R" VALUE, AND (IN
- APPLICATIONS OF LOOSE FILL INSULATION) THE MINIMUM INSTALLED WEIGHT PER SQUARE FOOT CONSISTENT WITH THE MANUFACTURER'S LABEL DENSITY FOR THE DESIRED "R" VALUE TO BE INSTALLED IN CEILING AND IN WALLS. WALL AND CEILING FINISHES SHALL HAVE A FLAME SPREAD
- INDEX OF NOT GREATER THAN 200. CRC R302.9.1 19. WALL AND CEILING FINISHES SHALL HAVE A SMOKED-DEVELOPED INDEX OF NOT GREATER THAN 450. CRC R302.9.2
- PROVIDE FALL PROTECTION REINFORCEMENT AND ADDRESS FALL PROTECTION REQUIREMENTS. REFER TO _____ A-100 AND A-502 FOR ADDITIONAL INFORMATION. 21. ALL TUB AND SHOWER VALVES ARE TO BE SINGLE CONTROL
- PRESSURE BALANCING OR THERMOSTATIC ANTI-SCALD TYPE. 22. WATER HAMMER ARRESTORS SHALL BE INSTALLED AT THE
- FOLLOWING QUICK-ACTING SHUT-OFF VALVES [CPC 609.10] AUTOMATIC WASHING MACHINE (HOT AND COLD WATER) ICEMAKER DISHWASHER
- FRONT AND REAR SPRINKLER OUTLETS ALL HOSE BIBS SHALL BE EQUIPPED WITH NON-REMOVABLE BACKFLOW PREVENTERS.
- PROVIDE ONE INCH UNDERCUT FOR EXTERIOR DOORS OF LPG WATER HEATER OR FURNACE COMPARTMENTS

DOOR LANDING NOTES

- LANDING SHALL HAVE A WIDTH NOT LESS THAN THE WIDTH OF THE DOOR AND 36" MIN. IN THE DIRECTION OF TRAVEL. (CBC 1008.1.5) PER CBC 1008.1.6 BELOW:
- "1008.1.6 Thresholds. Thresholds at doorways shall not exceed 0.75 inch in height for sliding doors serving dwelling units or 0.5 inch for

other doors. Raised thresholds and floor level changes greater than 0.25 inch at doorways shall be beveled with a slope not greater than One unit vertical in two units horizontal (50-percent slope). Exception: The threshold height shall be limited to 7.75 inches where the occupancy is Group R-2 or R-3; the door is an exterior door that is not a component of the required means of egress; the door, other than an exterior storm or screen door does not swing over the landing or step; and the doorway is not on an accessible route as required by Chapter IIA or 11B and is not part of an adaptable or accessible dwelling



500 SQ. FT. MODEL (532

SQ.FT.)

W/ ADAPTABLE FEATURES

OPTION

#3

PROJECT



CAPITAL PROJECTS DIVISION

2220 Tulare St., Ste. 720, Fresno, CA. 93721 Phone: (559) 262-4212 Fax: (559) 262-4879



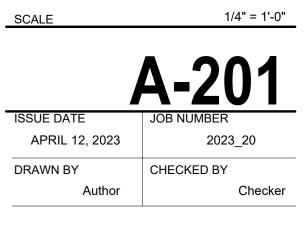
UPDATE

JULY 10, 2023

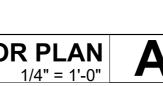
THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE ARCHITECT AND SHALL NOT BE USED ON ANY OTHER PROJECT OR

LOCATIONS EXCEPT AS DESCRIBED ON THE DRAWINGS WITHOUT WRITTEN AGREEMENT WITH THE ARCHITECT.

PROPOSED FLOOR PLAN & ROOF PLAN



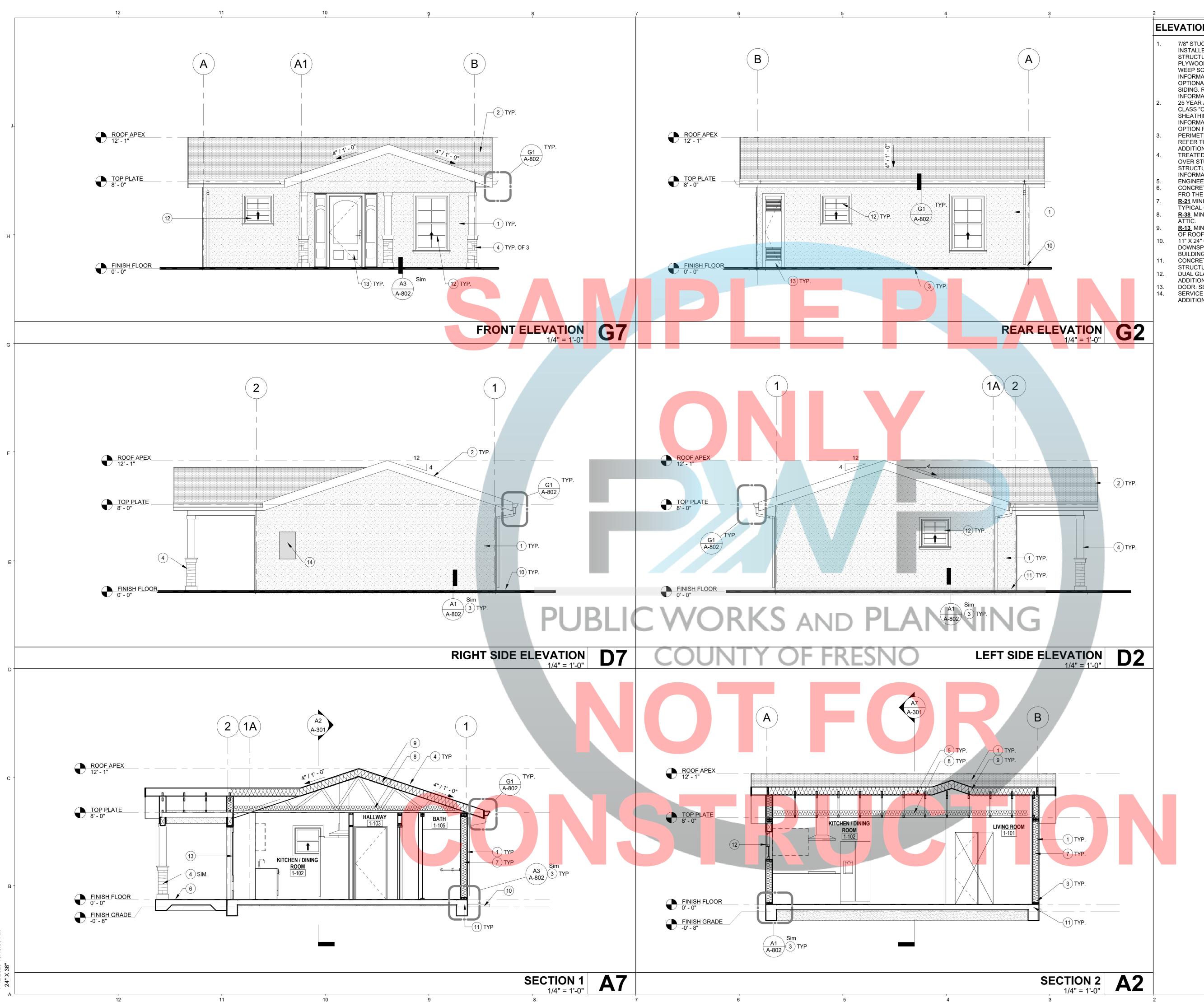
PROPOSED FLOOR PLAN 1/4" = 1'-0"



532 SF

106 SF

638 SF



- 25 YEAR ASPHALT COMPOSITION ROOFING WITH MINIMUM CLASS "C" RATING OVER 30# FELT OVER PLYWOOD SHEATHING. REFER TO <u>A8/A-201</u> FOR ADDITIONAL INFORMATION. OPTION ROOF: GA. 24 STANDING SEAMLESS METAL ROOF.
- PERIMETER WEEP SCREED FOR STUCCO APPLICATION. REFER TO <u>A3/A-802</u>, <u>A4/A-803</u>, <u>F4/A-803</u> FOR ADDITIONAL INFORMATION.
- TREATED WOOD POST WITH OPTIONAL 2X WRAPPED POST OVER STUCCO FINISH AND VENEER STONE. REFER TO STRUCTURAL DRAWINGS AND <u>A9/A-802</u> FOR ADDITIONAL INFORMATION.
- ENGINEERED ROOF TRUSS AND PLYWOOD SHEATHING. CONCRETE PATIO/LANDING. SLOPED AT 2% MAXIMUM AWAY FRO THE BUILDING. <u>**R-21**</u> MINIMUM FIBERGLASS BATTS WALL INSULATION.
- TYPICAL ON ALL EXTERIOR WALL. **R-38** MINIMUM FIBERGLASS BATT INSULATION. TYPICAL ON ATTIC.
- **<u>R-13</u>** MINIMUM BATT INSULATION. TYPICAL AT FRAME CAVITY OF ROOF. 11" X 24" CONCRETE BACK SPLASH. PROVIDE ONE PER
- DOWNSPOUT. POSITION TO DRAIN AWAY FROM THE BUILDING.
- CONCRETE FOOTING / FOUNDATION. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION. DUAL GLAZED WINDOW. REFER TO <u>A2 / A-201</u> FOR
- ADDITIONAL INFORMATION. DOOR. SEE SEE <u>A2/A-201</u>FOR ADDITIONAL INFORMATION. SERVICE PANEL. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.

500 SQ. FT. MODEL (532 SQ.FT.) W/ ADAPTABLE FEATURES **OPTION** #3

ACCESSORY DWELLING UNIT

PWP23-003

DEPARTMENT OF PUBLIC WORKS AND PLANNING



CAPITAL PROJECTS DIVISION

2220 Tulare St., Ste. 720, Fresno, CA. 93721 Phone: (559) 262-4212 Fax: (559) 262-4879

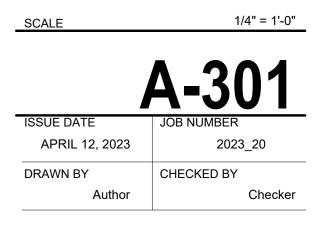


UPDATE

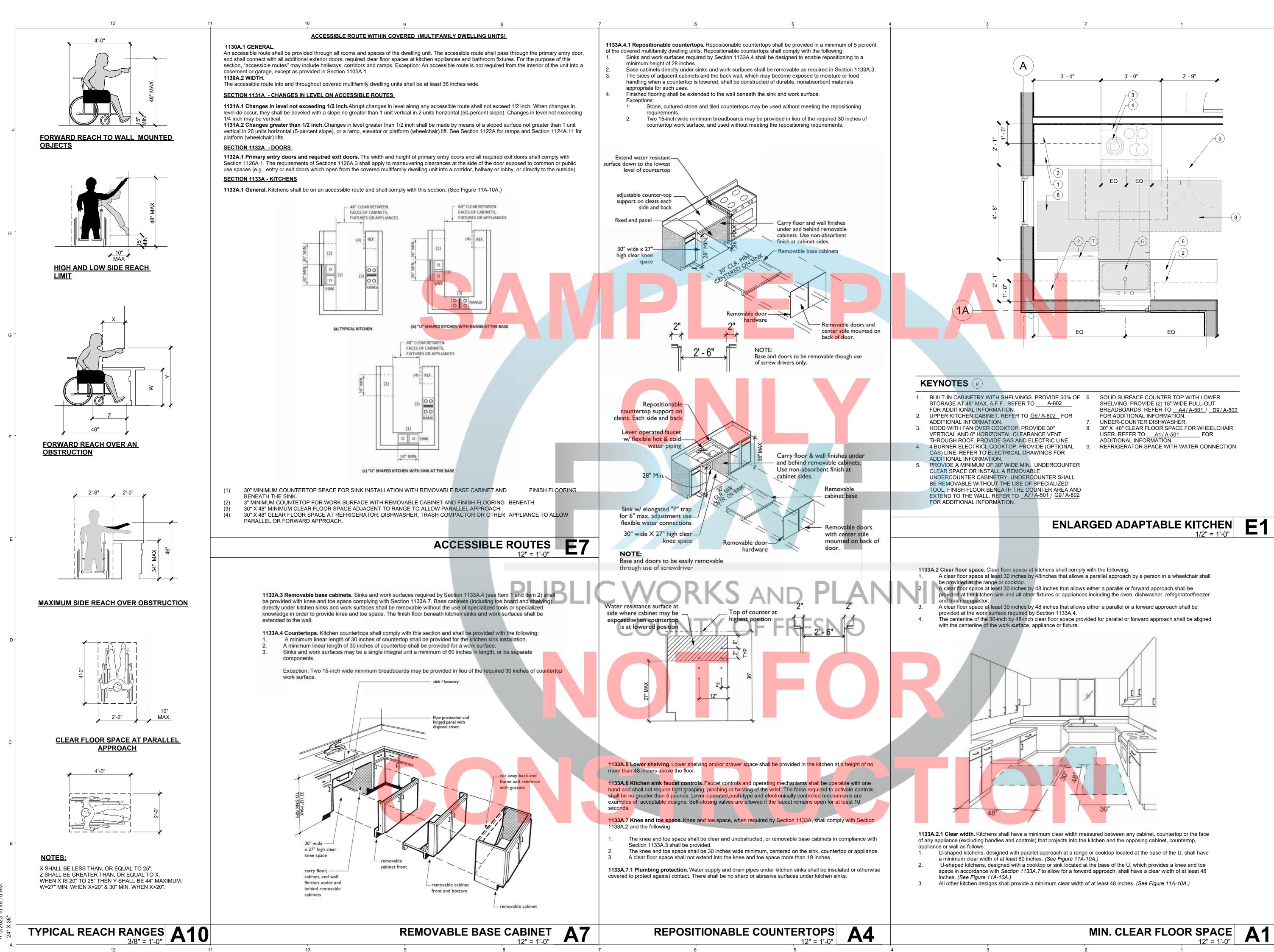
JULY 10, 2023

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE ARCHITECT AND SHALL NOT BE USED ON ANY OTHER PROJECT OR LOCATIONS EXCEPT AS DESCRIBED ON THE DRAWINGS WITHOUT WRITTEN AGREEMENT WITH THE ARCHITECT.

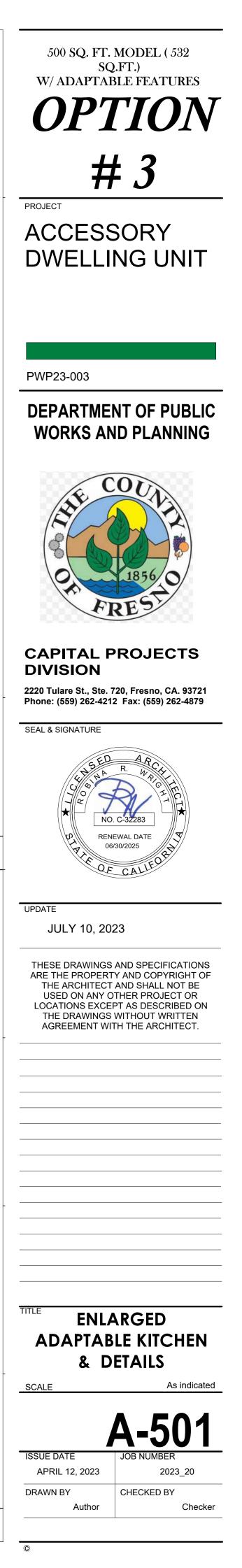
> ELEVATIONS & SECTIONS

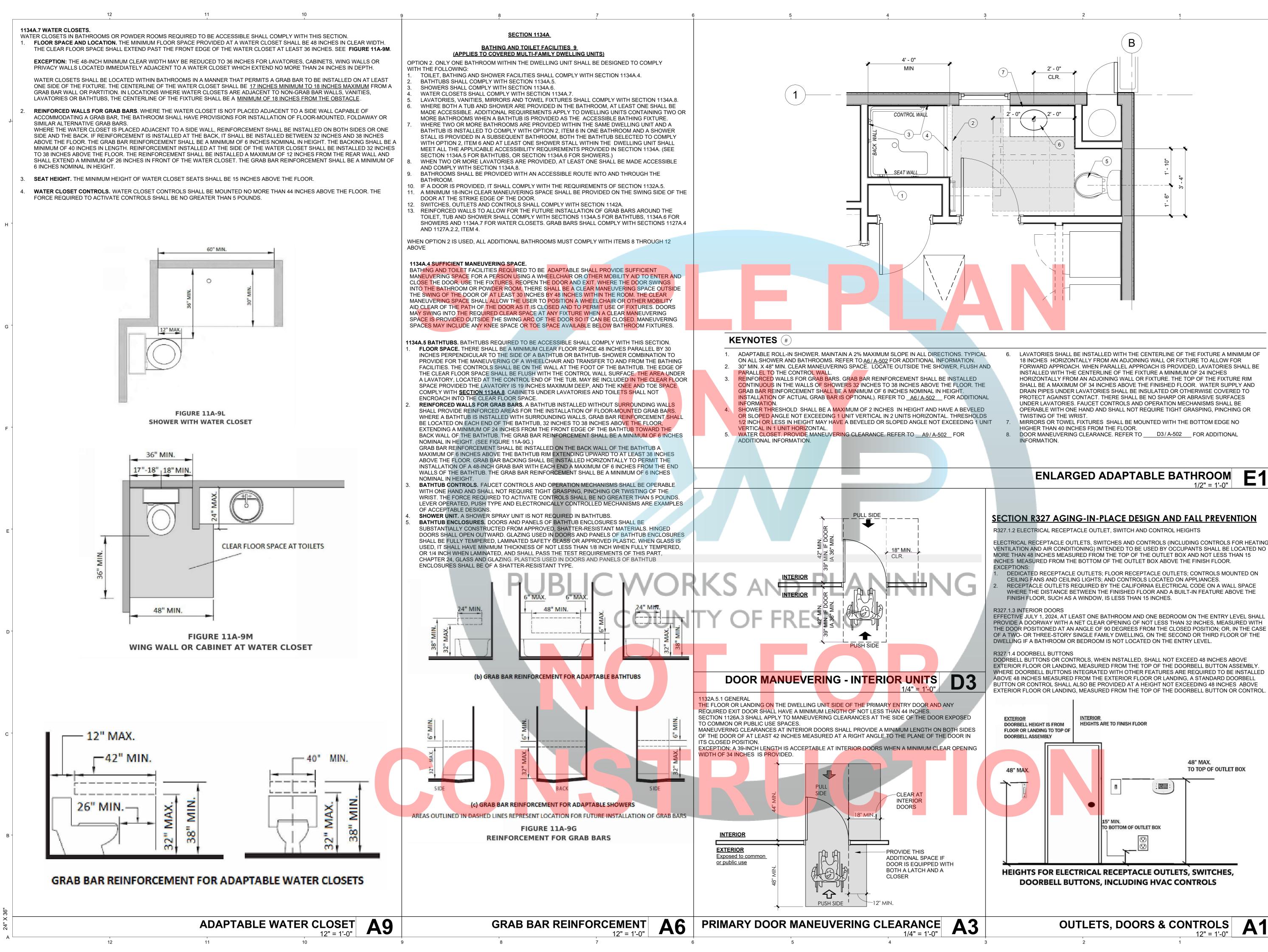


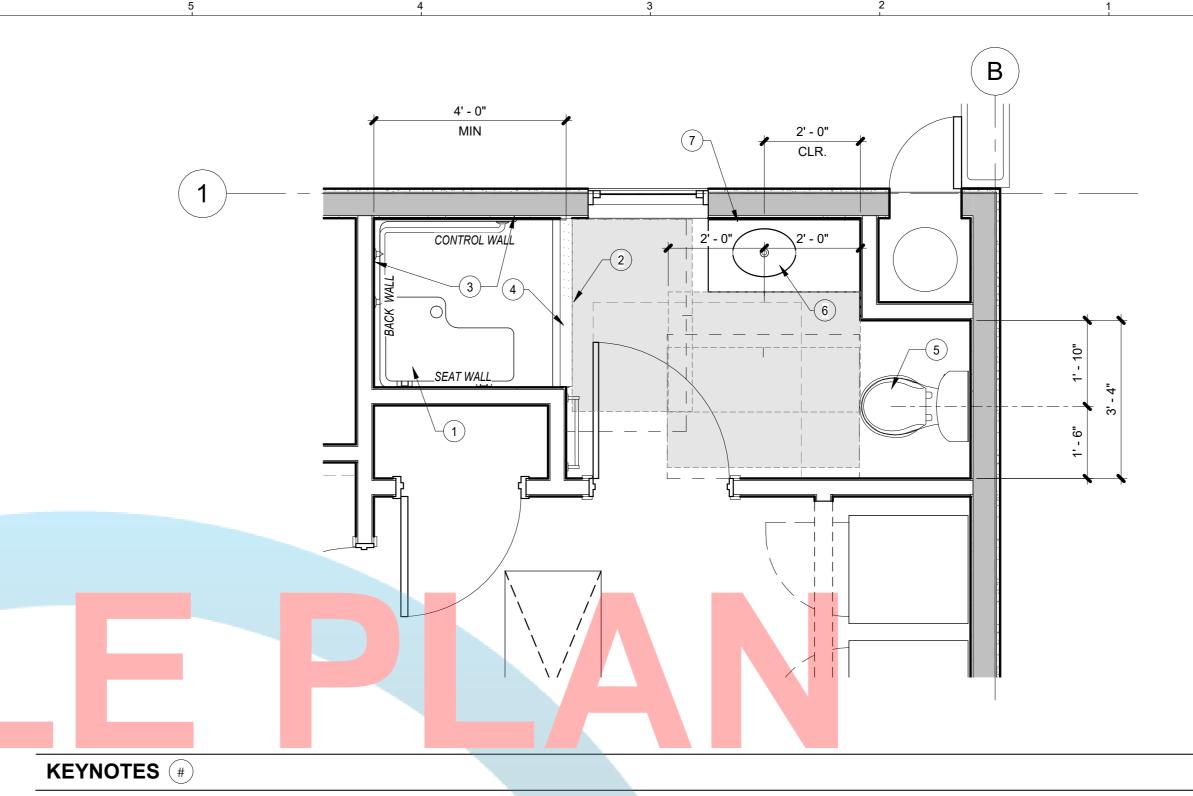
©



E1







FORWARD APPROACH. WHEN PARALLEL APPROACH IS PROVIDED, LAVATORIES SHALL BE HORIZONTALLY FROM AN ADJOINING WALL OR FIXTURE. THE TOP OF THE FIXTURE RIM SHALL BE A MAXIMUM OF 34 INCHES ABOVE THE FINISHED FLOOR. WATER SUPPLY AND DRAIN PIPES UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE COVERED TO

SECTION R327 AGING-IN-PLACE DESIGN AND FALL PREVENTION

ELECTRICAL RECEPTACLE OUTLETS. SWITCHES AND CONTROLS (INCLUDING CONTROLS FOR HEATING. VENTILATION AND AIR CONDITIONING) INTENDED TO BE USED BY OCCUPANTS SHALL BE LOCATED NO MORE THAN 48 INCHES MEASURED FROM THE TOP OF THE OUTLET BOX AND NOT LESS THAN 15

RECEPTACLE OUTLETS; FLOOR RECEPTACLE OUTLETS; CONTROLS MOUNTED ON RECEPTACLE OUTLETS REQUIRED BY THE CALIFORNIA ELECTRICAL CODE ON A WALL SPACE WHERE THE DISTANCE BETWEEN THE FINISHED FLOOR AND A BUILT-IN FEATURE ABOVE THE

PROVIDE A DOORWAY WITH A NET CLEAR OPENING OF NOT LESS THAN 32 INCHES, MEASURED WITH THE DOOR POSITIONED AT AN ANGLE OF 90 DEGREES FROM THE CLOSED POSITION; OR, IN THE CASE OF A TWO- OR THREE-STORY SINGLE FAMILY DWELLING, ON THE SECOND OR THIRD FLOOR OF THE

EXTERIOR FLOOR OR LANDING, MEASURED FROM THE TOP OF THE DOORBELL BUTTON ASSEMBLY WHERE DOORBELL BUTTONS INTEGRATED WITH OTHER FEATURES ARE REQUIRED TO BE INSTALLED ABOVE 48 INCHES MEASURED FROM THE EXTERIOR FLOOR OR LANDING, A STANDARD DOORBELL BUTTON OR CONTROL SHALL ALSO BE PROVIDED AT A HEIGHT NOT EXCEEDING 48 INCHES ABOVE EXTERIOR FLOOR OR LANDING, MEASURED FROM THE TOP OF THE DOORBELL BUTTON OR CONTROL

1 PROJECT ACCESSORY DWELLING UNIT PWP23-003 DEPARTMENT OF PUBLIC WORKS AND PLANNING **CAPITAL PROJECTS** DIVISION 2220 Tulare St., Ste. 720, Fresno, CA. 93721 Phone: (559) 262-4212 Fax: (559) 262-4879 SEAL & SIGNATURE **E1** RENEWAL DATE 06/30/2025

500 SQ. FT. MODEL (532

SQ.FT.)

W/ ADAPTABLE FEATURES

OPTION

UPDATE

JULY 10, 2023

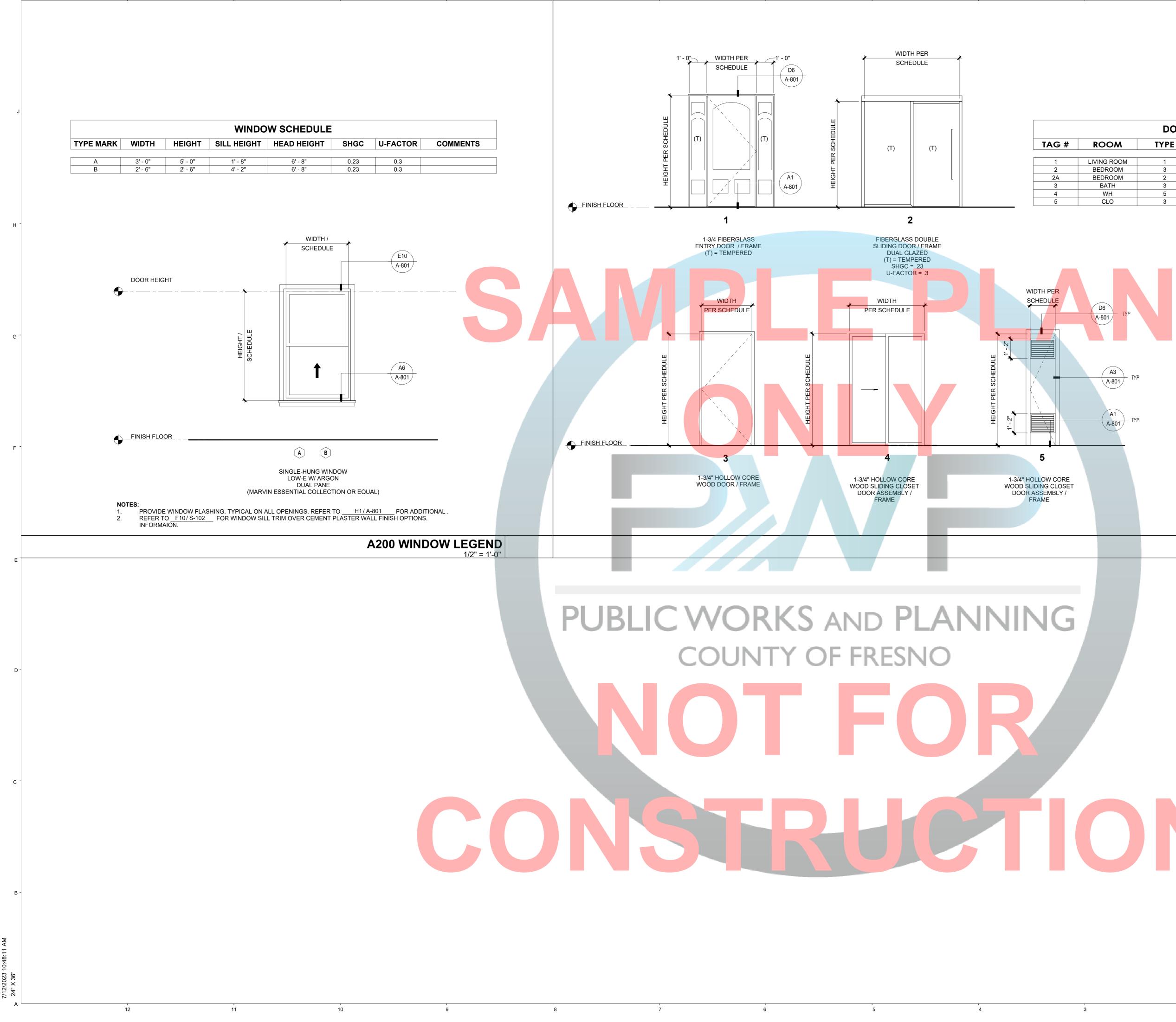
THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE ARCHITECT AND SHALL NOT BE USED ON ANY OTHER PROJECT OR LOCATIONS EXCEPT AS DESCRIBED ON

THE DRAWINGS WITHOUT WRITTEN AGREEMENT WITH THE ARCHITECT

ADAPTABLE **BATHROOM DETAILS**

As indicate SCALE ISSUE DATE APRIL 12, 2023 2023 20

DRAWN BY CHECKED BY Author Checker



11

10





DWELLING UNIT

DOOR SCHEDULE HEIGHT WIDTH TYPE COMMENTS 3' - 0" 6' - 8" 2' - 10" 6' - 8" 6' - 8" 4' - 0" 2' - 10" 6' - 8" 1' - 6" 6' - 8" 2' - 6" 6' - 8"

2



PWP23-003

DEPARTMENT OF PUBLIC WORKS AND PLANNING



CAPITAL PROJECTS DIVISION

2220 Tulare St., Ste. 720, Fresno, CA. 93721 Phone: (559) 262-4212 Fax: (559) 262-4879



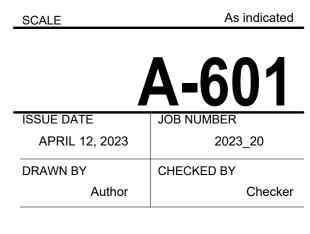


UPDATE

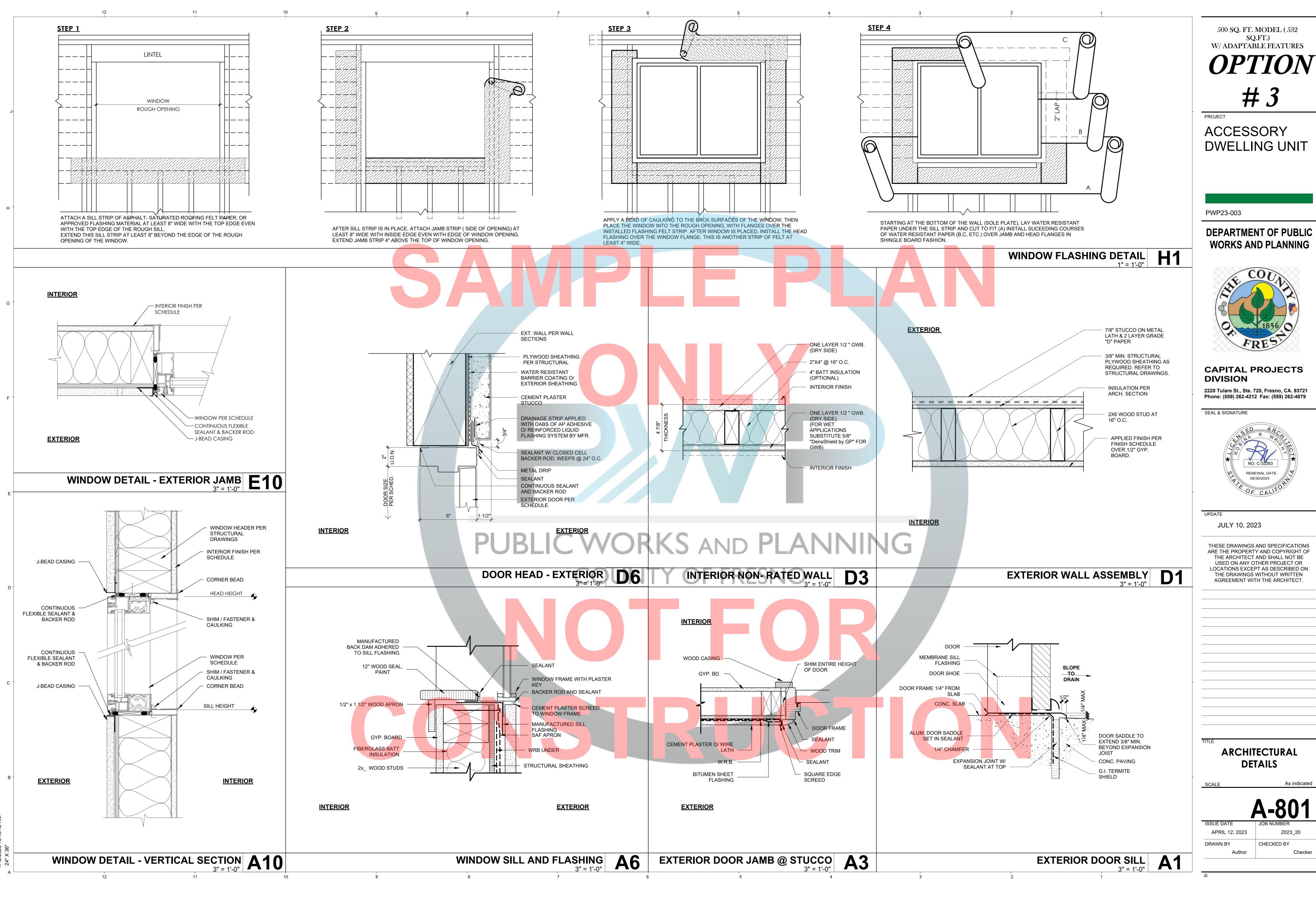
JULY 10, 2023

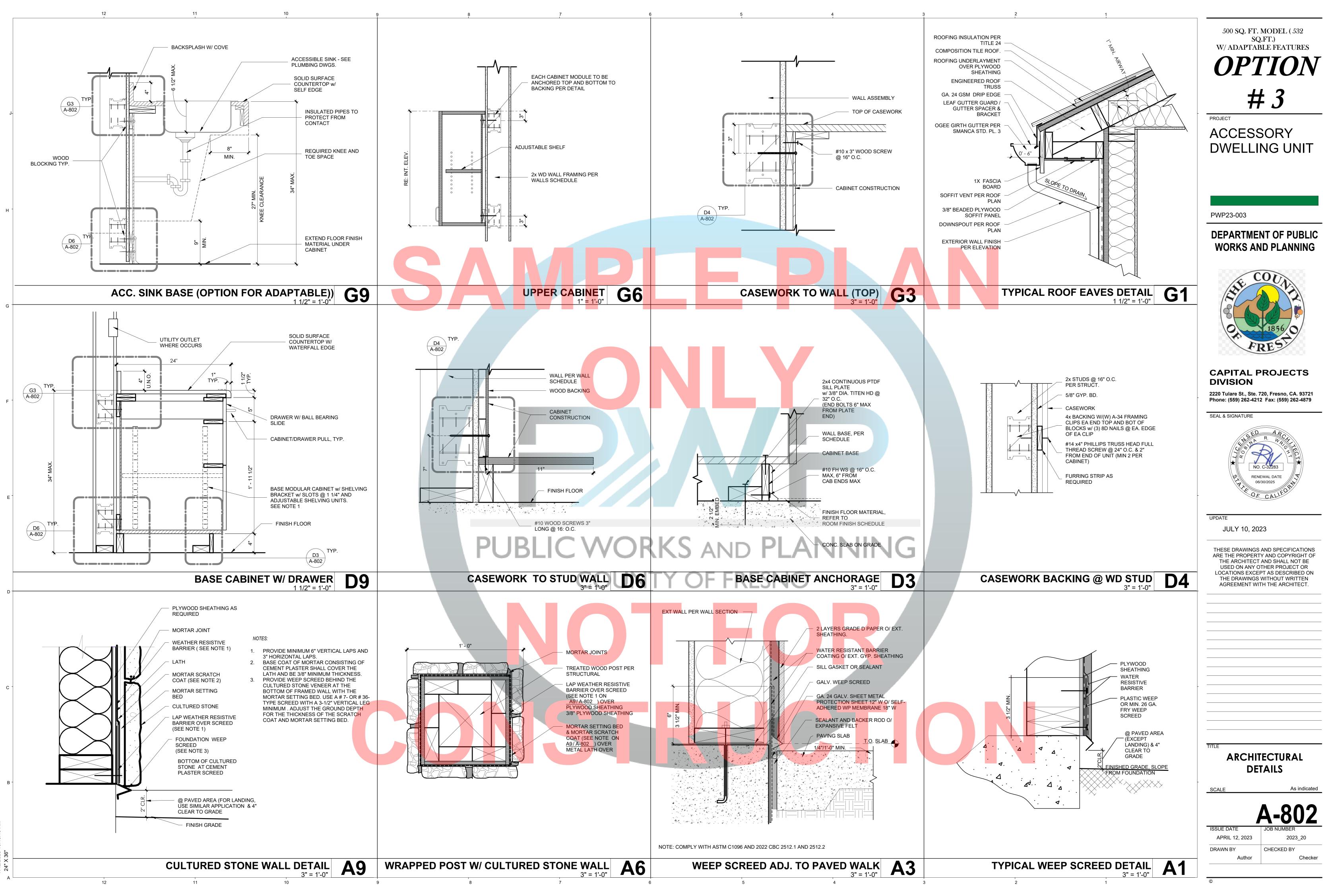
THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE ARCHITECT AND SHALL NOT BE USED ON ANY OTHER PROJECT OR LOCATIONS EXCEPT AS DESCRIBED ON THE DRAWINGS WITHOUT WRITTEN AGREEMENT WITH THE ARCHITECT

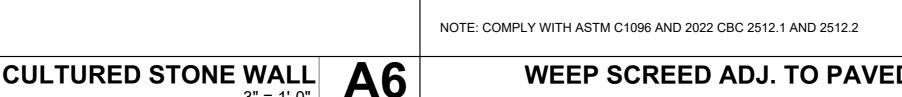
OPENING SCHEDULE

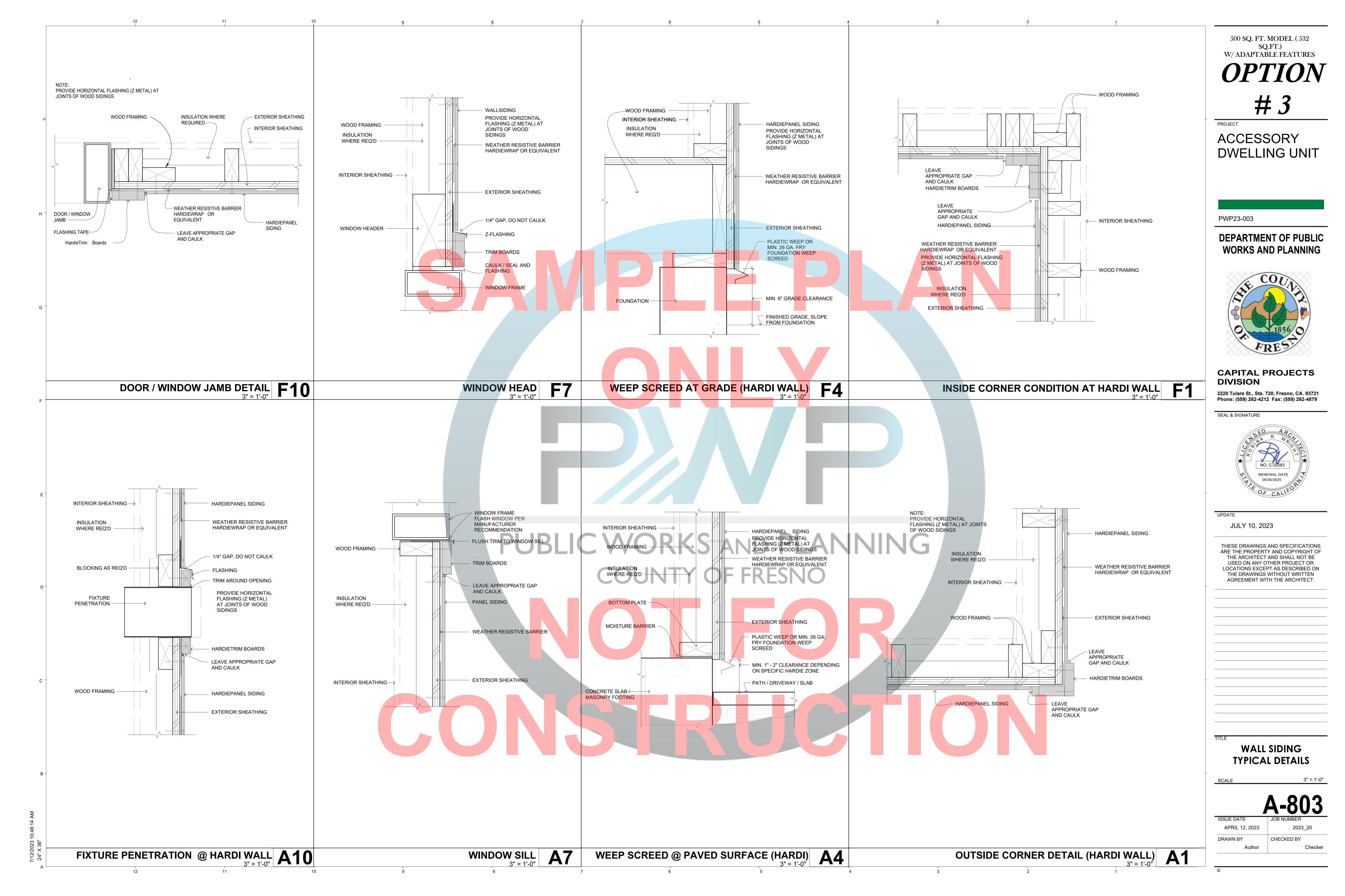


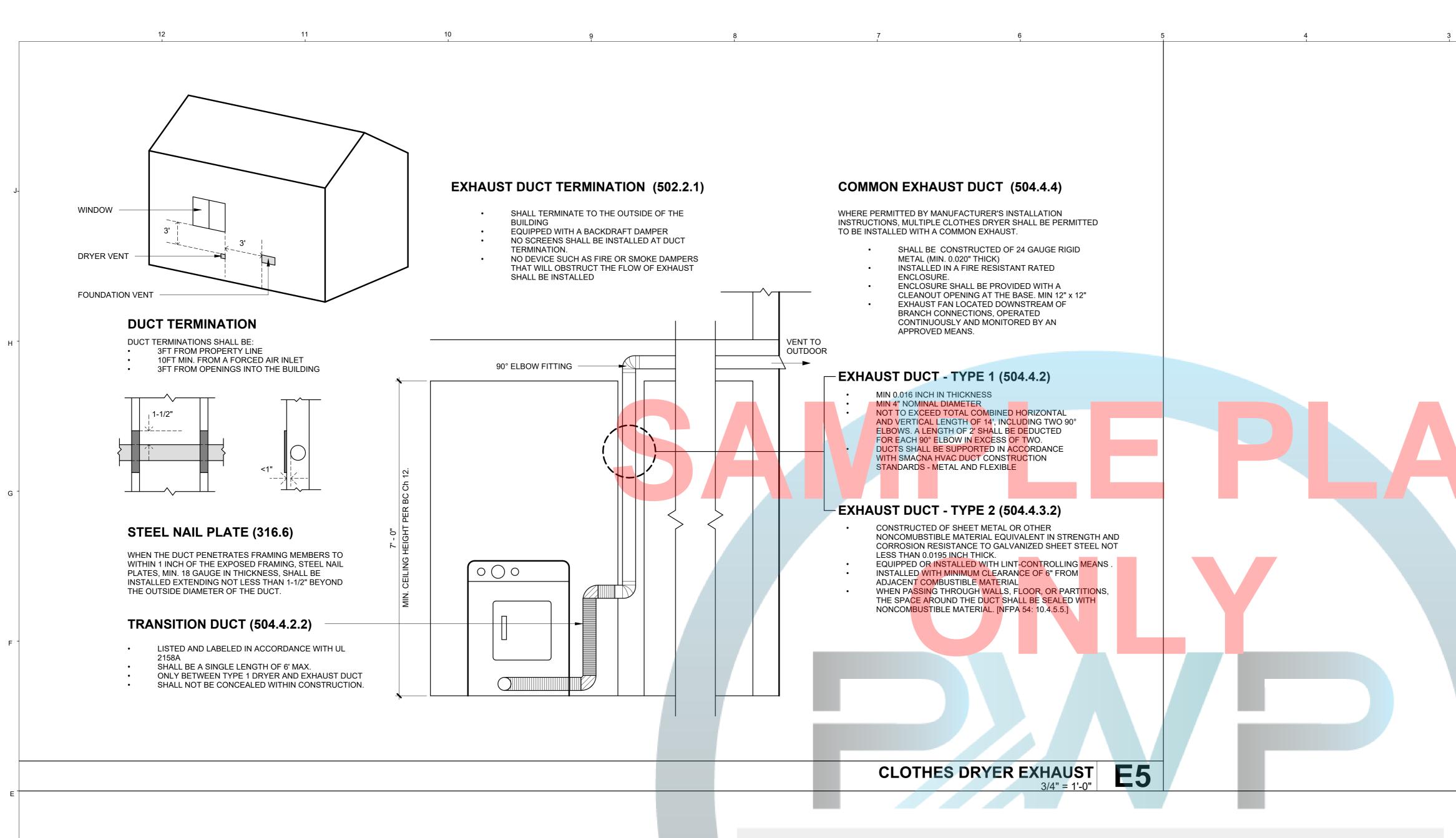
2













PUBLIC WORKS AND PLANNING COUNTY OF FRESNO

2	1	
		500 SQ. FT. MODEL (532 SQ.FT.) W/ ADAPTABLE FEATURES OPTION
		#3
		ACCESSORY DWELLING UNIT
		DEPARTMENT OF PUBLIC WORKS AND PLANNING
		COUNTRAL COUNTRAL
		Ort 1856 O FREST
	-	CAPITAL PROJECTS DIVISION 2220 Tulare St., Ste. 720, Fresno, CA. 93721 Phone: (559) 262-4212 Fax: (559) 262-4879
		SEAL & SIGNATURE
		★ NO. C-32283
		UPDATE JULY 10, 2023
		THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE ARCHITECT AND SHALL NOT BE USED ON ANY OTHER PROJECT OR LOCATIONS EXCEPT AS DESCRIBED ON THE DRAWINGS WITHOUT WRITTEN AGREEMENT WITH THE ARCHITECT.
		CLOTHES DRYER EXHAUST DETAILS
		scale 3/4" = 1'-0"
		ISSUE DATEJOB NUMBERAPRIL 12, 20232023_20DRAWN BYCHECKED BYAuthorChecker
2	1	©

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2023)

Y	N/A	RESPON. PARTY	Chapter 3 – Additions and Alterations	A RESP PAR		4.106.4.2 New multifamily dwellings, hotels and motels and new residential parking facilities. When parking is provided, parking spaces for new multifamily dwellings, hotels and motels shall meet the
			CHAPTER 3 GREEN BUILDING SECTION 301 GENERAL			requirements of Sections 4.106.4.2.1 and 4.106.4.2.2. Calculations for spaces shall be rounded up to the nearest whole number. A parking space served by electric vehicle supply equipment or designed as a future EV charging
			301.1 SCOPE. Buildings shall be designed to include the green building measures specified as mandatory in	_		space shall count as at least one standard automobile parking space only for the purpose of complying with any applicable minimum parking space requirements established by a local jurisdiction. See Vehicle Code Section 22511.2 for further details.
J-			the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and construction of structures covered by this code, but]		4.106.4.2.1Multifamily development projects with less than 20 dwelling units; and hotels and motels with
			are not required unless adopted by a city, county, or city and county as specified in Section 101.7. CC			less than 20 sleeping units or guest rooms. The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subje
			301.1.1 Additions and alterations. [HCD] The mandatory provisions of Chapter 4 shall be applied to additions or alterations of existing residential buildings where the addition or alteration increases the building's conditioned area, volume, or size. The requirements shall apply only to and/or within the specific area of the addition or			to this section. 1.EV Capable. Ten (10) percent of the total number of parking spaces on a building site, provided for all types of
			alteration.			parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical system,
			The mandatory provision of Section 4.106.4.2 may apply to additions or alterations of existing parking facilities or the addition of new parking facilities serving existing multifamily buildings. See Section 4.106.4.3 for application.			including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.
			E-015,I8; Note: Repairs including, but not limited to, resurfacing, restriping and repairing or maintaining existing lighting			The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.
			fixtures are not considered alterations for the purpose of this section.			Exceptions:
н			Note: On and after January 1, 2014, residential buildings undergoing permitted alterations, additions, or improvements shall replace noncompliant plumbing fixtures with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy or final			1.When EV chargers (Level 2 EVSE) are installed in a number equal to or greater than the required number of EV capable spaces.
			permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates.			2.When EV chargers (Level 2 EVSE) are installed in a number less than the required number of EV capable
			301.2 LOW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS. [HCD] The provisions of individual sections of CALGreen may apply to either low-rise residential buildings high-rise residential buildings, or both. Individual			spaces, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed.
			sections will be designated by banners to indicate where the section applies specifically to low-rise only (LR) or high-rise only (HR). When the section applies to both low-rise and high-rise buildings, no banner will be used.			Notes:
			SECTION 302 MIXED OCCUPANCY BUILDINGS]		a.Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.
			302.1 MIXED OCCUPANCY BUILDINGS. In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy.			b. There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or EV chargers are installed for use.
G -			Exceptions: 1. [HCD] Accessory structures and accessory occupancies serving residential buildings shall comply with Chapter			2.EV Ready . Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power lower to a space shall be equipped with low power lower to a space shall be equipped with low power lower to a space shall be equipped with low power lower lower to a space shall be equipped with low power lower lo
			4 and Appendix A4, as applicable. 2. [HCD] For purposes of <i>CAL</i> Green, live/work units, complying with Section 419 of the <i>California Building Code</i> ,			Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit.
			shall not be considered mixed occupancies. Live/Work units shall comply with Chapter 4 and Appendix A4, as applicable.			Exception: Areas of parking facilities served by parking lifts.
						 4.106.4.2.2 Multifamily development projects with 20 or more dwelling units, hotels and motels with 20 or more sleeping units or guest rooms. The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject site site site site site site site sit
			DIVISION 4.1 PLANNING AND DESIGN ABBREVIATION DEFINITIONS:			to this section.
			HCDDepartment of Housing and Community DevelopmentBSCCalifornia Building Standards CommissionDSA-SSDivision of the State Architect, Structural Safety			1.EV Capable . Ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EV SE Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical system,
			OSHPD Office of Statewide Health Planning and Development LR Low Rise			including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.
F -			HR High Rise AA Additions and Alterations N New			The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.
			CHAPTER 4			Exception: When EV chargers (Level 2 EVSE) are installed in a number greater than five (5) percent of parking
			RESIDENTIAL MANDATORY MEASURES			spaces required by Section 4.106.4.2.2, Item 3, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed over the five (5) percent required.
			SECTION 4.102 DEFINITIONS 4.102.1 DEFINITIONS The following terms are defined in Chapter 2 (and are included here for reference)			Notes: a.Construction documents shall show locations of future EV spaces.
			FRENCH DRAIN. A trench, hole or other depressed area loosely filled with rock, gravel, fragments of brick or			b.There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or EV chargers are installed for use.
			similar pervious material used to collect or channel drainage or runoff water. WATTLES. Wattles are used to reduce sediment in runoff. Wattles are often constructed of natural plant materials			2.EV Ready. Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per
			such as hay, straw or similar material shaped in the form of tubes and placed on a downflow slope. Wattles are also used for perimeter and inlet controls.			dwelling unit when more than one parking space is provided for use by a single dwelling unit. Exception: Areas of parking facilities served by parking lifts.
E]			4.106 SITE DEVELOPMENT 4.106.1 GENERAL . Preservation and use of available natural resources shall be accomplished through			3.EV Chargers. Five (5) percent of the total number of parking spaces shall be equipped with Level 2 EVSE.
			evaluation and careful planning to minimize negative effects on the site and adjacent areas. Preservation of slopes, management of storm water drainage and erosion controls shall comply with this section.			Where common use parking is provided, at least one EV charger shall be located in the common use parking area and shall be available for use by all residents or guests.
			4.106.2 STORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION. Projects which disturb less than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre			When low power Level 2 EV charging receptacles or Level 2 EVSE are installed beyond the minimum required, an automatic load management system (ALMS) may be used to reduce the maximum required electrical capacity to
			or more, shall manage storm water drainage during construction. In order to manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent			each space served by the ALMS. The electrical system and any on-site distribution transformers shall have sufficient capacity to deliver at least 3.3 kW simultaneously to each EV charging station (EVCS) served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes, and installed EVSE shall have a capacit
			property, prevent erosion and retain soil runoff on the site.			of not less than 30 amperes. ALMS shall not be used to reduce the minimum required electrical capacity to the required EV capable spaces.
			 Retention basins of sufficient size shall be dulized to retain storm water on the site. Where storm water is conveyed to a public drainage system, collection point, gutter or similar disposal method, water shall be filtered by use of a barrier system, wattle or other method approved by the enforcing agency. 			4.106.4.2.2.1 Electric vehicle charging stations (EVCS). Electric vehicle charging stations required by Section 4.106.4.2.2, Item 3, shall comply with Section 4.106.4.2.2.1.
D -			3. Compliance with a lawfully enacted storm water management ordinance.			Exception: Electric vehicle charging stations serving public accommodations, public housing, motels and hotels
			Note: Refer to the State Water Resources Control Board for projects which disturb one acre or more of soil, or are part of a larger common plan of development which in total disturbs one acre or more of soil. (Website: https://www.waterboards.ca.gov/water issues/programs/stormwater/construction.html)			shall not be required to comply with this section. See California Building Code, Chapter 11B, for applicable requirements.
			4.106.3 GRADING AND PAVING. Construction plans shall indicate how the site grading or drainage system will			4.106.4.2.2.1.1 Location. EVCS shall comply with at least one of the following options:
			manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following:			1. The charging space shall be located adjacent to an accessible parking space meeting the requirements of the
			 Swales Water collection and disposal systems 			California Building Code, Chapter 11A, to allow use of the EV charger from the accessible parking space. 2.The charging space shall be located on an accessible route, as defined in the California Building Code, Chapter
			 French drains Water retention gardens Other water measures which keep surface water away from buildings and aid in groundwater recharge. 			2, to the building.
			Exception: Additions and alterations not altering the drainage path.			Exception: Electric vehicle charging stations designed and constructed in compliance with the California Building Code, Chapter 11B, are not required to comply with Section 4.106.4.2.2.1.1 and Section 4.106.4.2.2.1.2, Item 3.
c 			4.106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Sections 4.106.4.1 or 4.106.4.2 to facilitate future installation and use of EV chargers. Electric vehicle supply equipment			4.106.4.2.2.1.2 Electric vehicle charging stations (EVCS) dimensions. The charging spaces shall be designed to comply with the following:
			(EVSE) shall be installed in accordance with the California Electrical Code, Article 625.			1.The minimum length of each EV space shall be 18 feet (5486 mm).
			Exceptions: 1. On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:			2. The minimum width of each EV space shall be 9 feet (2743 mm).
			1.1 Where there is no local utility power supply or the local utility is unable to supply adequate power.1.2 Where there is evidence suitable to the local enforcing agency substantiating that additional local utility			3.One in every 25 charging spaces, but not less than one, shall also have an 8-foot (2438 mm) wide minimum aisle. A 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EV space is 12 feet (3658 mm).
			infrastructure design requirements, directly related to the implementation of Section 4.106.4, may adversely impact the construction cost of the project. 2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking			a.Surface slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percer
			facilities.		i	slope) in any direction. 4.106.4.2.2.1.3 Accessible EV spaces.
В-			4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages. For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service			In addition to the requirements in Sections 4.106.4.2.2.1.1 and 4.106.4.2.2.1.2, all EVSE, when installed, shall comply with the accessibility provisions for EV chargers in the California Building Code, Chapter 11B. EV ready
			or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas			spaces and EVCS in multifamily developments shall comply with California Building Code, Chapter 11A, Section 1109A.
			and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.			4.106.4.2.3 EV space requirements. 1.Single EV space required. Install a listed raceway capable of accommodating a 208/240-volt dedicated branch
			Exemption: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed			circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or enclosure in close proximity to the location or the proposed location of the EV space. Construction documents shall identify the
			in close proximity to the proposed location of an EV charger at the time of original construction in accordance with the <i>California Electrical Code</i> .			raceway termination point, receptacle or charger location, as applicable. The service panel and/ or subpanel shall have a 40-ampere minimum dedicated branch circuit, including branch circuit overcurrent protective device
0			4.106.4.1.1 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination			installed, or space(s) reserved to permit installation of a branch circuit overcurrent protective device. Exception: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed
24 > (location shall be permanently and visibly marked as "EV CAPABLE".			in close proximity to the location or the proposed location of the EV space, at the time of original construction in accordance with the California Electrical Code.
A			12 11 10			9 8 7

			LO, SITEET T (Sandary		
tels and motels and new residential parking facilities.	Y N/A	RESPON.	2.Multiple EV spaces required. Construction documents s		Y
for new multifamily dwellings, hotels and motels shall meet the		PARTY	location of installed or future EV spaces, receptacles or E provide information on amperage of installed or future rec		
4.106.4.2.2. Calculations for spaces shall be rounded up to the nearest electric vehicle supply equipment or designed as a future EV charging			schematics and electrical load calculations. Plan design s circuit. Required raceways and related components that a		
automobile parking space only for the purpose of complying with any ements established by a local jurisdiction. See Vehicle Code Section			inaccessible or in concealed areas and spaces shall be in Exception: A raceway is not required if a minimum 40-am	stalled at the time of original construction.	
			installed in close proximity to the location or the proposed construction in accordance with the California Electrical C	location of the EV space at the time of original	
jects with less than 20 dwelling units; and hotels and motels with			4.106.4.2.4 Identification.		
o ms. its or guest rooms shall be based on all buildings on a project site subject			The service panel or subpanel circuit directory shall identi for future EV charging purposes as "EV CAPABLE" in acc		
			4.106.4.2.5 Electric Vehicle Ready Space Signage. Electric vehicle ready spaces shall be identified by signage		
al number of parking spaces on a building site, provided for all types of charging spaces (EV spaces) capable of supporting future Level 2 EVSE.			Traffic Operations Policy Directive 13-01 (Zero Emission)		
ate that the electrical panel service capacity and electrical system, her(s), have sufficient capacity to simultaneously charge all EVs at all			successor(s).		
mperes.			4.106.4.3 Electric vehicle charging for additions and a multifamily buildings.	Iterations of parking facilities serving existing	
ctory shall identify the overcurrent protective device space(s) reserved			WheC n new parking facilities are added, or electrical syst or altered and the work requires a building permit, ten (10		
APABLE" in accordance with the California Electrical Code.			or altered shall be electric vehicle charging spaces (EV sp		
			Notes:		
nstalled in a number equal to or greater than the required number of EV			1.Construction documents are intended to demonstrate th EV charging.		
			2. There is no requirement for EV spaces to be constructed	d or available until EV chargers are installed for use.	
nstalled in a number less than the required number of EV capable s required may be reduced by a number equal to the number of EV			DIVISION 4.2 ENERGY EFFICIEN	NCY	
			4.201 GENERAL		
			4.201.1 SCOPE. For the purposes of mandatory energy energy energy and a standard st Standard standard st Standard standard stand Standard standard stand Standard standard stand Standard standard stand Standard standard standard standard standard standard standard standa		
demonstrate the project's capability and capacity for facilitating future			Energy Commission will continue to adopt mandatory star	ndards.	
			DIVISION 4.3 WATER EFFICIEN	CY AND CONSERVATION	
o be constructed or available until receptacles for EV charging or EV					
he t <mark>otal n</mark> umber of parking spaces shall be equipped with low power			4.303INDOOR WATER USE 4.303.1 WATER CONSERVING PLUMBING FIXTURES		
ifamily parking facilities, no more than one receptacle is required per space is provided for use by a single dwelling unit.			and urinals) and fittings (faucets and showerheads) shall (4.303.1.3, and 4.303.4.4.		
				al real property shall be replaced with water	
ed by parking lifts.			Note: All noncompliant plumbing fixtures in any residential conserving plumbing fixtures. Plumbing fixture replacement	nt is required prior to issuance of a certificate of final	
ojects with 20 or more dwelling units, hotels and motels with 20 or			completion, certificate of occupancy, or final permit a Code Section 1101.1, et seq., for the definition of a nonco		
its or guest rooms shall be based on all buildings on a project site subject			affected and other important enactment dates.		
al number of parking apages and building site, provided for all types of			4.303.1.1 Water Closets . The effective flush volume of a flush. Tank-type water closets shall be certified to the per		
al number of parking spaces on a building site, provided for all t <mark>ypes o</mark> f charging spaces (EV spaces) capable of supporting future Leve <mark>l 2 EV</mark> SE.			Specification for Tank-type Toilets.	ionnance chiena of the 0.3. EFA WaterSense	
ate that the electrical panel service capacity and electrical system, her(s), have sufficient capacity to simultaneously charge all EVs at all			Note: The effective flush volume of dual flush toilets is de	efined as the composite, average flush volume of two	
mperes.			reduced flushes and one full flush.		
ctory shall identify the overcurrent protective device space(s) reserved			4.303.1.2 Urinals. The effective flush volume of wall more flush. The effective flush volume of all other uringle about the start with the		
APABLE" in accordance with the California Electrical Code.			flush.The effective flush volume of all other urinals shall no	or exceed 0.5 gallons per liush.	
/SE) are installed in a number greater than five (5) percent of parking em 3, the number of EV capable sp <mark>aces required may be reduced by a</mark>			4.303.1.3 Showerheads.		
ers installed over the five (5) percent required.			4.303.1.3.1 Single Showerhead. Showerheads shall have per minute at 80 psi. Showerheads shall be certified to the		
ations of future EV spaces.			Specification for Showerheads.		
o be constructed or available until receptacles for EV charging or EV			4.303.1.3.2 Multiple showerheads serving one shower		
			showerhead, the combined flow rate of all the showerhead valve shall not exceed 1.8 gallons per minute at 80 psi, or		
he total number of parking spaces shall be equipped with low power ifamily parking facilities, no more than one receptacle is required per			one shower outlet to be in operation at a time.		
space is provided for use by a single dwelling unit.			Note: A hand-held shower shall be considered a showerh	nead.	
ed by parking lifts.			4.303.1.4 Faucets.		
al number of parking spaces shall be equipped with Level 2 EVSE.		_	4.303.1.4.1 Residential Lavatory Faucets. The maximu		
at least one EV charger shall be located in the common use parking area nts or guests.			exceed 1.2 gallons per minute at 60 psi. The minimum flo than 0.8 gallons per minute at 20 psi.	ow rate of residential lavatory faucets shall not be less	
eptacles or Level 2 EVSE are installed beyond the minimum required, an			4.303.1.4.2 Lavatory Faucets in Common and Public I	Use Areas. The maximum flow rate of lavatory	
IS) may be used to reduce the maximum required electrical capacity to ctrical system and any on-site distribution transformers shall have	11		faucets installed in common and public use areas (outside shall not exceed 0.5 gallons per minute at 60 psi.		
W simultaneously to each EV charging station (EVCS) served by the nimum capacity of 40 amperes, and installed EVSE shall have a capacity	70		KKN ANID F	stalled in residential buildings shall not deliver mare	
not be used to reduce the minimum required electrical capacity to the			4.303.1.4.3 Metering Faucets. Metering faucets when in than 0.2 gallons per cycle.	istalled in residential buildings shall not deliver more	
		L.L.	4.303.1.4.4 Kitchen Faucets. The maximum flow rate of		
stations (EVCS). by Section 4.106.4.2.2, Item 3, shall comply with Section 4.106.4.2.2.1.	DL	JN	minute at 60 psi. Kitchen faucets may temporarily increas exceed 2.2 gallons per minute at 60 psi, and must default		
ns serving public accommodations, public housing, motels and hotels		-	60 psi.		
ection. See California Building Code, Chapter 11B, for applicable			Note: Where complying faucets are unavailable, aerators	s or other means may be used to achieve reduction.	
			4.303.1.4.5 Pre-rinse spray valves.		
e following options:				e H-2, Section 1605.3 (h)(4)(A), and Section 1607 (d)	
acent to an accessible parking space meeting the requirements of the			(7) and shall be equipped with an integral automatic shute		
allow use of the EV charger from the accessible parking space.			FOR REFERENCE ONLY: The following table and code s of Regulations, Title 20 (Appliance Efficiency Regulations)		
an accessible route, as define <mark>d in th</mark> e Calif <mark>ornia Build</mark> ing C <mark>ode, Ch</mark> apter			(A).		
ne designed and constructed in compliance with the O-life at D. 11			Title 20 Section 1605.3 (h)(4)(A): Commercial prerinse sp		
ns designed and constructed in compliance with the California Building mply with Section 4.106.4.2.2.1.1 and Section 4.106.4.2.2.1.2, Item 3.			shall have a minimum spray force of not less than 4.0 oun	nces-force (ozf)[113 grams-force(gf)]	
stations (EVCS) dimensions.			4.303.2 Submeters for multifamily buildings and dwell buildings.	ling units in mixed-used residential/commercial	
comply with the following:				e of individual rental dwelling units in accordance with	
shall be 18 feet (5486 mm).					1
hall be 9 feet (2743 mm).			4.303.3 Standards for plumbing fixtures and fittings. F accordance with the <i>California Plumbing Code</i> , and shall r		
ot less th <mark>an one, shall also have</mark> an 8-foot (2438 mm) wide minimum			1701.1 of the California Plumbing Code.		
aisle shall be permitted provided the minimum width of the EV space is					
aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent			TABLE - MAXIMUM FIXTURE WATER USE		
				FLOW RATE	
			FIXTURE TYPE		
4.106.4.2.2.1.1 and 4.106.4.2.2.1.2, all EVSE, when installed, shall r EV chargers in the California Building Code, Chapter 11B. EV ready		-	SHOWER HEADS (RESIDENTIAL)	1.8 GMP @ 80 PSI	
nents shall comply with California Building Code, Chapter 11A, Section			LAVATORY FAUCETS (RESIDENTIAL)	MAX. 1.2 GPM @ 60 PSI MIN. 0.8 GPM @ 20PSI	
			LAVATORY FAUCETS IN COMMON & PUBLIC		
raceway capable of accommodating a 208/240-volt dedicated branch			USE AREAS	0.5 GPM @ 60 PSI	
trade size 1 (nominal 1-inch inside diameter). The raceway shall and shall terminate into a listed cabinet, box or enclosure in close			KITCHEN FAUCETS	1.8 GPM @ 60 PSI	
ocation of the EV space. Construction documents shall identify the harger location, as applicable. The service panel and/ or subpanel shall			METERING FAUCETS	0.2 GAL/CYCLE	
anch circuit, including branch circuit overcurrent protective device stallation of a branch circuit overcurrent protective device.			WATER CLOSET	1.28 GAL/FLUSH	
ninimum 40-ampere 208/240-volt dedicated EV branch circuit is installed			URINALS	0.125 GAL/FLUSH	

8 7

N/A RESPON. PARTY 4.304 OUTDOOR WATER USE 4.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS. Residential developments shall comply

with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.

NOTES:

1. The Model Water Efficient Landscape Ordinance (MWELO) is located in the California Code Regulations, Title 23, Chapter 2.7, Division 2. MWELO and supporting documents, including water budget calculator, are available at: https://www.water.ca.gov/

DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE

4.406.1 RODENT PROOFING. Annular spaces around pipes, electric cables, conduits or other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or a similar method acceptable to the enforcing agency.

4.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING

4.408.1 CONSTRUCTION WASTE MANAGEMENT. Recycle and/or salvage for reuse a minimum of 65 percent of the non-hazardous construction and demolition waste in accordance with either Section 4.408.2, 4.408.3 or 4.408.4, or meet a more stringent local construction and demolition waste management

ordinance.

Exceptions: 1. Excavated soil and land-clearing debris.

2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist or are not located reasonably close to the jobsite. 3. The enforcing agency may make exceptions to the requirements of this section when isolated jobsites are located in areas beyond the haul boundaries of the diversion facility.

4.408.2 CONSTRUCTION WASTE MANAGEMENT PLAN. Submit a construction waste management plan in conformance with Items 1 through 5. The construction waste management plan shall be updated as necessary and shall be available during construction for examination by the enforcing agency.

Identify the construction and demolition waste materials to be diverted from disposal by recycling, reuse on the project or salvage for future use or sale. 2. Specify if construction and demolition waste materials will be sorted on-site (source separated) or bulk mixed

(single stream). 3. Identify diversion facilities where the construction and demolition waste material collected will be taken.

4. Identify construction methods employed to reduce the amount of construction and demolition waste generated.

5. Specify that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both.

4.408.3 WASTE MANAGEMENT COMPANY. Utilize a waste management company, approved by the enforcing agency, which can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with Section 4.408.1.

Note: The owner or contractor may make the determination if the construction and demolition waste materials will be diverted by a waste management company.

4.408.4 WASTE STREAM REDUCTION ALTERNATIVE [LR]. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 3.4 lbs./sq.ft. of the building area shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1

4.408.4.1 WASTE STREAM REDUCTION ALTERNATIVE. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 2 pounds per square foot of the building area, shall meet the minimum 65% construction Waste reduction requirement in Section 4.408.1

4.408.5 DOCUMENTATION. Documentation shall be provided to the enforcing agency which demonstrates compliance with Section 4.408.2, items 1 through 5, Section 4.408.3 or Section 4.408.4.

1. Sample forms found in "A Guide to the California Green Building Standards Code (Residential)" located at www.hcd.ca.gov/CALGreen.html may be used to assist in documenting compliance with this section. 2. Mixed construction and demolition debris (C & D) processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle).

4.410 BUILDING MAINTENANCE AND OPERATION

4.410.1 OPERATION AND MAINTENANCE MANUAL. At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building:

1. Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.

2. Operation and maintenance instructions for the following:

a. Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic systems, electric vehicle chargers, water-heating systems and other major appliances and equipment

- b. Roof and yard drainage, including gutters and downspouts.
- c. Space conditioning systems, including condensers and air filters.

d. Landscape irrigation systems.

e. Water reuse systems. 3. Information from local utility, water and waste recovery providers on methods to further reduce resource consumption, including recycle programs and locations.

4. Public transportation and/or carpool options available in the area.

5. Educational material on the positive impacts of an interior relative humidity between 30-60 percent and what methods an occupant may use to maintain the relative humidity level in that range.

6. Information about water-conserving landscape and irrigation design and controllers which conserve water. 7. Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation.

8. Information on required routine maintenance measures, including, but not limited to, caulking, painting, grading around the building, etc.

9. Information about state solar energy and incentive programs available. 10. A copy of all special inspections verifications required by the enforcing agency or this code.

11. Information from the Department of Forestry and Fire Protection on maintenance of defensible space around residential structures.

12. Information and/or drawings identifying the location of grab bar reinforcements.

4.410.2 RECYCLING BY OCCUPANTS. Where 5 or more multifamily dwelling units are constructed on a building site, provide readily accessible area(s) that serves all buildings on the site and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waster, and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive.

Exception: Rural jurisdictions that meet and apply for the exemption in Public Resources Code Section 42649.82 (a)(2)(A) et seq. are note required to comply with the organic waste portion of this section.



PROJECT ACCESSORY **DWELLING UNIT**

500 SQ. FT. MODEL (532 SQ.FT.) W/ ADAPTABLE FEATURES

OPTION

#3

PWP23-003

DEPARTMENT OF PUBLIC WORKS AND PLANNING



CAPITAL PROJECTS DIVISION

2220 Tulare St., Ste. 720, Fresno, CA. 93721 Phone: (559) 262-4212 Fax: (559) 262-4879



UPDATE

JULY 10, 2023

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE ARCHITECT AND SHALL NOT BE USED ON ANY OTHER PROJECT OR LOCATIONS EXCEPT AS DESCRIBED ON

THE DRAWINGS WITHOUT WRITTEN AGREEMENT WITH THE ARCHITECT.

GREEN BUILDING MANDATORY **MEASURES** 1

12" = 1'-0" SCALE

ISSUE DATE APRIL 12, 2023 2023_20 DRAWN BY CHECKED BY RW



I/A RESPON. PARTY	DIVISION 4.5 ENVIRONMENTAL QUALI SECTION 4.501 GENERAL		RESPON. PARTY	CONT. TABLE 4.504.1 - ADHESIVE VOC LIMIT	1,2	Y N/A RESPON. PARTY	Adhesives, sealant and caulks used on the project TABLE 4.504.3 - VOC CONTENT LIMIT	
	4.501.1 Scope The provisions of this chapter shall outline means of reducing the qua	lity of air contaminants that are odorous					ARCHITECTURAL COATINGS 2,3	
	irritating and/or harmful to the comfort and well being of a building's in			SPECIALTY APPLICATIONS	510		SPECIALTY COATINGS (CONT.)	VOC LIMIT
	SECTION 4.502 DEFINITIONS 5.102.1 DEFINITIONS			PVC WELDING CPVC WELDING	490		STONE CONSOLIDANTS	450
	The following terms are defined in Chapter 2 (and are included here for	or reference)		ABS WELDING	325		SWIMMING POOL COATINGS	340 100
	AGRIFIBER PRODUCTS. Agrifiber products include wheatboard, stranot including furniture, fixtures and equipment (FF&E) not considered			PLASTIC CEMENT WELDING	250		TUB & TILE REFINISH COATINGS	420
	COMPOSITE WOOD PRODUCTS. Composite wood products include			ADHESIVE PRIMER FOR PLASTIC	550 80		WATERPROOFING MEMBRANES	250
	medium density fiberboard. "Composite wood products" does not inclu panels, structural composite lumber, oriented strand board, glued lam	inated timber, prefabricated wood I-joists or		SPECIAL PURPOSE CONTACT ADHESIVE	250		WOOD COATINGS WOOD PRESERVATIVES	275 350
	finger-jointed lumber, all as specified in California Code of regulations DIRECT-VENT APPLIANCE. A fuel-burning appliance with a sealed of			STRUCTURAL WOOD MEMBER ADHESIVE	140		ZINC-RICH PRIMERS	340
	combustion from the outside atmosphere and discharges all flue gase MAXIMUM INCREMENTAL REACTIVITY (MIR). The maximum chan	s to the outside atmosphere.		TOP & TRIM ADHESIVE SUBSTRATE SPECIFIC APPLICATIONS	250		1. GRAMS OF VOC PER LITER OF COATING, INCLUDING EXEMPT COMPOUNDS	WATER &
	compound to the "Base Reactive Organic Gas (ROG) Mixture" per we hundredths of a gram (g O ³ /g ROC).	ight of compound added, expressed to		METAL TO METAL	30		2. THE SPECIFIED LIMITS REMAIN IN EFFECT UNLESS I	
	Note: MIR values for individual compounds and hydrocarbon solvents 94700 and 94701.	are specified in CCR, Title 17, Sections		PLASTIC FOAMS	50		ARE LISTED IN SUBSEQUENT COLUMNS IN THE TABLE. 3. VALUES IN THIS TABLE ARE DERIVED FROM THOSE	
	MOISTURE CONTENT. The weight of the water in wood expressed in	n percentage of the weight of the oven-dry		POROUS MATERIAL (EXCEPT WOOD)	50		THE CALIFORNIA AIR RESOURCES BOARD, ARCHITECT COATINGS SUGGESTED CONTROL MEASURE, FEB. 1, 2	008. MORE
	wood.			FIBERGLASS	80		INFORMATION IS AVAILABLE FROM THE AIR RESOURCE	ES BOARD.
	PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR article. The PWMIR is the total product reactivity expressed to hundre							
	product (excluding container and packaging). Note: PWMIR is calculated according to equations found in CCR, Title	e 17, Section 94521 (a).		1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBST TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CO			TABLE 4.504.5 - FORMALDEHYDE LIM	ITS 1
	REACTIVE ORGANIC COMPOUND (ROC). Any compound that has ozone formation in the troposphere.	the potential, once emitted, to contribute to		ALLOWED. 2. FOR ADDITIONAL INFORMATION REGARDING METHOL			MAXIMUM FORMALDEHYDE EMISSIONS IN P	
	VOC. A volatile organic compound (VOC) broadly defined as a chemi			THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOU QUALITY MANAGEMENT DISTRICT RULE 1168.		the	PRODUCT HARDWOOD PLYWOOD VENEER CORE	CURRENT LIMIT
	rings with vapor pressures greater than 0.1 millimeters of mercury at r typically contain hydrogen and may contain oxygen, nitrogen and other	oom temperature. These compounds					HARDWOOD PLYWOOD COMPOSITE CORE	0.05
	94508(a).			TABLE 4.504.2 - SEALANT VOC LIMIT (Loss Water and Loss Exampt Compaunds in Crame	por Liter)		PARTICLE BOARD	0.09
	4.503 FIREPLACES 4.503.1 GENERAL . Any installed gas fireplace shall be a direct-vent			(Less Water and Less Exempt Compounds in Grams SEALANTS	VOC LIMIT		MEDIUM DENSITY FIBERBOARD THIN MEDIUM DENSITY FIBERBOARD 2	0.11
	woodstove or pellet stove shall comply with U.S. EPA New Source Pe as applicable, and shall have a permanent label indicating they are ce	ertified to meet the emission limits.		ARCHITECTURAL	250		1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE	SPECIFIED
	Woodstoves, pellet stoves and fireplaces shall also comply with applic 4.504 POLLUTANT CONTROL				760		BY THE CALIF. AIR RESOURCES BOARD, AIR TOXICS CO MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCO WITH ASTA F 1333 FOR ADDITIONAL INFORMATION S	ORDANCE
	4.504 POLLUTANT CONTROL 4.504.1 COVERING OF DUCT OPENINGS & PROTECTION OF ME CONSTRUCTION. At the time of rough installation, during stora			NONMEMBRANE ROOF ROADWAY	300 250		WITH ASTM E 1333. FOR ADDITIONAL INFORMATION, SU CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 TH 93120.12.	
	startup of the heating, cooling and ventilating equipment, all duc openings shall be covered with tape, plastic, sheet metal of	t and other related air distribution component		SINGLE-PLY ROOF MEMBRANE	450		2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMU	M
	agency to reduce the amount of water, dust or debris which may enter			OTHER	420		THICKNESS OF 5/16" (8 MM).	
	4.504.2 FINISH MATERIAL POLLUTANT CONTROL. Finish materia	als shall comply with this section.		SEALANT PRIMERS		DIVISIO	ON 4.5 ENVIRONMENTAL QUALIT	TY (CONT.)
	4.504.2.1 Adhesives, Sealants and Caulks. Adhesives, sealar requirements of the following standards unless more stringent lo			ARCHITECTURAL NON-POROUS	250	California D	RPET SYSTEMS. All carpet installed in the building interi epartment of Public Health, "Standard Method for the Tes	ting and Evaluation of Volatile O
	management district rules apply:			POROUS	775		missions from Indoor Sources Using Environmental Cham od for California Specification 01350)	bers," Version 1.2, January 2017
	 Adhesives, adhesive bonding primers, adhesive primers shall comply with local or regional air pollution control of 	or air quality management district rules where		MODIFIED BITUMINOUS	500	See Californ	ia Department of Public Health's website for certification	programs and testing labs.
	applicable or SCAQMD Rule 1168 VOC limits, as show Such products also shall comply with the Rule 1168 pr	ohibition on the use of certain toxic		MARINE DECK OTHER	760 750	https://www	.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pag	ges/VOC.aspx.
	compounds (chloroform, ethylene dichloride, methylen tricloroethylene), except for aerosol products, as speci			Adhesives, sealant and caulks used on the project s		4.504.3.1 C	arpet cushion. All carpet cushion installed in the building epartment of Public Health, "Standard Method for the Tes	interior shall meet the requireme
	 Aerosol adhesives, and smaller unit sizes of adhesives units of product, less packaging, which do not weigh m 			TABLE 4.504.3 - VOC CONTENT LIMITS F		Chemical E	missions from Indoor Sources Using Environmental Charr lod for California Specification 01350)	bers," Version 1.2, January 2017
	than 16 fluid ounces) shall comply with statewide including prohibitions on use of certain toxic compou	VOC standards and other requirements,		COATINGS 2,3 GRAMS OF VOC PER LITER OF COATING, LESS			a Department of Public Health's website for certification	programs and testing labs.
	17, commencing with section 94507.			COMPOUNDS		https://www	.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pag	jes/VOC.aspx.
	4.504.2.2 Paints and Coatings. Architectural paints and coatin the ARB Architectural Suggested Control Measure, as sho	wn in Table 4.504.3, unless more stringent		COATING CATEGORY	VOC LIMIT	4.504.3.2 C	arpet adhesive. All carpet adhesive shall meet the require	ements of Table 4.504.1.
	local limits apply. The VOC content limit for coatings that do not mee categories listed in Table 4.504.3 shall be determined by classifying the	he coating as a Flat, Nonflat or Nonflat-High		NON-FLAT COATINGS			SILIENT FLOORING SYSTEMS. Where resilient flooring	
	Gloss coating, based on its gloss, as defined in subsections Air Resources Board, Suggested Control Measure, and the corresp VOC limit in Table 4.504.3 shall apply.	onding Flat, Nonflat or Nonflat-High Gloss		NONFLAT-HIGH GLOSS COATINGS	150	Method for t	silient flooring shall meet the requirements of the Californi he Testing and Evaluation of Volatile Organic Chemical E tal Chambers," Version 1.2, January 2017 (Emission testi	in period for California Specific
	4.504.2.3 Aerosol Paints and Coatings. Aerosol paints and co	patings shall meet the Product-weighted MIR		SPECIALTY COATINGS ALUMINUM ROOF COATINGS	400			
	Limits for ROC in Section 94522(a)(2) and other requirement toxic compounds and ozone depleting substances, in Sections 9	ents, including prohibitions on use of certain		BASEMENT SPECIALTY COATINGS	400	C HINNEY	ia Department of Public Health's website for certification	
	<i>Regulations</i> , Title 17, commencing with Section 94520; an Area Air Quality Management District additionally comply with	d in areas under the jurisdiction of the Bay		BITUMINOUS ROOF COATINGS	50	hhtps://www	.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pa	ges/VOC.aspx.
	of Regulation 8, Rule 49.			BITUMINOUS ROOF PRIMERS	350	4.504.5 CO	MPOSITE WOOD PRODUCTS. Hardwood plywood, part	ticleboard a <mark>nd medium densit</mark> y fil
	4.504.2.4 Verification. Verification of compliance with this section enforcing agency. Documentation may include, but is not limited			BOND BREAKERS CONCRETE CURING COMPOUNDS	350 350	formaldehyd	rood products used on the interior or exterior of the buildin le as specified in ARB's Air Toxics Control Measure for C	omposite Wood (17 CCR 93120
	 Manufacturer's product specification. Field verification of on-site product containers. 			CONCRETE/MASONRY SEALERS	100		e dates specified in those sections, as shown in Table 4.5	
	2. Field verification of on-site product containers.			DRIVEWAY SEALERS	50	4.504.5.1 D enforcing ag	ocumentation. Verification of compliance with this section gency. Documentation shall include at least one of the follo	owing:
				DRY FOG COATINGS FAUX FINISHING COATINGS	150		certifications and specifications.	
	TABLE 4.504.1 - ADHESIVE VOC LIMIT	1,2		FIRE RESISTIVE COATINGS	350	3. Product 93120, et se	labeled and inv <mark>oiced</mark> as meeting the Composite Wood Pr eq.).	
	(Less Water and Less Exempt Compounds in Grams			FLOOR COATINGS	100	4. Exterior Wood Asso	grade products marked as meeting the PS-1 or PS-2 star ciation, the Australian AS/NZS 2269, European 636 3S sta	
	ARCHITECTURAL APPLICATIONS	VOC LIMIT		FORM-RELEASE COMPOUNDS GRAPHIC ARTS COATINGS (SIGN PAINTS)	250 500		0151, CSA 0153 and CSA 0325 standards. ethods acceptable to the enforcing agency.	
	INDOOR CARPET ADHESIVES	50		HIGH TEMPERATURE COATINGS	420		RIOR MOISTURE CONTROL neral. Buildings shall meet or exceed the provisions of the	e California Building Standards C
	CARPET PAD ADHESIVES OUTDOOR CARPET ADHESIVES	150		INDUSTRIAL MAINTENANCE COATINGS	250	4.505.2 CO	NCRETE SLAB FOUNDATIONS. Concrete slab foundat	ions required to have a vapor retained
	WOOD FLOORING ADHESIVES	100		LOW SOLIDS COATINGS1 MAGNESITE CEMENT COATINGS	120	California B	uildin <mark>g Cod</mark> e, Cha <mark>pter 1</mark> 9, or concr <mark>ete sl</mark> ab-on-ground floo esidential Code, Chapter 5, shall also comply with this se	rs required to have a <mark>vapor</mark> retar
	RUBBER FLOOR ADHESIVES	60		MAGNESITE CEMENT COATINGS MASTIC TEXTURE COATINGS	450 100	4.505.2.1 C	apillary break. A capillary break shall be installed in com	pliance with at least o <mark>ne of</mark> the fo
	SUBFLOOR ADHESIVES	65		METALLIC PIGMENTED COATINGS	500		(101.6 mm) thick base of 1/2 inch (12.7mm) or larger cle	
	VCT & ASPHALT TILE ADHESIVES	50		MULTICOLOR COATINGS	250		ier in direct contact with concrete and a concrete mix des and curling, shall be used. For additional information, see	
	DRYWALL & PANEL ADHESIVES	50		PRETREATMENT WASH PRIMERS PRIMERS, SEALERS, & UNDERCOATERS	420	2. Other ed	-06. quivalent methods approved by the enforcing agency. esign specified by a licensed design professional.	
	COVE BASE ADHESIVES	50		REACTIVE PENETRATING SEALERS	350		esign specified by a licensed design professional.	ng materials with visible signs of t
	MULTIPURPOSE CONSTRUCTION ADHESIVE STRUCTURAL GLAZING ADHESIVES	70 100		RECYCLED COATINGS	250	damage sha	ISTURE CONTENT OF BUILDING MATERIALS. Buildin all not be installed. Wall and floor framing shall not be enc sture content. Moisture content shall be verified in compli	losed when the framing members
	SINGLE-PLY ROOF MEMBRANE ADHESIVES	250			50	1 Moisture	e content shall be determined with either a probe-type or c	
	OTHER ADHESIVES NOT LISTED	50		RUST PREVENTATIVE COATINGS SHELLACS	250	moisture ve	rification methods may be approved by the enforcing ager ction 101.8 of this code.	
				CLEAR	730	2. Moisture each piece	e readings shall be taken at a point 2 feet (610 mm) to 4 fe verified.	, , ,
				OPAQUE	550	3. At least	three random moisture readings shall be performed on wa to the enforcing agency provided at the time of approval to	all and floor framing with docume o enclose the wall and floor fran
				SPECIALTY PRIMERS, SEALERS & UNDERCOATERS	100	Insulation p	roducts which are visibly wet or have a high moisture cont	ent shall be replaced or allowed
				STAINS	250		wall or floor cavities. Wet-applied insulation products sh	

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE RESIDENTIAL MANDATORY MEASURES, SHEET 2

(January 2023)

Y NA RESPON. PARTY 4.506 INDOOR AIR QUALITY AND EXHAUST

4.506.1 Bathroom exhaust fans. Each bathroom shall be mechanically ventilated and shall comply with the following:

1. Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building. 2. Unless functioning as a component of a whole house ventilation system, fans must be controlled by a humidity control.

a. Humidity controls shall be capable of adjustment between a relative humidity range less than or equal to 50% to a maximum of 80%. A humidity control may utilize manual or automatic means of adjustment.

b. A humidity control may be a separate component to the exhaust fan and is not required to be integral (i.e., built-in)

Notes:

1. For the purposes of this section, a bathroom is a room which contains a bathtub, shower or tub/shower combination.

2. Lighting integral to bathroom exhaust fans shall comply with the California Energy Code.

4.507 ENVIRONMENTAL COMFORT

4.507.2 HEATING AND AIR-CONDITIONING SYSTEM DESIGN. Heating and air conditioning systems shall be sized, designed and have their equipment selected using the following methods:

- 1. The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J 2011 (Residential
- Load Calculation), ASHRAE handbooks or other equivalent design software or methods. 2. Duct systems are sized according to ANSI/ACCA 1 Manual D - 2014 (Residential Duct Systems),
- ASHRAE handbooks or other equivalent design software or methods.
- 3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S 2014 (Residential Equipment Selection), or other equivalent design software or methods.

Exception: Use of alternate design temperatures necessary to ensure the system functions are acceptable.

CHAPTER 7 INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

702 QUALIFICATIONS

702.1 INSTALLER TRAINING. HVAC system installers shall be trained and certified in the proper installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or certification program. Uncertified persons may perform HVAC installations when under the direct supervision and responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems. Examples of acceptable HVAC training and certification programs include but are not limited to the following:

- 1. State certified apprenticeship programs.
- 2. Public utility training programs.
- 3. Training programs sponsored by trade, labor or statewide energy consulting or verification organizations. 4. Programs sponsored by manufacturing organizations.
- 5. Other programs acceptable to the enforcing agency.

702.2 SPECIAL INSPECTION [HCD]. When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition to other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be considered by the enforcing agency when evaluating the qualifications of a special inspector:

Certification by a national or regional green building program or standard publisher. Certification by a statewide energy consulting or verification organization, such as HERS raters, performance contractors, and home energy auditors. buildin Successful completion of a third party apprentice training program in the appropriate trade. 4. Other programs acceptable to the enforcing agency.

Notes

the

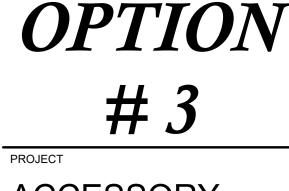
Special inspectors shall be independent entities with no financial interest in the materials or project they are inspecting for compliance with this code. HERS raters are special inspectors certified by the California Energy Commission (CEC) to homes in California according to the Home Energy Rating System (HERS).

[BSC] When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition, the special inspector shall have a certification from a recognized state, national or international association, as determined by the local agency. The area of certification shall be closely related to the primary job function, as determined by the local agency.

Note: Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.

703 VERIFICATIONS

703.1 DOCUMENTATION. Documentation used to show compliance with this code shall include but is not limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which demonstrate substantial conformance. When specific documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate section or identified applicable checklist.



500 SQ. FT. MODEL (532 SQ.FT.) W/ ADAPTABLE FEATURES

ACCESSORY **DWELLING UNIT**

PWP23-003

DEPARTMENT OF PUBLIC WORKS AND PLANNING



CAPITAL PROJECTS DIVISION

2220 Tulare St., Ste. 720, Fresno, CA. 93721 Phone: (559) 262-4212 Fax: (559) 262-4879



UPDATE

JULY 10, 2023

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE ARCHITECT AND SHALL NOT BE USED ON ANY OTHER PROJECT OR LOCATIONS EXCEPT AS DESCRIBED ON

THE DRAWINGS WITHOUT WRITTEN AGREEMENT WITH THE ARCHITECT.

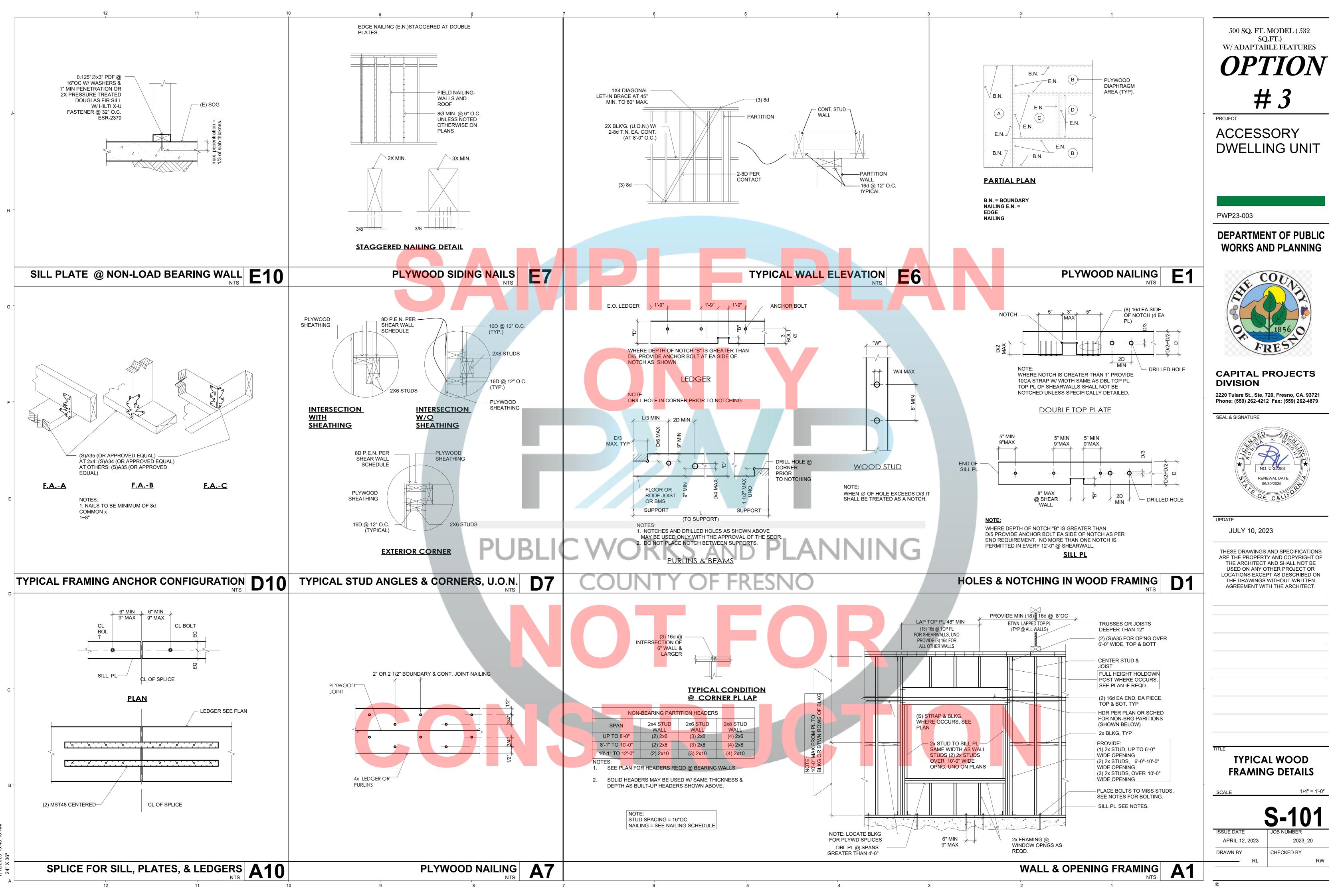
GREEN BUILDING MANDATORY **MEASURES 2**

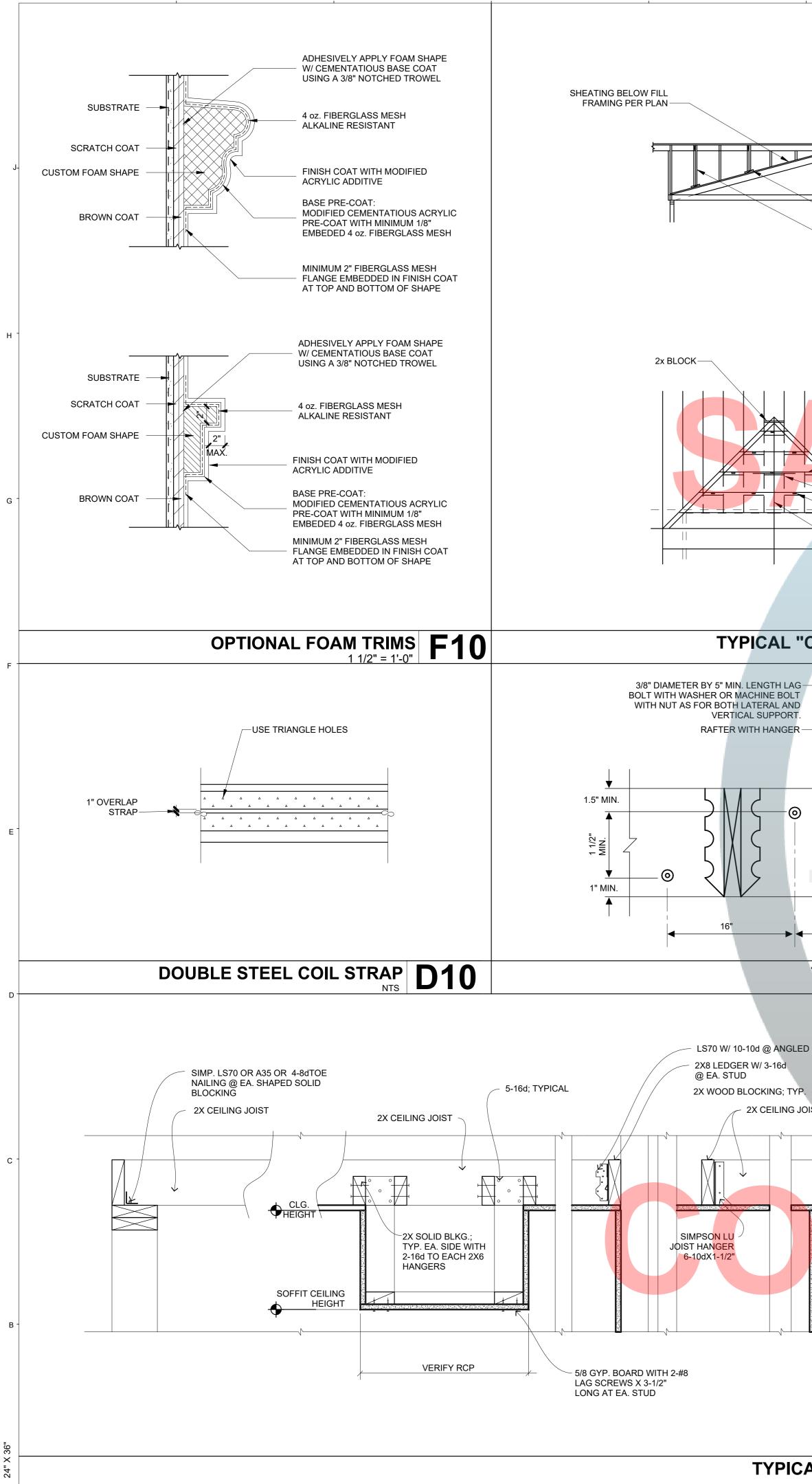
12" = 1'-0" SCALE

G	BC-2
ISSUE DATE	JOB NUMBER
APRIL 12, 2023	2023_20
DRAWN BY	CHECKED BY
RW	RW

2

Ô





12

-2x SLEEPER W/ 16d @ 6" O.C. TO 2x BLK. -DOUBLE -2x BLK. W/ SIMP. A35 EA. TOP PLATE END TO TRUSS/RAFTER -28" 2X6 FLAT BLK. W/ (2) 16d EA. END, TYP. RAFTER--LSAT15 STRAP @ 2x VERT. BRACES W/ (3) 48" O.C., TYP. 16d AT TOP AND BTM. -RAFTERS OR TRUSS PER PLAN -RIDGE/VALLEY -2x6 FLAT VALLEY O/ MEMBER PLYWOOD (SLEEPER) W/ 3-16d PER BRG. 2x6 FILL RAFTERS AT 24" O.C. **ROOF SHEATHING** -ROOF SHEATHING -2x6 COLLAR TIES AT 48" O.C. -2x6 VERT. BRACES AT 48" -3x BLOCKING O.C. MAX. -BEARING WALLS BELOW -2x6 RIDGE TYPICAL "CALIFORNIA FILL" FRAMING **F6** RIDGE TIE AT STUD WALL F3 1/2" MAX.-WALL SHEATHING-/--- PT SILL PLATE 3"x3"x 1/4" SLOTTED-WASHER PLATE —A.B. -PT SILL PLATE 1/2" MAX. TYPICAL LEDGER DETAILS D6 WASHER PLATE PLACEMENT D3 LS70 W/ 10-10d @ ANGLED CEILING JOIST 2X CEILING JOIST 2X WOOD BLOCKING; TYP WOOD STUD WAL PER SCHEDULE 2X8 LEDGER W/ 3-<mark>16d @</mark> EA. STUD &16d AT 6" O.C. TO EA. BLKG. (TYP.) SIMPSON LU JOIST HANGER TYPICAL WOOD FRAMED CEILING A6 NTS

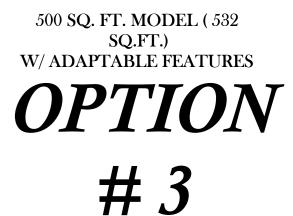
2

-MSTC28 CENTERED

ON THE RIDGE

ALL BUTT WELDS SHALL BE COMPLETE PENETRATION WELDS. ALL WELDING OF STRUCTURAL STEEL MEMBERS SHALL BE DONE BY CURRENTLY

- CERTIFIED WELDERS AND DONE IN CONFORMANCE WITH THE A.I.S.C. AND A.W.S. SPECIFICATIONS. ALL WELDING SHALL BE ACCOMPLISHED USING THE SHIELD METAL ARC WELDING PROCESS (SMAW WITH E7-XX ELECTRODES OF THE SUBMERGED ARC WELDING PROCESS (SAW) WITH E7X-EXXX ELECTRODES OR THE FLUX-CORED ARC WELDING PROCESS (FCAW WITH E7IT-8 ELECTRODES . (E70T-4 ELECTRODES ALLOWED FOR SHOP WELDING ONLY) LOW
- HYDROGEN ELECTRODES SHALL BE USED AND KEPT DRY, AND PARENT METALS SHALL BE PREHEATED IN ACCORDANCE WITH AWS STANDARDS. NO WELDING PERMITTED ON MEMBERS SUPPORTING LOADS.
 WHERE THE CONTRACTOR REQUESTS WELDING TO BE USED IN LIEU OF BOLTED
- CONNECTIONS SUCH WELDING SHALL BE DONE ONLY WITH THE ENGINEERS PRIOR APPROVAL.
 HOLES PUNCHED OR DRILLED IN BEAMS SHALL BE AS FOLLOWS UNLESS NOTED
- OTHERWISE ON THE DRAWING: HOLES FOR BOLTS SHALL BE 1/16" LARGER THAN THE NOMINAL DIAMETER OF THE BOLT WHERE CONNECTION IS OF SHEAR TYPE, AND 3/16" LARGER WHERE CONNECTION IS OF BEARING TYPE ON CONCRETE OR MASONRY.
- ALL STRUCTURAL STEEL AND MISCELLANEOUS STEEL SHALL RECEIVE ONE SHOP COAT OF RED OXIDE OR ZINC CHROMATE OR APPROVED EQUAL BASE.
 ALL STRUCTURAL & MISCELLANEOUS STEEL SHALL CONFORM TO THE FOLLOWING STANDARDS:
- A. WIDE FLANGE MEMBERS (W, S, AND HP SHAPES) ARE TO BE ASTM A992 (Fy=50ksi) IN ACCORDANCE WITH AISC.
- B. CHANNELS, ANGLES, TEES, AND MISCELLANEOUS AISC STEEL SHAPES ARE TO BE ASTM A36. Fy=36 KSI MIN. UNO
- C. HIGH STRENGTH BOLTS: ASTM A325N 1/2" TO 1" DIAMETER INCLUSIVE FY=92 KSI. 1 1/8" TO 1 1/2" DIAMETER INCLUSIVE FY=81 KSI
- D. ASTM A-307 BOLTS SHALL BE USED UNLESS OTHERWISE NOTED.
- STRUCTURAL PIPE SHALL CONFORM TO A.S.T.M. A-53 GRADE "B" Fy=35 KSI. MIN.
 STRUCTURAL TUBING SHALL CONFORM TO A.S.T.M. A-500 GRADE "C" Fy=50 KSI.
- G. ANCHOR BOLTS: ASTM A307 TYPICAL. H. HEADED STUDS: ASTM A108.
- I. WELDING ELECTRODES: E70XX
- J. ALL PLATES, MISC. SHAPES, AND STRUCTURAL SHAPES (AISC, etc.) USED AS PART OF A CONNECTION, DOUBLER PLATES, CONTINUITY PLATES, ETC. IN THESE PLANS SHALL BE MADE OF EQUAL MATERIAL (MATERIAL PROPERTIES, GRADE, YIELD STRENGTH, ETC.) AS THE MAIN STRUCTURAL MEMBERS BEING CONNECTED, TYP.
- LIGHT GAUGE COLD-FORMED STRUCTURAL STEEL SHALL CONFORM TO THE
- SPECIFICATIONS OF THE AISI GENERAL 04 AND AISI NAS 01 LIGHT GAUGE STRUCTURAL STEEL SHALL BE SHAPED AS SHOWN IN THE A.I.S.I. DESIGN
- MANUAL, UNLESS SPECIFICALLY OTHERWISE CALLED FOR.
 9. ALL ENDS OF EXPOSED STRUCTURAL SHAPES AND TUBE STEEL MEMBERS SHALL HAVE 1/4"
- CAP PLATE WITH WELDS GRIND SMOOTH.
 10. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL TEMPORARY SUPPORTS REQUIRED FOR ERECTION. IF ERECTION BRACING IS REQUIRED IT IS TO BE PREPARED BY A LICENSED
- ENGINEER.
 ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LATEST REVISED EDITION OF THE AISC MANUAL OF STEEL CONSTRUCTION, WHICH INCLUDES THE SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS, THE CODE OF STANDARD PRACTICE
- AND THE AWS STRUCTURAL WELDING CODE.
 2. GROUTING OF COLUMN BASE PLATES: BASE PLATES SHALL BE DRYPACKED OR GROUTED WITH 1 1/2" NON-SHRINK GROUT OR EQUAL. MINIMUM COMPRESSIVE STRENGTH SHALL BE 4000 PSI AT 28 DAYS. ALL SURFACES SHALL BE PROPERLY CLEANED OF FOREIGN MATERIAL PRIOR TO THE GROUTING OPERATION.
- 13. FULL PENETRATION WELDED CONNECTIONS (100%) AT MOMENT FRAMES, BRACED FRAMES, AND ALL FULL PENETRATIONS FIELD WELDS SHALL HAVE ULTRASONIC TESTING FOR COMPLIANCE WITH AISC 13th EDITION ULTRASONIC TESTING SHALL BE PERFORMED BY AN INDEPENDENT TESTING AGENCY THAT HAS BEEN INSPECTED BY THE NATIONAL STANDARDS. TESTING INSPECTIONS SHALL BE QUALIFIED BY ASNT BUREAU OF RECOMMENDED PRACTICE SNT-TC-A1. PROVIDE PROPER SURFACE PREP. AND BACKUP
- PLATES AS REQUIRED PER AISC AND AWS.
 14. ALL EXPOSED WELDS SHALL BE FILLED AND GROUND SMOOTH WHERE METAL COULD COME IN CONTACT WITH THE PUBLIC. UNLESS WELDS ARE PERMITTED BY THE PROJECT
- ARCHITECT.
 15. NO HOLES OTHER THAN THOSE SPECIFICALLY DETAILED SHALL BE ALLOWED THRU STRUCTURAL STEEL MEMBERS. BOLT HOLES SHALL CONFORM TO AISC SPECIFICATION, AND SHALL BE STANDARD HOLES UNLESS OTHERWISE NOTED. NO CUTTING OR BURNING OF STRUCTURAL STEEL WILL BE PERMITTED WITHOUT PRIOR CONSENT OF THIS ENGINEER
 16. HIGH STRENGTH BOLTS WHERE INDICATED IN THE PLANS OR DETAILED SHALL CONFORM TO A.S.T.M. A325 OR A490, AND BE PROVIDED WITH HARDENED WASHERS CONFORMING TO A.S.T.M. F436. SLIP-CRITICAL TYPE BOLTS (A325-SC OR A490-SC) SHALL BE TWIST-OFF-TYPE TENSION-CONTROL BOLT ASSEMBLY. AT CONTRACTORS OPTION, THE COMBINATION OF
- HIGH STRENGTH BOLTS AND DIRECT TENSION LOAD INDICATING WASHERS CONFORMING TO ASTM F-959 ARE ACCEPTABLE SUBSTITUTIONS. CONTACT SURFACES SHALL BE CLEAN MILL SCALE OR CLASS A QUALIFIED COATINGS.
 7. ALL SHOP AND FIELD BOLTED CONNECTIONS SHALL BE IN ACCORDANCE WITH ASTM A-307 USING UNFINISHED AMERICAN STANDARD REGULAR BOLTS. UNLESS OTHERWISE NOTED
- USING UNFINISHED AMERICAN STANDARD REGULAR BOLTS, UNLESS OTHERWISE NOTED.
 18. WHERE STEEL MEMBERS BEAR IN CONCRETE OR MASONRY WALLS, OPENINGS SHALL BE DRY-PACKED AFTER STEEL IS IN PLACE.
 19. PROVIDE SHOP DRAWINGS INDICATING SIZES, SPACING AND LOCATION OF JOISTS,
- GIRDERS, CONNECTIONS, BRIDGING, REINFORCING, ANCHORAGES, CAMBERS, AND LOADS. INDICATE WELDING CONNECTIONS USING STANDARD AWS WELDING SYMBOLS. INDICATE NEW WELD LENGTHS. INDICATE RECOMMENDED PROCEDURES FOR JOIST SEATS WITH UNSUFFICIENT BEARING.



ACCESSORY DWELLING UNIT

PWP23-003

PROJECT

DEPARTMENT OF PUBLIC WORKS AND PLANNING



CAPITAL PROJECTS DIVISION

2220 Tulare St., Ste. 720, Fresno, CA. 93721 Phone: (559) 262-4212 Fax: (559) 262-4879

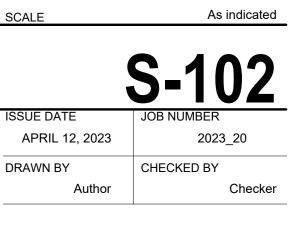


UPDATE

JULY 10, 2023

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE ARCHITECT AND SHALL NOT BE USED ON ANY OTHER PROJECT OR LOCATIONS EXCEPT AS DESCRIBED ON THE DRAWINGS WITHOUT WRITTEN AGREEMENT WITH THE ARCHITECT.

STRUCTURAL DETAILS



GENERAL STUCTURAL STEEL NOTES A1

NOMINAL	DESCRIPTION ^{a,b} OF FASTENER	SPACING ^c C	OF FASTENE
MATERIAL THICKNESS (inches)	AND LENGTH (inches)	EDGES (inches)	INTERMID SUPPOF (inches
WOOD	STRUCTURAL PANELS SUBFLOOR, ROOF AND WALLS AND PARTICLEBOARD WALL SHEATHING TO		FRAMING
	STAPLE 15 GA. 13/4	4	8
UP TO 1/2	0.097 - 0.099 NAIL 21/4 STAPLE 16 GA. 13/4	3	6
	0.113 NAIL 2	3	6
19/32 AND 5/8	STAPLE 15 AND 16 GA. 2	4	8
	0.097 - 0.99 NAIL 21/4	4	8
	STAPLE 14 GA. 2	4	8
23/32 AND 3/4	STAPLE 15 GA. 13/4 0.097 - 0.099 NAIL 21/4	4	6
	STAPLE 16 GA. 2	4	8
	STAPLE 14 GA. 21/4	4	8
Ι	0.113 NAIL 21/4	3	6
	STAPLE 15 GA. 21/4 0.097 - 0.099 NAIL 21/2	4	8
	0.001 0.000 Wile 21/2		
NOMINAL MATERIAL THICKNESS (inches)	DESCRIPTION ^{a,b} OF FASTENER AND LENGTH (inches)	EDGES (inches)	BODY C PANEL (inches
FLOOR,	UNDERLAYMENT; PLYWOOD-HARDBOARD-PARTICLE	BOARD ^f -FIBEF	R-CEMENT ^h
	FIBER-CEMENT		
	3D, CORROSION-RESISTANT, RING SHANK NAILS (FINISHED FLOORING OTHER THAN TILE)	3	6
	STAPLE 18 GA., 7/8 LONG, 1/4 CROWN (FINISHED FLOORING OTHER THAN TILE)	3	6
	X .121 SHANK x .375 HEAD DIAMETER CORROSION-RE		8
·	ED OR STAINLESS STEEL) ROOFING NAILS (FOR TILE	-	o
T 1/4 LONG,	NO. 8 x .375 HEAD DIAMETER, RIBBED WAFER- HEAD (FOR TILE FINISH)	DCREW8	8
	PLYWOOD		
	1 1/4 RING OR SCREW SHANK NAIL-MINIMUM 12 1/2 GA. (0.099") SHANK DIAMETER	3	6
1/4 AND 5/16	STAPLE 18 GA., 7/8, 3/16 CROWN WIDTH	2	5
11/32, 3/8, 15/32,	1 1/4 RING OR SCREW SHANK NAIL-MINIMUM	6	8 ^e
AND 1/2	12 1/2 GA. (0.099") SHANK DIAMETER 1 1/2 RING OR SCREW SHANK NAIL-MINIMUM	6	8
19/32, 5/8, 23/32 AND 3/4	12 1/2 GA. (0.099") SHANK DIAMETER		
	STAPLE 16 GA. 1 1/2	6	8
	HARDBOARD		
0.200	1 1/2 LONG RING- GROOVED UNDERLAYMENT NAIL 4D CEMENT-COATED SINKER NAIL	6	6
	STAPLE 18 GA., 7/8 LONG (PLASTIC COATED)	3	6
	PARTICLEBOARD		
1/4	4D RING-GROOVED UNDERLAYMENT NAIL	3	6
	STAPLE 18 GA., 7/8 LONG, 3/16 CROWN	3	6
3/8	6D RING-GROOVED UNDERLAYMENT NAIL STAPLE 16 GA., 1 1/8 LONG, 3/8 CROWN	6 3	10 6
1/0 5/0	6D RING-GROOVED UNDERLAYMENT NAIL	6	10
1/2, 5/8	STAPLE 16 GA., 1 5/8 LONG, 3/8 CROWN	3	6
 a. NAIL IS A GE ROUND HEA b. STAPLES SH NOTED. c. NAILS OR ST SUPPORTS N SPACED AT FLOORS. d. FASTENERS e. FOR 5-PLY P CENTER EAC f. HARDBOARE g. SPECIFIAD A WHERE THE ATTACHING SHALL BE IN 	NERAL DESCRIPTION AND SHALL BE PERMITTED TO E D OR ROUND HEAD. IALL HAVE A MINIMUM CROWN WIDTH OF 7/16-INCH ON TAPLES SHALL BE SPACES AT NOT MORE THAN 6 INCH WHERE SPANS ARE 48 INCHES OR GREATER. NAILS O NOT MORE THAN 12 INCHES ON CENTER AT INTERMID SHALL BE PLACE IN A FRID PATTERN THROUGHOUT T ANELS, INTERMIDIATE NAILS SHALL BE SPACED NOT I	N DIAMETER EX IES IN CENTER R STAPLES SHA DIATE SUPPORT THE BODY OF T WORE THAN 12 5.4 HALL BE PERM PH. FASTENERS BLE END WALL GES.	AT ALL ALL BE TS FOR THE PANEL. INCHES ON ITTED S FRAMING

11

10

9

8

7

6

		702.3.5 MIN							2.3 (1) FASTENI						
		ATION OF		-	ND	ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENERS ^{a,b,c} 4-8d BOX (2 1/2" x 0.113") OR	SPACING AND LOCATION	ITEM	DESCRIPTION OF BU ELEMENTS	IILDING	NUMBER AND TYPE OF FASTENERS ^{a,b,c}		ACING AND DCATION
THICKNESS OF GYPSUM BOARD OR	APPLICATION	OF GYPSUM BOARD OR	MAXIMUM SPACING OF	MAXIMUM SPACING OF FASTENERS	SIZE OF NAILS FOR APPLICATION	1	BLOCKING BETWEEN CEILING JOIST OR RAFTERS TO TOP PLATE	3-8d COMMON (2 1/2" x 0.131"); OR 3-10d BOX (3" x 0.128"); OR 3-3" x 0.131 NAILS	TOE NAIL	21 JC	DIST TO SILL, TOP PLATE OR GIF	RDER	FLOOR 4-8d BOX (2 1/2" x 0.113") OR 3-8d COMMON (2 1/2" x 0.131"); OR 3-10d BOX (3" x 0.128"); OR	TOE NAI	
GYPSUM PANEL PRODUCTS (inches)		GYPSUM PANEL PRODUCT TO FRAMING	FRAMING MEMBERS (inches O.C.)	(inches) NAILS ^a SCREWS	TO WOOD FRAMING ^c	2	CEILING JOIST TO TOP PLATE	4-8d BOX (2 1/2" x 0.113") OR 3-8d COMMON (2 1/2" x 0.131"); OR 3-10d BOX (3" x 0.128"); OR 3-3" x 0.131 NAILS	PER JOIST TOE NAIL	22 RI PL	M JOIST, BAND JOIST OR BLOC ATE (ROOF APPLICATIONS ALS	KING TO SILL OR TOP	3-3" x 0.131 NAILS 8d BOX (2 1/2" x 0.131") 8d COMMON (2 1/2" x 0.131") OR 10d BOX (3" x 0.128"); OR	4" O.C. T 6" O.C. T	
					13 GAGE, 1 1/4" LONG, 19/64"	3	CEILING JOIST NOT ATTACHED TO PARALLERL RAFTERS,	4-10d BOX (2 1/2" x 0.113") OR 3-16d COMMON (3 1/2" x 0.162"); OR	FACE NAIL	23 1"	x 6" SUBFLOOR OR LESS TO EA		3" x 0.131" NAILS	FACE NA	
3/8	CEILING d	PERPENDICULAR		7 12	HEAD; 0.098" DIAMETER, 1 1/4" LONG, ANNULAR-RINGED; OR 4d COOLER NAIL, 0.080" DIAMETER, 13/8" LONG,		LAPS OVER PARTITION [SEE SECTION R802.31, R802.3.2 AND TABLE R802.5.1 (9)]	3-10d BOX (3" x 0.128"); OR 4-3" x 0.131 NAILS			SUBFLOOR TO JOIST OR GIRDE		3-10d BOX (3" x 0.128"); OR 2 STAPLES, 1" CROWN, 16ga. 1 3/4" L 3-16d BOX (3" x 0.135") OR		ID FACE NAIL
	WALL		16	8 16	7/32" HEAD.	4	CEILING JOIST ATTACHE TO PARALLEL RAFTER (HEEL JOINT) [SEE SECTION R802.31 AND R802.3.2 AND	TABLE R802.51 (9)	FACE NAIL		PLANLKS (PLANK & BEAM - FLC	OR & ROOF)	2-16d COMMON (3 1/2" x 0.162") 3-16d BOX (3" x 0.135") OR 2-16d COMMON (3 1/2" x 0.162")		BEARING FACE NAIL
	CEILING	EITHER DIRECTION		7 12	13 GAGE, 13/8" LONG, 19/64" HEAD; 0.098" DIAMETER, 1 1/4" LONG, ANNULAR-RINGED:	5	TABLE R802.5.1 (9)] COLLAR TIE TO RAFTER, FACE NAIL OR 1 1/4" x 20ga.	4-10d BOX (3" x 0.128") OR	FACE NAIL EA. RAFTER	26 BA	AND OR RIM JOIST TO JOIST		3-16d COMMON (3 1/2" x 0.162") OR 4-10d BOX (3" x 0.128"); OR	END NAI	
1/2	CEILING d	PERPENDICULAR	24	7 12	OR 5d COOLER NAIL, 0.086" DIAMETER, 15/8" LONG, 15/64" HEAD; OR		RIDGE STRAP TO RAFTER	3-10d COMMON (3" x 0.148"); OR 4-3" x 0.131 NAILS 3-16d BOX (3 1/2" x 0.135") OR					4-3 x 0.131" NAILS; OR 4-3 x 14ga. STAPLES, 7/16" CROWN– 20d COMMON (4" x 0.192")	NAIL EAG	CH LAYER AS
	WALL	EITHER DIRECTION	24 16	8 12 8 16	GYPSUM BOARD NAIL, 0.086" — DIAMETER, 15/8" LONG, 9/32" HEAD.	6	RAFTER OR ROOF TRUSS TO PLATE	3-10d COMMON NAILS (3 1/2" x 0.148"); OR 4-10d BOX (3" x 0.128"); OR 4-3" x 0.131 NAILS	2 TOE NAILS ON ONE SIDE AND 1 TOE NAIL ON OPPOSITE SIDE OF EACH RAFTER OR TRUSS			-	· · · ·		S: 32" O.C. AT TOP TOM AND RED ACE NAIL AT TOP
					13 GAGE, 15/8" LONG, 19/64" HEAD; 0.098" DIAMETER, 13/8"			4-16d BOX (3 1/2" x 0.135") OR 3-10d COMMON NAILS (3 1/2" x 0.148"); OR	TOE NAIL	27 BU	JILT-UP GIRDERS AND BEAMS, 2		10d BOX (3" x 0.128"); OR 3" x 0.131" NAILS	AND BO OPPOSI	TOM STAGGERED ON
	CEILING	EITHER DIRECTION	16	7 12	LONG, ANNULAR-RINGED; OR 6d COOLER NAIL, 0.092" DIAMETER, 17/8" LONG, 1/4" HEAD; OR GYPSUM	7	ROOF RAFTERS TO RIDGR, VALLET OR HIP RAFTERS OR ROOF RAFTER TO MINIMUM 2" RIDGE BEAM	4-10d BOX (3" x 0.128"); OR -4-3" x 0.131 NAILS 3-16d BOX (3 1/2" x 0.135") OR					AND 2-20d COMMON (4" x 0.192"); OR 3-10d BOX (3" x 0.128"); OR 3-3" x 0.131" N∆II S	FACE NA AT EACH	IL AT ENDS AND SPLICE
	CEILING	PERPENDICULAR	24	7 12	BOARD NAIL, 0.0915" DIAMETER, 17/8" LONG, 19/64" HEAD.			3-16d COMMON (3 1/2" x 0.162"); OR 3-10d BOX (3" x 0.128"); OR 3-10d BOX (3" x 0.128"); OR 3-3" x 0.131" NAILS	END NAIL	28 LE	EDGER STRIP SUPPORTING JOIS	STS OR RAFTERS	4-16d BOX (3 1/2" x 0.135") OR 3-16d COMMON (3 1/2" x 0.162"); OR 4-10d BOX (3" x 0.128"); OR	AT EACH FACE NA	JOIST OR RAFTER, IL
	TYPE X AT GARAGE BENEATH HABITABLE	PERPENDICULAR	24	6 6	17/8" LONG 6d COATED NAILS OR EQUIVALENT DRYWALL SCREWS. SCREWS SHALL COMPLY WITH			WALL		29 BF	RIDGING TO JOIST		4-3 x 0.131" NAILS 2-10d (3" x 0.128")	EACH EN	D, TOE NAIL
	ROOMS				SECTION R702.3.5.1 13 GAGE, 15/8" LONG,	8	STUD TO STUD (NOT AT BRACED WALL PANELS)	16d COMMON (3 1/ <mark>2" x 0.1</mark> 62") 10d BOX (3" x 0.128"); OR 3" x 0.131" NAILS	24" O.C. FACE NAIL 16" O.C. FACE NAIL		DESCRIPTION OF BU		NUMBER AND TYPE		ACING OF STENERS
	WALL	EITHER DIRECTION	24	8 12	19/64" HEAD; 0.098" DIAMETER, 13/8" LONG, ANNULAR-RINGED; 6d COOLER NAIL, 0.092"	9	STUD TO STUD AND ABUTTING STUDS AR INTERSECTING	16d BOX (3 1/2" x 0.135"); OR 3" x 0.131" NAILS	12" O.C. FACE NAIL	ITEM	ELEMENTS		OF FASTENERS ^{a,b,c}		S INTERMIDIATE SUPPORTS
	WALL	EITHER DIRECTION	16	8 16	DIAMETER, 17/8" LONG, 1/4" HEAD; OR GYPSUM BOARD NAIL, 0.0915" DIAMTER, 17/8" LONG, 19/64" HEAD.		WALL CORNERS (AT BRACED WALL PANELS)	16d COMMON (3 1/2" x 0.162") 16d COMMON (3 1/2" x 0.162")	16" O.C. FACE NAIL 16" O.C. EACH EDGE			R602.3(3) FOR WOOD	TERIOR WALL SHEATHING TO FRAI STRUCTURAL PANEL EXTERIOR W		
		APPLICATION			SAME AS ABOVE FOR 3/8"	10	BUILT-IP HEADER (2" TO 2" HEADER WITH 1/2" SPACER)	16d BOX (3" x 0.135")	FACE NAIL- 12" O.C. EACH EDGE FACE NAIL-		8" - 1/2"		6d COMMON (2" x 0.113") NAIL (SUBFLOOR, WALL) _8d COMMON (2 1/2" x 0.131") NAIL (F	í I	12"
3/8	CEILING d	PERPENDICULAR	16	16 16	GYPSUM BOARD AND GYPSUM BOARD AND GYPSUM	11	CONTINOUSE HEADER TO STUD	5-8d BOX (2 1/2" x 0.113") OR 4-8d COMMON (2 1/2" x 0.131"); OR 4-10d BOX (3" x 0.128"	TOE NAIL)/32" - 1" 1/8" - 1 1/4"		8d COMMON NAIL (2 1/2" x 0.131") 10d COMMON NAIL (3" x 0.148") NAIL 8d (2 1/2" x 0.131") NAIL (ROOF)	L; OR 6"	12" 12"
	WALL	EITHER DIRECTION	16	16 24	PANEL PRODUCTS.	12	TOP PLATE TO TOP PLATE	16d COMMON (3 1/2" x 0.162") 10d BOX (3" x 0.128"); OR 3" x 0.131" NAILS	16" O.C. FACE NAIL				WALL SHEATHING		
	CEILING	EITHER DIRECTION	16	16 16	SAME AS ABO <mark>VE FOR 1/2" AND 5/8" GYPSUM BOARD AND GYPSUM PANEL PRODUCTS,</mark>		DOUBLE TOP PLATE SPLICE FOR SDCs A-D2 WITH SEISMIC BRACED WALL LINE SPACING <25'	8-16d BOX (3 1/2" x 0.162") OR 12-16d BOX (3 1/2" x 0.135"); OR	PER JOIST TOE NAIL	33 1/2	2" STRUCTURAL CELLULOSIC F	IBERBUARD SHEATH	11/2" GALANIZED ROOFING NAIL, 7 DIAMETER, OR 1" CROWN STAPLE _1 1/4" LONG		6"
1/2 OR 5/8	CEILING ^d	PERPENDICULAR EITHER DIRECTION	24	12 16 16 24	RESPECTIVELY	13	DIVICED WALL LINE OF ACING \$20	12-10d BOX (3" x 0.128"); OR 12-3" x 0.131 NAILS		34 25	5/32" STRUCTURAL CELLULOSIC	FIBERBOARD SHEAT	1 3/4" GALANIZED ROOFING NAIL, 7 DIAMETER, OR 1" CROWN STAPLE 1 1/4" LONG		6"
	CEILING	PERPENDICULAR	16	16 16	BASE PLY NAILED AS ABOVE FOR 1/2" GYPSUM BOARD AND		DOUBLE TOP PLATE SPLICE FOR SDCs D0, D1, D2, AND BRACED WALL LINE SPACING >25'	12-16d (3 1/2" x 0.135")	FACE NIAL ON EACH SIDE OF END JOINT (MIN. 24" LAP SPLICE LENGTH EACH SIDE OF END JOINT)	35 1/2	2" GYPSUM SHEATHING		1 1/2" GALANIZED ROOFING NAIL, S GALVANIZED 1 1/2" LONG, 1 1/4" SCREWS, TYPE	7"	7"
TWO 3/8 LAYERS	WALL	EITHER DIRECTION	24	24 24	- GYPSUM PANEL PRODUCTS; FACE PLY INSTALLED WITH ADHESIVE.	14	BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (NOT AT BRACED WALL PANELS)	16d COMMON (3 1/2" x 0.162") 16d BOX (3 1/2" x 0.135"); OR	16" O.C. FACE NAIL 12" O.C. FACE NAIL	36 5/8	8" GYPSUM SHEATHING		1 3/4" GALANIZED ROOFING NAIL, S GALVANIZED _1 5/8" LONG, 1 5/8" SCREWS, TYPE	7"	7"
FOR SI: 1 inch	-				T OR MORE THAN 2 1/2 INCHES APART SHALL	15	BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR	3" x 0.131" NAILS 16d BOX (3 1/2" x 0.135"); OR	3" EA. 16" O.C. FACE NAIL 2" EA. 16" O.C. FACE NAIL		WOOD STRUCTURA		ATION SUBFLOOR UNDER LAYMENT		
b. SCREWS SHA	D TO BE USED WITH T	HE PAIR OF NAILS SPACE E WITH SECTION R702.3	CED 12 INCHES OF 3.5.1. SCREWS FO	N CENT <mark>ER.</mark> R ATTACHING GYPSUN	I BOARD OR GYPSUM PANEL PRODUCTS TO I LESS THAN 7/16 INCH.		BLOCKING (NOT AT BRACED WALL PANELS)	3" x 0.131" NAILS 4-8d BOX (2 1/2" x 0.113") OR 3-16d BOX (3 1/2" x 0.135"); OR	4" EA. 16" O.C. FACE NAIL		4" AND LESS 8" - 1"		6d DEFORMED (2" x 0.120") NAIL; OF 8d COMMON (2 1/2" x 0.131") NAIL 8d COMMON (2 1/2" x 0.131") NAIL;	OR e"	12"
c. WHERE COLD NOT LESS TH WHERE THE () FORMED STEEL FRAM AN 5/8 INCH LONGER 1 COLD-FORMED STEEL	/ING IS USED WITH A C HAN THE GYPSUM BOA FRAMING HAS A NAILIN	LINCHING DESIGN RD OR GYSUM P/ G GROOVE FORM	I TO RECIEVE NAILS BY ANEL PRODUCT THICKI IED TO RECIEVE THE N	Y TWO EDGES OF METAL, THE NAILS SHALL BE NESS AND SHALL HAVE RINGED SHANKS. AILS, THE NAILS SHALL HAVE BARBED SHANKS	16	TOP OR BOTTOM PLATE TO STUD	4-8d COMMON (2 1/2" x 0.131"); OR 4-10d BOX (3" x 0.128"); OR 4-3" x 0.131 NAILS		39 1	1/8" - 1 1/4"		8d DEFORMED (2 1/2" x 0.120") NAIL 10d COMMON (3" x 0.148") NAIL; OF 8d DEFORMED (2 1/2" x 0.120") NAIL	۲ ۳	12"
13 GAGE, 17/8 d. THREE-EIGHT	3 INCHES LONG, 15/64- THS-INCH-THICK SINGL	NCH HEAD FOR 5/8-INC E-PLY GYPSUM BOARD	H GYPSUM BOAR OR GYPSUM PAN	D OR GYPSUM PA <mark>N</mark> EL I IEL PRODUCT SHALL N	PSUM PANEL PRODUCT; AND 6D, PRODUCT. OT BE USE ON A CEILING WHERE A RT INSULATION ABOVE A CEILING. ON CEILING			3-16d BOX (3 1/2" x 0.135") OR 2-16d COMMON (3 1/2" x 0.162"); OR	END NAIL	a. NAILS		OR DEFORMED SHAN	KS EXCEPT WHERE OTHERWISE ST		
APPLICATION PRODUCT SH	S TO RECIEVE A WATE ALL BE APPLIED PERP	R-BASED TEXTURE MA ENDICULAR TO FRAMIN	TERIAL, EITHER H IG. WHERE APPLY	IAND OR SPRAY APPLIE ING A WATER-BASED T	ED, THE GYPSUM BOARD OR GYPSUM PANEL TEXTURE MATERIAL, THE MINIMUM GYPSUM RAMING, AND FROM 1/2 INCH TO 5/8 INCH	3-10d BOX (3" x 0.128"); OR 3-3" x 0.131" NAILS 3-10d BOX (3" x 0.128") OR				CONNECTIONS SHALL HAVE MINIMUM AVERAGE BENDING YIELD STRENGTHS AS SHOWNI: 80 KSI FOR SHANK DIAMETER OF 0.192 INCH (20d COMMON NAIL), 90 KSI FOR SHANK DIAMETERS LARGER THAN 0.142 INCH BUT NOT LARGER THAN 0.177 INCH, AND 100 KSI FOR SHAN DIAMETERS OF 0.142 INCH OR LESS. b. STAPLES ARE 16 GAGE WIRE AND HAVE A MINIMUM 7/16-INCH ON DIAMETER CROWN WIDTH.					
FOR 24-INCH	ON CENTER FRAMING	OR 1/2-INCH SAG-RESI	STANT GYPSUM C	EILING BOARD SHALL I	BE USED.	17	TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	2-16d COMMON (3 1/2" x 0.162"); OR 3-3" x 0.131" NAILS	FACE NAIL	c. NAILS d. FOUR- e. SPACII	SHALL BE SPACED AT NOT MOF FOOT BY 8-FOOT OR 4-FOOT B' NG OF FASTENERS NOT INCLUE	RE THAN 6 INCHES O Y 9-FOOT PANELS SH DED IN THIS TABLE SI	N CENTER AT ALL SUPPORTS WHEF ALL BE APPLIED VERTICALLY. HALL BE BASED ON TABLE R602.3(2)).	
		R602.3(3) R RAL PANEL			R WOOD G USED TO	18	1" BRACE TO EACH STUD AND PLATE	3-8d BOX (2 1/2" x 0.113") OR 2-8d COMMON (2 1/2" x 0.113"); OR 2-10d BOX (3" x 0.128"); OR	FACE NAIL	GABLE EN NAILS FOI	ND WALL FRAMING SHALL BE SP R ATTACHING PANEL ROOF SHE	PACED 6 INCHES ON EATHING TO INTERMI	R LESS, NAILS FOR ATTACHING WO CENTER. WHERE THE U;TIMATE DE EDIATE SUPPORTS SHALL BE SPAC	SIGN WIND SPEED IS ED 6 IMCHES ON CE	GREATER THAN 130 MPH,
MINIMUM	M		/IND PRI					2 STAPLES 1 3/4"		g. GYPSL CONFC	JM SHEATHING SHALL CONFOR DRM TO ASTM C 208.	RM TO ASTM C 1396 A	ID 4 INCH ON CENTER TO GABLE EN ND SHA BE INSTALLED IN ACCORDA DGES APPLIES TO PANEL EDGES SI	NCE WITH GA 253. F	
			NEL STU INESS SPAC	ING EDGES	G SPACING FIELD WIND EXPOSURE CATEGORY	19	1" x6" SHEAT <mark>HING T</mark> O EACH BEARING	3-8d BOX (2 1/2" x 0.113") OR 2-8d COMMON (2 1/2" x 0.113"); OR 2-10d BOX (3" x 0.128"); OR	FACE NAIL	BLOCK SUPPO THE FF	(ING AND AT ALL FLOOR PERIM DRTED BY FRAMING MEMBERS) RAMING MEMBERS NEED NOT B	ETERS ONLY. SPACIN AND REQUIRED BLOO BE PROVIDED EXCEP	IG OF FASTENERS ON ROOF SHETH CKING. BLOCKING OF ROOF OR FLO T AS REQUIRED BY OTHER PROVISI	ING PANEL EDGES	APPLIES TO PANEL EDGES EL EDGES PERPENDICULAR TO
6d COMMON (2.0" x 0.113")	(inches) 1.5	· · · ·	hes) (inch /8 3/8	, ((inches o.c.) B C D 12 140 115 110			2 STAPLES, 1" CROWN, 16ga. 1 3/4" LONG 3-8d BOX (2 1/2" x 0.113") OR		i. WHERI ON ONE S		N ADJACENT PARALL NAILS FROM THE CEI	EL CEILING JOIST IN ACCORDANCE LING JOIST TO TOP PLATE IN ACCO		
8d COMMON (2.5" x 0.131")	1.75	24/16 7/	16 7/1		12 170 140 135 12 140 115 110			3-8d COMMON (2 1/2" x 0.113"); OR 3-10d BOX (3" x 0.128"); OR 3 STAPLES, 1" CROWN, 16ga. 1 3/4" LONG			JSITE SIDE OF THE RAFTER SH		<u>-</u> р.		
a. PANEL STRENG	TH AXIS PARALLEL OR	E PER HOUR = 0.4 PERPENDICULAR TO SI PANEL STRENGTH AXIS	JPPORTS. THREE		ING WITH STUDS SPACED MORE THAN 16 INCHES	20	1" x 8" WIDER SHEATHING TO EACH BEARING	WIDER THAN 1" x 8" 4-8d BOX (2 1/2" x 0.113") OR 3-8d COMMON (2 1/2" x 0.131"); OR	FACE NAIL			•	2) SINGLE TOP-P		
		ACTING TOWARD AND		LDING SURFACES IN A	CCORDANCE WITH SECTION R301.2. LATERAL			3-10d BOX (3" x 0.128"); OR 4 STAPLES, 1" CROWN, 16ga. 1 3/4" LONG					TOP - PLATE SPLICE CONN		
c. WOOD STRUCTURAL PANELS WITH SPAN RATINGS OF WALL-16 OR WALL-24 SHALL BE PERMITTED AS AN ALTERNATE TO PANELS WITH A 24/0 SPAN RATING. PLYWOOD SIDING RATED 16 O.C. OR 24 O.C. SHALL BE PERMITTED AS AN ALTERNATE TO PANELS WITH A 24/16 SPAN RATING. WALL-16 AND PLYWOOD SIDING 16 O.C. SHALL BE USED WITH STUDS SPACED NOT MORE THAN 16 INCHES ON CENTER.										BRAC	FURE IN SDC D0, D1A AND D2, WITH ED WALL LINE SPACING GREATER THAN	CORNERS AN		BUTT JOINTS STRAIGHT W	
TABLE R602.3(4) ALLOWABLE SPANS FOR					OR					OF	R EQUAL TO 25 FEET	SPLICE PLATE SIZE			IIMUM NAILS EACH SIDE OF JOINT
THICKNESS	GRADE	LE BOARD		HEATHING	i					D0, D1 AND	IRE IN SDC A-C; AND IN SDC D2 WITH BRACED WALL LINE ING LESS THAN 25 FEET	3" x 6" x 0.036" GALVANIZED STEEL PLATE OR EQUIVALENT	(2 1/2" x 0.113") GALVA	NIZED STEEL LATE OR UIVALENT	(12) 8d BOX (2 1/2" x 0.113") NAILS
(inches) 3/8	M-1 EXTERIOR GLUE	WHEN SIDING IS N		WHEN SIDIN	NG IS NAILED TO SHEATHING							3" x 8" x 0.036" GALVANIZED STEEL	- (2 1/2" x 0.113") GALVA	16" x 0.036" ANIZED STEEL PLATE OR	
1/2 FOR SI: 1 inch	M-2 EXTERIOR GLUE	16	6		16							PLATE OR EQUIVALENT		QUIVALENT	(18) 8d BOX (2 1/2" x 0.113") NAILS
a. WALL SHEATHIN THAT FOUR PAN	GNOT EXPOSED TO TH	T MEET. ALL PANEL ED		,	E END JOINTS OF THE PANEL SHALL BE OFFSET SO 6-INCH GEP BETWEEN PANELS AND NAIL NOT					FOR SI: 1 ir	nch = 25.4 mm, 1 FOOT = 304.8 n	nm		1	
0		9		8	7		6	5 4		3		2		1	

5

4

3

		700 0 E MIN		тиси			TABLE R602.3 (1) FASTENING SCHEDULE									
		702.3.5 MIN ATION OF					ІТЕМ	DESCRIPTION OF BUILDING	NUMBER AND TYPE	SPACING AND		DESCRIPTION OF BU	ILDING	NUMBER AND TYPE	SPACING	
THICKNESS OF GYPSUM		YPSUM PA		RODU		SIZE OF	1	ELEMENTS BLOCKING BETWEEN CEILING JOIST OR RAFTERS TO TOP PLATE	OF FASTENERS ^{a,b,c} 4-8d BOX (2 1/2" x 0.113") OR 3-8d COMMON (2 1/2" x 0.131"); OR 3-10d BOX (3" x 0.128"); OR 3-3" x 0.131 NAILS	TOE NAIL		ELEMENTS		OF FASTENERS ^{a,b,c} FLOOR 4-8d BOX (2 1/2" x 0.113") OR		
BOARD OR GYPSUM PANEL PRODUCTS (inches)	APPLICATION	BOARD OR GYPSUM PANEL PRODUCT TO FRAMING	OF FRAMING MEMBERS (inches O.C.)	FAS ⁻ (ir	TENERS nches)	NAILS FOR APPLICATION TO WOOD FRAMING [©]	2	CEILING JOIST TO TOP PLATE	4-8d BOX (2 1/2" x 0.113") OR 3-8d COMMON (2 1/2" x 0.131"); OR 3-10d BOX (3" x 0.128"); OR	PER JOIST TOE NAIL	21	JOIST TO SILL, TOP PLATE OR GIF	KING TO SILL OR TO	3-8d COMMON (2 1/2" x 0.131"); OR 3-10d BOX (3" x 0.128"); OR -3-3" x 0.131 NAILS 8d BOX (2 1/2" x 0.131") DF8d COMMON (2 1/2" x 0.131") OR	TOE NAIL 4" O.C. TOE NAIL	
	I	APPLICATION W	,	HESIVE	1	13 GAGE, 1 1/4" LONG, 19/64"			3-3" x 0.131 NAILS 4-10d BOX (2 1/2" x 0.113") OR			PLATE (ROOF APPLICATIONS ALS	0)	10d BOX (3" x 0.128"); OR 3" x 0.131" NAILS	6" O.C. TOE NAIL	
3/8	CEILING d	PERPENDICULAR EITHER DIRECTION	16 16	7	12	HEAD; 0.098" DIAMETER, 1 1/4" LONG, ANNULAR-RINGED; OR 4d COOLER NAIL, 0.080" DIAMETER, 13/8" LONG,	3	CEILING JOIST NOT ATTACHED TO PARALLERL RAFTERS, LAPS OVER PARTITION [SEE SECTION R802.31, R802.3.2 AND TABLE R802.5.1 (9)]	3-16d COMMON (3 1/2" x 0.162"); OR 3-10d BOX (3" x 0.128"); OR 4-3" x 0.131 NAILS	FACE NAIL	23 24	1" x 6" SUBFLOOR OR LESS TO EA 2" SUBFLOOR TO JOIST OR GIRDE		2-8d COMMON (2 1/2" x 0.131"); OR 3-10d BOX (3" x 0.128"); OR -2 STAPLES, 1" CROWN, 16ga. 1 3/4" LONG- 3-16d BOX (3" x 0.135") OR	FACE NAIL BLIND AND FACE	NAIL
	CEILING	EITHER DIRECTION	16	7	12	7/32" HEAD. 13 GAGE, 13/8" LONG,	4	CEILING JOIST ATTACHE TO PARALLEL RAFTER (HEEL JOINT) [SEE SECTION R802.31 AND R802.3.2 AND TABLE R802.5.1 (9)]	TABLE R802.51 (9)	FACE NAIL	25	2" PLANLKS (PLANK & BEAM - FLC	OR & ROOF)	_2-16d COMMON (3 1/2" x 0.162") 3-16d BOX (3" x 0.135") OR 2-16d COMMON (3 1/2" x 0.162")	AT EACH BEARING	G FACE NAIL
1/2	CEILING d	PERPENDICULAR	24	7	12	19/64" HEAD; 0.098" DIAMETER, 1 1/4" LONG, ANNULAR-RINGED; OR 5d COOLER NAIL, 0.086" DIAMETER, 15/8" LONG,	5	COLLAR TIE TO RAFTER, FACE NAIL OR 1 1/4" x 20ga. RIDGE STRAP TO RAFTER	4-10d BOX (3" x 0.128") OR 3-10d COMMON (3" x 0.148"); OR 4-3" x 0.131 NAILS	FACE NAIL EA. RAFTER	26	BAND OR RIM JOIST TO JOIST		3-16d COMMON (3 1/2" x 0.162") OR 4-10d BOX (3" x 0.128"); OR 4-3 x 0.131" NAILS; OR -4-3 x 14ga. STAPLES, 7/16" CROWN	END NAIL	
112	WALL	EITHER DIRECTION	24	8	12	15/64" HEAD; OR GYPSUM BOARD NAIL, 0.086" DIAMETER, 15/8" LONG, 9/32" HEAD.	6	RAFTER OR ROOF TRUSS TO PLATE	3-16d BOX (3 1/2" x 0.135") OR 3-10d COMMON NAILS (3 1/2" x 0.148"); OR 4-10d BOX (3" x 0.128"); OR 4-3" x 0.131 NAILS	2 TOE NAILS ON ONE SIDE AND 1 TOE NAIL ON OPPOSITE SIDE OF EACH RAFTER OR TRUSS				20d COMMON (4" x 0.192")	NAIL EACH LAYER FOLLOWS: 32" O.C AND BOTTOM AND STAGGERED 24" O.C. FACE NAI	C. AT TOP D
	WALL		10	8	16	13 GAGE, 15/8" LONG, 19/64" HEAD; 0.098" DIAMETER, 13/8"			4-16d BOX (3 1/2" x 0.135") OR 3-10d COMMON NAILS (3 1/2" x 0.148"); OR	TOE NAIL	27	BUILT-UP GIRDERS AND BEAMS, 2	2" LUMBER LAYERS	3" x 0.131" NAILS	AND BOTTOM STA OPPOSITE SIDES	AGGERED ON
	CEILING	EITHER DIRECTION	16	7	12	LONG, ANNULAR-RINGED; OR 6d COOLER NAIL, 0.092" DIAMETER, 17/8" LONG, 1/4" HEAD; OR GYPSUM BOARD NAIL, 0.0915" DIAMETER,	7	ROOF RAFTERS TO RIDGR, VALLET OR HIP RAFTERS OR ROOF RAFTER TO MINIMUM 2" RIDGE BEAM	4-10d BOX (3" x 0.128"); OR -4-3" x 0.131 NAILS 3-16d BOX (3 1/2" x 0.135") OR 3-16d COMMON (3 1/2" x 0.162"); OR	END NAIL				AND 2-20d COMMON (4" x 0.192"); OR 3-10d BOX (3" x 0.128"); OR 	FACE NAIL AT ENI AT EACH SPLICE	
		PERFENDICULAR	24			17/8" LONG, 19/64" HEAD.			3-10d BOX (3" x 0.128"); OR 3-3" x 0.131" NAILS		28	LEDGER STRIP SUPPORTING JOIS	STS OR RAFTERS	3-16d COMMON (3 1/2" x 0.162"); OR 4-10d BOX (3" x 0.128"); OR _4-3 x 0.131" NAILS 2-10d (3" x 0.128")	AT EACH JOIST OF FACE NAIL	
5/8	TYPE X AT GARAGE BENEATH HABITABLE ROOMS	PERPENDICULAR	24	6	6	EQUIVALENT DRYWALL SCREWS. SCREWS SHALL COMPLY WITH SECTION R702.3.5.1	8	STUD TO STUD (NOT AT BRACED WALL PANELS)	16d COMMON (3 1/2" x 0.162") 10d BOX (3" x 0.128"); OR	24" O.C. FACE NAIL 16" O.C. FACE NAIL				2-100 (3 × 0.126)	SPACING	OF
	WALL	EITHER DIRECTION	24	8	12	13 GAGE, 15/8" LONG, 19/64" HEAD; 0.098" DIAMETER, 13/8" LONG, ANNULAR-RINGED; 6d COOLER NAIL, 0.092" DIAMETER, 17/8" LONG, 1/4" HEAD; OR	9	STUD TO STUD AND ABUTTING STUDS AR INTERSECTING WALL CORNERS (AT BRACED WALL PANELS)	3" x 0.131" NAILS 16d BOX (3 1/2" x 0.135"); OR 3" x 0.131" NAILS	12" O.C. FACE NAIL	ІТЕМ	DESCRIPTION OF BU ELEMENTS	ILDING	NUMBER AND TYPE OF FASTENERS ^{a,b,c}	(inches) SU	ERS ERMIDIATE JPPORTS (inches)
	WALL	EITHER DIRECTION	16	8	16	GYPSUM BOARD NAIL, 0.0915" DIAMTER, 17/8" LONG, 19/64" HEAD.	10	BUILT-IP HEADER (2" TO 2" HEADER WITH 1/2" SPACER)	16d COMMON (3 1/2" x 0.162") 16d COMMON (3 1/2" x 0.162")	16" O.C. FACE NAIL 16" O.C. EACH EDGE	SH	EATHING TO FRAMING (SEE TABLE		NTERIOR WALL SHEATHING TO FRAMING AN D STRUCTURAL PANEL EXTERIOR WALL SHE 6d COMMON (2" x 0.113") NAIL	D PARTICLE BOARD	WALL ´ RAMING)
	CEILING d	APPLICATION PERPENDICULAR		SIVE	16	SAME AS ABOVE FOR 3/8"			16d BOX (3" x 0.135") 5-8d BOX (2 1/2" x 0.113") OR	12" O.C. EACH EDGE FACE NAIL	30 31	3/8" - 1/2" 10/32" - 1"		(SUBFLOOR, WALL) 8d COMMON (2 1/2" x 0.131") NAIL (ROOF) 8d COMMON NAIL (2 1/2" x 0.131")	6"	12"
3/8	WALL	EITHER DIRECTION	16	16	24	GYPSUM BOARD AND GYPSUM BOARD AND GYPSUM PANEL PRODUCTS.	11	CONTINOUSE HEADER TO STUD	4-8d COMMON (2 1/2" x 0.131"); OR 4-10d BOX (3" x 0.128" 16d COMMON (3 1/2" x 0.162")	TOE NAIL	32	1 1/8" - 1 1/4"		10d COMMON NAIL (3" x 0.148") NAIL; OR 8d (2 1/2" x 0.131") NAIL (ROOF)	6"	12"
	CEILING	EITHER DIRECTION	16	16	16		12	TOP PLATE TO TOP PLATE	10d BOX (3" x 0.128"); OR 3" x 0.131" NAILS	12" O.C. FACE NAIL	22			R WALL SHEATHING	D 3"	6"
1/2 OR 5/8	CEILING d	PERPENDICULAR	24	12	16	SAME AS ABOVE FOR 1/2" AND 5/8" GYPSUM BOARD AND GYPSUM PANEL PRODUCTS, RESPECTIVELY		DOUBLE TOP PLATE SPLICE FOR SDCs A-D2 WITH SEISMIC BRACED WALL LINE SPACING <25'	8-16d BOX (3 1/2" x 0.162") OR 12-16d BOX (3 1/2" x 0.135"); OR 12-10d BOX (3" x 0.128"); OR 12-3" x 0.131 NAILS	PER JOIST TOE NAIL	33	25/32" STRUCTURAL CELLULOSIC		HII 1/2" GALANIZED ROOFING NAIL, 7/16" HEA DIAMETER, OR 1" CROWN STAPLE 16ga. 1 1/4" LONG 1 3/4" GALANIZED ROOFING NAIL, 7/16" HEA AT DIAMETER, OR 1" CROWN STAPLE 16ga.	D 3"	6"
	WALL	EITHER DIRECTION	24	16	24	BASE PLY NAILED AS ABOVE FOR	13	DOUBLE TOP PLATE SPLICE FOR SDCs D0, D1, D2, AND BRACED WALL LINE SPACING >25'	12-16d (3 1/2" x 0.135")	FACE NIAL ON EACH SIDE OF END JOINT (MIN. 24" LAP SPLICE LENGTH EACH SIDE	35	1/2" GYPSUM SHEATHING		1 1/4" LONG 1 1/2" GALANIZED ROOFING NAIL, STAPLE GALVANIZED	7"	7"
TWO 3/8 LAYERS	CEILING	PERPENDICULAR EITHER DIRECTION	16 24	16 24	16 24	1/2" GYPSUM BOARD AND GYPSUM PANEL PRODUCTS; FACE PLY INSTALLED WITH ADHESIVE.	14	BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (NOT AT BRACED WALL PANELS)	16d COMMON (3 1/2" x 0.162") 16d BOX (3 1/2" x 0.135"); OR	OF END JOINT) 16" O.C. FACE NAIL 12" O.C. FACE NAIL	36	5/8" GYPSUM SHEATHING		1 1/2" LONG, 1 1/4" SCREWS, TYPE W OR S 1 3/4" GALANIZED ROOFING NAIL, STAPLE GALVANIZED 1 5/8" LONG, 1 5/8" SCREWS, TYPE W OR S	7"	7"
FOR SI: 1 incl	-			SS THAN 2		OR MORE THAN 2 1/2 INCHES APART SHALL	15	BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (NOT AT BRACED WALL PANELS)	3" x 0.131" NAILS 16d BOX (3 1/2" x 0.135"); OR 3" x 0.131" NAILS	3" EA. 16" O.C. FACE NAIL 2" EA. 16" O.C. FACE NAIL			L PANELS, COMBI	6d DEFORMED (2" x 0.120") NAIL; OR	MING	
b. SCREWS SH STRUCTURA	ED TO BE USED WITH TI ALL BE IN ACCORDANCI LINSULATED PANELS S	HE PAIR OF NAILS SPA E WITH SECTION R702. SHALL PENETRATE THE	CED 12 INCHES 3.5.1. SCREWS WOOD STRICT	ON CENTER FOR ATTAC	R. HING GYPSUM EL FACING NOT	BOARD OR GYPSUM PANEL PRODUCTS TO		DLOCKING (NOT AT DRACED WALL PANELS)	4-8d BOX (2 1/2" x 0.113") OR 3-16d BOX (3 1/2" x 0.135"); OR 4-8d COMMON (2 1/2" x 0.131"); OR	4" EA. 16" O.C. FACE NAIL	37 38	3/4" AND LESS 7/8" - 1"		8d COMMON (2 1/2" x 0.131") NAIL 8d COMMON (2 1/2" x 0.131") NAIL; OR 8d DEFORMED (2 1/2" x 0.131") NAIL; OR	6"	12"
NOT LESS T WHERE THE OR BE 5D, 13	HAN 5/8 INCH LONGER T COLD-FORMED STEEL I 3 1/2 GAGE, 15/8 INCHES	THAN THE GYPSUM BO/ FRAMING HAS A NAILIN & LONG, 15/64-INCH HE/	ARD OR GYSUN G GROOVE FO AD FOR 1/2-INC	1 PANEL PRO RMED TO RE H GYSPUM E	ODUCT THICKN ECIEVE THE NA BOARD OR GYF	ESS AND SHALL HAVE RINGED SHANKS. NLS, THE NAILS SHALL HAVE BARBED SHANKS PSUM PANEL PRODUCT; AND 6D,	16	TOP OR BOTTOM PLATE TO STUD	4-10d BOX (3" x 0.128"); OR 4-3" x 0.131 NAILS	NINC	39 FOR S	1 1/8" - 1 1/4" il: 1 inch = 25.4 mm, 1 FOOT = 304.8m	m. 1 MILE PER HO	10d COMMON (3" x 0.148") NAIL; OR 8d DEFORMED (2 1/2" x 0.120") NAIL JR = 0.447 m/s: KSI = 6.895 Mpa.	6"	12"
d. THREE-EIGH WATER-BAS APPLICATIO	ED TEXTURED FINISH IS NS TO RECIEVE A WATE	E-PLY GYPSUM BOARD TO BE APPLIED, OR W R-BASED TEXTURE MA	OR GYPSUM P HERE IT WILL E TERIAL, EITHEI	Panel Prod Be Require R Hand Or	DUCT SHALL NO D TO SUPPOR SPRAY APPLIE	RODUCT. DT BE USE ON A CEILING WHERE A T INSULATION ABOVE A CEILING. ON CEILING D, THE GYPSUM BOARD OR GYPSUM PANEL EXTURE MATERIAL, THE MINIMUM GYPSUM			3-16d BOX (3 1/2" x 0.135") OR 2-16d COMMON (3 1/2" x 0.162"); OR 3-10d BOX (3" x 0.128"); OR 3-3" x 0.131" NAILS	END NAIL	a. NAILS ARE SMOOTH-COMMON, BOX OR DEFORMED SHANKS EXCEPT WHERE OTHERWISE STATED. NAILS USED FOR FRAMING AND CONNECTIONS SHALL HAVE MINIMUM AVERAGE BENDING YIELD STRENGTHS AS SHOWNI: 80 KSI FOR SHANK DIAMETER OF 0.192 IN (200 COMMON NAIL), 90 KSI FOR SHANK DIAMETERS LARGER THAN 0.142 INCH BUT NOT LARGER THAN 0.177 INCH, AND 100 KSI FOR					
BOARD THIC		EASED FROM 3/8 INCH	TO 1/2 INCH FO	R 16-INCH C	ON CENTER FR	AMING, AND FROM 1/2 INCH TO 5/8 INCH	17	TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	3-10d BOX (3" x 0.128") OR 2-16d COMMON (3 1/2" x 0.162"); OR 3-3" x 0.131" NAILS	FACE NAIL	b. S c. N d. F	OUR-FOOT BY 8-FOOT OR 4-FOOT BY	RE THAN 6 INCHES 9-FOOT PANELS S	ON CENTER AT ALL SUPPORTS WHERE SPAN	S ARE 48 INCHES OR	GREATER.
		R602.3(3) R RAL PANEL RESIST V	WALL	SHE/	ATHING	R WOOD G USED TO	18	1" BRACE TO EACH STUD AND PLATE	3-8d BOX (2 1/2" x 0.113") OR 2-8d COMMON (2 1/2" x 0.113"); OR 2-10d BOX (3" x 0.128"); OR 2 STAPLES 1 3/4"	FACE NAIL	f. W GABI NAIL DIST	HERE THE ULTIMATE DESIGN WIND LE END WALL FRAMING SHALL BE SF S FOR ATTACHING PANEL ROOF SHI ANCE FROM RIDGES, EAVES AND G/	SPEED IS 130 MPH PACED 6 INCHES OI EATHING TO INTER ABLE END WALLS; <i>F</i>	OR LESS, NAILS FOR ATTACHING WOOD STRU N CENTER. WHERE THE U;TIMATE DESIGN WIN MEDIATE SUPPORTS SHALL BE SPACED 6 IMC NND 4 INCH ON CENTER TO GABLE END WALL AND SHA BE INSTALLED IN ACCORDANCE WIT	ID SPEED IS GREATE HES ON CENTER FOR FRAMING.	R THAN 130 MPH, R MINIMUM 48-INCH
MINIMUN	I NAIL STR ENETRATION PAI	WOOD NON RUCTURAL PA NEL SPAN THICK	IINAL W NEL S' (NESS SPA	ALL TUD ACING	PANEL NA SPACINO EDGES	FIELD WIND EXPOSURE CATEGORY	19	1" x6" SHEATHING TO EACH BEARING	3-8d BOX (2 1/2" x 0.113") OR 2-8d COMMON (2 1/2" x 0.113"); OR 2-10d BOX (3" x 0.128"); OR 2 STAPLES, 1" CROWN, 16ga. 1 3/4" LONG	FACE NAIL	h. S B S TI	LOCKING AND AT ALL FLOOR PERIM UPPORTED BY FRAMING MEMBERS HE FRAMING MEMBERS NEED NOT B	ETERS ONLY. SPAC AND REQUIRED BLC E PROVIDED EXCE	EDGES APPLIES TO PANEL EDGES SUPPORT ING OF FASTENERS ON ROOF SHETHING PAN OCKING. BLOCKING OF ROOF OR FLOOR SHEA PT AS REQUIRED BY OTHER PROVISIONS OF	EL EDGES APPLIES T THING PANEL EDGE	TO PANEL EDGES S PERPENDICULAR TO
6d COMMON (2.0" x 0.113")	(inches) F 1.5		/8 :	3/8	(inches o.c.) 16	(inches o.c.) B C D 12 140 115 110 12 170 140 135			3-8d BOX (2 1/2" x 0.113") OR 3-8d COMMON (2 1/2" x 0.113"); OR		i. W ON C		N ADJACENT PARA NAILS FROM THE C	LLEL CEILING JOIST IN ACCORDANCE WITH TH EILING JOIST TO TOP PLATE IN ACCORDANCE		
8d COMMON (2.5" x 0.131")			16 7	7/16 7/16	24	12 170 140 135 12 140 115 110	20	1" x 8" WIDER SHEATHING TO EACH BEARING	3-10d BOX (3" x 0.128"); OR 3 STAPLES, 1" CROWN, 16ga. 1 3/4" LONG	FACE NAIL		TARLE	P602 3 (2) SINGLE TOP-PLAT	=	
a. PANEL STRENG ON CENTER SH	IALL BE APPLIE <mark>D WITH</mark> P	PERPENDICULAR TO S PANEL STRENGTH AXIS	UPPORTS. THR	AR TO SUP	PORTS.	NG WITH STUDS SPACED MORE THAN 16 INCHES CORDANCE WITH SECTION R301.2. LATERAL			WIDER THAN 1" x 8" 4-8d BOX (2 1/2" x 0.113") OR 3-8d COMMON (2 1/2" x 0.131"); OR 3-10d BOX (3" x 0.128"); OR			SPI	•	NECTION DETAILS		
BRACING REQU	JIREMENTS SHALL BE IN TURAL PANELS WITH SP/	I ACCORDANCE WITH S	ECTION R602.1	IO. SHALL BE P	PERMITTED AS	AN ALTERNATE TO PANELS WITH A 24/0	۲		4 STAPLES, 1" CROWN, 16ga. 1 3/4" LONG		ST	CONDITION RUCTURE IN SDC D0, D1A AND D2, WITH	CORNERS A		N DETAILS	
AND PLYWOOD	SIDING 16 O.C. SHALL E	BE USED WITH STUDS S	SPACED NOT M	ORE THAN 1	16 INCHES ON (E	GREATER THAN OR EQUAL TO 25 FEET	SPLICE PLATE SI	ZE MINIMUM NAILS EACH SPLICE PLATE	SIZE MINIMUM NA	
		02.3(4) ALL LE BOARD	WALL	SHEA							D0, D1	JCTURE IN SDC A-C; AND IN SDC AND D2 WITH BRACED WALL LINE SPACING LESS THAN 25 FEET	3" x 6" x 0.036" GALVANIZED STEE PLATE OR EQUIVALENT	SIDE OF JOINT (6) 8d BOX (6) 8d BOX	SIDE OF 6" (12) 8d FEEL (2 1/2" x 1 NAIL	BOX 0.113")
THICKNESS (inches) 3/8	GRADE M-1 EXTERIOR GLUE	WHEN SIDING IS N	AILED TO STUD			G IS NAILED TO SHEATHING							3" x 8" x 0.036" GALVANIZED STE PLATE OR	(9) 8d BOX 3" x 16" x 0.0	36" TEEL	
1/2 FOR SI: 1 inch		16									P6 5		EQUIVALENT	EQUIVALEN		0.113")
THAT FOUR PA		T MEET. ALL PANEL ED				END JOINTS OF THE PANEL SHALL BE OFFSET SO -INCH GEP BETWEEN PANELS AND NAIL NOT						l: 1 inch = 25.4 mm, 1 FOOT = 304.8 m	<u>nn. </u>			
 ר		0			8	7		6	5 4		3		2	1		

		702 3 5 MIN	лили т	HICKNESS		02.3 (1) FASTENI	NG S	CHEDULE							
	APPLIC	ATION OF	GYPSU	M BOARD A		ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENERS ^{a,b,c}	SPACING AND LOCATION	ІТЕМ	DESCRIPTION OF BUILD ELEMENTS	DING	NUMBER AND TYPE OF FASTENERS ^{a,b,c}	SPACIN LOCA	
THICKNESS OF GYPSUM BOARD OR	G	ORIENTATION OF GYPSUM BOARD OR	MAXIMUM SPACING OF	MAXIMUM SPACING OF FASTENERS	SIZE OF NAILS FOR	1	BLOCKING BETWEEN CEILING JOIST OR RAFTERS TO TOP PLATE	4-8d BOX (2 1/2" x 0.113") OR 3-8d COMMON (2 1/2" x 0.131"); OR 3-10d BOX (3" x 0.128"); OR 3-3" x 0.131 NAILS	TOE NAIL	21	JOIST TO SILL, TOP PLATE OR GIRDER	4-8	FLOOR 8d BOX (2 1/2" x 0.113") OR 8d COMMON (2 1/2" x 0.131"); OR	TOE NAIL	
GYPSUM PANEL PRODUCTS (inches)	APPLICATION	GYPSUM PANEL PRODUCT TO FRAMING	FRAMING MEMBERS (inches O.C.)	(inches) NAILS ^a SCREWS	APPLICATION TO WOOD FRAMING ^c	2	CEILING JOIST TO TOP PLATE	4-8d BOX (2 1/2" x 0.113") OR 3-8d COMMON (2 1/2" x 0.131"); OR 3-10d BOX (3" x 0.128"); OR 3-3" x 0.131 NAILS	PER JOIST TOE NAIL	22	RIM JOIST, BAND JOIST OR BLOCKING PLATE (ROOF APPLICATIONS ALSO)	G TO SILL OR TOF _{8d} 10	d BOX (3" x 0.128"); OR	4" O.C. TOE N 6" O.C. TOE N	
3/8	CEILING d	PERPENDICULAR	16	7 12	13 GAGE, 1 1/4" LONG, 19/64" HEAD; 0.098" DIAMETER, 1 1/4" LONG, ANNULAR-RINGED;	3	CEILING JOIST NOT ATTACHED TO PARALLERL RAFTERS, LAPS OVER PARTITION [SEE SECTION R802.31, R802.3.2 AND TABLE R802.5.1 (9)]	4-10d BOX (2 1/2" x 0.113") OR 3-16d COMMON (3 1/2" x 0.162"); OR 3-10d BOX (3" x 0.128"); OR 4-3" x 0.131 NAILS	FACE NAIL	23	1" x 6" SUBFLOOR OR LESS TO EACH	JOIST 2-6 3-1	x 0.131" NAILS Bd BOX (2 1/2" x 0.113") OR Bd COMMON (2 1/2" x 0.131"); OR 10d BOX (3" x 0.128"); OR STAPLES, 1" CROWN, 16ga. 1 3/4" LONG	FACE NAIL	
0/0	WALL	EITHER DIRECTION	16	8 16	OR 4d COOLER NAIL, 0.080" DIAMETER, 13/8" LONG, 7/32" HEAD.					24	2" SUBFLOOR TO JOIST OR GIRDER	3-1	16d BOX (3" x 0.135") OR 16d COMMON (3 1/2" x 0.162")	BLIND AND FA	CE NAIL
	CEILING	EITHER DIRECTION	16	7 12	13 GAGE, 13/8" LONG, 19/64" HEAD:	4	CEILING JOIST ATTACHE TO PARALLEL RAFTER (HEEL JOINT) [SEE SECTION R802.31 AND R802.3.2 AND TABLE R802.5.1 (9)]	TABLE R802.51 (9)	FACE NAIL	25	2" PLANLKS (PLANK & BEAM - FLOOR	2-1	16d BOX (3" x 0.135") OR 16d COMMON (3 1/2" x 0.162")	AT EACH BEA	RING FACE NAIL
1/2	CEILING d	PERPENDICULAR	24	7 12	0.098" DIAMETER, 1 1/4" LONG, ANNULAR-RINGED; OR 5d COOLER NAIL, 0.086" DIAMETER, 15/8" LONG,	5	COLLAR TIE TO RAFTER, FACE NAIL OR 1 1/4" x 20ga. RIDGE STRAP TO RAFTER	4-10d BOX (3" x 0.128") OR 3-10d COMMON (3" x 0.148"); OR 4-3" x 0.131 NAILS	FACE NAIL EA. RAFTER	26	BAND OR RIM JOIST TO JOIST	4-1 4-3	16d COMMON (3 1/2" x 0.162") OR 10d BOX (3" x 0.128"); OR 3 x 0.131" NAILS; OR 3 x 14ga. STAPLES, 7/16" CROWN————	END NAIL	
	WALL	EITHER DIRECTION	24	8 12	15/64" HEAD; OR GYPSUM BOARD NAIL, 0.086"	6	RAFTER OR ROOF TRUSS TO PLATE	3-16d BOX (3 1/2" x 0.135") OR 3-10d COMMON NAILS (3 1/2" x 0.148"); OR	2 TOE NAILS ON ONE SIDE AND 1 TOE NAIL ON OPPOSITE SIDE			20	d COMMON (4" x 0.192")	NAIL EACH LA FOLLOWS: 32 AND BOTTOM	O.C. AT TOP
	WALL	EITHER DIRECTION	16	8 16	DIAMETER, 15/8" LONG, 9/32" HEAD. 13 GAGE, 15/8" LONG,			4-10d BOX (3" x 0.128"); OR 4-3" x 0.131 NAILS 4-16d BOX (3 1/2" x 0.135") OR	OF EACH RAFTER OR TRUSS	27	BUILT-UP GIRDERS AND BEAMS, 2" LU		d BOX (3" x 0.128"); OR x 0.131" NAILS	STAGGERED 24" O.C. FACE AND BOTTOM OPPOSITE SII	STAGGERED ON
	CEILING	EITHER DIRECTION	16	7 12	19/64" HEAD; 0.098" DIAMETER, 13/8" LONG, ANNULAR-RINGED; OR 6d COOLER NAIL, 0.092" DIAMETER,	7	ROOF RAFTERS TO RIDGR, VALLET OR HIP RAFTERS OR	3-10d COMMON NAILS (3 1/2" x 0.148"); OR 4-10d BOX (3" x 0.128"); OR -4-3" x 0.131 NAILS	TOE NAIL				20d COMMON (4" x 0.192"); OR	FACE NAIL AT AT EACH SPL	
	CEILING	PERPENDICULAR	24	7 12	17/8" LONG, 1/4" HEAD; OR GYPSUM BOARD NAIL, 0.0915" DIAMETER, 17/8" LONG, 19/64" HEAD.		ROOF RAFTER TO MINIMUM 2" RIDGE BEAM	3-16d BOX (3 1/2" x 0.135") OR 3-16d COMMON (3 1/2" x 0.162"); OR 3-10d BOX (3" x 0.128"); OR 3-3" x 0.131" NAILS	END NAIL	28	LEDGER STRIP SUPPORTING JOISTS	OR RAFTERS 3-1	10d BOX (3" x 0.128"); OR 2" x 0.131" NAILS 16d BOX (3 1/2" x 0.135") OR 16d COMMON (3 1/2" x 0.162"); OR 10d BOX (3" x 0.128"); OR	AT EACH JOIS FACE NAIL	T OR RAFTER,
5/8	TYPE X AT GARAGE BENEATH HABITABLE	PERPENDICULAR	24	6 6	17/8" LONG 6d COATED NAILS OR EQUIVALENT DRYWALL SCREWS. SCREWS SHALL COMPLY WITH SECTION R702.3.5.1			WALL 16d COMMON (3 1/2" x 0.162")	24" O.C. FACE NAIL	29	BRIDGING TO JOIST		3 x 0.131" NAILS 10d (3" x 0.128")	EACH END, TO	DE NAIL
	ROOMS				13 GAGE, 15/8" LONG,	8	STUD TO STUD (NOT AT BRACED WALL PANELS)	10d BOX (3" x 0.128"); OR 3" x 0.131" NAILS	16" O.C. FACE NAIL		DESCRIPTION OF BUILD		NUMBER AND TYPE	SPACI FASTE	
	WALL	EITHER DIRECTION	24	8 12	19/64" HEAD; 0.098" DIAMETER, 13/8" LONG, ANNULAR-RINGED; 6d COOLER NAIL, 0.092"		STUD TO STUD AND ABUTTING STUDS AR INTERSECTING	16d BOX (3 1/2" x 0.135"); OR 3" x 0.131" NAILS	12" O.C. FACE NAIL	ITEM	ELEMENTS		OF FASTENERS ^{a,b,c}	EDGES	INTERMIDIATE SUPPORTS
	WALL	EITHER DIRECTION	16	8 16	DIAMETER, 17/8" LONG, 1/4" HEAD; OR GYPSUM BOARD NAIL, 0.0915" DIAMTER,	9	WALL CORNERS (AT BRACED WALL PANELS)	16d COMMON (3 1/2" x 0.162")	16" O.C. FACE NAIL				RIOR WALL SHEATHING TO FRAMING AND	PARTICLE BOA	(inches) RD WALL
		APPLICATION	WITH ADHES		17/8" LONG, 19/64" HEAD.	10	BUILT-IP HEADER (2" TO 2" HEADER WITH 1/2" SPACER)	16d COMMON (3 1/2" x 0.162") 16d BOX (3" x 0.135")	16" O.C. EACH EDGE FACE NAIL 12" O.C. EACH EDGE		3/8" - 1/2"	60	d COMMON (2" x 0.113") NAIL SUBFLOOR, WALL)	6"	12"
	CEILING d	PERPENDICULAR	16	16 16	SAME AS ABOVE FOR 3/8" GYPSUM BOARD AND	11	CONTINOUSE HEADER TO STUD	5-8d BOX (2 1/2" x 0.113") OR	FACE NAIL TOE NAIL	31	10/32" - 1"		d COMMON (2 1/2" x 0.131") NAIL (ROOF) d COMMON NAIL (2 1/2" x 0.131")	6"	12"
3/8	WALL	EITHER DIRECTION	16	16 24	GYPSUM BOARD AND GYPSUM PANEL PRODUCTS.			4-8d COMMON (2 1/2" x 0.131"); OR 4-10d BOX (3" x 0.128" 16d COMMON (3 1/2" x 0.162")	16" O.C. FACE NAIL	32	1 1/8" - 1 1/4"		0d COMMON NAIL (3" x 0.148") NAIL; OR d (2 1/2" x 0.131") NAIL (ROOF)	6"	12"
						12	TOP PLATE TO TOP PLATE	10d BOX (3" x 0.128"); OR 3" x 0.131" NAILS	12" O.C. FACE NAIL				VALL SHEATHING		
	CEILING	EITHER DIRECTION	16	16 16	SAME AS ABOVE FOR 1/2" AND 5/8" GYPSUM BOARD		DOUBLE TOP PLATE SPLICE FOR SDCs A-D2 WITH SEISMIC	8-16d BOX (3 1/2" x 0.162") OR 12-16d BOX (3 1/2" x 0.135"); OR	PER JOIST TOE NAIL	33	1/2" STRUCTURAL CELLULOSIC FIBER		1/2" GALANIZED ROOFING NAIL, 7/16" HEAD NAMETER, OR 1" CROWN STAPLE 16ga. 1/4" LONG	3"	6"
1/2 OR 5/8	CEILING ^d	PERPENDICULAR	24	12 16 16 24	AND GYPSUM PANEL PRODUCTS, RESPECTIVELY	13	BRACED WALL LINE SPACING <25'	12-10d BOX (3" x 0.128"); OR 12-3" x 0.131 NAILS		34	25/32" STRUCTURAL CELLULOSIC FIB	BERBOARD SHEAT	3/4" GALANIZED ROOFING NAIL, 7/16" HEAD DIAMETER, OR 1" CROWN STAPLE 16ga. 1/4" LONG	3"	6"
	CEILING	PERPENDICULAR	16	16 16	BASE PLY NAILED AS ABOVE FOR 1/2" GYPSUM BOARD AND		DOUBLE TOP PLATE SPLICE FOR SDCs D0, D1, D2, AND BRACED WALL LINE SPACING >25'	12-16d (3 1/2" x 0.135")	FACE NIAL ON EACH SIDE OF END JOINT (MIN. 24" LAP SPLICE LENGTH EACH SIDE OF END JOINT)	35	1/2" GYPSUM SHEATHING	G 1	1/2" GALANIZED ROOFING NAIL, STAPLE GALVANIZED 1/2" LONG, 1 1/4" SCREWS, TYPE W OR S	7"	7"
TWO 3/8 LAYERS	WALL	EITHER DIRECTION	24	24 24	 GYPSUM PANEL PRODUCTS; FACE PLY INSTALLED WITH ADHESIVE. 	14	BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (NOT AT BRACED WALL PANELS)	16d COMMON (3 1/2" x 0.162") 16d BOX (3 1/2" x 0.135"); OR	16" O.C. FACE NAIL 12" O.C. FACE NAIL	36	5/8" GYPSUM SHEATHING	G	3/4" GALANIZED ROOFING NAIL, STAPLE GALVANIZED 5/8" LONG, 1 5/8" SCREWS, TYPE W OR S	7"	7"
FOR SI: 1 inch	a = 25.4 mm.						BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR	3" x 0.131" NAILS 16d BOX (3 1/2" x 0.135"); OR	3" EA. 16" O.C. FACE NAIL		WOOD STRUCTURAL PA	ANELS, COMBINATI	ION SUBFLOOR UNDER LAYMENT TO FRAM	ING	
BE PERMITTE	ED TO BE USED WITH TH	HE PAIR OF NAILS SPA	CED 12 INCHES O	N CENTER.	AT OR MORE THAN 2 1/2 INCHES APART SHALL	15	BLOCKING (NOT AT BRACED WALL PANELS)	3" x 0.131" NAILS 4-8d BOX (2 1/2" x 0.113") OR	2" EA. 16" O.C. FACE NAIL 4" EA. 16" O.C. FACE NAIL	37	3/4" AND LESS	80	d DEFORMED (2" x 0.120") NAIL; OR d COMMON (2 1/2" x 0.131") NAIL	6"	12"
c. WHERE COLD	L INSULATED PANELS S D FORMED STEEL FRAM	HALL PENETRATE THE	WOOD STRICTUR	RAL PANEL FACING NO N TO RECIEVE NAILS B	T LESS THAN 7/16 INCH. Y TWO EDGES OF METAL, THE NAILS SHALL BE			3-16d BOX (3 1/2" x 0.135"); OR 4-8d COMMON (2 1/2" x 0.131"); OR 4-10d BOX (3" x 0.128"); OR	TOE NAIL	38	7/8" - 1"	80	d COMMON (2 1/2" x 0.131") NAIL; OR d DEFORMED (2 1/2" x 0.120") NAIL	6"	12"
WHERE THE	COLD-FORMED STEEL F	FRAMING HAS A NAILIN	G GROOVE FORM	MED TO RECIEVE THE N	NESS AND SHALL HAVE RINGED SHANKS. IAILS, THE NAILS SHALL HAVE BARBED SHANKS (PSUM PANEL PRODUCT; AND 6D,	16	TOP OR BOTTOM PLATE TO STUD	4-100 BOX (3 X 0.128); OR 4-3" x 0.131 NAILS	NING		1 1/8" - 1 1/4" I: 1 inch = 25.4 mm, 1 FOOT = 304.8mm, 1	80	0d COMMON (3" x 0.148") NAIL; OR d DEFORMED (2 1/2" x 0.120") NAIL	6"	12"
d. THREE-EIGHT		E-PLY GYPSUM BOARD	OR GYPSUM PAN	NEL PRODUCT SHALL N	PRODUCT. IOT BE USE ON A CEILING WHERE A RT INSULATION ABOVE A CEILING. ON CEILING			3-16d BOX (3 1/2" x 0.135") OR 2-16d COMMON (3 1/2" x 0.162"); OR 3-10d BOX (3" x 0.128"); OR	END NAIL	a. N	AILS ARE SMOOTH-COMMON, BOX OR DI	EFORMED SHANKS	EXCEPT WHERE OTHERWISE STATED. NAI ELD STRENGTHS AS SHOWNI: 80 KSI FOR S		
APPLICATION PRODUCT SH	NS TO RECIEVE A WATE HALL BE APPLIED PERPI	R-BASED TEXTURE MA	TERIAL, EITHER H	HAND OR SPRAY APPLI YING A WATER-BASED	ED, THE GYPSUM BOARD OR GYPSUM PANEL	OL	INTY OF F	3-3" x 0.131" NAILS		(2 D	0d COMMON NAIL), 90 KSI FOR SHANK D AMETERS OF 0.142 INCH OR LESS.	DIAMETERS LARGER	R THAN 0.142 INCH BUT NOT LARGER THAN		
	I ON CENTER FRAMING				RAMING, AND FROM 1/2 INCH TO 5/8 INCH BE USED.	17	TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	3-10d BOX (3" x 0.128") OR 2-16d COMMON (3 1/2" x 0.162"); OR 3-3" x 0.131" NAILS	FACE NAIL	c. N. d. F	OUR-FOOT BY 8-FOOT OR 4-FOOT BY 9-F	THAN 6 INCHES ON (FOOT PANELS SHAL	CENTER AT ALL SUPPORTS WHERE SPANS L BE APPLIED VERTICALLY.	ARE 48 INCHES	OR GREATER.
		RAL PÀŃEI	WALL		R WOOD G USED TO	18	1" BRACE TO EACH STUD AND PLATE	3-8d BOX (2 1/2" x 0.113") OR 2-8d COMMON (2 1/2" x 0.113"); OR 2-10d BOX (3" x 0.128"); OR	FACE NAIL	f. W GABI NAIL	E END WALL FRAMING SHALL BE SPACE S FOR ATTACHING PANEL ROOF SHEATH	EED IS 130 MPH OR ED 6 INCHES ON CE HING TO INTERMED	ALL BE BASED ON TABLE R602.3(2). LESS, NAILS FOR ATTACHING WOOD STRU(ENTER. WHERE THE U;TIMATE DESIGN WINE DIATE SUPPORTS SHALL BE SPACED 6 IMCH 4 INCH ON CENTER TO GABLE END WALL FI	SPEED IS GRE	ATER THAN 130 MPH,
MINIMUM			MUM MAXII	LL SPACIN		- 19	1" x6" SHEATHING TO EACH BEARING	2 STAPLES 1 3/4" 3-8d BOX (2 1/2" x 0.113") OR 2-8d COMMON (2 1/2" x 0.113"); OR	FACE NAIL	g.G C h.SI	YPSUM SHEATHING SHALL CONFORM TO DNFORM TO ASTM C 208. PACING OF FASTENERS ON FLOOR SHEA OCKING AND AT ALL FLOOR PERIMETER	O ASTM C 1396 AND ATHING PANEL EDO RS ONLY. SPACING) SHA BE INSTALLED IN ACCORDANCE WITH GES APPLIES TO PANEL EDGES SUPPORTED GOF FASTENERS ON ROOF SHETHING PANE	GA 253. FIBER D BY FRAMING I L EDGES APPLI	IEMBERS AND REQUIRED ES TO PANEL EDGES
SIZE PE		NEL SPAN THICH	NEL STU (NESS SPAC hes) (inch		FIELD WIND EXPOSURE CATEGORY			2-88 COMMON (2 1/2 X 0.113); OR 2-10d BOX (3" x 0.128"); OR 2 STAPLES, 1" CROWN, 16ga. 1 3/4" LONG		TI SI	E FRAMING MEMBERS NEED NOT BE PF JPPORTED BY FRAMING MEMBERS OR S	ROVIDED EXCEPT A SOLID BLOCKING.	ING. BLOCKING OF ROOF OR FLOOR SHEAT AS REQUIRED BY OTHER PROVISIONS OF TH	HIS CODE. FLOO	OR PERIMETER SHALL BE
6d COMMON (2.0" x 0.113")	1.5	24/0 3	/8 3/8	8 16	12 140 115 110			3-8d BOX (2 1/2" x 0.113") OR 3-8d COMMON (2 1/2" x 0.113"); OR		ON C		LS FROM THE CEILIN	L CEILING JOIST IN ACCORDANCE WITH THI NG JOIST TO TOP PLATE IN ACCORDANCE V	,	
8d COMMON (2.5" x 0.131")	1.75	24/16 7/	7/1		12 170 140 135	-		3-60 COMMON (2 1/2 X 0.113); OR 3-10d BOX (3" x 0.128"); OR 3 STAPLES, 1" CROWN, 16ga. 1 3/4" LONG							
	= 25.4 mm, 1 MILE	PER HOUR = 0.4	7/1 47 m/s	16 24	12 140 115 110	20	1" x 8" WIDER SHEATHING TO EACH BEARING	WIDER THAN 1" x 8"	FACE NAIL			R602. <mark>3 (2</mark>)	SINGLE TOP-PLATE		
ON CENTER SHA	ALL BE APPLIE <mark>D WITH</mark> P	ANEL STRENGTH AXIS	PERPENDICULAR	R TO SUPPORTS.	TING WITH STUDS SPACED MORE THAN 16 INCHES			4-8d BOX (2 1/2" x 0.113") OR 3-8d COMMON (2 1/2" x 0.131"); OR 3-10d BOX (3" x 0.128"); OR 4 STAPLES, 1" CROWN, 16ga. 1 3/4" LONG					DP - PLATE SPLICE CONNECTION		
BRACING REQUI c. WOOD STRUCTU SPAN RATING. P	IREMENTS SHALL BE IN URAL PANELS WITH SPA PLYWOOD SIDING RATE	ACCORDANCE WITH S AN RATINGS OF WALL- D 16 O.C. OR 24 O.C. S	ECTION R602.10. 16 OR WALL-24 SH HALL BE PERMITT	HALL BE PERMITTED AS TED AS AN ALTERNATE	S AN ALTERNATE TO PANELS WITH A 24/0 TO PANELS WITH A 24/16 SPAN RATING, WALL-16								INTERSECTING BUTT	JOINTS IN A	
	SIDING 16 O.C. SHALL B										GREATER THAN	PLICE PLATE SIZE	MINIMUM NAILS EACH SPLICE PLATE S		I NAILS EACH
	TABLE R60 PARTICI	``	WALL S	HEATHING	3					D0, D1	ICTURE IN SDC A-C; AND IN SDC AND D2 WITH BRACED WALL LINE PACING LESS THAN 25 FEET	3" x 6" x 0.036" LVANIZED STEEL PLATE OR	(6) 8d BOX (2 1/2" x 0.113") (6) 8d BOX (2 1/2" x 0.113") (2 1/2" x 0.113") (2 1/2" x 0.113") (2 1/2" x 0.113") (3 1/2" x 0.113") (3 1/2" x 0.113") (4 1/2" x 0.113") (5 1/2" x 0.113") (7 1/2"	SIDE " (12 EEL (2.1/)	OF JOINT) 8d BOX 2" x 0.113") NAILS
THICKNESS (inches) 3/8	GRADE	WHEN SIDING IS N	AILED TO STUDS	SPACING (inches)	NG IS NAILED TO SHEATHING							EQUIVALENT 3" x 8" x 0.036" ALVANIZED STEEL	(9) 8d BOX (2 1/2" x 0.113") EQUIVALENT 3" x 16" x 0.036 GALVANIZED ST		
3/8 1/2 FOR SI: 1 inch	M-2 EXTERIOR GLUE				16							PLATE OR EQUIVALENT	(2 1/2" x 0.113") NAILS EQUIVALENT	(18 (2 1/) 8d BOX 2" x 0.113") NAILS
a. WALL SHEATHIN	NGNOT EXPOSED TO TH				IE END JOINTS OF THE PANEL SHALL BE OFFSET SO 6-INCH GEP BETWEEN PANELS AND NAIL NOT	1				FOR S	l: 1 inch = 25.4 mm, 1 FOOT = 304.8 mm		I	1	
	INCH FROM PANEL EDG				7		6	5				2	1		

11

10

12



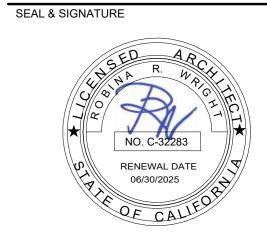
PWP23-003

DEPARTMENT OF PUBLIC WORKS AND PLANNING



CAPITAL PROJECTS DIVISION

2220 Tulare St., Ste. 720, Fresno, CA. 93721 Phone: (559) 262-4212 Fax: (559) 262-4879



UPDATE

JULY 10, 2023

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE ARCHITECT AND SHALL NOT BE USED ON ANY OTHER PROJECT OR LOCATIONS EXCEPT AS DESCRIBED ON THE DRAWINGS WITHOUT WRITTEN AGREEMENT WITH THE ARCHITECT.

SCHEDULE (RESIDENTIAL) 12" = 1'-0" SCALE

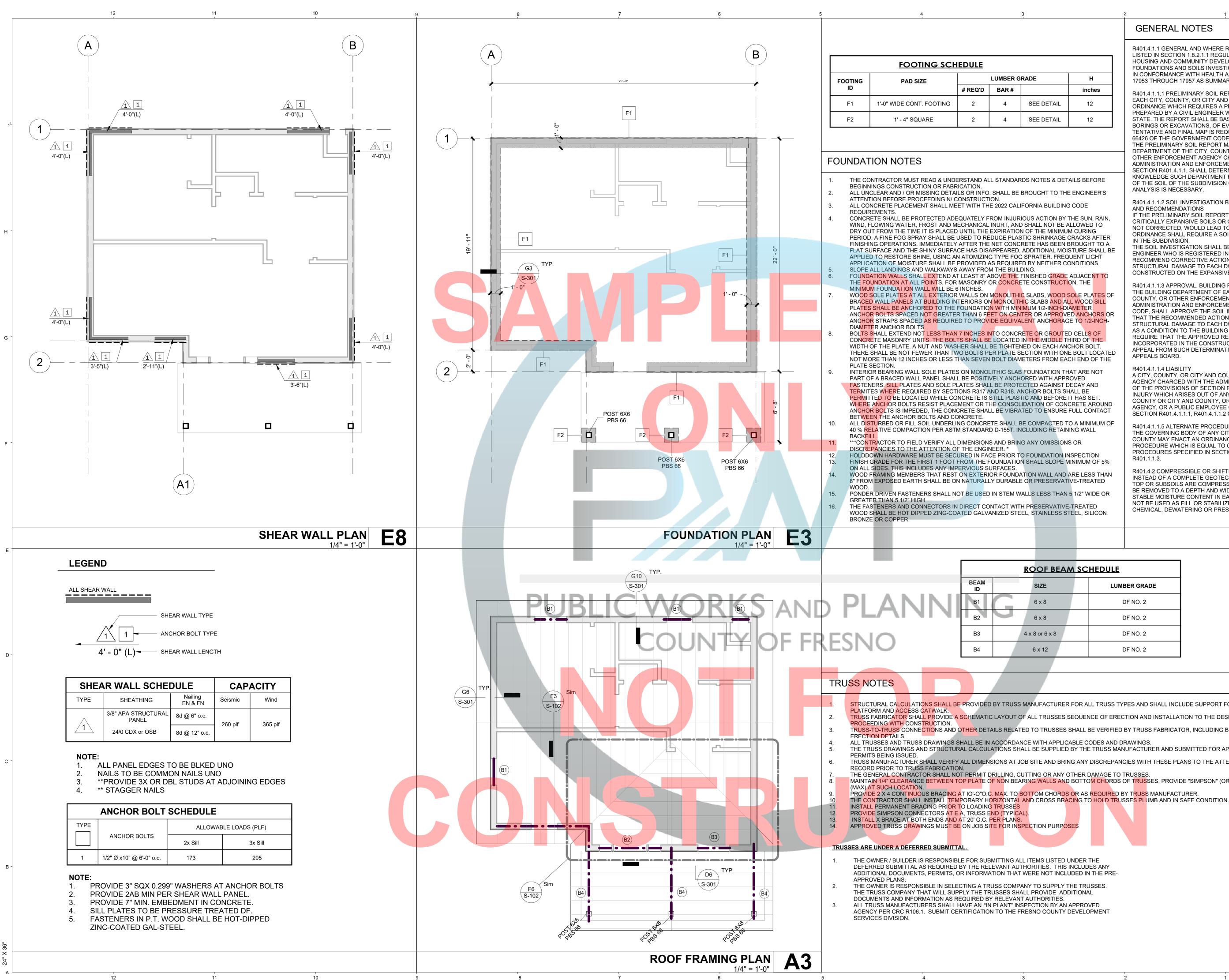
FASTENING

	S-103
ISSUE DATE	JOB NUMBER
APRIL 12, 2023	2023_20
DRAWN BY	CHECKED BY
Author	Checker

2

TITLE

©



н
inches
12
12

GENERAL NOTES

R401.4.1.1 GENERAL AND WHERE REQUIRED FOR APPLICATIONS LISTED IN SECTION 1.8.2.1.1 REGULATED BY THE DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT FOUNDATIONS AND SOILS INVESTIGATIONS SHALL BE CONDUCTED IN CONFORMANCE WITH HEALTH AND SAFETY CODE SECTIONS 17953 THROUGH 17957 AS SUMMARIZED BELOW.

R401.4.1.1.1 PRELIMINARY SOIL REPORT EACH CITY, COUNTY, OR CITY AND COUNTY SHALL ENACT AN

ORDINANCE WHICH REQUIRES A PRELIMINARY SOIL REPORT, PREPARED BY A CIVIL ENGINEER WHO IS REGISTERED BY THE STATE. THE REPORT SHALL BE BASED UPON ADEQUATE TEST BORINGS OR EXCAVATIONS, OF EVERY SUBDIVISION, WHERE A TENTATIVE AND FINAL MAP IS REQUIRED PURSUANT TO SECTION 66426 OF THE GOVERNMENT CODE.

THE PRELIMINARY SOIL REPORT MAY BE WAIVED IF THE BUILDING DEPARTMENT OF THE CITY. COUNTY OR CITY AND COUNTY. OR OTHER ENFORCEMENT AGENCY CHARGED WITH THE ADMINISTRATION AND ENFORCEMENT OF THE PROVISIONS OF SECTION R401.4.1.1, SHALL DETERMINE THAT, DUE TO THE KNOWLEDGE SUCH DEPARTMENT HAS AS TO THE SOIL QUALITIES OF THE SOIL OF THE SUBDIVISION OR LOT, NO PRELIMINARY ANALYSIS IS NECESSARY

R401.4.1.1.2 SOIL INVESTIGATION BY LOT, NECESSITY, PREPARATION AND RECOMMENDATIONS IF THE PRELIMINARY SOIL REPORT INDICATES THE PRESENCE OF CRITICALLY EXPANSIVE SOILS OR OTHER SOIL PROBLEMS WHICH, IF NOT CORRECTED, WOULD LEAD TO STRUCTURAL DEFECTS, SUCH ORDINANCE SHALL REQUIRE A SOIL INVESTIGATION OF EACH LOT IN THE SUBDIVISION. THE SOIL INVESTIGATION SHALL BE PREPARED BY A CIVIL

ENGINEER WHO IS REGISTERED IN THIS STATE. IT SHALL RECOMMEND CORRECTIVE ACTION WHICH IS LIKELY TO PREVENT STRUCTURAL DAMAGE TO EACH DWELLING PROPOSED TO BE CONSTRUCTED ON THE EXPANSIVE SOIL.

R401.4.1.1.3 APPROVAL, BUILDING PERMIT CONDITIONS, APPEAL THE BUILDING DEPARTMENT OF EACH CITY, COUNTY OR CITY AND COUNTY. OR OTHER ENFORCEMENT AGENCY CHARGED WITH THE ADMINISTRATION AND ENFORCEMENT OF THE PROVISIONS OF THIS CODE, SHALL APPROVE THE SOIL INVESTIGATION IF IT DETERMINES THAT THE RECOMMENDED ACTION IS LIKELY TO PREVENT STRUCTURAL DAMAGE TO EACH DWELLING TO BE CONSTRUCTED. AS A CONDITION TO THE BUILDING PERMIT, THE ORDINANCE SHALL REQUIRE THAT THE APPROVED RECOMMENDED ACTION BE INCORPORATED IN THE CONSTRUCTION OF EACH DWELLING. APPEAL FROM SUCH DETERMINATION SHALL BE TO THE LOCAL APPEALS BOARD.

R401.4.1.1.4 LIABILITY

A CITY, COUNTY, OR CITY AND COUNTY OR OTHER ENFORCEMENT AGENCY CHARGED WITH THE ADMINISTRATION AND ENFORCEMENT OF THE PROVISIONS OF SECTION R401.4.1.1, IS NOT LIABLE FOR ANY INJURY WHICH ARISES OUT OF ANY ACT OR OMISSION OF THE CITY, COUNTY OR CITY AND COUNTY, OR OTHER ENFORCEMENT AGENCY, OR A PUBLIC EMPLOYEE OR ANY OTHER PERSON UNDER SECTION R401.4.1.1.1, R401.4.1.1.2 OR R401.4.1.1.3.

R401.4.1.1.5 ALTERNATE PROCEDURES THE GOVERNING BODY OF ANY CITY, COUNTY, OR CITY AND COUNTY MAY ENACT AN ORDINANCE PRESCRIBING AN ALTERNATE PROCEDURE WHICH IS EQUAL TO OR MORE RESTRICTIVE THAN THE PROCEDURES SPECIFIED IN SECTIONS R401.4.1.1.1, R401.4.1.1.2 AND R401.1.1.3.

R401.4.2 COMPRESSIBLE OR SHIFTING SOIL INSTEAD OF A COMPLETE GEOTECHNICAL EVALUATION, WHERE TOP OR SUBSOILS ARE COMPRESSIBLE OR SHIFTING, THEY SHALL BE REMOVED TO A DEPTH AND WIDTH SUFFICIENT TO ENSURE STABLE MOISTURE CONTENT IN EACH ACTIVE ZONE AND SHALL NOT BE USED AS FILL OR STABILIZED WITHIN EACH ACTIVE ZONE BY CHEMICAL, DEWATERING OR PRESATURATION.

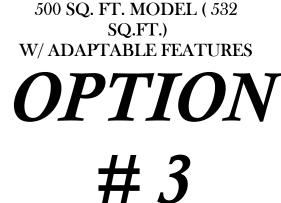
ROOF BEAM SCHEDULE LUMBER GRADE SIZE 6 x 8 DF NO. 2 6 x 8 DF NO. 2 4 x 8 or 6 x 8 DF NO. 2 6 x 12 DF NO. 2

STRUCTURAL CALCULATIONS SHALL BE PROVIDED BY TRUSS MANUFACTURER FOR ALL TRUSS TYPES AND SHALL INCLUDE SUPPORT FOR MECHANICAL UNIT, TRUSS FABRICATOR SHALL PROVIDE A SCHEMATIC LAYOUT OF ALL TRUSSES SEQUENCE OF ERECTION AND INSTALLATION TO THE DESIGNER FOR REVIEW PRIOR TO TRUSS-TO-TRUSS CONNECTIONS AND OTHER DETAILS RELATED TO TRUSSES SHALL BE VERIFIED BY TRUSS FABRICATOR, INCLUDING BRACING, STRONG BACKS AND

THE TRUSS DRAWINGS AND STRUCTURAL CALCULATIONS SHALL BE SUPPLIED BY THE TRUSS MANUFACTURER AND SUBMITTED FOR APPROVAL PRIOR TO BUILDING

TRUSS MANUFACTURER SHALL VERIFY ALL DIMENSIONS AT JOB SITE AND BRING ANY DISCREPANCIES WITH THESE PLANS TO THE ATTENTION OF THE ENGINEER OF

MAINTAIN 1/4" CLEARANCE BETWEEN TOP PLATE OF NON BEARING WALLS AND BOTTOM CHORDS OF TRUSSES, PROVIDE "SIMPSON" (OR EQ) ST TRUSS CLIP AT 48" O.C.



ACCESSORY **DWELLING UNIT**

PWP23-003

PROJECT

DEPARTMENT OF PUBLIC WORKS AND PLANNING



CAPITAL PROJECTS DIVISION

2220 Tulare St., Ste. 720, Fresno, CA. 93721 Phone: (559) 262-4212 Fax: (559) 262-4879

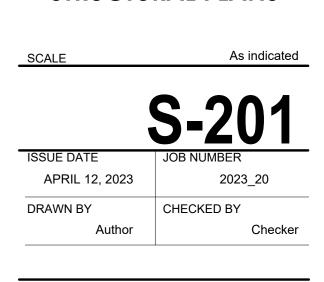


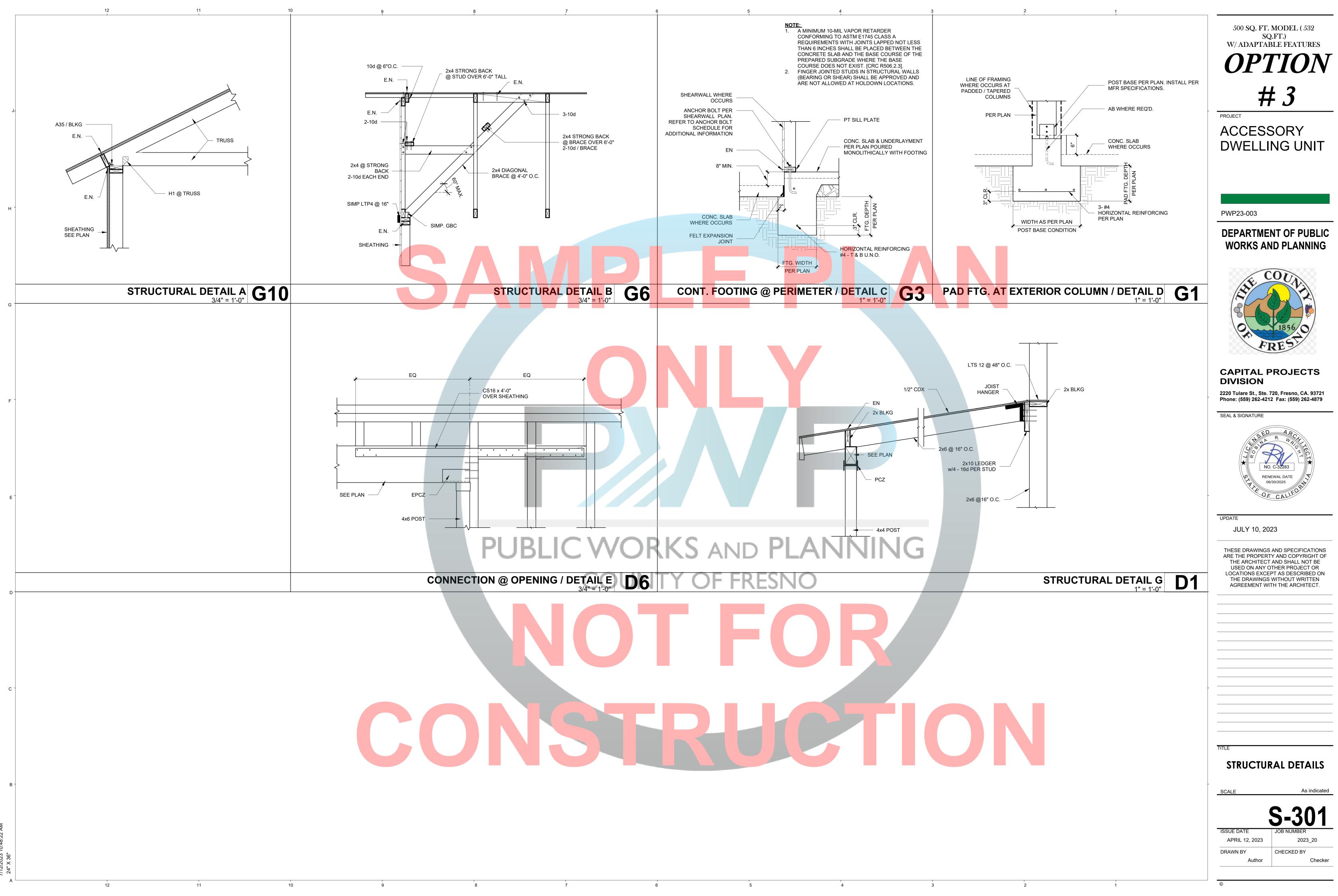
UPDATE

JULY 10, 2023

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE ARCHITECT AND SHALL NOT BE USED ON ANY OTHER PROJECT OR LOCATIONS EXCEPT AS DESCRIBED ON THE DRAWINGS WITHOUT WRITTEN AGREEMENT WITH THE ARCHITECT

STRUCTURAL PLANS





				ACNIC	VII			TT	-0-							1	
ł						JE			:9								
			DETECTION SYS		.L BE	INST	ſALL	ED IN	I THE FO	LLOWIN	G LOCA	TIONS	:				
			EPING ROOM. CH SEPARATE SL	EEDING		ד ואו ג	пе				ר דווב ו	BEDRO		2			
			SOURCE. SMOKE													PROVIDED	THAT SUCH
			VED FROM A CON FARE NOT EQUIF							-							
	ALARMS	SHALL	EMIT A SIGNAL														
			<u>ONNECTION.</u> THAN ONE SMOK		I IS R	FQU	IRFI	י סד נ	BE INSTA		ITHIN A		עוסט	ים וא	WELLING OR SI	FEPING I	INIT THE SM
J	ALARM S	SHALL	BE INTERCONNE	CTED IN S	SUCH	HAM	IANN	IER T	HAT THE	ACTIVA	TION O	F ONE	ALA	RM W	/ILL ACTIVATE /	ALL OF TH	E ALARMS IN
	INDIVIDU DOORS (-	IT. THE ALARMS \$ D.	SHALL BE	E CLE	:ARL`	Y AU	DIBL	E IN ALL	BEDRO	OMS OV	ER BA	CKG	ROUI	ND NOISE LEVE	LS WITH A	LL INTERVE
	R315.1 C	ARBO	N MONOXIDE ALA														
	R315.1.1 THE BUI		<u>R SUPPLY.</u> FOR N WIRING	JEM CON	ISTR	UCTI	on f	REQU	IRED CA	RBON M	ONOXIE	DE ALA	ARMS	SHA	LL RECEIVE TH	IEIR PRIM	ARY POWER
			WIRING IS SERVE									-					
	<u>R315.1.2</u> UNIT'OR		<u>CONNECTION.</u> W N A	HERE MC)RE I	HAN	ON	= CAF	KBON MC	NOXIDE		/I IS RE	QUI	RED	I O BE INSTALL	ED WITHIN	THE DWELL
			THE ALARMS SH		NTEF	RCON	INE(CTED	IN A MAI	NNER TH	IAT ACT	ΓΙνατια	O NC	F ON	E ALARM SHAL	L ACTIVAT	E ALL OF TH
			E. INDIVIDUAL UN REQUIREMENTS.			NOXI	DE /	LAR	MS REQL	JIRED B	SECTI	ON R3	15.1	AND	R315.2 SHALL E	BE INSTALI	_ED IN THE
н			CATIONS: EACH SEPARATE										ידוואוי			(\$)	
			EVEL OF A DWELL										/IINI I			(3).	
ľ									G	ROUM		DD C	DET	AIL			
-												_					
									•	#2 BAR	E CU FC	OR BO	NDIN	IG AN	ID GROUND		
	NFW	SERV								-	-			-	AND METAL		
		PAN	-							UNDER	GROUN	D WA	IERI	PIPE.			
G											ID ROD						
						#2 B	ARE	GEC	; /						HE GROUND GROUND		
										WIRE							
											TALL T						
								Ĩ			E CLAM POSITE	-					
	5/8"X10'	GROL	IND ROD		— (6' MII	N. —			5/8	"X10' GI	ROUN	D RC	D			
ľ						-17			00115		_						
								RE	SCHE							-	
F	SYMB.	TYPE	MAKE AND MOD)EL					MNTG.	LAMP / BULB	VOLT			NOT	TES	FLOOR I	
	\ast	'D1'	AIRE DELUXE #	FP6285B					J-BOX	20W LED	120						OR ADAPTAB RAWINGS FO
	ο	'D2'	LITHONIA# WF6	ELED-30	K-90(CRI-N	ЛW-I	M6	REC.	11W LED	120		DIN	l, WE	T RATD,		ECTRICAL R
ľ	<u>00</u>	'D3'	PROJECT SOUF		# 420	07			SURF.	60W LED	120		DA	AMP I	RATED	· · ·	
ŀ	/ 0	'D4'	ITEM# 1362638 C-LITE# C-DS4-6	650_27					SURF.	11W	120				T RATD,		HALL BE LOC
			DESIGNHOUSE		8723	8				LED 60W				·		M	EASURE FRC
-	0	'D7'	ITEM#100406008						FLUSH	LED	120				RATD,	FII	NISH FLOOR
							LI	GH	TING					JLE N.T.S			
E														1.		⊥ NAIRES SH	HALL HAVE A
														2.	ALL INSTALLE		
														3.	TABLE 150.0-A SCREW-BASE		· · · ·
														4.	APPENDIX JA		
														4.	SHALL MEET /		
														4	1. I. SHALL N	NOT CONT	AIN SCREW
															2 IL HAVE A	I ABFI TH	
														4.	THAN 2.0	CFM AT 7	5 PASCALS V
															THAN 2.0 EXHAUST	CFM AT 7	5 PASCALS V SING WITH II
D -	PANEL: 500 SQ. FT. O	5QT-3	225 AMP BUS 120/240V, 1 PH, 3 W		: 200A : 80% RA				N: EXTERIOR G: SURFACE						THAN 2.0 EXHAUST CERTIFIE 3. III. BE SEA	CFM AT 75 FAN HOU D AIRTIGH ALED WITH	5 PASCALS V SING WITH II IT; AND I A GASKET (
D-	500 SQ. FT. O PANEL BREA	NPT 3	225 AMP BUS 120/240V, 1 PH, 3 W 100% RATED NEUTR	TRIP: AL A.I.C.:	80% RA 42000 VOL	ATED A T-AMPER	RES	NOUNTIN	G: SURFACE E: NEMA 3R	54		BREAKEI		4.	THAN 2.0 EXHAUST CERTIFIE 3. III. BE SEA CEILING,	CFM AT 75 FAN HOU D AIRTIGH ALED WITH AND HAVE	5 PASCALS V SING WITH II IT; AND
D	500 SQ. FT. O PANEL CKT NO. 1 20	NOT	225 AMP BUS 120/240V, 1 PH, 3 W 100% RATED NEUTR TES SERVES ELECTRIC WATER HEATER	RAL A.I.C.: LOAD	80% RA 42000 VOL	ATED	RES C	LOAD	G: SURFACE E: NEMA 3R SERV	OMRECEPTACL	ES AFCI	AMP POLE 1 20	CKT NO. 2	4.	THAN 2.0 EXHAUST CERTIFIE 3. III. BE SEA CEILING, SPACES S INSTRUC	CFM AT 75 FAN HOU D AIRTIGH ALED WITH AND HAVE SEALED W TIONS TO	5 PASCALS V SING WITH II IT; AND I A GASKET (E ALL AIR LE/
D -	S00 SQ. FT. O PANEL CKT BREA NO. AMP 1 20 3 20 5 20	KER POLE NOT 1 AFCI/ 1 AFCI/	225 AMP BUS 120/240V, 1 PH, 3 W 100% RATED NEUTR TES ELECTRIC WATER HEATER ESS SMALL APPLIANCE - RECEPT. CI SMALL APPLIANCE - RECEPT.	AL TRIP: A.I.C.: LOAD 1000 ACLE 1000 ACLE 1000	80% RA 42000 VOL A 2260	ATED A T-AMPER	EN RES C 2260	LOAD 1260 Lf 1260 D	G: SURFACE E: NEMA 3R SERV VING/DINNING ROO EDROOM 1 & HALL ISHWASHER	OM RECEPTACL LWAY	ES AFCI AFCI/ESS AFCI	AMP POLE 1 20 1 20 1 20	2 4 6	4.	THAN 2.0 EXHAUST CERTIFIE 3. III. BE SEA CEILING, SPACES S INSTRUC CEILING; 4. IV. MEET	CFM AT 75 FAN HOU D AIRTIGH ALED WITH AND HAVE SEALED W TIONS TO AND THE CLEA	5 PASCALS V SING WITH II IT; AND I A GASKET (E ALL AIR LEA ITH A GASKE MAINTAIN AI RANCE AND
D -	500 SQ. FT. O PANEL BREA CKT AMP 1 20 3 20 5 20 7 20 9 20	KER NOT 1 AFCI/	225 AMP BUS 120/240V, 1 PH, 3 W 100% RATED NEUTR TES ELECTRIC WATER HEATER ESS SMALL APPLIANCE - RECEPT. CI SMALL APPLIANCE - RECEPT. CI LAUNDRY RECEPTACLE BATHROOM	AL TRIP: A.I.C.: LOAD 1000 ACLE 1000 ACLE 1000 1000 180	80% RA 42000 VOL A 2260	ATED A T-AMPER	EN RES C 2260 1360	LOAD 1260 Lf 1260 Lf 1260 Bl 1000 Di 360 Ki 1200 Ri	G: SURFACE E: NEMA 3R SERV VING/DNNING ROO EDROOM 1 & HALL ISHWASHER ITCHEN RECEPTA EFRIGERATOR	OM RECEPTACL LWAY CLES	ES AFCI AFCI/ESS AFCI AFCI AFCI AFCI/ESS	AMP POLE 1 20 1 20 1 20 1 20 1 20 1 20 1 20	CKT NO. 2 4 6 8 10	4. 4. 4.	THAN 2.0 EXHAUST CERTIFIE 3. III. BE SEA CEILING, SPACES S INSTRUC CEILING; 4. IV. MEET ELECTRIC	CFM AT 75 FAN HOU D AIRTIGH ALED WITH AND HAVE SEALED W TIONS TO AND THE CLEA CAL CODE	5 PASCALS V SING WITH II IT; AND I A GASKET (E ALL AIR LEA ITH A GASKE MAINTAIN AI RANCE AND SECTION 41
D	500 SQ. FT. O PANEL BREA CKT AMP 1 20 3 20 5 20 7 20	KER NOT 1 AFCI/	225 AMP BUS 120/240V, 1 PH, 3 W 100% RATED NEUTR TES SERVES ELECTRIC WATER HEATER ESS SMALL APPLIANCE - RECEPT. CI SMALL APPLIANCE - RECEPT. CI SMALL APPLIANCE - RECEPT. CI LAUNDRY RECEPTACLE BATHROOM ESS LIGHTING EXTERIOR GFIRECEPTACLE	AL TRIP: A.I.C.: LOAD 1000 ACLE 1000 ACLE 1000 1000 180 222	80% RA 42000 VOL 2260 2000	ATED A T-AMPER	EN RES C 2260	LOAD 1260 Lf 1260 Lf 1260 Bl 1000 D 360 Ki 1200 Ri 600 G 2080	G: SURFACE E: NEMA 3R SERV VING/DNNING ROO EDROOM 1 & HALI ISHWASHER ITCHEN RECEPTA	DM RECEPTACL LWAY CLES	ES AFCI AFCI/ESS AFCI AFCI AFCI AFCI/ESS AFCI	AMP POLE 1 20 1 20 1 20 1 20 1 20	CKT NO. 2 4 6 8	4.	THAN 2.0 EXHAUST CERTIFIE 3. III. BE SEA CEILING, SPACES S INSTRUC CEILING; 4. IV. MEET ELECTRIC BLANK ELECT FEET ABOVE	CFM AT 75 FAN HOU D AIRTIGH ALED WITH AND HAVE SEALED W TIONS TO AND THE CLEA CAL CODE RICAL BO THE FINISH	5 PASCALS V SING WITH II IT; AND A GASKET (E ALL AIR LEA ITH A GASKE MAINTAIN AI RANCE AND SECTION 41 XES. THE NU HED FLOOR A
D -	500 SQ. FT. O PANEL BREA CKT AMP 1 20 3 20 5 20 7 20 9 20 11 20 33 20	KER NOT 1 AFCI/	225 AMP BUS 120/240V, 1 PH, 3 W 100% RATED NEUTR ESS SERVES ELECTRIC WATER HEATER ESS SMALL APPLIANCE - RECEPT. CI SMALL APPLIANCE - RECEPT. CI LAUNDRY RECEPTACLE BATHROOM ESS LIGHTING EXTERIOR GFIRECEPTACLE	AL TRIP: A.I.C.: LOAD 1000 ACLE 1000 ACLE 1000 1000 180 222 180	: 80% RA : 42000 VOL 0 A 2260 2000 1380	ATED A T-AMPER	EN RES C 2260 1360 822	LOAD 1260 LF 1260 LF 1260 BF 1260 BF 1260 BF 1260 BF 1260 BF 1200 RF 600 G 2080 0	G: SURFACE E: NEMA 3R SERVI VING/DINNING ROO EDROOM 1 & HALL ISHWASHER ITCHEN RECEPTA EFRIGERATOR ARBAGE DISPOSA	DM RECEPTACL LWAY CLES	ES AFCI AFCI/ESS AFCI AFCI AFCI AFCI/ESS AFCI	AMP POLE 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20	CKT NO. 2 4 6 8 10 12 14	4. 4. 4.	THAN 2.0 EXHAUST CERTIFIE 3. III. BE SEA CEILING, SPACES S INSTRUC CEILING; 4. IV. MEET ELECTRIC BLANK ELECT FEET ABOVE	CFM AT 75 FAN HOU D AIRTIGH ALED WITH AND HAVE SEALED W TIONS TO AND THE CLEA CAL CODE RICAL BO THE FINISH GREATER	5 PASCALS V SING WITH II IT; AND A GASKET (ALL AIR LEA TTH A GASKE MAINTAIN AI RANCE AND SECTION 41 XES. THE NU HED FLOOR A
	500 SQ. FT. O PANEL CKT AMP 1 20 3 20 5 20 7 20 9 20 11 20 13 20 15 20 17 19 21 23	KER NOT 1 AFCI/	225 AMP BUS 120/240V, 1 PH, 3 W 100% RATED NEUTR ESS SERVES ELECTRIC WATER HEATER ESS SMALL APPLIANCE - RECEPT. CI SMALL APPLIANCE - RECEPT. CI LAUNDRY RECEPTACLE BATHROOM ESS LIGHTING EXTERIOR GFIRECEPTACLE	AL TRIP: A.I.C.: LOAD 1000 ACLE 1000 ACLE 1000 1000 180 222 180	80% RA 42000 VOL A 2260 2000 1380 2260 0 2260 0 0	ATED A T-AMPER	EN RES C 2260 1360 822 2260	LOAD 1260 LF 1260 LF 1260 BF 1260 BF 1260 BF 1260 BF 1260 BF 1200 RF 600 G 2080 0	G: SURFACE E: NEMA 3R SERVI VING/DINNING ROU EDROOM 1 & HALL ISHWASHER ITCHEN RECEPTA EFRIGERATOR ARBAGE DISPOSA	DM RECEPTACL LWAY CLES	ES AFCI AFCI/ESS AFCI AFCI AFCI AFCI/ESS AFCI	AMP POLE 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20	CKT NO. 2 4 6 8 10 12 14 16 18 20 22 24	4. 4. 4.	THAN 2.0 EXHAUST CERTIFIE 3. III. BE SEA CEILING, SPACES S INSTRUC CEILING; 4. IV. MEET ELECTRIC BLANK ELECT FEET ABOVE SHALL BE NO BE SERVED B SPEED CONTI	CFM AT 75 FAN HOU D AIRTIGH ALED WITH AND HAVE SEALED W TIONS TO AND THE CLEA CAL CODE RICAL BO THE FINISH GREATER Y A DIMME ROL.	5 PASCALS V SING WITH II IT; AND A GASKET (E ALL AIR LEA TTH A GASKE MAINTAIN AI RANCE AND SECTION 41 XES. THE NU HED FLOOR A THAN THE N ER, VACANCY
D -	500 SQ. FT. O PANEL BREA CKT AMP 1 20 3 20 5 20 7 20 9 20 11 20 13 20 15 20 17 19 21 23 25 27	KER NOT 1 AFCI/	225 AMP BUS 120/240V, 1 PH, 3 W 100% RATED NEUTR ESS SERVES ELECTRIC WATER HEATER ESS SMALL APPLIANCE - RECEPT. CI SMALL APPLIANCE - RECEPT. CI LAUNDRY RECEPTACLE BATHROOM ESS LIGHTING EXTERIOR GFIRECEPTACLE	AL TRIP: A.I.C.: LOAD 1000 ACLE 1000 ACLE 1000 1000 180 222 180	80% RA 42000 VOL A 2260 2000 1380 2260 0 2260 0 0 0 0	ATED A T-AMPER	EN RES C 2260 1360 822 2260 0	LOAD 1260 LF 1260 LF 1260 BF 1260 BF 1260 BF 1260 BF 1260 BF 1200 RF 600 G 2080 0	G: SURFACE E: NEMA 3R SERVI VING/DINNING ROU EDROOM 1 & HALL ISHWASHER ITCHEN RECEPTA EFRIGERATOR ARBAGE DISPOSA	DM RECEPTACL LWAY CLES	ES AFCI AFCI/ESS AFCI AFCI AFCI AFCI/ESS AFCI	AMP POLE 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20	CKT 2 4 6 8 10 12 14 16 18 20 22 24 26 28	4. 4. 4.	THAN 2.0 EXHAUST CERTIFIE 3. III. BE SEA CEILING, SPACES S INSTRUC CEILING; 4. IV. MEET ELECTRIC BLANK ELECT FEET ABOVE SHALL BE NO BE SERVED B SPEED CONTI LIGHTING SHA	CFM AT 75 FAN HOU D AIRTIGH ALED WITH AND HAVE SEALED W TIONS TO AND THE CLEA CAL CODE RICAL BO2 THE FINISH GREATER Y A DIMME ROL. ALL HAVE I	5 PASCALS V SING WITH II IT; AND I A GASKET (E ALL AIR LEA ITH A GASKE MAINTAIN AI RANCE AND SECTION 41 XES. THE NU HED FLOOR A THAN THE N ER, VACANCY
	500 SQ. FT. O BREA CKT AMP 1 20 3 20 5 20 7 20 9 20 11 20 13 20 15 20 17 19 21 23 25	KER NOT 1 AFCI/	225 AMP BUS 120/240V, 1 PH, 3 W 100% RATED NEUTR ESS SERVES ELECTRIC WATER HEATER ESS SMALL APPLIANCE - RECEPT. CI SMALL APPLIANCE - RECEPT. CI LAUNDRY RECEPTACLE BATHROOM ESS LIGHTING EXTERIOR GFIRECEPTACLE	AL TRIP: A.I.C.: LOAD 1000 ACLE 1000 ACLE 1000 180 2222 180 180 180	80% RA 42000 VOL A 2260 2000 1380 2260 0 2260 0 0	ATED A T-AMPER	EN RES C 2260 1360 822 2260 0 0	LOAD 1260 LF 1260 LF 1260 BF 1260 BF 1260 BF 1260 BF 1260 BF 1200 RF 600 G 2080 0	G: SURFACE E: NEMA 3R SERVI VING/DINNING ROU EDROOM 1 & HALL ISHWASHER ITCHEN RECEPTA EFRIGERATOR ARBAGE DISPOSA	DM RECEPTACL LWAY CLES	ES AFCI AFCI/ESS AFCI AFCI AFCI AFCI/ESS AFCI	AMP POLE 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20	CKT 2 4 6 8 10 12 14 16 18 20 22 24 26	4. 4. 5. 6.	THAN 2.0 EXHAUST CERTIFIE 3. III. BE SEA CEILING, SPACES S INSTRUC CEILING; 4. IV. MEET ELECTRIC BLANK ELECT FEET ABOVE SHALL BE NO BE SERVED B SPEED CONTI LIGHTING SHA LIGHTING TO 1. EXCEPTIC	CFM AT 75 FAN HOU D AIRTIGH ALED WITH AND HAVE SEALED W TIONS TO AND THE CLEA CAL CODE RICAL BO THE FINISH GREATER Y A DIMME ROL. ALL HAVE I BE MANUA	5 PASCALS V SING WITH II IT; AND A GASKET (E ALL AIR LEA ITH A GASKE MAINTAIN AI RANCE AND SECTION 41 XES. THE NU HED FLOOR (THAN THE N ER, VACANC) READILY AC(ALLY TURNE) CTION 150.0(
	500 SQ. FT. O BREA CKT AMP 1 20 3 20 5 20 7 20 9 20 11 20 13 20 15 20 17 19 21 23 25 27 29 31	KER NOT 1 AFCI/	225 AMP BUS 120/240V, 1 PH, 3 W 100% RATED NEUTR TES ELECTRIC WATER HEATER ESS ESS SMALL APPLIANCE - RECEPT. CI SMALL APPLIANCE - RECEPT. CI BATHROOM BATHROOM ESS LIGHTING EXTERIOR GFIRECEPTACLE CI HOOD & FAN "For Future 240V Use" - Heat PA	AL TRIP: A.I.C.: LOAD 1000 ACLE 1000 ACLE 1000 180 2222 180 180 180	80% RA 42000 VOL A 2260 2000 1380 2260 0 2260 0 0 0 0 0 0 0 0	ATED A T-AMPER	EN RES C 2260 1360 822 2260 0 0 0 0	MOUNTIN ICLOSUR 1260 LI 1260 BI 1260 BI 1200 DI 360 KI 1200 RI 600 G. 2080 0 2080 0 2080 0 2080 0 2080 0	G: SURFACE E: NEMA 3R SERVI VING/DINNING ROU EDROOM 1 & HALL ISHWASHER ITCHEN RECEPTA EFRIGERATOR ARBAGE DISPOSA	DM RECEPTACL LWAY CLES	ES AFCI AFCI/ESS AFCI AFCI AFCI/ESS AFCI I-1	AMP POLE 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20	CKT 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32	4. 4. 5. 6.	THAN 2.0 EXHAUST CERTIFIE 3. III. BE SEA CEILING, SPACES S INSTRUC CEILING; 4. IV. MEET ELECTRIC BLANK ELECT FEET ABOVE SHALL BE NO BE SERVED B SPEED CONTI LIGHTING SHA LIGHTING TO 1. EXCEPTIC	CFM AT 75 FAN HOU D AIRTIGH ALED WITH AND HAVE SEALED W TIONS TO AND THE CLEA CAL CODE RICAL BO THE FINISH GREATER Y A DIMME ROL. ALL HAVE H BE MANUA DN TO SEC TED LIGHT	5 PASCALS V SING WITH II IT; AND I A GASKET (E ALL AIR LEA ITH A GASKE MAINTAIN AI RANCE AND SECTION 410 XES. THE NU HED FLOOR (THAN THE N ER, VACANC) READILY AC(ALLY TURNE) CTION 150.0()
	500 SQ. FT. O PANEL BREA CKT AMP 1 20 3 20 5 20 7 20 9 20 11 20 13 20 15 20 17 19 21 23 25 27 29 31 33 50	PT 3 KER POLE NOT 1 AFCI/ 1	225 AMP BUS 120/240V, 1 PH, 3 W 100% RATED NEUTR TES ELECTRIC WATER HEATER ESS SMALL APPLIANCE - RECEPT. CI SMALL APPLIANCE - RECEPT. CI BATHROOM BATHROOM ESS LIGHTING EXTERIOR GFIRECEPTACLE CI HOOD & FAN "For Future 240V Use" - Heat Put Heater Ready Electric Cooktop Ready Electric Clothes Dryer Ready	TRIP: A.I.C.: LOAD 1000 ACLE 180 ACLE 4800 ACLE 2880 2880 2880	80% RA 42000 VOL A 2260 2000 1380 2260 0 1380 2260 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ATED A T-AMPEF B	EN RES C 2260 1360 822 2260 0 0 0 0 4800 2880	MOUNTIN ICLOSUR 1260 Lf 1260 Lf 1260 Bi 1000 D 360 Ki 1200 R 600 G 2080 0 2080 0 2080000000000	G: SURFACE E: NEMA 3R SERVI VING/DNNING ROO EDROOM 1 & HALL ISHWASHER TCHEN RECEPTA EFRIGERATOR ARBAGE DISPOS/ UTDOOR/INDOOF	DM RECEPTACL LWAY CLES RUNIT O DU-1/IDU	ES AFCI AFCI/ESS AFCI AFCI AFCI/ESS AFCI I-1	AMP POLE 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20	CKT 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36	4. 4. 5. 6. 6.	THAN 2.0 EXHAUST CERTIFIE 3. III. BE SEA CEILING, SPACES S INSTRUC CEILING; 4. IV. MEET ELECTRIC BLANK ELECT FEET ABOVE SHALL BE NO BE SERVED B SPEED CONTI LIGHTING SHA LIGHTING TO 1. EXCEPTIC INTEGRA	CFM AT 75 FAN HOU D AIRTIGH ALED WITH AND HAVE SEALED W TIONS TO AND THE CLEA CAL CODE RICAL BO THE FINISH GREATER Y A DIMME ROL. ALL HAVE I BE MANUA DN TO SEC TED LIGHT S SHALL B IERE THA	5 PASCALS V SING WITH II IT; AND A GASKET (E ALL AIR LEA ITH A GASKE MAINTAIN AI RANCE AND SECTION 41 XES. THE NU HED FLOOR A THAN THE N ER, VACANCY READILY AC(ALLY TURNE) CTION 150.0() TING VIA A RE SYPASS A DIM
	500 SQ. FT. O BREA CKT AMP 1 20 3 20 5 20 7 20 9 20 11 20 13 20 15 20 17 19 21 23 25 27 29 31 33 55 37 50 39 30	PPT 3 KER POLE NOT 1 AFCI/ 2	225 AMP BUS 120/240V, 1 PH, 3 W 100% RATED NEUTR EEECTRIC WATER HEATER ESS SMALL APPLIANCE - RECEPT. CI SMALL APPLIANCE - RECEPT. CI LAUNDRY RECEPTACLE BATHROOM ESS LIGHTING EXTERIOR GFIRECEPTACLE CI HOOD & FAN E For F uture 240V Use" - Heat Pr Heater Ready Electric Cooktop Ready Electric Clothes Dryer Ready TOTAL CONNECTED LOAD	TRIP: A.I.C.: LOAD 1000 ACLE 1000 180 2222 180 180 180 180 4800 4800 2880 2880 D (VA) :	80% RA 42000 VOL 2260 2000 1380 2260 1380 2260 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ATED A T-AMPEF B	EN RES C 2260 1360 822 2260 0 2260 0 0 0 0 4800 2880 14382 14382	MOUNTIN ICLOSUR 1260 LI 1260 BI 1260 BI 1200 DI 360 KI 1200 RI 600 G. 2080 0 2080 0 2080 0 2080 0 2080 0 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	G: SURFACE E: NEMA 3R SERVI VING/DNNING ROO EDROOM 1 & HALL ISHWASHER TCHEN RECEPTA EFRIGERATOR ARBAGE DISPOS/ UTDOOR/INDOOR UTDOOR/INDOOR	DM RECEPTACL LWAY CLES AL R UNIT ODU-1/IDU UNIT ODU-1/IDU	ES AFCI AFCI/ESS AFCI AFCI AFCI AFCI I-1	AMP POLE 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20	CKT 2 4 6 8 10 12 14 16 18 20 22 24 25 28 30 32 34 36 38 40	4. 4. 5. 6. 6.	THAN 2.0 EXHAUST CERTIFIE 3. III. BE SEA CEILING, SPACES S INSTRUC CEILING; 4. IV. MEET ELECTRIC BLANK ELECT FEET ABOVE SHALL BE NO BE SERVED B SPEED CONTI LIGHTING SHA LIGHTING TO 1. EXCEPTIC INTEGRA	CFM AT 75 FAN HOU D AIRTIGH ALED WITH AND HAVE SEALED W TIONS TO AND THE CLEA CAL CODE RICAL BO THE FINISH GREATER Y A DIMME ROL. ALL HAVE I BE MANUA DN TO SEC TED LIGHT S SHALL B IERE THA 0(K).	5 PASCALS V SING WITH II IT; AND A GASKET (E ALL AIR LEA TTH A GASKE MAINTAIN AI RANCE AND SECTION 41 XES. THE NU HED FLOOR A THAN THE N ER, VACANC READILY AC(ALLY TURNE) TON 150.0(H TNG VIA A RE SYPASS A DIN T DIMMER OF
	500 SQ. FT. O BREA CKT AMP 1 20 3 20 3 20 5 20 7 3 20 5 20 7 7 20 9 20 11 20 13 20 15 20 17 19 21 21 23 22 25 27 29 31 33 35 50 37 50 39 41 30 41 NOTES: NOTES: NOTES: NOTES NOTES	PT 3	225 AMP BUS 120/240V, 1 PH, 3 W 100% RATED NEUTR EEECTRIC WATER HEATER ESS SMALL APPLIANCE - RECEPT. CI SMALL APPLIANCE - RECEPT. CI LAUNDRY RECEPTACLE BATHROOM ESS LIGHTING EXTERIOR GFIRECEPTACLE CI HOOD & FAN STERIOR For Future 240V Use" - Heat Pr Heater Ready Electric Cooktop Ready Electric Clothes Dryer Ready TOTAL CONNECTED LOAD	TRIP: A.I.C.: LOAD 1000 ACLE 1000 180 2222 180 180 180 180 4800 4800 2880 2880 D (VA) :	80% RA 42000 VOL 2260 2000 1380 2260 0 1380 2260 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ATED A T-AMPEF B	EN RES C 2260 1360 822 2260 0 0 0 0 4800 2880 14382	MOUNTIN ICLOSUR 1260 LI 1260 BI 1260 BI 1200 DI 360 KI 1200 RI 600 G. 2080 0 2080 0 2080 0 2080 0 2080 0 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	G: SURFACE E: NEMA 3R SERVI VING/DNNING ROO EDROOM 1 & HALL ISHWASHER IT CHEN RECEPTA EFRIGERATOR ARBAGE DISPOS/ UTDOOR/INDOOF	DM RECEPTACL LWAY CLES AL R UNIT ODU-1/IDU UNIT ODU-1/IDU	ES AFCI AFCI/ESS AFCI AFCI AFCI AFCI I-1	AMP POLE 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20	CKT 2 4 6 8 10 12 14 16 18 20 22 24 25 28 30 32 34 36 38 40	4. 4. 5. 6. 7.	THAN 2.0 EXHAUST CERTIFIE 3. III. BE SEA CEILING, SPACES S INSTRUC CEILING; 4. IV. MEET ELECTRIC BLANK ELECT FEET ABOVE SHALL BE NO BE SERVED B SPEED CONTI LIGHTING SHA LIGHTING SHA LIGHTING TO 1. EXCEPTION INTEGRA NO CONTROL FUNCTION WH SECTION 150. AUTOMATIC-C 1. I. IN BATH	CFM AT 75 FAN HOU D AIRTIGH ALED WITH AND HAVE SEALED W TIONS TO AND THE CLEA CAL CODE RICAL BO THE FINISH GREATER Y A DIMME ROL. ALL HAVE I BE MANUA ON TO SEC TED LIGHT S SHALL B HERE THA 0(K). DFF CONTH IROOMS, (5 PASCALS V SING WITH II IT; AND I A GASKET (E ALL AIR LEA ITH A GASKE MAINTAIN AI RANCE AND SECTION 410 XES. THE NU HED FLOOR A THAN THE N ER, VACANCY READILY ACCANCY READILY ACCANCY ALLY TURNED STION 150.0(H TO MARK ACCANCY ALLY TURNED
	500 SQ. FT. O BREA CKT AMP 1 20 3 20 5 20 7 20 9 20 11 20 13 20 15 20 17 19 21 23 225 27 29 31 33 35 37 50 37 39 41 30 41 NOTES: AFCI ARC-FA	PT 3 KER POLE NOT 1 AFCI/ 1 AFCI/ 1 AFCI/ 1 AFCI/ 1 AFCI/ 1 AFCI/ 2 2 2 AULT CIRCUT	225 AMP BUS 120/240V, 1 PH, 3 W 100% RATED NEUTR ES SERVES ELECTRIC WATER HEATER ESS SMALL APPLIANCE - RECEPT. CI SMALL APPLIANCE - RECEPT. CI BATHROOM ESS LIGHTING EXTERIOR GFIRECEPTACLE HOOD & FAN STOR Future 240V Use" - Heat Prime Heater Ready Electric Cooktop Ready Electric Clothes Dryer Ready TOTAL CONNECTED LOAD TOTAL CALCULATED LOAD	TRIP: A.J.C.: LOAD 1000 ACLE 1000 ACLE 1000 ACLE 1000 ACLE 1000 180 222 180 180 480 4800 2880 2880 2880 20 (VA) : ND (VA) : ND (AMPS) :	80% RA 42000 VOL A 2260 1380 2260 22000 1380 2260 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		EN RES C 2260 1360 822 2260 0 2260 0 0 0 0 4800 2880 14382 14382	MOUNTIN ICLOSUR 1260 LI 1260 BI 1260 BI 1200 DI 360 KI 1200 RI 600 G. 2080 0 2080 0 2080 0 2080 0 2080 0 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	G: SURFACE E: NEMA 3R SERVI VING/DNNING ROO EDROOM 1 & HALL ISHWASHER TCHEN RECEPTA EFRIGERATOR ARBAGE DISPOS/ UTDOOR/INDOOR UTDOOR/INDOOR	DM RECEPTACL LWAY CLES AL R UNIT ODU-1/IDU UNIT ODU-1/IDU	ES AFCI AFCI/ESS AFCI AFCI AFCI AFCI I-1	AMP POLE 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20	CKT 2 4 6 8 10 12 14 16 18 20 22 24 25 28 30 32 34 36 38 40	4. 4. 5. 6. 7. 8.	THAN 2.0 EXHAUST CERTIFIE 3. III. BE SEA CEILING, SPACES S INSTRUC CEILING; 4. IV. MEET ELECTRIC BLANK ELECT FEET ABOVE SHALL BE NO BE SERVED B SPEED CONTI LIGHTING SHA LIGHTING TO 1. EXCEPTIC INTEGRA NO CONTROL FUNCTION WH SECTION 150. AUTOMATIC-C 1. I. IN BATH AT LEAST	CFM AT 75 FAN HOU D AIRTIGH ALED WITH AND HAVE SEALED W TIONS TO AND THE CLEA CAL CODE RICAL BO THE FINISH GREATER Y A DIMME ROL. ALL HAVE I BE MANUA DN TO SEC TED LIGHT S SHALL B HERE THA O(K). DFF CONTH IROOMS, C ONE INST	5 PASCALS V SING WITH II IT; AND I A GASKET (E ALL AIR LEA ITH A GASKE MAINTAIN AI RANCE AND SECTION 41 XES. THE NU HED FLOOR A THAN THE N ER, VACANCY READILY AC(ALLY TURNEE CTION 150.0() ING VIA A RE SYPASS A DIN T DIMMER OF ROLS.
С -	500 SQ. FT. O BREA CKT AMP 1 20 1 20 3 20 5 20 7 20 9 20 11 20 13 20 15 20 17 19 21 23 25 27 29 31 33 35 37 39 30 41 30 NOTES: AFCI ARC-FA ESS BRANC	PT 3	225 AMP BUS 120/240V, 1 PH, 3 W 100% RATED NEUTR ESS ELECTRIC WATER HEATER ESS SMALL APPLIANCE - RECEPT, CI SMALL APPLIANCE - RECEPT, CI LAUNDRY RECEPTACLE BATHROOM ESS LIGHTING EXTERIOR GFIRECEPTACLE CI HOOD & FAN For Future 240V Use" - Heat Pr Heater Ready Electric Cooktop Ready Electric Clothes Dryer Ready TOTAL CONNECTED LOAD TOTAL CALCULATED LOA TOTAL CALCULATED LOA TOTAL CALCULATED LOA TOTAL CALCULATED LOA TOTAL CALCULATED LOA	TRIP: A.J.C.: LOAD 1000 A.J.C.: 1000 ACLE 1000 ACLE 1000 ACLE 1000 180 2222 180 180 222 180 480 2880 2880 2880 2880 20 (VA) : ND (VA) : ND (AMPS) :	80% RA 42000 VOL A 2260 1380 2260 1380 2260 0 2260 0 0 0 0 0 0 0 0 0 0 0 0 0	ATED A T-AMPER B	EN RES C 2260 1360 822 2260 0 0 0 0 0 4800 2880 14382 14382 14382 119.9	MOUNTIN ICLOSUR 1260 L/ 1260 J/ 1260 B/ 1200 R 600 G 2080 0 2080 0 2080 0 2080 0 2080 0 7 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	G: SURFACE E: NEMA 3R SERVI VING/DNNING ROU EDROOM 1 & HALL ISHWASHER IT CHEN RECEPTA EFRIGERATOR ARBAGE DISPOSA UTDOOR/INDOOF UTDOOR/INDOOF	CLES CLES CLES CLES CLES CLES CLES CLES	ES AFCI AFCI/ESS AFCI AFCI AFCI AFCI I-1	AMP POLE 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 30 2	CKT 2 4 6 8 10 12 14 16 18 20 22 24 25 28 30 32 34 36 38 40	4. 4. 5. 6. 7. 8.	THAN 2.0 EXHAUST CERTIFIE 3. III. BE SEA CEILING, SPACES S INSTRUC CEILING; 4. IV. MEET ELECTRIC BLANK ELECT FEET ABOVE SHALL BE NO BE SERVED B SPEED CONTE LIGHTING SHA LIGHTING TO 1. EXCEPTIC INTEGRA NO CONTROL FUNCTION WE SECTION 150. AUTOMATIC-C 1. I. IN BATE AT LEAST VACANCY 2. II. FOR LIC	CFM AT 75 FAN HOU D AIRTIGH ALED WITH AND HAVE SEALED W TIONS TO AND THE CLEA CAL CODE RICAL BO THE FINISH GREATER Y A DIMME ROL. ALL HAVE I BE MANUA ON TO SEC TED LIGHT S SHALL B HERE THA O(K). OFF CONTH IROOMS, C ONE INST SENSOR GHTING IN	5 PASCALS V SING WITH II IT; AND A GASKET (A GASKET (A LL AIR LEA ITH A GASKE MAINTAIN AI RANCE AND SECTION 41 XES. THE NU HED FLOOR (THAN THE N ER, VACANC) READILY AC(ALLY TURNED CTION 150.0() TING VIA A RE SYPASS A DIN T DIMMER OF ROLS. GARAGES, LA FALLED LUMI PROVIDING TERNAL TO 1
	500 SQ. FT. O BREA CKT AMP 1 20 3 20 5 20 7 20 9 20 11 20 13 20 15 20 17 19 21 23 25 27 29 31 33 35 37 50 39 30 41 30 MOTES: AFCI ARC-FA ESS BRANC PANEL 1. A	PT 3	225 AMP BUS 120/240V, 1 PH, 3 W 100% RATED NEUTR ESS ELECTRIC WATER HEATER ESS SMALL APPLIANCE - RECEPT. CI SMALL APPLIANCE - RECEPT. CI LAUNDRY RECEPTACLE BATHROOM ESS LIGHTING EXTERIOR GFIRECEPTACLE CI HOOD & FAN "For Future 240V Use" - Heat PH Heater Ready Electric Cooktop Ready Electric Clothes Dryer Ready TOTAL CONNECTED LOAD TOTAL CALCULATED LOAD	TRIP: A.I.C.: LOAD 1000 ACLE 1000 180 2222 180 180 Ump Space	80% RA 42000 VOL 2000 2000 1380 2260 0 2260 0 2260 0 0 0 0 0 0 0 0 0 0	ATED A T-AMPER B	EN RES C 2260 1360 822 2260 0 0 0 0 0 4800 2880 14382 14382 14382 119.9	MOUNTIN ICLOSUR 1260 L/ 1260 J/ 1260 B/ 1200 R 600 G 2080 0 2080 0 2080 0 2080 0 2080 0 7 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	G: SURFACE E: NEMA 3R SERVI VING/DNNING ROU EDROOM 1 & HALL ISHWASHER IT CHEN RECEPTA EFRIGERATOR ARBAGE DISPOSA UTDOOR/INDOOF UTDOOR/INDOOF	CLES CLES CLES CLES CLES CLES CLES CLES	ES AFCI AFCI/ESS AFCI AFCI AFCI AFCI I-1	AMP POLE 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 30 2	CKT 2 4 6 8 10 12 14 16 18 20 22 24 25 28 30 32 34 36 38 40	4. 4. 5. 6. 7. 8. 8. 8.	THAN 2.0 EXHAUST CERTIFIE 3. III. BE SEA CEILING, SPACES S INSTRUC CEILING; 4. IV. MEET ELECTRIC BLANK ELECT FEET ABOVE SHALL BE NO BE SERVED B SPEED CONTI LIGHTING SHA LIGHTING SHA LIGHTING TO 1. EXCEPTION INTEGRA NO CONTROL FUNCTION WH SECTION 150. AUTOMATIC-C 1. I. IN BATH AT LEAST VACANCY 2. II. FOR LIC DOORS, C	CFM AT 75 FAN HOU D AIRTIGH ALED WITH AND HAVE SEALED W TIONS TO AND THE CLEA CAL CODE RICAL BO THE FINISH GREATER Y A DIMME ROL. ALL HAVE I BE MANUA ON TO SEC TED LIGHT S SHALL B HERE THA O(K). OFF CONTH IROOMS, O ONE INST SENSOR GHTING IN	5 PASCALS V SING WITH II IT; AND A GASKET (A GASKET (A GASKET (A GASKET (A GASKET (A GASKET (A GASKET (MAINTAIN AI RANCE AND SECTION 41 XES. THE NU HED FLOOR (A THAN THE N CROLS (A CANC) READILY ACCANC) READILY AC
С -	500 SQ. FT. O BREA CKT AMP 1 20 3 20 5 20 7 20 9 20 11 20 13 20 15 20 17 10 19 21 23 25 27 29 31 33 35 50 37 50 39 30 41 30 NOTES: AFCI ARC-FA ESS BRANC PANEL 1. A S 2. T	PT 3	225 AMP BUS 120/240V, 1 PH, 3 W 100% RATED NEUTR ESS ELECTRIC WATER HEATER ESS SMALL APPLIANCE - RECEPT. CI SMALL APPLIANCE - RECEPT. CI LAUNDRY RECEPTACLE BATHROOM ESS LIGHTING EXTERIOR GFIRECEPTACLE CI HOOD & FAN "For Future 240V Use" - Heat PH Heater Ready Electric Cooktop Ready Electric Clothes Dryer Ready Electric Clothes Dryer Ready TOTAL CANCECTED LOAD TOTAL CALCULATED LOAD	TRIP: A.I.C.: LOAD 1000 ACLE 180 2222 180 2222 180 222 4800 2800 2880 2880 2880 2880 2880 2880 2880 2880 2880 2880 2880 2880 2880 2880 2880 2880 2880 2880 280 <	80% RA 42000 VOL 2000 1380 2260 2260 2260 0 2260 0 0 0 0 0 0 0 0	ATED A T-AMPEF B C C C C C C C C C C C C C C C C C C	EN RES C 2260 1360 822 2260 0 0 0 0 4800 2880 14382 14382 14382 14382 119.9	Impounting Iclosure 1260 If 1260 If 1260 If 1260 If 1260 If 1260 If 1200 Ri 1200 Ri 2080 0 2080 0 2080 0 1 If If If <	G: SURFACE E: NEMA 3R SERVI VING/DNNING ROU EDROOM 1 & HALL ISHWASHER TCHEN RECEPTA EFRIGERATOR ARBAGE DISPOS/ UTDOOR/INDOOF UTDOOR/INDOOF	CLES CLES CLES CLES CUNIT O DU-1/IDU CLES CUNIT O DU-1/IDU CLICTIC CTIC CTIC CTIC CTIC CTIC CTIC C	ES AFCI AFCI/ESS AFCI AFCI AFCI/ESS AFCI I-1	AMP POLE 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 30 2	CKT NO. 2 4 6 8 10 12 14 16 18 20 22 24 22 24 26 28 30 32 34 36 38 40 42	4. 4. 5. 6. 7. 8. 8. 8.	THAN 2.0 EXHAUST CERTIFIE 3. III. BE SEA CEILING, SPACES S INSTRUC CEILING; 4. IV. MEET ELECTRIC BLANK ELECT FEET ABOVE SHALL BE NO BE SERVED B SPEED CONTI LIGHTING SHA LIGHTING TO 1. EXCEPTION INTEGRA NO CONTROL FUNCTION WH SECTION 150. AUTOMATIC-C 1. I. IN BATH AT LEAST VACANCY SEI	CFM AT 75 FAN HOU D AIRTIGH ALED WITH AND HAVE SEALED W TIONS TO AND THE CLEA CAL CODE RICAL BO THE FINISH GREATER Y A DIMME ROL. ALL HAVE I BE MANUA ON TO SEC TED LIGHT S SHALL B HERE THA O(K). DFF CONTH ROOMS, O ONE INST SENSOR GHTING IN CONTROLS E PROVIDE	5 PASCALS V SING WITH II IT; AND A GASKET (A GASKET (A GASKET (A GASKET (A GASKET (A GASKET (A GASKET (MAINTAIN AI RANCE AND SECTION 410 XES. THE NU HED FLOOR (A THAN THE N SECTION 410 XES. THE NU HED FLOOR (A THAN THE N C THAN THE N C THAN THE N C TION 150.0(H T DIMMER OF C TION 150.0(H C THAS A DIN T DIMMER OF C TON 150.0(H C THAS A DIN T DIMMER OF C TON 150.0(H C THAS A DIN T DIMMER OF C THAT TURN C THAT TURN C THAT TURN C THAT TURN
С -	500 SQ. FT. O BREA CKT AMP 1 20 3 20 5 20 7 20 9 20 11 20 13 20 15 20 17 19 21 23 25 27 29 31 35 50 37 50 39 41 NOTES: AFCI ARC-FA ESS BRANC PANEL 1. A S 2. T	PT 3 KER POLE NOT 1 1 AFCI/ A	225 AMP BUS 120/240V, 1 PH, 3 W 100% RATED NEUTR PES SERVES ELECTRIC WATER HEATER ESS SMALL APPLIANCE - RECEPT. CI SMALL APPLIANCE - RECEPT. CI LAUNDRY RECEPTACLE BATHROOM ESS LIGHTING EXTERIOR GFIRECEPTACLE CI HOOD & FAN "For Future 240V Use" - Heat PH Heater Ready Electric Cooktop Ready Electric Clothes Dryer Ready TOTAL CANNECTED LOAD TOTAL CALCULATED LOAD TOTAL CALC	TRIP: A.I.C.: LOAD 1000 ACLE 180 ACLE 180 ACLE 4800 2880 2880 ACLE 2880 ACLE 2880 ACLE 2880 ACLE 2880 AD (AMPS) : SUPPLIED BY THE AD ING DWE ACCE EVICE (SF NTEGRA ELY ADJA	80% RA 42000 VOL A 2260 1380 2260 1380 2260 0 1380 2260 0 0 0 0 0 0 0 0 0 10 0 0 10 10 0 10	ATED A T-AMPEF B C C C C C C C C C C C C C C C C C C	EN RES C 2260 1360 822 2260 0 0 0 0 0 0 0 2880 14382 14382 14382 119.9 IITS DF TH IERE	LOAD 1260 L1 1260 L1 1260 L1 1260 B1 1260 G 2080 0 2080 0 2080 0 2080 0 1200 R 600 G 2080 0 2080 0 1200 R 600 G 2080 0 1200 R 600 G 2080 0 1200 R 600 G 2080 0 1200 R 600 G 2080 0 1200 R 600 G 1200 R 600 G 1200 R 1200 R 600 G 1200 R 1200 R 1000	G: SURFACE E: NEMA 3R SERVI VING/DNNING ROME EDROOM 1 & HALL ISHWASHER TCHEN RECEPTA EFRIGERATOR ARBAGE DISPOS/ UTDOOR/INDOOF UTDOOR/INDOOF GOT FUTURE 240V Use harging Station for Future Solar Ele ALCULATED LC 29962 VA	CLES CLES CLES CLES CLES CLES CLES CLES	ES AFCI AFCI/ESS AFCI AFCI AFCI/ESS AFCI I-1	AMP POLE 1 20 1 20 1 20 1 20 1 20 1 20 1 20 2 2 3 0 2 3	CKT NO. 2 4 6 8 10 12 14 16 18 20 22 24 22 24 26 28 30 32 34 36 38 40 42	4. 4. 5. 6. 6. 7. 8. 8. 8. 8.	THAN 2.0 EXHAUST CERTIFIE 3. III. BE SEA CEILING, SPACES S INSTRUC CEILING; 4. IV. MEET ELECTRIC BLANK ELECT FEET ABOVE SHALL BE NO BE SERVED B SPEED CONTI LIGHTING SHA LIGHTING SHA LIGHTING SHA LIGHTING TO 1. EXCEPTIO INTEGRA NO CONTROL FUNCTION WH SECTION 150. AUTOMATIC-C 1. I. IN BATH AT LEAST VACANCY 2. II. FOR LIC DOORS, C SHALL BE VACANCY SEI CURRENT.	CFM AT 75 FAN HOU D AIRTIGH ALED WITH AND HAVE SEALED W TIONS TO AND THE CLEA CAL CODE RICAL BO THE FINISH GREATER Y A DIMME ROL. ALL HAVE I BE MANUA ON TO SEC TED LIGHT S SHALL B HERE THA ON TO SEC TONE INST	5 PASCALS V SING WITH II IT; AND I A GASKET (E ALL AIR LEA ITH A GASKE MAINTAIN AI RANCE AND SECTION 410 XES. THE NU HED FLOOR A THAN THE N ER, VACANCY READILY ACCA THAN THE N ER, VACANCY THAN THE N STHAT TURN ED. NTROLS SHA
С -	500 SQ. FT. O BREA CKT AMP 1 20 3 20 5 20 7 20 9 20 11 20 13 20 15 20 17 10 19 21 23 25 27 29 31 33 35 50 37 50 39 30 41 30 NOTES: AFCI ARC-FA ESS BRANC PANEL 1. A S 2. T	PT 3	225 AMP BUS 120/240V, 1 PH, 3 W 100% RATED NEUTR ESS ELECTRIC WATER HEATER ESS SMALL APPLIANCE - RECEPT. CI SMALL APPLIANCE - RECEPT. CI LAUNDRY RECEPTACLE BATHROOM ESS LIGHTING EXTERIOR GFIRECEPTACLE CI HOOD & FAN "For Future 240V Use" - Heat PH Heater Ready Electric Cooktop Ready Electric Clothes Dryer Ready Electric Clothes Dryer Ready TOTAL CONNECTED LOAD TOTAL CALCULATED LOAD	TRIP: A.J.C.: LOAD 1000 ACLE 180 ACLE 180 ACLE 4800 2880 2880 2880 2880 2880 2880 2880 2880 2880 2880 280 2880 280 2880 280 2880 280 2880 280 280 280 ALMPS) :	80% RA 42000 VOL 2260 1380 2260 22000 2260 2260 0 2260 0 0 0 0 0	ATED A T-AMPER B C C C C C C C C C C C C C C C C C C	EN RES C 2260 1360 822 2260 0 0 0 0 0 4800 2880 14382 14382 119.9 IITS IITS DF TH IERE REC	LOAD I 1260 II 1260 II 1260 II 1260 II 1260 II 1260 II 1200 R 600 G 2080 0 2080 0 100 II 100 II 100 R 2080 0 100 II 100 II 100 II 1100 R 1100 <t< th=""><th>G: SURFACE E: NEMA 3R SERVI VING/DNNING ROU EDROOM 1 & HALL ISHWASHER TCHEN RECEPTA EFRIGERATOR ARBAGE DISPOS/ UTDOOR/INDOOF OF FUTURE 240V Use harging Station or Future 240V Use harging Station or Future Solar Ele ALCULATED LO 29962 VA</th><th>OVIDED</th><th>ES AFCI AFCI/ESS AFCI AFCI AFCI AFCI I-1</th><th>AMP POLE 1 20 1 20 1 20 1 20 1 20 1 20 30 2 30 2 30</th><th>CKT NO. 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42</th><th>4. 4. 5. 6. 6. 7. 8. 8. 8. 8. 9.</th><th>THAN 2.0 EXHAUST CERTIFIE 3. III. BE SEA CEILING, SPACES S INSTRUC CEILING; 4. IV. MEET ELECTRIC BLANK ELECT FEET ABOVE SHALL BE NO BE SERVED B SPEED CONTI LIGHTING SHA LIGHTING SHA LIGHTING TO 1. EXCEPTION INTEGRA NO CONTROL FUNCTION WH SECTION 150. AUTOMATIC-C 1. I. IN BATH AT LEAST VACANCY 2. II. FOR LIC DOORS, C SHALL BE VACANCY SEI CURRENT. DIMMING CON</th><th>CFM AT 75 FAN HOU D AIRTIGH ALED WITH AND HAVE SEALED W TIONS TO AND THE CLEA CAL CODE RICAL BOX THE FINISH GREATER Y A DIMME ROL. ALL HAVE I BE MANUA ON TO SEC TED LIGHT S SHALL B HERE THA O(K). DFF CONTI S SHALL B HERE THA D S SHALL B HERE THA S SHALL B HERE THA S SHALL B S SHALL B S SHALL B S SHALL B S SHALL B S SHALL B S SHALL S S SHALL S S SHALL S S SHALL S S S SHALL S S S S S S S S S S S S S S S S S S S</th><th>5 PASCALS V SING WITH II IT; AND A GASKET (A GASKET (ALL AIR LEA ITH A GASKE MAINTAIN AI RANCE AND SECTION 41 XES. THE NU HED FLOOR A THAN THE N ER, VACANCY READILY AC(ALLY TURNEI CTION 150.0(I TING VIA A RE SYPASS A DIN T DIMMER OF ROLS. GARAGES, LA FALLED LUM PROVIDING TERNAL TO IN S THAT TURN D. STROLS SHA GHTING IN F ROOMS, KIT</th></t<>	G: SURFACE E: NEMA 3R SERVI VING/DNNING ROU EDROOM 1 & HALL ISHWASHER TCHEN RECEPTA EFRIGERATOR ARBAGE DISPOS/ UTDOOR/INDOOF OF FUTURE 240V Use harging Station or Future 240V Use harging Station or Future Solar Ele ALCULATED LO 29962 VA	OVIDED	ES AFCI AFCI/ESS AFCI AFCI AFCI AFCI I-1	AMP POLE 1 20 1 20 1 20 1 20 1 20 1 20 30 2 30	CKT NO. 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42	4. 4. 5. 6. 6. 7. 8. 8. 8. 8. 9.	THAN 2.0 EXHAUST CERTIFIE 3. III. BE SEA CEILING, SPACES S INSTRUC CEILING; 4. IV. MEET ELECTRIC BLANK ELECT FEET ABOVE SHALL BE NO BE SERVED B SPEED CONTI LIGHTING SHA LIGHTING SHA LIGHTING TO 1. EXCEPTION INTEGRA NO CONTROL FUNCTION WH SECTION 150. AUTOMATIC-C 1. I. IN BATH AT LEAST VACANCY 2. II. FOR LIC DOORS, C SHALL BE VACANCY SEI CURRENT. DIMMING CON	CFM AT 75 FAN HOU D AIRTIGH ALED WITH AND HAVE SEALED W TIONS TO AND THE CLEA CAL CODE RICAL BOX THE FINISH GREATER Y A DIMME ROL. ALL HAVE I BE MANUA ON TO SEC TED LIGHT S SHALL B HERE THA O(K). DFF CONTI S SHALL B HERE THA D S SHALL B HERE THA S SHALL B HERE THA S SHALL B S SHALL B S SHALL B S SHALL B S SHALL B S SHALL B S SHALL S S SHALL S S SHALL S S SHALL S S S SHALL S S S S S S S S S S S S S S S S S S S	5 PASCALS V SING WITH II IT; AND A GASKET (A GASKET (ALL AIR LEA ITH A GASKE MAINTAIN AI RANCE AND SECTION 41 XES. THE NU HED FLOOR A THAN THE N ER, VACANCY READILY AC(ALLY TURNEI CTION 150.0(I TING VIA A RE SYPASS A DIN T DIMMER OF ROLS. GARAGES, LA FALLED LUM PROVIDING TERNAL TO IN S THAT TURN D. STROLS SHA GHTING IN F ROOMS, KIT
С -	SOU SQ. FT. O BREA CKT AMP 1 20 3 20 5 20 7 20 11 20 5 20 7 20 11 20 13 20 15 20 17 10 13 20 21 20 21 20 23 20 31 30 35 50 37 50 39 30 41 30 NOTES: AFCI ARC-FA ESS BRANC PANEL 1. A S 2. T B 2.1. .	PT 3 KER POLE NOT 1 1 AFCI/	225 AMP BUS 120/240V, 1 PH, 3 W 100% RATED NEUTR SERVES ELECTRIC WATER HEATER ESS SMALL APPLIANCE - RECEPT. CI SMALL APPLIANCE - RECEPT. CI LAUNDRY RECEPTACLE BATHROOM ESS LIGHTING EXTERIOR GFIRECEPTACLE CI HOOD & FAN For Future 240V Use" - Heat PH Heater Ready Electric Cooktop Ready Electric Cooktop Ready Electric Clothes Dryer Ready TOTAL CONNECTED LOAD TOTAL CALCULATED LOAD TOTAL CALCUL	AL TRIP: AJ.C.: LOAD 1000 1000 ACLE 180 ACLE 4800 ACLE 4800 2880 2880 D (VA) : 4800 AD (VA) : AD (AMPS) : SUPPLIED BY THE AD (AD JA PD SHALI AD AD AD AD AD AD AD AD AD AD	80% RA 42000 VOL 2260 1380 2260 22000 1380 2260 0 2260 0 0 0 0 0 0 0 0 0 0 0 0 0	ATED A T-AMPER B B C C C C C C C C C C C C C C C C C	ES C 2260 1360 822 2260 0 0 0 0 0 0 4800 2880 14382 14382 14382 14382 14382 119.9 IITS DF TH IERE REA	LOAD 1260 L1 1260 L	G: SURFACE E: NEMA 3R SERVI VING/DINNING ROM EDROOM 1 & HALL ISHWASHER TCHEN RECEPTA EFRIGERATOR ARBAGE DISPOS/ UTDOOR/INDOOF UTDOOR/INDOOF CORFULURE 240V Use harging Station for Future Solar Ele ALCULATED LC 29962 VA	CLES CLES CLES CLES CLES CLES CLES CLES	ES AFCI AFCI/ESS AFCI AFCI AFCI/ESS AFCI I-1	AMP POLE 1 20 1 20 1 20 1 20 1 20 1 20 30 2 30	CKT NO. 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42	4. 4. 5. 6. 6. 7. 8. 8. 8. 8. 9.	THAN 2.0 EXHAUST CERTIFIE 3. III. BE SEA CEILING, SPACES S INSTRUC CEILING; 4. IV. MEET ELECTRIC BLANK ELECT FEET ABOVE SHALL BE NO BE SERVED B SPEED CONTI LIGHTING SHA LIGHTING TO 1. EXCEPTIC INTEGRA NO CONTROL FUNCTION WH SECTION 150. AUTOMATIC-C 1. I. IN BATH AT LEAST VACANCY 2. II. FOR LIC DOORS, C SHALL BE VACANCY SEI CURRENT. DIMMING CON	CFM AT 75 FAN HOU D AIRTIGH ALED WITH AND HAVE SEALED W TIONS TO AND THE CLEA CAL CODE RICAL BO THE FINISH GREATER Y A DIMME ROL. ALL HAVE I BE MANUA ON TO SEC TED LIGHT S SHALL B HERE THA ON TO SEC TONE INST S SHALL B HERE THA ON TO SEC TED LIGHT S SHALL B HERE THA ON TO SEC TO SENSOR S SHALL B S SHALL B HERE THA ON TO SEC TO SENSOR S SHALL B S S S S S S S S S S S S S S S S S S S	5 PASCALS V SING WITH II IT; AND A GASKET (ALL AIR LEA ITH A GASKE MAINTAIN AI RANCE AND SECTION 41 XES. THE NU HED FLOOR A SECTION 41 XES. THE NU HED FLOOR A THAN THE N ER, VACANCY READILY ACCANCY READILY ACCANCY READILY ACCANCY READILY ACCANCY CTION 150.0(I THAN THE N STHAT TURNE STASS A DIN T DIMMER OF STHAT TURNE D TERNAL TO S THAT TURN ED. STHAT TURN ED. STHAT TURN ED. STHAT TURN ED. STHAT TURN ED. STHAT TURN ED. STHAT TURN ED.
С -	SOU SQ. FT. O BREA CKT AMP 1 20 3 20 5 20 7 20 11 20 5 20 7 20 11 20 13 20 15 20 17 10 13 20 21 20 21 20 23 20 31 30 35 50 37 50 39 30 41 30 NOTES: AFCI ARC-FA ESS BRANC PANEL 1. A S 2. T B 2.1. .	PT 3 KER POLE NOT 1 1 AFCI/	225 AMP BUS 120/240V, 1 PH, 3 W 100% RATED NEUTR PES SERVES ELECTRIC WATER HEATER ESS SMALL APPLIANCE - RECEPT. CI SMALL APPLIANCE - RECEPT. EBATHROOM ESS LIGHTING EXTERIOR GFIRECEPTACLE CI HOOD & FAN "For Future 240V Use" - Heat PH Heater Ready Electric Clothes Dryer Ready Electric Clothes Dryer Ready TOTAL CANNECTED LOAD TOTAL CALCULATED LOAD	AL TRIP: AJ.C.: LOAD 1000 1000 ACLE 180 ACLE 4800 ACLE 4800 2880 2880 D (VA) : 4800 AD (VA) : AD (AMPS) : SUPPLIED BY THE AD (AD JA PD SHALI AD AD AD AD AD AD AD AD AD AD	80% RA 42000 VOL 2260 1380 2260 22000 1380 2260 0 2260 0 0 0 0 0 0 0 0 0 0 0 0 0	ATED A T-AMPER B B C C C C C C C C C C C C C C C C C	ES C 2260 1360 822 2260 0 0 0 0 0 0 4800 2880 14382 14382 14382 14382 14382 119.9 IITS DF TH IERE REA	LOAD 1260 L1 1260 L	G: SURFACE E: NEMA 3R SERVI VING/DINNING ROM EDROOM 1 & HALL ISHWASHER TCHEN RECEPTA EFRIGERATOR ARBAGE DISPOS/ UTDOOR/INDOOF UTDOOR/INDOOF CORFULURE 240V Use harging Station for Future Solar Ele ALCULATED LC 29962 VA	CLES CLES CLES CLES CLES CLES CLES CLES	ES AFCI AFCI/ESS AFCI AFCI AFCI/ESS AFCI I-1	AMP POLE 1 20 1 20 1 20 1 20 1 20 1 20 30 2 30	CKT NO. 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42	4. 4. 5. 6. 6. 7. 8. 8. 8. 8. 9. 10.	THAN 2.0 EXHAUST CERTIFIE 3. III. BE SEA CEILING, SPACES S INSTRUC CEILING; 4. IV. MEET ELECTRIC BLANK ELECT FEET ABOVE SHALL BE NO BE SERVED B SPEED CONTI LIGHTING SHA LIGHTING SHA LIGHTING TO 1. EXCEPTIO INTEGRA NO CONTROL FUNCTION WH SECTION 150. AUTOMATIC-C 1. I. IN BATH AT LEAST VACANCY 2. II. FOR LIC DOORS, C SHALL BE VACANCY SEI CURRENT. DIMMING CON LIVING ROOM ACCESSIBLE MANUALLY AE INDEPENDEN	CFM AT 75 FAN HOU D AIRTIGH ALED WITH AND HAVE SEALED W TIONS TO AND THE CLEA CAL CODE RICAL BO THE FINISH GREATER Y A DIMME ROL. ALL HAVE I BE MANUA ON TO SEC TED LIGHT S SHALL B HERE THA ON TO SEC TONE INST CONTROLS ITROLS. LI S, DINING WALL-MOU DJUSTED L T CONTROL	5 PASCALS V SING WITH II IT; AND A GASKET (E ALL AIR LEA ITH A GASKE MAINTAIN AI RANCE AND SECTION 410 XES. THE NU HED FLOOR (THAN THE N ER, VACANC) READILY ACC ALLY TURNE CTION 150.0(16 THAN THE N ER, VACANC) READILY ACC ALLY TURNE CTION 150.0(16 THAN THE N ER, VACANC) READILY ACC ALLY TURNE CTION 150.0(16 THAN THE N ER, VACANC) READILY ACC ALLY TURNE CTION 150.0(16 THAT TURNE
В -	SOU SQ. FT. O BREA CKT AMP 1 20 3 20 5 20 7 20 11 20 5 20 7 20 11 20 13 20 15 20 17 10 13 20 21 20 21 20 23 20 31 30 35 50 37 50 39 30 41 30 NOTES: AFCI ARC-FA ESS BRANC PANEL 1. A S 2. T B 2.1. .	PT 3 KER POLE NOT 1 1 AFCI/	225 AMP BUS 120/240V, 1 PH, 3 W 100% RATED NEUTR SERVES ELECTRIC WATER HEATER ESS SMALL APPLIANCE - RECEPT. CI SMALL APPLIANCE - RECEPT. CI LAUNDRY RECEPTACLE BATHROOM ESS LIGHTING EXTERIOR GFIRECEPTACLE CI HOOD & FAN For Future 240V Use" - Heat PH Heater Ready Electric Cooktop Ready Electric Cooktop Ready Electric Clothes Dryer Ready TOTAL CONNECTED LOAD TOTAL CALCULATED LOAD TOTAL CALCUL	AL TRIP: AJ.C.: LOAD 1000 1000 ACLE 180 ACLE 4800 ACLE 4800 2880 2880 D (VA) : 4800 AD (VA) : AD (AMPS) : SUPPLIED BY THE AD (AD JA PD SHALI AD AD AD AD AD AD AD AD AD AD	80% RA 42000 VOL 2260 1380 2260 22000 1380 2260 0 2260 0 0 0 0 0 0 0 0 0 0 0 0 0	ATED A T-AMPER B B C C C C C C C C C C C C C C C C C	EN RES C 2260 1360 822 2260 0 0 0 0 0 0 4800 2880 14382 14382 14382 14382 14382 14382 14382 14382 14382 14382 119.9 EN EN EN EN EN EN EN EN EN EN	Impounting Iclosure Iclosure 1260 If 1260 If 1260 If 1260 If 1260 If 1260 If 1200 R 600 G 2080 0 2080 0 2080 0 1 If	G: SURFACE E: NEMA 3R SERVI VING/DNNING ROUEDROOM 1 & HALL ISHWASHER TCHEN RECEPTA ERGERATOR ARBAGE DISPOS/ UTDOOR/INDOOF OF Future 240V Usa harging Station or Future 240V Usa harging Station or Future Solar Ele ALCULATED LO 29962 VA	OVIDED CUPMIC	ES AFCI AFCI/ESS AFCI AFCI AFCI AFCI I-1 I-1 I-1 I-1 I-1 I-1 I-1 I-1 I-1 I-	AMP POLE 1 20 1 20 1 20 1 20 1 20 1 20 30 2 30	CKT NO. 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42	4. 4. 5. 6. 6. 7. 8. 8. 8. 8. 9. 10.	THAN 2.0 EXHAUST CERTIFIE 3. III. BE SEA CEILING, SPACES S INSTRUC CEILING; 4. IV. MEET ELECTRIC BLANK ELECT FEET ABOVE SHALL BE NO BE SERVED B SPEED CONTI LIGHTING SHA LIGHTING TO 1. EXCEPTIC INTEGRA NO CONTROL FUNCTION WH SECTION 150. AUTOMATIC-C 1. I. IN BATH AT LEAST VACANCY 2. II. FOR LIC DOORS, C SHALL BE VACANCY SEI CURRENT. DIMMING CON LIVING ROOM ACCESSIBLE S	CFM AT 75 FAN HOU D AIRTIGH ALED WITH AND HAVE SEALED W TIONS TO AND THE CLEA CAL CODE RICAL BO THE FINISH GREATER Y A DIMME ROL. ALL HAVE I BE MANUA ON TO SEC TED LIGHT S SHALL B HERE THA ON TO SEC TONE INST CONTROLS ITROLS. LI S, DINING WALL-MOU DJUSTED L T CONTROL	5 PASCALS V SING WITH II IT; AND A GASKET (E ALL AIR LEA ITH A GASKE MAINTAIN AI RANCE AND SECTION 410 XES. THE NU HED FLOOR (THAN THE N ER, VACANC) READILY ACC ALLY TURNE CTION 150.0(16 THAN THE N ER, VACANC) READILY ACC ALLY TURNE CTION 150.0(16 THAN THE N ER, VACANC) READILY ACC ALLY TURNE CTION 150.0(16 THAN THE N ER, VACANC) READILY ACC ALLY TURNE CTION 150.0(16 THAT TURNE
С -	SOU SQ. FT. O BREA CKT AMP 1 20 3 20 5 20 7 20 11 20 5 20 7 20 11 20 13 20 15 20 17 10 13 20 21 20 21 20 23 20 31 30 35 50 37 50 39 30 41 30 NOTES: AFCI ARC-FA ESS BRANC PANEL 1. A S 2. T B 2.1. .	PT 3 KER POLE NOT 1 1 AFCI/	225 AMP BUS 120/240V, 1 PH, 3 W 100% RATED NEUTR SERVES ELECTRIC WATER HEATER ESS SMALL APPLIANCE - RECEPT. CI SMALL APPLIANCE - RECEPT. CI LAUNDRY RECEPTACLE BATHROOM ESS LIGHTING EXTERIOR GFIRECEPTACLE CI HOOD & FAN For Future 240V Use" - Heat PH Heater Ready Electric Cooktop Ready Electric Cooktop Ready Electric Clothes Dryer Ready TOTAL CONNECTED LOAD TOTAL CALCULATED LOAD TOTAL CALCUL	AL TRIP: AJ.C.: LOAD 1000 1000 ACLE 180 ACLE 4800 ACLE 4800 2880 2880 D (VA) : 4800 AD (VA) : AD (AMPS) : SUPPLIED BY THE AD (AD JA PD SHALI AD AD AD AD AD AD AD AD AD AD	80% RA 42000 VOL 2260 1380 2260 22000 1380 2260 0 2260 0 0 0 0 0 0 0 0 0 0 0 0 0	ATED A T-AMPER B B C C C C C C C C C C C C C C C C C	EN RES C 2260 1360 822 2260 0 0 0 0 0 0 4800 2880 14382 14382 14382 14382 14382 14382 14382 14382 14382 14382 119.9 EN EN EN EN EN EN EN EN EN EN	Impounting Iclosure Iclosure 1260 If 1260 If 1260 If 1260 If 1260 If 1260 If 1200 R 600 G 2080 0 2080 0 2080 0 1 If	G: SURFACE E: NEMA 3R SERVI VING/DINNING ROM EDROOM 1 & HALL ISHWASHER TCHEN RECEPTA EFRIGERATOR ARBAGE DISPOS/ UTDOOR/INDOOF UTDOOR/INDOOF CORFULURE 240V Use harging Station for Future Solar Ele ALCULATED LC 29962 VA	CLES CLES CLES CLES CLES CLES CLES CLES	ES AFCI AFCI/ESS AFCI AFCI AFCI AFCI I-1 I-1 I-1 I-1 I-1 I-1 I-1 I-1 I-1 I-	AMP POLE 1 20 1 20 1 20 1 20 1 20 1 20 30 2 30	CKT NO. 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42	4. 4. 5. 6. 6. 7. 8. 8. 8. 8. 9. 10.	THAN 2.0 EXHAUST CERTIFIE 3. III. BE SEA CEILING, SPACES S INSTRUC CEILING; 4. IV. MEET ELECTRIC BLANK ELECT FEET ABOVE SHALL BE NO BE SERVED B SPEED CONTI LIGHTING SHA LIGHTING SHA LIGHTING TO 1. EXCEPTIO INTEGRA NO CONTROL FUNCTION WH SECTION 150. AUTOMATIC-C 1. I. IN BATH AT LEAST VACANCY 2. II. FOR LIC DOORS, C SHALL BE VACANCY SEI CURRENT. DIMMING CON LIVING ROOM ACCESSIBLE MANUALLY AE INDEPENDEN	CFM AT 75 FAN HOU D AIRTIGH ALED WITH AND HAVE SEALED W TIONS TO AND THE CLEA CAL CODE RICAL BO THE FINISH GREATER Y A DIMME ROL. ALL HAVE I BE MANUA ON TO SEC TED LIGHT S SHALL B HERE THA ON TO SEC TONE INST CONTROLS ITROLS. LI S, DINING WALL-MOU DJUSTED L T CONTROL	5 PASCALS V SING WITH II IT; AND A GASKET (E ALL AIR LEA ITH A GASKE MAINTAIN AI RANCE AND SECTION 410 XES. THE NU HED FLOOR (THAN THE N ER, VACANC) READILY ACC ALLY TURNE CTION 150.0(16 THAN THE N ER, VACANC) READILY ACC ALLY TURNE CTION 150.0(16 THAN THE N ER, VACANC) READILY ACC ALLY TURNE CTION 150.0(16 THAN THE N ER, VACANC) READILY ACC ALLY TURNE CTION 150.0(16 THAT TURNE



ELECTRICAL PLAN KEYNOTES

- 1. NEW 225ABUSS-120/240V-1PH-3W-N3R MAIN SERVICE PANEL WITH 200A MAIN CIRCUIT BREAKER. MAIN ELECTRICAL POWER PANEL. POSSIBLE LOCATION OF FUTURE SOLAR PANEL INVERTER.
- 3. POSSIBLE LOCATION OF FUTURE. EV CHARGING STATION. VERIFY EXACT LOCATION DURING INSTALLATION.
- 240V-30A-2P-N3R DISCONNECT FOR CONDENSING UNIT. 5. ABOVE IN CABINET FOR HOOD EXHAUST.
- 6. SWITCH FOR HOOD FAN.
- 7. 3 FT OF ALLOCATED SPACE RESERVED FOR FUTURE SYSTEM ISOLATION/TRANSFER EQUIPMENT. DEDICATED RACEWAY SHALL BE BEHIND CLEARANCE.
- 8. INTERCONNECTION PATHWAY. REFER TO ARCHITECTURAL PLANS FOR SOLAR ZONE AREA. 9. LIGHT FIXTURE AND RECEPTACLE IN ATTIC. SEE BUILDING SECTIONS

ELECTRICAL LEGEND

- \$ SINGLE POLE SWITCH
- \$³ 3 WAY SWITCH
- \$^D DIMMER SWITCH
- \$ FAN SPEED SWITCH
- \$^M MOTOR RATED SWITCH
- \$[∨] VACANCY SWITCH
- \$^A ASTRONOMICAL SWITCH
- SH HUMIDITY SENSOR SWITCH
- DUPLEX +15" BOTTOM OF RECEPTACLE BOX
- DUPLEX ABOVE COUNTER +48" TOP OF RECEPTACLE BOX
- DUPLEX GROUND FAULT CIRCUIT INTERRUPTER +15" BOTTOM OF RECEPTACLE BOX
- GFCI DUPLEX ABOVE COUNTER +48" TOP OF RECEPTACLE BOX
- RECEPTACLE SPECIAL (RATING AS INDICATED)
- ⊕_A RECEPTACLE 30A. 120/240V. NEMA 14-30R (CLOTHES DRYER TYPE) \oplus_{B} RECEPTACLE - 50A. 120/240V. NEMA 14-50R (DOMESTIC RANGE TYPE)
- ▲ COMMUNICATION DATA

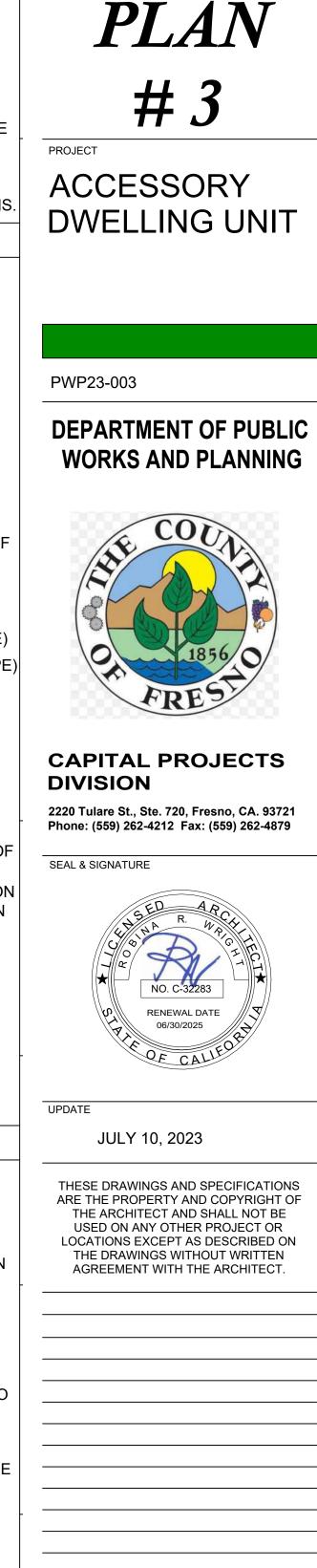
- SMOKE ALARM 'BRK', 7010B W/ BATTERY BACK-UP, HARD WIRED MOUNT WITHIN 6 INCHES OF HIGH POINT OF CEILING. (CSFM 7257-0087:140)
- CARBON MONOXIDE/SMOKE ALARM 'BRK', SC910B W/ BATTERY BACK-UP, HARD WIRED, MOUNT WITHIN 6 INCHES OF HIGH POINT OF CEILING. (CSFM 7256-0087:140)
- (HEARING IMPAIRED UNITS) SMOKE ALARM & STROBE COMBINATION 'BRK' 7010BSL, W/ BATTERY BACK-UP, HARD WIRED. MOUNT WITHIN 6 INCHES OF HIGH POINT OF CEILING. (CSFM 7257-0087:159)
- (HEARING IMPAIRED UNITS) CARBON MONOXIDE ALARM 'BRK' CO5120BN, W/ BATTERY BACK-UP, HARD WIRED. MOUNT WITHIN 6 INCHES OF HIGH POINT OF CEILING. (CSFM 7256-0087:159)

CHIME BELL

- DOOR BELL
- ILLUMINATED ADDRESS SIGN
- EXHAUST FAN SPECS PER MECHANICAL PLANS

CALIFORNIA ELECTRICAL CODE NOTES

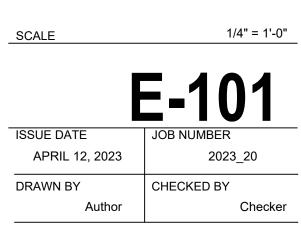
- COORDINATE WITH UTILITY COMPANY PROVIDER PRIOR TO COMMENCING WORK. THE AVAILABLE FAULT CURRENT WILL BE PROVIDED BY THE UTILITY PROVIDER LIGHTING FIXTURES SPECIFIED CAN BE SUBSTITUTED WITH AN EQUIVALENT FIXTURE. UNLESS OTHERWISE NOTED; ELECTRICAL RECEPTACLE OUTLETS ON BRANCH CIRCUITS OF 30 AMPERES OR LESS AND COMMUNICATION SYSTEM RECEPTACLES SHALL BE LOCATED NO MORE THAN 48 INCHES MEASURED FROM THE TOP OF THE RECEPTACLE OUTLET BOX NOR LESS THAN 15 INCHES (381 MM) MEASURED FROM THE BOTTOM OF THE RECEPTACLE OUTLET BOX TO THE LEVEL OF THE FINISHED FLOOR OR WORKING PLATFORM. UNLESS OTHERWISE NOTED; CONTROLS OR SWITCHES INTENDED TO BE USED BY THE OCCUPANT OF THE ROOM OR AREA TO CONTROL LIGHTING AND RECEPTACLE OUTLETS, APPLIANCES, ALARMS OR COOLING, HEATING AND VENTILATING EQUIPMENT SHALL BE LOCATED NO MORE THAN 48 INCHES (1219 MM) MEASURED FROM THE TOP OF THE OUTLET BOX NOR LESS THAN 15 INCHES (381 MM) MEASURED FROM THE BOTTOM OF THE OUTLET BOX TO THE LEVEL OF THE FINISHED FLOOR OR WORKING PLATFORM. REFER TO EQUIPMENT MANUFACTURER SPECS FOR ADDITIONAL OVER-CURRENT PROTECTIONS OTHER THAN THE BRANCH CIRCUIT BREAKER. ALL WIRING IN DWELLINGS TO BE NONMETALLIC SHEATHED CABLES (ROMEX) A THREE-WIRE PLUS GROUND BRANCH CIRCUIT IS REQUIRED FOR ALL 240V CIRCUITS SERVING COOKING EQUIPMENT AND CLOTHES DRYER. PROVIDE WEATHER PROOF BOXES FOR ALL EXTERIOR SWITCHES AND CONTROLS. ALL 120V-1PH-15A AND 20A BRANCH CIRCUITS SUPPLYING RECEPTACLES IN KITCHENS, FAMILY, DINNING, LIVING, DENS, BEDROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS OR SIMILAR ROOMS SHALL HAVE A LISTED ARC-PROTECTION CIRCUIT BREAKER INSTALLED IN COMBINATION WITH OUTLET BRANCH CIRCUIT TYPE ARC-FAULT CIRCUIT INTERRUPTER INSTALLED AT THE FIRST BOX. SEE SECTION 210.12(A)(3) FOR WIRING METHODS.
- RECEPTACLES SHALL BE INSTALLED SUCH THAT NO POINT MEASURED HORIZONTALLY ALONG THE FLOOR LINE OF ANY WALL SPACE IS MORE THAN 6 FT FROM A RECEPTACLE OUTLET. WATER HEATER SHALL USE A 120/240 VOLT 3 CONDUCTOR, 10 AWG COPPER BRANCH CIRCUIT, WITHIN 3 FEET FROM THE WATER HEATER AND ACCESSIBLE TO THE WATER HEATER WITH NO OBSTRUCTIONS.



500 SQ. FT.

W/ ADAPTABLE FEATURES

TITLE **PROPOSED FLOOR** PLAN



		12	11	10	9	
	oject Name: Option # 3 ADU		Calculation Date/Time: 2023-05-30T10	04:51+05:30 (Page 1 of 12)	Project Name: Option # 3 ADU	
		is	이 것은 것이 있는 것은 것은 것은 것이 있는 것이 있는 것이 있는 것 <mark></mark>	J Designs for Fresno County_Energy		
	01 Projec					Energy Design Ratings
			RATIO			
					Standard Design	34.8 41.6
						Proposed
	12 Projec	ct Scope Newly Constructed	13 Number of Be	drooms 1		
					National Action	
			19 Glazing Percent	age (%) 15.40%	West Facing	33.3 41.3
		n count n/a				RESULT
	01 Building Complies with Co					
		the second s		sion of a CEC-approved HERS provider.		
<text></text>		CCH	IEERSI			
<text></text>		b				
	TICE: This document has been generated by Califor cannot guarantee, the accuracy or completeness	rnia Home Energy Efficiency Rating Services (CHE of the Information contained in this document.	EERS) using information uploaded by third parties not affiliated with or Report Version: 2022.0.000	related to CHEERS. Therefore, CHEERS is not responsible for,	NOTICE: This document has been generated by Californ and cannot guarantee, the accuracy or completeness of	ia Home Energy Efficiency Rating Services (CHEERS) using infor the information contained in this document.
		NTIAL PERFORMANCE COMPLIANCE				TIAL PERFORMANCE COMPLIANCE METHOD
	Iculation Description: Title 24 Analysi	is	Input File Name: 4411_Prototypical AD			
		tandard Design (Later /42		Btu/ft ² - yr) Margin Percentage		
		Pro-	compriance Margin (k		DC System Size Excention	
		33.52	31.11 2.41	7.19	(kWdc)	
	Net EUI ²	13.18	10.77 2.41	18.29		
						ed as condition for meeting the modeled energy perf
					 Window overhangs and/or fins Variable capacity heat pump compliance 	e option (verification details from VCHP Staff report, ,
		13.18	2.08	15.78		EEA) rated heat pump water heater; specific brand/m
		33.52	30.94 2.58	7.7	The following is a summary of the features that	
	Net EUI ²	13.18	10.6 2.58	19.58	Indoor air quality ventilation	
		AV ib			Verified Refrigerant Charge Airflow in habitable rooms (SC3.1.4.1.7	
					 Wall-mounted thermostat in zones greater 	ater than 150 ft2 (SC3.4.5)
		13.10		13.23	BUILDING - FEATURES INFORMATION	
					01	
A hading Energy (Effectory Standards - 3:02 Residential Compliances Report Generated 3:02 3:05:39 Challing Energy (Effectory Standards - 3:02 Residential Compliances Report Generated 3:02 3:05:39 A hading Energy (Effectory Standards - 3:02 Residential Compliances Communication (Compliances - 3:02 Residential Compliances) Communication (Compliances - 3:02 Residential Compliances) Report Generated 3:02 3:05:30 (Compliances - 1:05:06:05:06) Communication (Compliances - 1:05:06:06:06) Report Generated 3:02 3:05:30 (Compliances - 1:05:06:06:06) Communication (Compliances - 1:05:06:06:06) Communication (Compliances - 1:05:06:06:06:06:06:06:06:06:06:06:06:06:06:					Option # 3 ADU	532 1
Analysis V.1 Umit 20.rhb/22x Analysis V.2 Umit 20.rhb/22x V.1 Umit 20.rhb/22x Analysis V.1 Umit 20.rhb/22x V.1 Umit 20.rhb/22x Analysis V.1 Umit 20.rhb/22x V.1 Umit 20.rhb/22x V.1 Umit 20.rhb/22x Analysis V.1 Umit 20.rhb/22x V.1 Umit 20.rhb/22x V.1 Umit 20.rhb/22x V.1 Umit 20.rhb/22x Analysis V.1 Umit 20.rhb/22x	RTIFICATE OF COMPLIANCE - RESIDER	NTIAL PERFORMANCE COMPLIANCE	Schema Version: rev 20220901 METHOD Calculation Date/Time: 2023-05-30T10	CF1R-PRF-01E 04:51+05:30 (Page 9 of 12)	CERTIFICATE OF COMPLIANCE - RESIDENT Project Name: Option # 3 ADU	Schema V
GL G2 G3 G4 G5 G6 G7 G8 Name Zone Area (n ¹) Printeter (t) F6g insult, Rvalve and Deg/h Corpeted Fraction and Deg/h Heated Sib- or Gale Uring Area_ADU 512 9.3.1 inm 0 B05 No ACALE SUBACC DOSTRUCTIONS 0		21		o Designs for Fresno County_Energy		
Name Zone Area (T) Protocol (T) and Depth Calipbete Protocol Neares Stab-on-Grade Linky Area, ADU 532 9.3.1.1 non-e 0 B0% No MACUE SUMFACE CONSTRUCTORS	1	03				03 04 05
$\frac{1}{10000000000000000000000000000000000$	Name Zone	Area (ft ²) Perim		Carpeted Fraction Heated	Name System Type	Distribution Type Water Heater Name Number of
01 02 03 04 05 06 07 08 Construction Name Surface Type Construction Type Irraining Total Curry Inteller (F Exter) Assembly Lapers 8-21 Wall Exterior Mails Wood Framed Wall 246 @ 16 in 0, C R.13 None / None 0.092 Inside Finish: Grypum Board Curry (F Frame: R.21 / Zo6 R-33 Wall Interior Walls Wood Framed Wall 244 @ 16 in 0, C R.13 None / None / 0 0.922 Inside Finish: Grypum Board One Starter (Finish: Storgum Board One Storgem Starter (Finish: Storgum Board One Storgem Starter (Finish: Storgum Board One Storgem Starter (Finish: Grypum Board One Storgem Starter (Fi	Slab-on-Grade Living Area_ADL	J 532 93	3.11 none 0	80% No		Standard DHW Heater 1 1
Construction Name Surface Type Construction Type Framing Total Cavity Money / Name Assembly Layers R-21 Wall Exterior Walls Wood Framed Wall 2x6 @ 16 in. 0, C R-21 None / None 0.069 Inside Finish: Grypum Board Cavity / Frame: R-12 / 2x6 Name # of Units Task Vol. [ge1] NEED Meetr Pump Results R-31 Wall Interior Walls Wood Framed Wall 2x6 @ 16 in. 0, C R-31 None / None 0.069 Linkide Finish: Grypum Board Cavity / Frame: R-13 / 2x6 A11: Roofs Wood Framed Wall 2x4 @ 24 in. 0, C R-3 None / None 0.054 Roofine: Light Roof (Agshult Shingle) Shingh Datk None / None 0.054 Control (Cavity / Frame: R-9.1) / 2x6 Wood Framed None Roof Res A11: Roofs Wood Framed 2x4 @ 24 in. 0, C R-38 None / None 0.025 Corty / Frame: R-9.1) / 2x6 Name Pipe Insulation Resaled Piping Consult MINGE ENVELOPE - HERS VERIFICATION Caling		1 03	04 05 06	07 08	WATER HEATERS - NEEA HEAT PUMP	
Image Prane Prane <th< td=""><td></td><td></td><td>Framing Total Cavity Interior / Exterior</td><td></td><td>01 02</td><td>03 04</td></th<>			Framing Total Cavity Interior / Exterior		01 02	03 04
R-21 Wall Exterior Walls Wood Framed Wall 26 @ 15 in. 0, C R-21 None / None 0.069 Exterior Finish: Scature R-31 Wall Interior Walls Wood Framed Wall 24 @ 16 in. 0, C R-31 None / None 0.092 Chevity / Frame: h3 / 2/4 Wood Frame / None 0.092 Chevity / Frame: h3 / 2/4 Attic RoofLiving Attic Roof Wood Framed 24 @ 24 in. 0, C R-0 None / 0 0.644 Roofing: Light Roof (Ashpilt Shingle) None / None None	Surface typ		R-value		Name # of Units	
R-13 Wall Interior Walls Wood Framed Wall 2x4 @ 16 in. 0. C R-13 None / None 0.092 Inside Finish: Gypsum Board Cavity / Frame: R-13 / 2x4 Attic RoofLxing Aratic RoofLxing Aratic RoofLxing Wood Framed 2x4 @ 24 in. 0. C R-0 None / 0 0.644 RoofIng: Light RoofLxing Cavity / Frame: no Insul. / 2x4 R-38 Roof Attic Ceiling 2x4 @ 24 in. 0. C R-38 None / None 0.025 Our Covity / Frame: no Insul. / 2x4 JUDING ENVELOPE - HERS VERIFICATION Ceiling 2x4 @ 24 in. 0. C R-38 None / None 0.025 Our Covity / Frame: no Insul. / 2x4 JUDING ENVELOPE - HERS VERIFICATION Ceiling 0	R-21 Wall Exterior Wa	lls Wood Framed Wall 2x6	@ 16 in. O. C. R-21 None / None	0.069 Cavity / Frame: R-21 / 2x6	DHW Heater 1 1	40 Rheem
R-13 Wall Interior Walls Wood Framed Wall 2x4 @ 16 in 0. C R-13 None / None 0.092 Cavity / Frame, R-13 / 2x4 Attic RoofLVing Attic Roofs Wood Framed 2x4 @ 24 in 0. C R-0 None / 0 0.644 Roofng: Light Roof (Asphalt Shingle) Roof Deck: Wood Name Pipe Insulation Parallel Piping Compact Di Stilling/Sheathing/Recking Cavity / Frame: Ro Insul. / 2x4 R-38 Roof Attic Ceilings (below attic) Wood Framed 2x4 @ 24 in 0. C R-38 None / None 0.025 Over Ceiling losts: R-28 J Insul. Cavity / Frame: Ro Insul. / 2x4 DHW Sys 1-1/1 Not Required	D. 12 11-11			Inside Finish: Gypsum Board	WATER HEATING - HERS VERIFICATION	
Attic Roofs Wood Framed Ceiling 2x4 @ 24 in. 0. C R-0 None / 0 0.644 Rooms roof Deck: Wood Siding/sheating/decking Cavity / Frame: no insul./ 2x4 R-38 Roof Attic Ceilings (below attic) Wood Framed Ceiling 2x4 @ 24 in. 0. C R-38 None / None 0.025 Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board JULDING ENVELOPE - HERS VERIFICATION Quality Insulation Installation (QI) High R-value Spray Foam Insulation Building Envelope Air Leakage CFM50 CFM50 Not Required Not Required N/A n/a n/a	n-13 wall Interior Wal		e 10 III. U. C. R-13 None / None	Other Side Finish: Gypsum Board	01 02	
Area_ADU Ceiling Ceiling Stating/sheathing/decking R-Ba Roof Attic Ceilings (below attic) Wood Framed Cavity / Frame: Roys). / 2x4 Over Ceiling Joists: R-28.9 insul. Cavity / Frame: Roys). / 2x4 SPACE CONDITIONING SYSTEMS JULDIOS ENVELOPE - HERS VERIFICATION Cavity / Frame: Roys). / 2x4 Not Required		Wood Framed	@ 24 in. O. C. R-0 None / 0	Roof Deck: Wood		
R-38 Roof Attic Ceilings (below attic) Wood Framed Ceiling 2x4 @ 24 in. 0. C R-38 None / None 0.025 Curr Ceiling Joist: R-28.9 insul. Cover Ceiling Joist: R-28.9 insul. Inside Finish: Gypsum Board JILDING ENVELOPE - HERS VERIFICATION JILDING ENVELOPE - HERS VERIFICATION Image: System Type Heating Unit Name Heating Equipment Count Cooling Unit Name Quality Insulation Installation (QII) High R-value Spray Foam Insulation Building Envelope Air Leakage CFM50 CFM50 Not Required Not Required N/A n/a n/a Image: Spray Envelope Count Image: Spray Envelope Count Registration Date/Time: 05/30/2023 03:58 HERS Provider: CHEERS Registration Number: 423-P010091392A-000-000-000000-0000 Registration Spray Efficiency Rating Services (CHEERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, Cannot guarantes, the accuracy or completeness of the linformation contained in this document. Report Generated: 2023-05-29 21:35:49 Report Version: 2022.0000 Report Version: 2022.0000	nicd_ADD	- cenng	EFRO	Siding/sheathing/decking Cavity / Frame: no insul. / 2x4		Not Rec
Inside Finish: Gypsum Board Inside Finish: Gypsum Board Inside Finish: Gypsum Board OI O2 O3 O4 O5 Inside Finish: Gypsum Board Item Inside Finish: Gypsum Board Item Inside Finish: Gypsum Board O1 O2 O3 O4 O5 Quality Insulation Installation (QII) High R-value Spray Foam Insulation Building Envelope Air Leakage CFM50 CFM50 Not Required N/A n/a n/a Item Insulation Installation (QII) Heat pump heating cooling Heating Cooling 1 Heating Cooling Registration Installated with or related to CHEERS; using information uploaded by third parties not attiliated with or related to CHEERS; is not responsible for, California Home Energy Efficiency Standards - 2002 Residential Compliance Report Version: 2022.0.000 Report Version: Report Version: Report Version: Report Version: 2022.0.000 Report Version: 2022.0.000 Report Version: Report Version: Report Version: Report Version: Report Version: 2022.0.000 Report Version: 2022.0.000 Report Version: Report V			@ 24 in. O. C. R-38 None / None	0.025 Cavity / Frame: R-9.1 / 2x4		03 04 05
01 02 03 04 05 Quality Insulation (QII) High R-value Spray Foam Insulation Building Envelope Air Leakage CFM50 CFM50 Not Required N/A n/a n/a Not Required N/A n/a n/a Registration Number: 423-P010091392A-000-00000000000000000000000000000000	Under Stade and			inside Finish: Gypsum Board	Name System Type H	
Quality Insulation Installation (QII) High R-value Spray Foam Insulation Building Envelope Air Leakage CFM50 Not Required Not Required N/A n/a n/a Registration Number: 423-P010091392A-000-00000000-0000 Registration Date/Time: 05/30/2023 03:58 HERS Provider: CHEERS rise document has been generated by Callfornia Home Energy Efficiency Rating Services (CHERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and guarantee, the accuracy or completements of the information contained in this document. Report Version: 2022.0.000 Report Generated: 2023-05-29 21:35:49	01					
Registration Number: 423-P010091392A-000-000-0000000-0000 Registration Date/Time: 05/30/2023 03:58 HERS Provider: CHEERS Trice: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, cannot guarantee, the accuracy or completeness of the information contained in this document. A Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report Generated: 2023-05-29 21:35:49						
A Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report Generated: 2023-05-29 21:35:49 CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report	nov negalieu	novnequileu	n/a n/a	пуа		
	TICE: This document has been generated by Califor cannot guarantee, the accuracy or completeness	rnia Home Energy Efficiency Rating Services (CHb of the information contained in this document.	EERS) using information uploaded by third parties not affiliated with or Report Version: 2022.0.000	related to CHEERS. Therefore, CHEERS is not responsible for,	Registration Number: 423-P010091392A-000 NOTICE: This document has been generated by Californ and cannot guarantee, the accuracy or completeness of CA Building Energy Efficiency Standards - 202	-000-000000-0000 Registrati la Home Energy Efficiency Rating Services (CHEERS) using Infor the Information contained in this document. 2 Residential Compliance Report Vo Schema
			Schema Version: rev 20220901			Schema
		12	11	10	9	

8	7
	CC10 000

Image: New York (EDR2total) (EDR1) (EDR2efficiency) (EDR2total) 35.9 35.9 35.9 1.9 2.4 1.4 35.1 1.7 1.2 0.8 34.3 2 2.7 1.6 35.7 1.5 0.3 0.2 2 2.7 1.6	Ratings				Compliance Margins	
Proposed Design 34.5 1.9 2.4 1.4 35.1 1.7 1.2 0.8 34.3 2 2.7 1.6 35.7 1.5 0.3 0.2 RESULT ³ : PASS	EDR ency)		50			Total ² EDR (EDR2total)
34.5 1.9 2.4 1.4 35.1 1.7 1.2 0.8 34.3 2 2.7 1.6 35.7 1.5 0.3 0.2	11	35.9			• •	
35.1 1.7 1.2 0.8 34.3 2 2.7 1.6 35.7 1.5 0.3 0.2	Proposed	Design	1			
34.3 2 2.7 1.6 35.7 1.5 0.3 0.2		34.5		1.9	2.4	1.4
35.7 1.5 0.3 0.2 RESULT ³ : PASS	S.	35.1	1	1.7	1.2	0.8
RESULT ³ : PASS		34.3	4	2	2.7	1.6
		35.7	1	1.5	0.3	0.2
equipment	RESULT ³ :	PASS	2			
system and batteries ter than or equal to zero and unmet load hour limits are not exceeded	1000	d batteries	net load	hour limits are r	not exceeded	

roject Name: Option a Calculation Description				: 2023-05-30T10:04:51+05:30 _Prototypical ADU Designs for 0.ribd22x		(Page 3 of 1 nergy
NERGY USE SUMMARY						
Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft ² -yr)	Standard Design TDV Energy (EDR2) (kTDV/ft ² -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft ² -yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft ² -yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2
Space Heating	2.39	10.56	3.38	25.83	-0.99	-15.27
Space Cooling	3.18	63,1	2.53	55.52	0.65	7.58
IAQ Ventilation	0.45	4.76	0.45	4.76	0	0
Water Heating	3.85	39.76	2.4	25.17	1.45	14.59
Self Utilization/Flexibility Credit				0		0
North Facing Efficiency Compliance Total	9.87	118.18	8.76	111.28	1.11	6.9
Space Heating	2.39	10.56	3.32	25.34	-0.93	-14.78
Space Cooling	3.18	63.1	2.69	59.32	0.49	3.78
IAQ Ventilation	0.45	4.76	0.45	4.76	0	0
Water Heating	3.85	39.76	2.4	25.14	1.45	14.62
Self Utilization/Flexibility Credit				0		0
East Facing Efficiency Compliance Total	9.87	118.18	8.86	114.56	1.01	3.62

CE

Registration Date/Time: 05/30/2023 03:58 HERS Provider: CHEERS EERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, Report Version: 2022.0.000 Report Generated: 2023-05-29 Schema Version: rev 20220901	Reg Notice and ca CA	gistration Number: 4. CE: This document has be annot guarantee, the acc Building Energy Effici	23-P010091392A-00 en generated by Califor uracy or completeness iency Standards - 20	0-000-0000 nia Home Ene f the informat 22 Resident	000-0000 rgy Efficiency Rating Servi ion contained in this docu ial Compliance	vices (CHEER: ument.	Report Vers	n Date/Time: 0 etion uploaded by sion: 2022.0.00 rsion: rev 2022	00	:58 t affillated with or	HERS Prov r related to CHEERS. Report Ge	ider: CHEERS Therefore, CHEERS nerated: 2023-05	S is not responsible for, 5-29 21:35:49	
METHOD CF1R-PRF-01E Calculation Date/Time: 2023-05-30T10:04:51+05:30 (Page 6 of 12) Input File Name: 4411_Prototypical ADU Designs for Fresno County_Energy Analysis_V9.1 Unit 20.ribd22x	Proj Calc	ject Name: Option culation Description	# 3 ADU		ORMANCE COMPLI	LIANCE MI	Ca		e: 4411_Prot	totypical ADI	:04:51+05:30 U Designs for Fi	resno County_E	CF1R-PRF-01E (Page 7 of 12) Energy	
05 06 07 08 09 10 11 12	ZON	01	02		03		04		05		06		07	
Annual		Zone Name	Zone Typ	pe	HVAC System Nan	me	Zone Floor A	rea (ft ²)	Avg. Ceiling	Height \	Water Heating Sy	/stem 1	Status	
Power Electronics CFI Azimuth Tilt Array Angle (deg) 121 Inverter Eff. Solar Access (%)		Living Area_ADU	Condition	ied	HVAC System1	11	532		8		DHW Sys 1	L .	New	
none true 150-270 n/a n/a <=7:12 96 98	OPA	QUE SURFACES				11	YA.	A.	F F					
		01	02		03		04	05		06	07	7	08	
ed energy performance for this computer analysis.		Name	Zone		Construction	A	zimuth	Orientatio	n Gro	oss Area (ft ²)	Window a Area	7.6.1.2.4.6.1.1	Tilt (deg)	
		Front Wall W_	Living Area_ADU	,	R-21 Wall	1	0	Front	1	200	54		90	
Staff report, Appendix B, and RA3) ecific brand/model, or equivalent, must be installed		Rear Wall E_	Living Area_ADU	_	R-21 Wall		180	Back		180	21.		90	
		Left Wall N_ Right Wall S_	Living Area_ADU	_	R-21 Wall R-21 Wall		90 270	Left Right	-	176	6.2		90	
ERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional		hight that 5_	Living	_		-	210	A HIGH						
ed to be completed in the HERS Registry		Interior Wall	Area_ADU>>Livir Area_ADU	ng	R-13 Wall		n/a	n/a		57.04	0	0	n/a	
		Attic Roof	Living Area_ADU		R-38 Roof Attic		n/a	n/a		532	n/	a	n/a	
	ATT	IC			10 Pm		1		and the second	-				
		01	02		03		04	05	De Co	06	07		08	
		Name	Construction Attic RoofLiving		Туре	Root R	tise (x in 12)	Roof Reflecta	ince Roo	of Emittance	Radiant	Barrier	Cool Roof	
04 05 06 07	Att	ic Living Area_ADU	Area_ADU		Ventilated		4	0.1		0.85	No	•	No	
Number of Bedrooms Number of Zones Number of Ventilation Number of Water Heating Systems	FEN	ESTRATION / GLAZIN	IG				_							
1 1 0 1		01 0	02 03		04 05	06	07	08 09	10	11	12	13	14	
		Name Ty	pe Surface	e Orie	ntation Azimuth	Width (ft)	Height (ft)	Mult. Area (ft ²)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading	
	V	Window A-	dow Front Wall		ront 0	3	5	1 15	0.3	NFRC	0.23	NFRC	Bug Screen	
		3050_		- ·				1 10	0.5	Mine	0.25	Nine	bug screen	
Registration Date/Time: 05/30/2023 03:58 HERS Provider: CHEERS EERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for,	Reg	sistration Number: 4:	23-P010091392A-00 en generated by Californ	0-000-0000 nia Home Ene	000-0000 rgy Efficiency Rating Servi ion contained in this docu	vices (CHEER	Registration	n Date/Time: 0 ation uploaded by	05/30/2023 03: third parties not	:58 t affiliated with or	HERS Prov	ider: CHEERS	S is not responsible for,	
Report Version: 2022.0.000 Report Generated: 2023-05-29 21:35:49 Schema Version: rev 20220901	CA	Building Energy Effici	iency Standards - 20	22 Resident	ial Compliance	unent.	Report Ver	sion: 2022.0.00 rsion: rev 2022	00		Report Ge	nerated: 2023-05	5-29 21:35:49	
METHOD CF1R-PRF-01E Calculation Date/Time: 2023-05-30T10:04:51+05:30 (Page 10 of 12) Input File Name: 4411_Prototypical ADU Designs for Fresno County_Energy Analysis_V9.1 Unit 20.ribd22x	Proj Cale	TIFICATE OF COMP ject Name: Option culation Descriptio	# 3 ADU		ORMANCE COMPL	LIANCE MI	Ca		e: 4411_Pro	totypical AD	:04:51+05:30 U Designs for F	resno County_I	CF1R-PRF-01E (Page 11 of 12) Energy	
05 06 07 08 09		01	02	03	04 05	5 0	6 07	08	09	10	11	12	13	
e Number of Units Solar Heating Compact Distribution HERS Verification Water Heater Name (#)		Name	System Type	Number of Units	Efficiency HSPF	F2/ Cap	47 Cap 1	7 Efficiency Type	Cooling SEER / SEER2	EER/ C	Contraction of the Contraction o	npressor Hi Type	ERS Verification	
1 n/a None n/a DHW Heater 1 (1)		Heat Pump System 1	VCHP-ductless	1	HSPF 8.3		14400		15	CEER 9 N			eat Pump System 1-hers-htpump	PI
05 06 07 08	HVA	C HEAT PUMPS - HE	RS VERIFICATION		19	44		10-		-				
eat Pump NEEA Heat Pump Tank Location Duct Inlet Air Source Duct Outlet Air Source	s I È	01	02	03	04	•	05		06	07	7	08	09	
eem RheemPROPH40T2R Outside Living Area_ADU Living Area_ADU		at Pump System	Verified Airflow	Airflow T	arget Verified EE		Verifie SEER/SE	ERZ	ed Refrigeran Charge Yes	nt Verit HSPF/H	HSPF2	ified Heating Cap 47 Yes	Verified Heating Cap 17 Yes	
		-hers-htpump				X	17							
04 05 06 07 Compact Distribution Shower Drain Water Heat	VAR	01	T PUMP COMPLIAN		- HERS VERIFICATION	04	05		06	07	08	09	10	
Compact Distribution Type Recirculation Control Shower or an reactive rea		Name	Certi Low-S VCHP S	itatic	Habitable in Co	tless Units onditioned Space	Wall Mo Thermos	with &	Proceuro	ow Leakage Ducts in Conditioned	Minimum Airflow per RA3.3 and	Certified non-continuo Fan	Indoor Fan not Running Continuously	
05 06 07 08 09		Heat Pump System				lequired	Require		15	Space Not required	SC3.3.3.4.1 Not required	Not required		
t Cooling Equipment	IND	OOR AIR QUALITY (I/	AQ) FANS		1					~				
Cooling Unit Name Count Fan Name Distribution Name Thermostat Type		01	02	03	04	1	05		06	07	7	08	09	
Heat Pump System 1 n/a n/a Setback		Dwelling Unit	Airflow (CFM)	Fan Effic (W/CF		Type	Include Heat/Ene	IA	Q Recovery	Include E Indicator	HER	S Verification	Status	
							Recover	ry?						
	SF	am IAQVentRpt	31	0.35	Exhau	lust	No		n/a / n/a	N		Yes		
Registration Date/Time: 05/30/2023 03:58 HERS Provider: CHEERS ERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, Report Version: 2022.0.000 Report Generated: 2023-05-29 21:35:49	NOTIO and co	gistration Number: 4, CE: This document has be annot guarantee, the acc Building Energy Effici	een generated by Califor uracy or completeness o	nia Home Ene f the informat	rgy Efficiency Rating Servi ion contained in this docu	vices (CHEER ument.	S) using inform	n Date/Time: (ation uploaded by sion: 2022.0.00	third parties not	:58 t affiliated with o	r related to CHEERS	rider: CHEERS Therefore, CHEERS	S is not responsible for,	
Schema Version: rev 20220901								rsion: rev 2022						

7

6

5

6

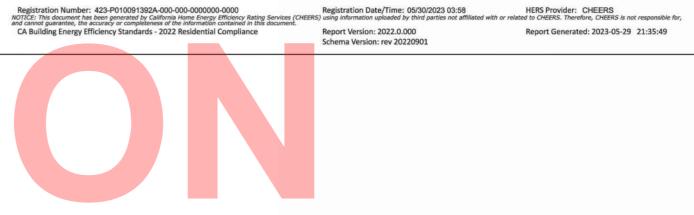
roject Name: Option	# 3 ADU		Calculation Date/Time	: 2023-05-30T10:04:51+05:30		(Page 4 of 12
Calculation Description	: Title 24 Analysis			Prototypical ADU Designs for	Fresno County_E	nergy
NERGY USE SUMMARY			Analysis_V9.1 Unit 20	1		
Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft ² -yr)	Standard Design TDV Energy (EDR2) (kTDV/ft ² -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft ² -yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft ² -yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2)
Space Heating	2.39	10.56	3.3	25.13	-0.91	-14.57
Space Cooling	3.18	63.1	2.53	55.43	0.65	7.67
IAQ Ventilation	0.45	4.76	0.45	4.76	0	0
Water Heating	3.85	39.76	2.4	25.18	1.45	14.58
Self Utilization/Flexibility Credit				O		o
South Facing Efficiency Compliance Total	9.87	118.18	8.68	110.5	1.19	7.68
Space Heating	2.39	10.56	3.36	25.86	-0.97	-15.3
Space Cooling	3.18	63.1	2.76	61.38	0.42	1.72
IAQ Ventilation	0.45	4.76	0.45	4.76	0	0
Water Heating	3.85	39.76	2.4	25.15	1.45	14.61
Self Utilization/Flexibility Credit		510		0		o
West Facing Efficiency Compliance Total	9.87	118.18	8.97	117.15	0.9	1.03

2

				ne Energy Efficien formation contain idential Compl			Report	Version: 2					enerated: 20		
RTIFICATE OF	Option # 3 AD	DU U		PERFORMAN		NCE ME	ETHOD		Section 20		-05-30T10:04		C	(F1R-PRF-01E Page 8 of 12)
Iculation Des		24 Analys	IS							nit 20.ribd2	typical ADU [2x	Designs for F	-resno Coun	ity_Energ	y
01	02	03		04	05	06	07	08	09	10	11	12	13		14
Name	Туре	Surfac	ce	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft ²)	U-factor	U-factor Source	SHGC	SHGC Sou	urce Ext	erior Shading
Window- 1068_	Window	Front Wal	11 W_	Front	0	1	6,67	1	6.67	0.3	NFRC	0.23	NFRC		Bug Screen
000r 1- 3068_	Window	Front Wal	II W_	Front	0	3	6.67	1	20.01	0.3	NFRC	0.23	NFRC		Bug Screen
Window- 1068_2	Window	Front Wal	II W_	Front	0	1	6.67	1	6.67	0.3	NFRC	0.23	NFRC		Bug Screen
Window B- 2626_	Window	Front Wal	II W_	Front	0			1	6.25	0.3	NFRC	0.23	NFRC		Bug Screen
Window A- 3050_2	Window	Rear Wa	II E_	Back	180			1	15	0.3	NFRC	0.23	NFRC		Bug Screen
Window B- 2626_2	Window	Rear Wa	II E_	Back	180		1	1	6.25	0.3	NFRC	0.23	NFRC		Bug Screen
Window B- 2626_3	Window	Left Wal	I N_	Left	90		PD.	1	6.25	0.3	NFRC	0.23	NFRC		Bug Screen
ERHANGS AND	FINS			4	m fi		T	1	TH) (a	7				1
01		02	03	3 04	05	0	06	07	08	09	10	11	12	13	14
				Overha	ng		-		Le	ft Fin			Righ	t Fin	
Windo	w	Depth	Dist	Up Left Ext	ent Right Extent	Flag	p Ht.	Depth	Тор Uр	Dist L	Bot Up	Depth	Тор Up	Dist R	Bot Up
Window A-	3050_	6	1.1	.3 6	6	_	0	0	0	0	0	0	0	0	0
Window-1	1068_	6	1.1	.3 6	6		0	0	0	0	0	0	0	0	0
Door 1- 3	068_	6	1.1	.3 6	6		0	0	0	0	0	0	0	0	0
Window- 10	068_2	6	1.1	3 6	6		0	0	0	0	0	0	0	0	0
TICE: This docume cannot guarantee, A Building Energ RTIFICATE OF oject Name: (COMPLIANC	tandards - 20 CE - RESIDEI	022 Res	idential Comp	liance		Report Schema	Version: 2 Version: 1 Calcula t	022.0.000 rev 202209(ion Date/	01 Time: 2023-	-05-30T10:04	Report G	enerated: 207	23-05-29 : C (P	21:35:49 F1R-PRF-01E age 12 of 12)
Iculation Dec	cription: Title	24 Analysi	is							1411_Protot nit 20.ribd2	typical ADU [2x	Designs for F	Fresno Coun	ity_Energy	y
inculation Desi		ECLARATIO	N STATE	MENT											
OCUMENTATION	s Certificate of				curate and co	mplete.									
OCUMENTATION	hor Name:		e docun	nentation is ac					ation Author						
OCUMENTATION I certify that thi cumentation Auti ranchi Shah	hor Name:		e docun	nentation is ac		T	1	Vira	inchi	Signature:	v				
DCUMENTATION I certify that thi cumentation Aut ranchi Shah mpany: ww.gettitle24.			e docur	nentation is ac		T	Ţ	Viro Signature 05/30/2	Date: 023	shah					
DCUMENTATION I certify that thi cumentation Auti ranchi Shah mpany: www.gettitle24. dress: 730 Beach Bly	com		e docur	nentation is ac				Viro Signature 05/30/2	Date: 023	shah	(If applicable):				
I certify that thi comentation Auti ranchi Shah mpany: www.gettitle24. dress: 1730 Beach Blv y/State/Zip: Mirada, CA 90	com rd., #133		e docur	nentation is ac				Vivo Signature 05/30/2 CEA/ HERS	Date: 023 Certification	shah					
DCUMENTATION I certify that thi cumentation Auti ranchi Shah mpany: www.gettitle24. dress: .730 Beach Blw y/State/Zip: Mirada, CA 90 SPONSIBLE PER ertify the followin 1. I am elig 2. I certify 3. The buil calculati sponsible Designe	com rd., #133 D638 ISON'S DECLAI g under penalty jible under Divis that the energy ding design feat ons, plans and s	f Compliance RATION STAT of perjury, un ion 3 of the Bi features and jures or system	TEMEN Inder the Jusiness a perform m design	т	e of California: Code to accept ms identified or eed on this Certi	n this Certi ficate of C	ficate of Co ompliance	Viro Signature 05/30/2 CEA/HER Phone: 714-888 building de ompliance are consist building pe Responsib	Date: 023 • Certification • 4736 • onform to the ent with the emit applicat le Designer S	d on this Certil	(If applicable): ficate of Compli	rt 1 and Part 6			
CUMENTATION certify that thi cumentation Auti ranchi Shah mpany: ww.gettitle24. dress: 730 Beach Blv //State/Zip: Mirada, CA 91 SPONSIBLE PER ettify the followin 1. I am elig 2. I certify 3. The buil calculati ponsible Designe bina Wright A	com rd., #133 D638 ISON'S DECLAI g under penalty ible under Divis that the energy ding design feat ons, plans and s er Name:	f Compliance RATION STAT of perjury, un ion 3 of the Bi features and jures or system specifications	TEMEN nder the lusiness a perform n design submitte	T laws of the State and Professions ance specificatio features identifi	e of California: Code to accept ms identified or eed on this Certi	n this Certi ficate of C	ficate of Co ompliance	Virco Signature O5/30/2 CEA/HER Phone: 714-888 building de ompliance of are consist building per	anchu Date: 023 Certification -4736 -4756	d on this Certil	(If applicable): ficate of Compli	rt 1 and Part 6			
DCUMENTATION I certify that thi cumentation Auti ranchi Shah mpany: www.gettitle24. dress: I730 Beach Blv y/State/Zip: Mirada, CA 90 SPONSIBLE PER ertify the followin 1. I am elig 2. I certify 3. The buil	com rd., #133 D638 ISON'S DECLAI g under penalty jible under Divis that the energy ding design feat ons, plans and s er Name:	f Compliance RATION STAT of perjury, un ion 3 of the Bi features and jures or system specifications	TEMEN nder the lusiness a perform n design submitte	T laws of the State and Professions ance specificatio features identifi	e of California: Code to accept ms identified or eed on this Certi	n this Certi ficate of C	ficate of Co ompliance	Vúrc Signature 05/30/2 CEA/ HER Phone: 714-888 building de are consist building pe Responsib Date Signe 05/30/2	anchu Date: 023 Certification -4736 -4756	d on this Certil	(If applicable): ficate of Compli	rt 1 and Part 6			

Digitally signed by California Home Energy Efficiency Rating Services (CHEERS). This digital signature is provided in order to secure the content of this registered document, and in no way implies Registration Provider responsibility for the accuracy of the information.

2



OPTION #3 PROJECT ACCESSORY DWELLING UNIT

500 SQ. FT. MODEL (532 SQ.FT.) W/ ADAPTABLE FEATURES

PWP23-003

DEPARTMENT OF PUBLIC WORKS AND PLANNING



CAPITAL PROJECTS DIVISION

2220 Tulare St., Ste. 720, Fresno, CA. 93721 Phone: (559) 262-4212 Fax: (559) 262-4879



UPDATE

JUNE 26, 2023

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE ARCHITECT AND SHALL NOT BE USED ON ANY OTHER PROJECT OR LOCATIONS EXCEPT AS DESCRIBED ON THE DRAWINGS WITHOUT WRITTEN AGREEMENT WITH THE ARCHITECT.

TITLE TITLE 24 ENERGY COMPLIANCE

SCALE T24-1 ISSUE DATE JOB NUMBER 2023_20 APRIL 12, 2023 DRAWN BY CHECKED BY Author Checker

4

C

1:	2 1	11	10
		1	1

		2022 Single-Family Residential Mandatory Req	quiremer
		Vingle-family residential buildings subject to the Energy Codes must comply with all applicable main wiew the respective section for more information.	ndatory meas
Option # 3 ADU	30-05-2023 (04/2022		
Project Address California Energy Climate Zone Total Cond. Floor Area Addition Option # 3 Fresno County CA Climate Zone 13 532 n/a	# of Units Building 1 § 110.6(Envelope: Air Leakage. Manufactured fenestration, exterior doors, and exterior pet doors m	
INSULATION Area Construction Type Cavity (ft ²) Special Features S	Status		
	Vew § 110.6(or weather-st
	Vew § 110.7:	outlined, guerrerer, en opposi	
	§ 110.8(a): Insulation Certification by Manufacturers. Insulation must be certified by the D Goods and Services (BHGS). 	Department of
	§ 110.8(g): Insulation Requirements for Heated Slab Floors. Heated slab floors must be in Roofing Products Solar Reflectance and Thermal Emittance. The thermal em	
	§ 110.8(roofing material must meet the requirements of § 110.8(i) and be labeled per §10 on the CF1R.)-113 when th
	§ 110.8(or less and l
FENESTRATION Total Area: 82 Glazing Percentage: 15.4% New/Altered Average U-Factor: Orientation Area(ft ²) U-Fac SHGC Overhang Sidefins Exterior Shades S	0.30	Roof Deck, Ceiling and Rafter Roof Insulation. Roof decks in newly constructed average U-factor not exceeding U-0.184. Ceiling and rafter roofs minimum R-22 insu	d attics in clim
Front (W) 28.3 0.300 0.23 6.0 none N/A N	Vew § 150.0(eighted avera
	Vew	prevent air leakage. Insulation must be installed in direct contact with a roof or ce as specified in § 110.7, including but not limited to placing insulation either above	eiling which is
	New § 150.0(b): Loose-fill Insulation. Loose fill insulation must meet the manufacturer's required Wall Insulation. Minimum R-13 insulation in 2x4 inch wood framing wall or have	
Left (N) 6.3 0.300 0.23 none none N/A N	§ 150.0(
	§ 150.0(d): Raised-floor Insulation. Minimum R-19 insulation in raised wood framed floor or	
	§ 150.0(Slab Edge Insulation. Slab edge insulation must meet all of the following: have without facings, no greater than 0.3 percent; have a water vapor permeance	no greater t
		physical damage and UV light deterioration; and, when installed as part of a heat Vapor Retarder. In climate zones 1 through 16, the earth floor of unvented crawl	ted slab floor
	§ 150.0(g)1: vapor retarder. This requirement also applies to controlled ventilation crawl space §150.0(d).	e for building
	§ 150.0(yapor Retarder. In climate zones 14 and 16, a Class I or Class II vapor retarder all insulation in all exterior walls, vented attics, and unvented attics with air-permeter all insulation in all exterior walls, vented attics, and unvented attics with air-permeter and the second s	eable insulati
HVAC SYSTEMS	§ 150.0(Fenestration Products. Fenestration, including skylights, separating conditioned a maximum U-factor of 0.45; or area-weighted average U-factor of all fenestration	d space from n must not ex
Qty. Heating Min. Eff Cooling Min. Eff Thermostat S	8 110 5/	s, Decorative Gas Appliances, and Gas Log: e) Pilot Light. Continuously burning pilot lights are not allowed for indoor and outdo	or firenlasse
1 Electric Heat Pump 8.50 HSPF Split Heat Pump 15.0 SEER Setback I	New § 110.5(§ 150.0(e)1: Closable Doors. Masonry or factory-built fireplaces must have a closable metal of	or glass door
	§ 150.0(Combustion Intake. Masonry or factory-built fireplaces must have a combustion	r or combusti
HVAC DISTRIBUTION Duct Location Heating Cooling Duct Location R-Value S	§ 150.0(readily acces
	New § 110.0-	Certification. Heating, ventilation, and air conditioning (HVAC) equipment, water \$ 110.3: regulated applications much be certified by the manufacturer to the Celifornia Face	r heaters, sho
	§ 110.2(a): HVAC Efficiency. Equipment must meet the applicable efficiency requirements in	n Table 110.
WATER HEATING	§ 110.2(Controls for Heat Pumps with Supplementary Electric Resistance Heaters. heaters must have controls that prevent supplementary heater operation when the and in which the cut-on temperature for compression beating is higher than the cut-on temperature for compression heating is higher than temperature for cu	he heating loa
	Status _{Vew}	and in which the cut-on temperature for compression heating is higher than the cut-off temperature for compression heating is higher than the cut-off temperature for cooling systems not controlled by a central energy method.	ature for supp
	§ 110.2(c): setback thermostat.*	
	§ 110.3(Insulation. Unfired service water heater storage tanks and solar water-heating b surface heat loss rating. Isolation Valves. Instantaneous water heaters with an input rating greater than 6	
2022 Single-Family Residential Mandatory Requirements Summary	5/6/22	2022 Single-Family Residential Mandatory Req	quiremer
Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with respectively.	ith the JA8	 Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS sug 	Il of the follow
§ 150.0(k)1G: Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. * Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant wi § 150.0(k)1H: elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires	ith the JA8 ires.	Energy Storage System (ESS) Ready. All single-family residences must meet al	Il of the follow pplied branch four branch one circuit su
Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant wi elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires. Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5	ith the JA8 ires. e not required watts of	Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS sumain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with	Il of the follow pplied branch four branch o one circuit su ; main panelb em isolation e
 § 150.0(k)1G: Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. * Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant wi elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires § 150.0(k)11: Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the draw linen closet is closed. 	ith the JA8 ires. e not required watts of wer, cabinet or	 Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS sumain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch locati the Pump Space Heater Ready. Systems using gas or propane furnaces to ser unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit with circuit wiring installed within 3' of the furnace with circuit within and the sum circuit within an and the sum circuit within an and the sum circuit within an and the sum circuit stalled within an an analysis of the furnace with circuit within an analysis of the furnace with circuit within an an analysis of the furnace with circuit within and the supplies and the su	Il of the follow pplied branch four branch one circuit su min panelb misolation e ion to allow ti rve individual uit conductors
§ 150.0(k)1G: Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. * Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant wi § 150.0(k)1H: Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the draw linen closet is closed. § 150.0(k)2A: Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL § 150.0(k)2B:	ith the JA8 ires. e not required watts of wer, cabinet or _ 7A. § 150.0(Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS sumain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch locati the the the the the the the the the the	Il of the follow pplied branch four branch one circuit su ; main panelb im isolation e ion to allow the rve individual uit conductors allow for the i
§ 150.0(k)1G: Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. * Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant wi § 150.0(k)1H: Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are § 150.0(k)1I: Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are § 150.0(k)1I: Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are § 150.0(k)2A: Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL § 150.0(k)2B: Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems. * § 150.0(k)2A: Accessible Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually tu on and off. *	ith the JA8 ires. e not required i watts of wer, cabinet or _ 7A. urned § 150.0(§ 150.0(§ 150.0(§ 150.0(§ 150.0(Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS sugmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch location the the transport of the transpo	Il of the follow pplied branch four branch or one circuit su misolation e ion to allow the rve individual uit conductors allow for the dual dwelling stated at lease
 § 150.0(k)1G: Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. * Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant wi elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires. § 150.0(k)1H: Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the draw linen closet is closed. § 150.0(k)2A: Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL § 150.0(k)2B: Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems. * Accessible Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually tu on and off. * § 150.0(k)2B: Multiple Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sens to comply with § 150.0(k). 	ith the JA8 ires. e not required i watts of wer, cabinet or _ 7A. urned § 150.0(§ 150.0(§ 150.0(§ 150.0(§ 150.0(Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS sugmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch location the the transport of 240V branch circuit wiring installed within 3' of the furnace with circuit dentified as "240V ready;" and a reserved main electrical service panel space to a permanently marked as "For Future 240V use." Electric Cooktop Ready. Systems using gas or propane cooktop to serve individ 240V branch circuit wiring installed within 3' of the cooktop to serve individ 240V ready;" and a reserved main electrical service panel space to allow for the i marked as "For Future 240V use." 	Il of the follow pplied branch four branch or one circuit su misolation e ion to allow the rve individual uit conductors allow for the dual dwelling stated at leas installation of
 § 150.0(k)1G: Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. * Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant wi elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires § 150.0(k)11: Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the draw linen closet is closed. § 150.0(k)2A: Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL § 150.0(k)2B: Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems. * Accessible Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually tu on and off. * Multiple Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sens to comply with § 150.0(k). § 150.0(k)2C: Mandatory Requirements. Lighting controls must comply with the applicable requirements of § 110.9. Energy Management Control Systems. An energy management control system (EMCS) may be used to comply with dim 	ith the JA8 ires. e not required i watts of wer, cabinet or . 7A. Irned sor is installed iming, § 150.00	 Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS sugmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch locati the Heat Pump Space Heater Ready. Systems using gas or propane furnaces to ser unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit identified as "240V ready;" and a reserved main electrical service panel space to a permanently marked as "For Future 240V use." Electric Cooktop Ready. Systems using gas or propane cooktop to serve individ 240V branch circuit wiring installed within 3' of the cooktop to serve individ 240V ready;" and a reserved main electrical service panel space to allow for the i marked as "For Future 240V use." Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plum dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer locations with gas or propane plum dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer locations with gas or propane plum 	Il of the follow pplied branch four branch of one circuit su misolation e ison to allow the rve individual uit conductors allow for the ison tual dwelling stated at lease installation of bing to serve ocation with of
 § 150.0(k)1G: Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8.* Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant wi elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires § 150.0(k)1H: Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the draw linen closet is closed. § 150.0(k)2A: Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL § 150.0(k)2A: Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems.* Accessible Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually tu on and off.* Multiple Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sens to comply with § 150.0(k). § 150.0(k)2C: Mandatory Requirements. Lighting controls must comply with the applicable requirements of § 110.9. Energy Management Control Systems. An energy management control system (EMCS) may be used to comply with dimming s 150.0(k)2A. 	ith the JA8 ires. e not required watts of wer, cabinet or . 7A. urned sor is installed ming, trols specified	 Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS sugmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch locati the Heat Pump Space Heater Ready. Systems using gas or propane furnaces to ser unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit identified as "240V ready;" and a reserved main electrical service panel space to a permanently marked as "For Future 240V use." Electric Cooktop Ready. Systems using gas or propane cooktop to serve individ 240V branch circuit wiring installed within 3' of the cooktop to serve individ 240V ready;" and a reserved main electrical service panel space to allow for the i marked as "For Future 240V use." Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plum 	Il of the follow pplied branch four branch of one circuit su misolation e ison to allow the rve individual uit conductors allow for the ison tual dwelling stated at lease installation of bing to serve ocation with of
 § 150.0(k)1G: Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8.* Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant wi elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires. § 150.0(k)11: Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the draw linen closet is closed. § 150.0(k)2A: Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL § 150.0(k)2B: Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems.* Accessible Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually tu on and off.* § 150.0(k)2B: Multiple Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sens to comply with § 150.0(k). § 150.0(k)2C: Mandatory Requirements. Lighting controls must comply with the applicable requirements of § 110.9. Energy Management Control Systems. An energy management control system (EMCS) may be used to comply with in § 150.0(k)2A. Automatic Shutoff Controls. In bathrooms, garages, laundry rooms, utility rooms and walk-in closets, at least one installed in § 150.0(k)2A. 	ith the JA8 ires. e not required watts of wer, cabinet or . 7A. urned sor is installed ming, trols specified d luminaire	 (s) Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS supmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch locating the Heat Pump Space Heater Ready. Systems using gas or propane furnaces to ser unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit identified as "240V ready;" and a reserved main electrical service panel space to a permanently marked as "For Future 240V use." (u) Electric Cooktop Ready. Systems using gas or propane cooktop to serve individ 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." (v) Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plum dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer k the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." 	Il of the follow pplied branch four branch of one circuit su misolation e ison to allow the rive individual uit conductors allow for the tual dwelling rated at leas installation of bing to serve ocation with of panel space
 § 150.0(k)1G: Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. * Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant wi elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the draw linen closet is closed. § 150.0(k)2A: Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL § 150.0(k)2A: Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems.* Accessible Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually tu on and off. * Multiple Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sens to comply with § 150.0(k). § 150.0(k)2D: Mandatory Requirements. Lighting controls must comply with the applicable requirements of § 110.9. Energy Management Control Systems. An energy management control system (EMCS) may be used to comply with dimm occupancy, and control requirements if it provides the functionality of the specified control per § 110.9 and the physical cont in § 150.0(k)2A: Automatic Shutoff Controls. In bathrooms, garages, laundry rooms, utility rooms and walk-in closets, at least one installed opaque fronts or doors must have controls that turn the light off when the drawers and co opaque fronts or doors must have controls that turn the drawer or door is closed. 	ith the JA8 ires. e not required i watts of wer, cabinet or . 7A. urned sor is installed iming, trols specified d luminaire abinets with sible wall-	 (s) Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS supmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch locating the Heat Pump Space Heater Ready. Systems using gas or propane furnaces to ser unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit identified as "240V ready;" and a reserved main electrical service panel space to a permanently marked as "For Future 240V use." (u) Electric Cooktop Ready. Systems using gas or propane cooktop to serve individ 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." (v) Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plum dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer k the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." 	Il of the follow pplied branch four branch of one circuit su misolation e ison to allow the rive individual uit conductors allow for the tual dwelling rated at leas installation of bing to serve ocation with of panel space
 § 150.0(k)1G: Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8.* Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant wi elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires. § 150.0(k)11: Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the draw linen closet is closed. § 150.0(k)2A: Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL § 150.0(k)2B: Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems.* Accessible Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually tu on and off. * Multiple Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sens to complay with § 150.0(k). § 150.0(k)2D: Mandatory Requirements. Lighting controls must comply with the applicable requirements of § 110.9. Energy Management Control Systems. An energy management control system (EMCS) may be used to comply with dimin in § 150.0(k)2D. Automatic Shutoff Controls. In bathrooms, garages, laundry rooms, utility rooms and walk-in closets, at least one installed must be controlled by an occupancy or vacancy sensor providing automatic-off functionality. Lighting inside drawers and ca opaque fronts or doors must have controls that turn the light off when the drawer or door is closed. § 150.0(k)2F: Dimmers. Lighting to be manually adjuste	ith the JA8 ires. e not required i watts of wer, cabinet or _ 7A. urned sor is installed ming, trols specified d luminaire abinets with sible wall- olling LED light	 (s) Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS sugmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch location of the traceways installed between the panelboard and the switch location of a system unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuid identified as "240V ready;" and a reserved main electrical service panel space to a permanently marked as "For Future 240V use." (u) Electric Cooktop Ready. Systems using gas or propane cooktop to serve individ 240V branch circuit wiring installed within 3' of the cooktop to serve individ 240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." (v) Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plum dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer key the blank cover identified as "240V ready;" and a reserved main electrical service panel plum dedicated permanently marked as "For Future 240V use." 	Il of the follow pplied branch four branch of one circuit su misolation e ison to allow the rive individual uit conductors allow for the tual dwelling rated at leas installation of bing to serve ocation with of panel space
 § 150.0(k)1G: Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. * Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant wi elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires. § 150.0(k)1H: Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 50 power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the draw linen closet is closed. § 150.0(k)2A: Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL § 150.0(k)2A: Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems. * Accessible Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually tu on and off. * Multiple Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sens to comply with § 150.0(k)2D: Mandatory Requirements. Lighting controls must comply with the applicable requirements of § 110.9. § 150.0(k)2D: Mandatory Requirements. Lighting controls must comply with the applicable requirements of § 110.9. § 150.0(k)2D: Mandatory Requirements. Lighting controls must comply with the applicable requirements of § 110.9. § 150.0(k)2D: Mandatory Requirements if it provides the functionality of the specified control per § 110.9 and the physical cont in § 150.0(k)2A: Automatic Shutoff Controls. In bathrooms, garages, laundry rooms, utility rooms and walk-in closets, at least one installed opaque fronts or doors must have controls that turn the light off when	ith the JA8 ires. e not required iwatts of wer, cabinet or . 7A. urned sor is installed iming, trols specified d luminaire abinets with sible wall- olling LED light vabinets or	 (s) Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS supmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch locating the Heat Pump Space Heater Ready. Systems using gas or propane furnaces to ser unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit identified as "240V ready;" and a reserved main electrical service panel space to a permanently marked as "For Future 240V use." (u) Electric Cooktop Ready. Systems using gas or propane cooktop to serve individ 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." (v) Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plum dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer k the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." 	Il of the follow pplied branch four branch of one circuit su misolation e ison to allow the rive individual uit conductors allow for the tual dwelling rated at leas installation of bing to serve ocation with of panel space
 § 150.0(k)1G: Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8.* Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant will elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires. Lamps and other separable light sources that are not compliant will elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires. Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the draw linen closet is closed. § 150.0(k)2A: Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL § 150.0(k)2A: Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems.* Accessible Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually tu on and off.* Multiple Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sens to comply with § 150.0(k)2C: Mandatory Requirements. Lighting controls must comply with the applicable requirements of § 110.9. Energy Management Control Systems. An energy management control system (EMCS) may be used to comply with dimming 5 (150.0(k)2P. Automatic Shutoff Controls. In bathrooms, garages, laundry rooms, utility rooms and walk-in closets, at least one installed must be controlled by an occupancy or vacancy sensor providing automatic-off functionality. Lighting inside dra	ith the JA8 ires. e not required iwatts of wer, cabinet or . 7A.	 (s) Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS supmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch locating the Heat Pump Space Heater Ready. Systems using gas or propane furnaces to ser unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit identified as "240V ready;" and a reserved main electrical service panel space to a permanently marked as "For Future 240V use." (u) Electric Cooktop Ready. Systems using gas or propane cooktop to serve individ 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." (v) Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plum dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer k the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." 	Il of the follow pplied branch four branch of one circuit su misolation e ison to allow the rive individual uit conductors allow for the tual dwelling rated at leas installation of bing to serve ocation with of panel space
 § 150.0(k)16: Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminait elevated temperature requirements, and Linen Closets. Light Sources internal to drawers, cabinetry or linen closets are to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 50 lumens, and are equipped with controls that automatically turn the lighting off when the draw linen closet is closed. § 150.0(k)2A: Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL (\$ 150.0(k)2B: Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems. Accessible Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually tu on and off. Multiple Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sens to comply with § 150.0(k)2D: Mandatory Requirements. Lighting controls must comply with the applicable requirements of § 110.9. Energy Management Control Systems. An energy management control system (EMCS) may be used to comply with dimm cocupancy, and control requirements if it provides the functionality of the specified control per § 110.9 and the physical cont in § 150.0(k)2P: Dimote Shutoff Controls. In bathrooms, garages, laundry rooms, utility rooms and walk-in closets, at least one installed is provided that they are rodor is closed. 150.0(k)2F: mounted dimming controls that allow the lighting or whase the dimmers contro sources in these spaces must comply with NAAS SL 7A. 150.0(k)2F: mounted dimming c	ith the JA8 ires. e not required wer, cabinet or . 7A. 	 (s) Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS supmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch locating the Heat Pump Space Heater Ready. Systems using gas or propane furnaces to ser unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit identified as "240V ready;" and a reserved main electrical service panel space to a permanently marked as "For Future 240V use." (u) Electric Cooktop Ready. Systems using gas or propane cooktop to serve individ 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." (v) Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plum dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer k the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." 	Il of the follow pplied branch four branch of one circuit su misolation e ison to allow the rive individual uit conductors allow for the tual dwelling rated at leas installation of bing to serve ocation with of panel space
 § 150.0(k)1G: Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant will elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the draw linen closet is closed. § 150.0(k)2A: Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 5 (50.0(k)2B: Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems.* Accessible Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sens to comply with § 150.0(k)2B: Multiple Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sens to comply with § 150.0(k)2C: Mandatory Requirements. Lighting controls must comply with the applicable requirements of § 110.9. § 150.0(k)2C: Mandatory Requirements. Lighting controls must comply with the applicable requirements of § 110.9. § 150.0(k)2D: Controls ontrol systems. An energy management control system (EMCS) may be used to comply with dim or sig 5100.0(k)2A. § 150.0(k)2E: Mandatory Requirements if it provides the functionality of the specified control per § 110.9 and the physical cont in § 150.0(k)2A. § 150.0(k)2E: Mandatory Requirements if therowides the functionality of the specified control per § 110.9 and the physical cont in § 150.0(k)2A. § 150.0(k)2E: Mandatory Requirements if they require sensor providing automatic-of functionality. Lighting inside drawers and c	ith the JA8 ires. e not required i watts of wer, cabinet or 7A. 	 (s) Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS supmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch locating the Heat Pump Space Heater Ready. Systems using gas or propane furnaces to ser unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit identified as "240V ready;" and a reserved main electrical service panel space to a permanently marked as "For Future 240V use." (u) Electric Cooktop Ready. Systems using gas or propane cooktop to serve individ 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." (v) Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plum dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer k the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." 	Il of the follow pplied branch four branch of one circuit su misolation e ison to allow the rive individual uit conductors allow for the tual dwelling rated at leas installation of bing to serve ocation with of panel space
§ 150.0(k)1G: Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JAB. Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant will elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires. The second	ith the JA8 ires. e not required i watts of wer, cabinet or 7A. 	 (s) Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS supmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch locating the Heat Pump Space Heater Ready. Systems using gas or propane furnaces to ser unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit identified as "240V ready;" and a reserved main electrical service panel space to a permanently marked as "For Future 240V use." (u) Electric Cooktop Ready. Systems using gas or propane cooktop to serve individ 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." (v) Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plum dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer k the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." 	Il of the follow pplied branch four branch of one circuit su misolation e ison to allow the rive individual uit conductors allow for the tual dwelling rated at leas installation of bing to serve ocation with of panel space
§ 150.0(k)1G: Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8.* Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources of that are not compliant will elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires. Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 50 lumens, and are equipped with controls that automatically turn the lighting off when the draw linen closet is closed. § 150.0(k)2A: Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL (50.0(k)2A: § 150.0(k)2A: Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems.* Accessible Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually tu on and off.* § 150.0(k)2A: Multiple Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sens to comply with § 150.0(k)2C: § 150.0(k)2C: Mandatory Requirements. Lighting controls must comply with the applicable requirements of § 110.9. Energy Management Control Systems. An energy management control system (EMCS) may be used to comply with dim occupancy, and control requirements, are nero sensor providing automatic-off functionality. Lighting in side drawers and ca opaque fronts or doors must have controls that turm the light off wh	ith the JA8 ires. e not required wer, cabinet or . 7A.	 (s) Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS supmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch locating the Heat Pump Space Heater Ready. Systems using gas or propane furnaces to ser unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit identified as "240V ready;" and a reserved main electrical service panel space to a permanently marked as "For Future 240V use." (u) Electric Cooktop Ready. Systems using gas or propane cooktop to serve individ 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." (v) Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plum dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer k the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." 	Il of the follow pplied branch four branch of one circuit su misolation e ison to allow the rive individual uit conductors allow for the tual dwelling rated at leas installation of bing to serve ocation with of panel space
 Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant will elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires (150.0(k))11: Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closet to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the draw linen closet is closed. Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL (\$150.0(k)2A: Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with the isolated. Sto0.0(k)2B: Interior Switches and Controls. Exhaust fams must be controlled separately from lighting systems. Accessible Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sens to comply with \$150.0(k)2. Multiple Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sens to comply with \$150.0(k)2. Mandatory Requirements. Lighting controls must comply with the applicable requirements of § 110.9. Energy Management Control Systems. An energy management control system (EMCS) may be used to comply with fig \$150.0(k)2. Sto0.0(k)2C: Mandatory Requirements if it provides the functionality of the specified control pe \$ 110.9 and the physical cont in § 150.0(k)2A. Sto0.0(k)2A: Sto0.0(k)2A: Sto0.0(k)2A: Sto0.0(k)2A:	ith the JA8 ires. e not required iwatts of wer, cabinet or . 7A.	 (s) Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS supmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch locating the Heat Pump Space Heater Ready. Systems using gas or propane furnaces to ser unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit identified as "240V ready;" and a reserved main electrical service panel space to a permanently marked as "For Future 240V use." (u) Electric Cooktop Ready. Systems using gas or propane cooktop to serve individ 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." (v) Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plum dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer k the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." 	Il of the follow pplied branch four branch of one circuit su misolation e ison to allow the rive individual uit conductors allow for the tual dwelling rated at leas installation of bing to serve ocation with of panel space
 Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant will elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires (150.0(k))11: Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 50 power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the draw linen closet is closed. Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL § 150.0(k)2A: Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL § 150.0(k)2A: Interior Switches and Controls. Controls that are must be controlled esparately from lighting systems. Accessible Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually to on and off. Multiple Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sens to comply with § 150.0(k)2D: Mandatory Requirements. Lighting controls must comply with the applicable requirements of § 110.9. Energy Management Control Systems. An energy management control system (EMCS) may be used to comply with dim occupancy and control requirements if uprovides the functionality. Lighting inside drawers and co apaque fronts or doors must have controls that turn the light off when the drawer or door is closed. § 150.0(k)2P: Mutomatic Shutoff Controls. In bathrooms, garages, laundry rooms	ith the JA8 ires. e not required i watts of wer, cabinet or . 7A.	 (s) Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS supmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch locating the Heat Pump Space Heater Ready. Systems using gas or propane furnaces to ser unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit identified as "240V ready;" and a reserved main electrical service panel space to a permanently marked as "For Future 240V use." (u) Electric Cooktop Ready. Systems using gas or propane cooktop to serve individ 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." (v) Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plum dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer k the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." 	Il of the follow pplied branch four branch of one circuit su misolation e ison to allow the rive individual uit conductors allow for the tual dwelling rated at leas installation of bing to serve ocation with of panel space
 \$ 150.0(k)10: \$ Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires. Lamps and other separable light sources that are not compliant with to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 50 lumens, and are equipped with controls that automatically turn the lighting off when the draw linen closet is closed. Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL \$ 150.0(k)2A: Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems.* Accessible Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually tu on and off.* Multiple Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sens to comply with § 150.0(k)2B: Energy Management Control Systems. An energy management control system (EMCS) may be used to comply with dim cocupancy, and control requirements. Lighting controls must norby providing automatic-off functionality. Lighting inside drawers and capaque fronts or doors must have controls that allow the light of inducing inside drawers and capaque forthol ed ya noccupancy, sarages, laundry rooms, utility rooms and walk-in closets, at least one installed in the separately form celling-installed lighting. § 150.0(k)2P: Dimmers. Lighting in habitable spaces (e.g., living rooms, kitchens, and bedrooms) must have readily access on unst dave controls that allow the lighting inside drawers and capaque fronts or doors must hav	ith the JA8 ires. e not required watts of wer, cabinet or . 7A.	 (s) Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS supmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch locating the Heat Pump Space Heater Ready. Systems using gas or propane furnaces to ser unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit identified as "240V ready;" and a reserved main electrical service panel space to a permanently marked as "For Future 240V use." (u) Electric Cooktop Ready. Systems using gas or propane cooktop to serve individ 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." (v) Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plum dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer k the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." 	Il of the follow pplied branch four branch of one circuit su misolation e ison to allow the rive individual uit conductors allow for the tual dwelling rated at leas installation of bing to serve ocation with of panel space
 § 150.0(k)1G: Screw based luminaires, Screw based luminaires must contain lamps that comply with Reference Joint Appendix JAB. Light Sources in Enclosed or Recessed Luminaires, Lamps and other separable light sources that are not compliant will be valed temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires (100,0(k))11: Light Sources in Drawers, Cabinets, and Linen Closets. Light sources intamal to drawers, cabinety or linen closets are to comply with Table 150.0.4 or be controlled by vacancy sensors provided that they are rated to consume no more than 150 mover, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting of when the draw linen closet is closed. § 150.0(k)22: Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL § 150.0(k)24: netrior Switches and Controls. Schaust fans must be controlled separately from lighting systems. Accessible Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually to on and dift. § 150.0(k)24: Multiple Controls. Lighting controls must comply with the applicable requirements of § 110.9. Energy Management Control Systems. An energy management control system (EMCS) may be used to comply with 3150.0(k)24. Automatic Shutoff Controls. In bathrooms, garages, laundry rooms, utility noroms and brakes, at dearners and eague space site, Jinking controls must be controled sparately from celling-installed lighting. § 150.0(k)27: Multipie Controls. In bathrooms, garages, laundry rooms, kitchena, and bedrooms) must have readily access mounted dimming controls that allow the lighting of exhaust fans shall be controled independent from thans. Lighting in habitable Spaces (e.g., Jinky coroms, kitchena	ith the JA8 ires. e not required watts of wer, cabinet or . 7A.	 (s) Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS supmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch locating the Heat Pump Space Heater Ready. Systems using gas or propane furnaces to ser unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit identified as "240V ready;" and a reserved main electrical service panel space to a permanently marked as "For Future 240V use." (u) Electric Cooktop Ready. Systems using gas or propane cooktop to serve individ 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." (v) Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plum dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer k the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." 	Il of the follow pplied branch four branch of one circuit su misolation e ison to allow the rive individual uit conductors allow for the tual dwelling rated at leas installation of bing to serve ocation with of panel space
 § 150.0(k)1G: Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JAB. Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant will elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires (150.0(k)11: Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinety or linen closets are to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 50 power, emit no more than 150 lumens, and are equipped with controls that automatically turn the light method that they are light to be manually turn interior Switches and Controls. Exhaust fams must be controlled separately from lighting systems. § 150.0(k)2A: Interior Switches and Controls. Exhaust fams must be controlled separately from lighting systems. § 150.0(k)2A: Interior Switches and Controls. Exhaust fams must be controlled separately from lighting systems. § 150.0(k)2A: Muttiple Controls. Lighting controls must comply with the applicable requirements of § 110.9. Energy Management Control Systems. An energy management control system (EMCS) may be used to comply with dim 5150.0(k)2D: Cocupancy and control requirements. Lighting cortrols must comply rooms, kitches, and bedrooms) must be controled by an occupancy or vacancy sensor providing automatio-off functionality. Lighting in labiblates approxes and the dimension of separes (e.g., mix) grooms, kitches, and bedrooms) must have readily access in sub tex controls in a tallow the lighting to be manually dup and down. Forward phase cut dimense control sources in these spaces must comply with SLS TA. § 150.0(k)2F: Independent controls. Integrated lighting of exhaust	ith the JA8 ires. e not required watts of wer, cabinet or _ 7A. _ TA. _ urned sor is installed ming, trols specified d luminaire abinets with sible wall- olling LED light abinets or al building, or to ne switch lity and meets all more than 5 comply with the where the t agency, mply with any less than 5 ss than 160 e must be	 (s) Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS supmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch locating the Heat Pump Space Heater Ready. Systems using gas or propane furnaces to ser unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit identified as "240V ready;" and a reserved main electrical service panel space to a permanently marked as "For Future 240V use." (u) Electric Cooktop Ready. Systems using gas or propane cooktop to serve individ 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." (v) Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plum dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer k the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." 	Il of the follow pplied branch four branch of one circuit su misolation e ison to allow the rive individual uit conductors allow for the tual dwelling rated at leas installation of bing to serve ocation with of panel space
 § 150.0(1)G. Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JAB. Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not complant witelevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires. Light Sources in Enclosed or recessed luminaires. Lamps and other separable light sources that are not complant wite elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires. Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinety or linen closets are to consume to nome than 150 lumens, and are equipped with controls that automatically turn the lighting off when the draw linen closet is closed. § 150.0(1)22. Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL § 150.0(1)22. Martible Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sens to comply with Controls. Lighting controls must comply with the applicable requirements of § 110.9. Energy Management Control Systems. An energy management Control system (IRCK) may be used to comply with first oconsystem, in Choice System. An energy management Control system first or lis closed. Jioo.(u)22. Mandatory Requirements if throwides the functionality of the specified control per § 110.9 and the physical control in § 150.0(1)24. Mutomatic Shutoff Controls. In bathrooms, garages, laundry rooms, kitling rooms and walk-in closets, at least one installer must be controlled by an occupanty or vacancy sensor providing automatic off functionality. Lighting in phasid arbitrase and control or screens in these spaces must comply with NEMA SSL 7A. § 150.0(ith the JA8 ires. e not required iwatts of wer, cabinet or _ 7A. _ 7A. _ TA. _ TA. _ TA. _ TRE _ 7A. _ TA. _ TRE _ 7A. _ TA. _ TRE _ 5 150.0(§ 150	 (s) Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS supmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch locating the Heat Pump Space Heater Ready. Systems using gas or propane furnaces to ser unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit identified as "240V ready;" and a reserved main electrical service panel space to a permanently marked as "For Future 240V use." (u) Electric Cooktop Ready. Systems using gas or propane cooktop to serve individ 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." (v) Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plum dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer k the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." 	Il of the follow pplied branch four branch of one circuit su misolation e ison to allow the rive individual uit conductors allow for the tual dwelling rated at leas installation of bing to serve ocation with of panel space
 § 150.0(1)G. Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JAB. Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not complant witelevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires. Light Sources in the Inclosed to recessed luminaires. Lamps and other separable light sources that are not complant wite elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires. Light Sources in the rowers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinety or linen closets and to comply with Table 150.0-to to control did by varancy sensors provided that they are related to consum on more than 5 power, ent no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the draw linen closet is closed. Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems.¹ Accessible Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sens to comply with Stoucky.² Mandatory Requirements. Lighting controls must comply with the applicable requirements of § 110.9. Energy Management Control Systems. An energy management Control System (TACK) may be used to comply with a § 150.0(k)/2. Mandatory Requirements if th provides the functionality of the specified control per § 110.9 and the physical control in § 150.0(k)/2. Stouky2: Timmers, Lighting in habitrooms, garages, laundry rooms, kittliny rooms and walk-in closets, at least one installer must be controlled by an occupanty or vacancy sensor providing automatic off functionality. Lighting in listel 4 and wore sources in these spaces must comply with NEMA SSL 7A.	ith the JA8 ires. e not required watts of wer, cabinet or 7A. 7A. 7A. 150.0(\$ 150.0(\$ 1	 (s) Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS supmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch locating the Heat Pump Space Heater Ready. Systems using gas or propane furnaces to ser unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit identified as "240V ready;" and a reserved main electrical service panel space to a permanently marked as "For Future 240V use." (u) Electric Cooktop Ready. Systems using gas or propane cooktop to serve individ 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." (v) Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plum dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer k the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." 	Il of the follow pplied branch four branch of one circuit su misolation e ison to allow the rive individual uit conductors allow for the tual dwelling rated at leas installation of bing to serve ocation with of panel space
Image: Stop(I):G Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JAB. Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant witelevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires. § 150.0(k)11: Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinety or linen closet is closed. § 150.0(k)22: Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL Accessible controls. Lyshing must have readily accessible wall-mounted controls that allow the lighting to be manually to an and off. Multiple Controls. Controls. Exhaust fans must be controlled separately from lighting systems. Accessible Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sent to comply with § 150.0(k). § 160.0(k)22: Energy Management Control Systems. An energy management control system [LMCS] may be used to comply with dim cognancy, and control requirements if it provides the functionality of the specified control per § 110.9 and the physical control is phase (e.g., ling rooms, dining rooms, ditting rooms, ditti	ith the JA8 ires. e not required is watts of wer, cabinet or _7A. _7A. 	 (s) Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS supmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch locating the Heat Pump Space Heater Ready. Systems using gas or propane furnaces to ser unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit identified as "240V ready;" and a reserved main electrical service panel space to a permanently marked as "For Future 240V use." (u) Electric Cooktop Ready. Systems using gas or propane cooktop to serve individ 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." (v) Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plum dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer k the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." 	Il of the follow pplied branch four branch of one circuit su misolation e ison to allow the rive individual uit conductors allow for the tual dwelling rated at leas installation of bing to serve ocation with of panel space
 § 150.0(k)16: Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires. Using Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinety on the draw line closet is closed. Light Sources and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 500(k)22: Interior Switches and Controls. Light sources internal to drawers, cabinety on the draw line closet is closed. Sto0(k)22: Interior Switches and Controls. Light go controls must comply with the reading accessible wall-mounted controls that allow the lighting to be manually to on and off. Multiple Controls. Controls must no bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sent to comply with \$150.0(k). Brogry Reagement Control Systems. An energy management control system (EMCS) may be used to comply with dim (S100.0(k)). Brogry Reagement Control Systems. An energy management control system (EMCS) may be used to comply with dim (S100.0(k)). Sto0(k)22: Dimmers. Lighting not her lighting to the manually dup company, and control regriter mass dires, dimary management control system (S100.0(k)). Sto0(k)24: Automatic Shutoff Controls. In bathrows, granges, laundry rooms, utility rooms and walk-in closets, at least on installed infinition in habibibite spaces (e.g., living rooms, dimary rooms, kitches, and bedroms), hust here reality access mounted dimming controls that allow the lighting to the manually dup and walk-in closets, at least one installed in physical control system function of system funce and closets, at least on installed spaces (e.g., living rooms	ith the JA8 ires. e not required wer, cabinet or _7A. _7A. 	 (s) Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS supmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch locating the Heat Pump Space Heater Ready. Systems using gas or propane furnaces to ser unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit identified as "240V ready;" and a reserved main electrical service panel space to a permanently marked as "For Future 240V use." (u) Electric Cooktop Ready. Systems using gas or propane cooktop to serve individ 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." (v) Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plum dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer k the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." 	Il of the follow pplied branch four branch of one circuit su misolation e ison to allow the rive individual uit conductors allow for the tual dwelling rated at leas installation of bing to serve ocation with of panel space
1500(k)16: Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JAB. Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant wit 1500(k)11: Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with 1500(k)21: Light Sources in Dravens, Cabinets, and Linen Closets. Light sources in the able of mencioset is colored by an occupation with Table 150.04 or be confloid by vacancy sensors provided that they are rated to consume no more than 5 power, emit no more than 150 lumens, and are equipped with controls that automatically tum the lighting off when the drav 1500(k)21: Interior Switches and Controls. Lighting must have readily accessible wall-mounted controls that alow the lighting to the manually tu or and off. Multiple Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sent 150.0(k)24: Mandatory Requirements. Lighting controls must comply with the applicable requirements of § 110.9. Energy Management Control Systems. An energy management control system (EMCS) may be used to comply with § 150.0(k)24: Mundatory Requirements. Lighting controls must comply with the applicable requirements of § 110.9. Energy Management Controls. Systems, An energy management control system (EMCS) may be used to comply with § 150.0(k)24: Mundatory Requirements in bathrooms, garages, laundry rooms, utility rooms and waik-in closets, at least one installed § 150.0(k)24 Mundatory Shutoff Controls. In bathrooms, garages, laundry rooms, duiting rooms, Ruthers, and bedrooms) must have readily accessite § 150.0(k)24 Mundatory Shutoff Controls. In bathrooms, garages, laundry rooms, duity mores and waik-in closets, at least one installed § 150.0(k)24 Dimmers. Lighting in habitable spaces (e.g., living rooms, duitory rooms, duitory rooms, duitory rooms, Stichers, and bedrooms) must have readily accessite § 150.0(k)24 Dimme	ith the JA8 ires. e not required watts of wer, cabinet or _7A. _7A. 	 (s) Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS supmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch locating the Heat Pump Space Heater Ready. Systems using gas or propane furnaces to ser unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit identified as "240V ready;" and a reserved main electrical service panel space to a permanently marked as "For Future 240V use." (u) Electric Cooktop Ready. Systems using gas or propane cooktop to serve individ 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." (v) Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plum dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer k the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." 	Il of the follow pplied branch four branch of one circuit su misolation e ison to allow the rive individual uit conductors allow for the tual dwelling rated at leas installation of bing to serve ocation with of panel space
 \$100,0(11C Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference. Joint Appendix JAB. Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with standard temperature requirements, including marking requirements, must not be installed in enclosed or necessed luminaires. Screw based luminaires and there separable light sources that are not compliant with rable 150.0.4 or the controlled by vacancy sensors provided that they are rated to consume no more than 50 power, emit no more than 50 lumens, and are equipped with controls that automatically turn the lighting of when the draw inclosed is closed. 110.00(2). Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems. Accessible Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sent to comply with 5150.00(2). Energy Management Control Systems. An energy management control system (EMCS) may be used to comply with 5150.00(2). Energy Management Control Systems. An energy management control system (EMCS) may be used to comply with 5150.00(2). Coupancy, and controls hat turn the lighting or twacancy sensor providing automatic-off functionality. Lighting inside drawers and capage from to down such ave controls down. Forward phase out dimmers such as the sequence of the sole and. 150.00(2). Dimmers. Lighting in habitable spaces (e.g., Wing rooms, dining rooms, kitchens, and bedrooms) must have enally aucourd guardense of the sole addrawer and control shat at met and sole addrawer and control shat at more single-family residences and the applicable requirements as the sole of more sole addrawer sole addrawer and a sole addrawer and control shat and the lighting of male addrawer and copage addrawer and controls and addrawer addrawer and control	ith the JA8 ires. e not required iwats of wer, cabinet or . 7A. 	 (s) Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS supmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch locating the Heat Pump Space Heater Ready. Systems using gas or propane furnaces to ser unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit identified as "240V ready;" and a reserved main electrical service panel space to a permanently marked as "For Future 240V use." (u) Electric Cooktop Ready. Systems using gas or propane cooktop to serve individ 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." (v) Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plum dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer k the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." 	Il of the follow pplied branch four branch of one circuit su misolation e ison to allow the rive individual uit conductors allow for the tual dwelling rated at leas installation of bing to serve ocation with of panel space
Image: Stability in the second seco	ith the JA8 ires. e not required wer, cabinet or . 7A. urned sor is installed ming, trols specified d luminaire abinets with sible wall- lling LED light abinets or al building, or to neswitch ity and meets all more than 5 comply with the where the t agency, mply with any less than 50 enust be impent and a single-family ating system. (b)-(c) must be f a double pole	 (s) Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS supmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch locating the Heat Pump Space Heater Ready. Systems using gas or propane furnaces to ser unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit identified as "240V ready;" and a reserved main electrical service panel space to a permanently marked as "For Future 240V use." (u) Electric Cooktop Ready. Systems using gas or propane cooktop to serve individ 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." (v) Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plum dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer k the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." 	Il of the follow pplied branch four branch of one circuit su misolation e ison to allow the rive individual uit conductors allow for the tual dwelling rated at leas installation of bing to serve ocation with of panel space
 Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JAB. Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant wit elevated temperature requirements, including marking requirements, must not be installed in enclosed or consume no more than 50 towney, emit no more than 50 towney. Scholled by vaccourse internal to drawers, cabinety or linen closets are not complex with rable 150.04.04 to exoting the sources internal to drawers, cabinety or linen closet are not complex with rable 150.04.04 to exot built controls that automatically turn the lighting of them the draw limit costs to account and controls. All forward phase out dimmers used with LED light sources must comply with NEMA SSL field/04/24. Interior Switches and Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually lu on and off. Sto0.04(2): Mandatory Requirements. Lighting controls must comply with the applicable requirements of § 110.9. Energy Management Controls. Sprems. An energy management control system. School (2): Coupport, with 2 100.04(2): Coupport, with 2 100.04(2): Coupport, with 2 100.04(2): Coupport, with control systems. An energy management control system (EMCS) may be used to comply with dim coupport, with 5 100.04(2): Coupport, with control systems. An energy management control system (EMCS) may be used to comply with dim coupport, with 5 10.04(2): Coupport, with Controls. In bathtrooms, garages, laundry rooms, utility rooms and wak-in closets, at least one installed mawes and cauge first or down must have controls hart ume teight of the mit me drawing regulation of the same lighting in bable spaces (e.g., linity coroms, attribute and downs: and bate control with the sphees of dimense onto in § 150.04(2). Independent controle. Inspartating thy more shares the control with and the same and cauge sh	ith the JA8 ires. e not required wer, cabinet or . 7A. urned sor is installed ming, trols specified d luminaire abinets with sible wall- lling LED light abinets or al building, or to neswitch ity and meets all more than 5 comply with the where the t agency, mply with any less than 50 enust be impent and a single-family ating system. (b)-(c) must be f a double pole	 (s) Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS supmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch locating the Heat Pump Space Heater Ready. Systems using gas or propane furnaces to ser unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit identified as "240V ready;" and a reserved main electrical service panel space to a permanently marked as "For Future 240V use." (u) Electric Cooktop Ready. Systems using gas or propane cooktop to serve individ 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." (v) Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plum dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer k the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." 	Il of the follow pplied branch four branch of one circuit su misolation e ison to allow the rive individual uit conductors allow for the tual dwelling rated at leas installation of bing to serve ocation with of panel space
Society in the series of	ith the JA8 ires. e not required wer, cabinet or . 7A. urned sor is installed ming, trols specified d luminaire abinets with sible wall- lling LED light abinets or al building, or to neswitch ity and meets all more than 5 comply with the where the t agency, mply with any less than 50 enust be impent and a single-family ating system. (b)-(c) must be f a double pole	 (s) Energy Storage System (ESS) Ready. All single-family residences must meet al equipment with backed up capacity of 60 amps or more and four or more ESS supmain service to a subpanel that supplies the branch circuits in § 150.0(s); at least source collocated at a single panelboard suitable to be supplied by the ESS, with near the primary exit, and one circuit supplying a sleeping room receptacle outlet; 225 amps; sufficient space must be reserved to allow future installation of a system panelboard, with raceways installed between the panelboard and the switch locating the Heat Pump Space Heater Ready. Systems using gas or propane furnaces to ser unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit identified as "240V ready;" and a reserved main electrical service panel space to a permanently marked as "For Future 240V use." (u) Electric Cooktop Ready. Systems using gas or propane cooktop to serve individ 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." (v) Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plum dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer k the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the imarked as "For Future 240V use." 	Il of the follow pplied branch four branch of one circuit su misolation e ison to allow the rive individual uit conductors allow for the tual dwelling rated at leas installation of bing to serve ocation with of panel space

36, 3 × /5/2 24"

8

7

ne compliance approach I per square foot or SHGC) values from leakage must be Bureau of Household § 110.8(g). ce values of the cool roof is specified epartment of Consumer 16 area-weighted r area-weighted average 54 or less. Attic access st be gasketed to Itration and exfiltration op of a drywall ceiling. R-20 in 2x6 inch wood actor not exceeding 0.102. nsulation material alone inch; be protected from nents of § 110.8(g). Class I or Class II e exception to ned space side of or outdoors must hav _ pening of the firebox. st six square inches in

, and all other 10.2-N.* electric resistance e heat pump alone; entary heating, and CS) must have a insulation, or tank

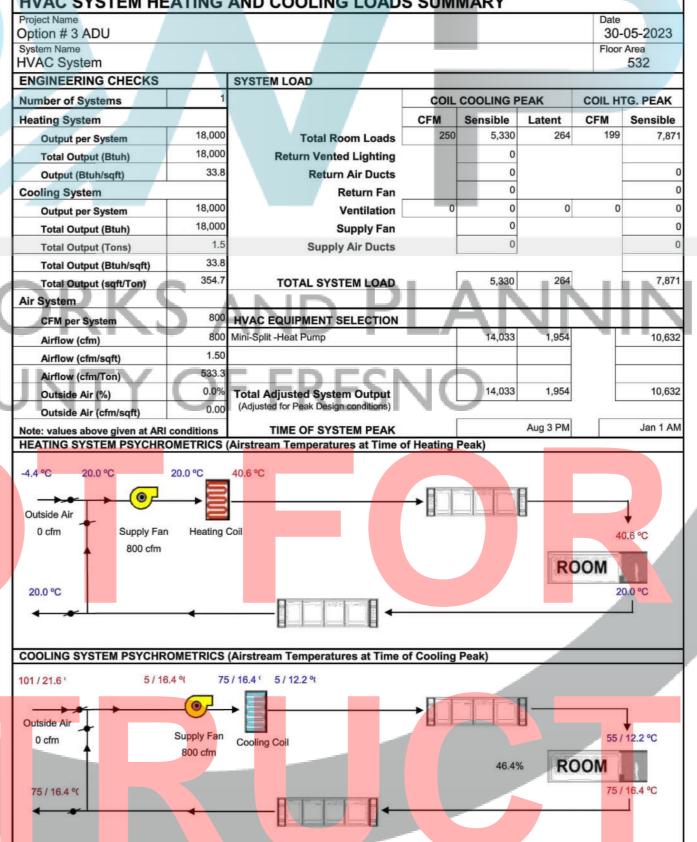
ve isolation valves with are closed.

HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY ady interconnection ated raceway from the Option # 3 ADU ntified and have their rator, one lighting circuit System Name HVAC System ninimum busbar rating of vitch within 3' of the main ENGINEERING CHECKS SYSTEM LOAD kup power source. Number of Systems COIL COOLING PEAK include: A dedicated mps with the blank cover Heating System ble pole circuit breaker 18,000 18,000 33.8 5,330 Output per System Total Room Loads dedicated unobstructed **Return Vented Lighting** Total Output (Btuh) blank cover identified as Return Air Ducts Output (Btuh/sqft) uit breaker permanently **Return Fan** Cooling System units must include: A Output per System 18.00 Ventilation ated at least 30 amps with 18,000 Supply Fan Total Output (Btuh) tallation of a double pole Total Output (Tons) Supply Air Ducts Total Output (Btuh/sqft) Total Output (sqft/Ton) TOTAL SYSTEM LOAD ir System N I PN HVAC EQUIPMENT SELECTION CFM per System Mini-Split -Heat Pump 14,033 Airflow (cfm) Airflow (cfm/sqft) Airflow (cfm/Ton) Outside Air (%) Total Adjusted System Output (Adjusted for Peak Design conditions 14,033 Outside Air (cfm/sqft
 Note: values above given at ARI conditions
 TIME OF SYSTEM PEAK

 HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)
 20.0 °C 20.0 °C 40.6 °C -4 4 °C Outside Air 0 cfm Supply Fan Heating Coil 800 cfm 20.0 °C + * COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak) 5/16.4 % 75/16.4 5/12.2 % 101 / 21.6 ' -----Outside Air 0 cfm 75 / 16.4 %

6

§ 110.5:	Pilot Lights. Continuously burning pilot lights are prohibited for natural gas: fan-type central furnaces; household cooking appliances (except appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu per hour); and pool a		
§ 150.0(h)1:	spa heaters. * Building Cooling and Heating Loads. Heating and/or cooling loads are calculated in accordance with the ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; the SMACNA Residential Comfort System Installation Standards Manual; or the ACCA Manual J using design conditions specified in § 150.0(h)2.		
§ 150.0(h)3A:	Clearances. Air conditioner and heat pump outdoor condensing units must have a clearance of at least five feet from the outlet of any dryer.		
§ 150.0(h)3B:	Liquid Line Drier. Air conditioners and heat pump systems must be equipped with liquid line filter driers if required, as specified by the manufacturer's instructions.		
§ 150.0(j)1:	Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation. All domestic hot water piping must be insulated as specified in § 609.11 of the California Plumbing Code. *		
§ 150.0(j)2:	Insulation Protection. Piping insulation must be protected from damage, including that due to sunlight, moisture, equipment' maintenance, and wind as required by §120.3(b). Insulation exposed to weather must be water retardant and protected from UV light (n adhesive tapes). Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must include, or be protected by, a Class I or Class II vapor retarder. Pipe insulation buried below grade must be installed in a waterproof an non-crushable casing or sleeve.		
§ 150.0(n)1:	Gas or Propane Water Heating Systems. Systems using gas or propane water heaters to serve individual dwelling units must designate a space at least 2.5' x 2.5' x 7' suitable for the future installation of a heat pump water heater, and meet electrical and plumbing requirements, based on the distance between this designated space and the water heater location; and a condensate drain no more than 2" higher than the base of the water heater		
§ 150.0(n)3:	Solar Water-heating Systems. Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or by a listing agency that is approved by the executive director.		
ucts and Fans:			
§ 110.8(d)3:	Ducts. Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.		
§ 150.0(m)1:	Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated the R-6.0 or higher; ducts located entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8) do not require insulation. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable UL requirements, or aerosol sealant that meets UL 72. The combination of mastic and either mesh or tape must be used to seal openings greater than ¼", If mastic or tape is used. Building cavities, air handler support platforms, and plenums designed or constructed with materials other than sealed sheet metal, duct board of flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts; ducts installed in these spaces must not be compressed. *		
§ 150.0(m) <mark>2:</mark>	Factory-Fabricated Duct Systems. Factory-fabricated duct systems must comply with applicable requirements for duct construction, connections, and closures; joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.		
§ 150.0(m)3:	Field-Fabricated Duct Systems. Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.		
§ 150.0(m)7:	Backdraft Damper. Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic dampers.		
§ 150.0(m) <mark>8:</mark>	Gravity Ventilation Dampers. Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.		
§ 150.0(m) <mark>9:</mark>	Protection of Insulation. Insulation must be protected from damage due tosunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather must be suitable for outdoor service (e.g., protected by aluminum, sheet metal, painted canvas, or plastic cover). Cellular foam insulation must be protected as above or painted with a water retardant and solar radiation-resistant coating.		
§ 150.0(m) <mark>10:</mark>	Porous Inner Core Flex Duct. Porous inner cores of flex ducts must have a non-porous layer or air barrier between the inner core and outer vapor barrier.		
§ 150.0(m)11:	Duct System Sealing and Leakage Test. When space conditioning systems use forced air duct systems to supply conditioned air to a occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with Reference Residential Appendix RA3.1.		
§ 150.0(m)12:	Air Filtration. Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 or equivalent filters. Filters for space conditioning systems must have a two inch depth or can be one inch if sized per Equation 150.0-A. Clean-filter pressure drop and labeling must meet the requirements in §150.0(m)12. Filters must be accessible for regular service. Filter racks or grilles must use gaskets, sealing, or other means to close gaps around the inserted filters to and prevents air from bypassing the filter.*		



5



2022 Single-Family Residential Mandatory Requirements Summary

Space Conditioning System Airflow Rate and Fan Efficacy. Space conditioning systems that use ducts to supply cooling must have a hole for the placement of a static pressure probe, or a permanently installed static pressure probe in the supply plenum. Airflow must § 150.0(m)13: be ≥ 350 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.45 watts per CFM for gas furnace air handlers and ≤ 0.58 watts per CFM for all others. Small duct high velocity systems must provide an airflow ≥ 250 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.62 watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3.3. *

§ 150.0(o)1:	Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1. *		
§ 150.0(o)1B:	Central Fan Integrated (CFI) Ventilation Systems. Continuous operation of CFI air handlers is not allowed to provide the whole- dwelling unit ventilation airflow required per §150.0(o)1C. A motorized damper(s) must be installed on the ventilation duct(s) that prevents all airflow through the space conditioning duct system when the damper(s) is closed and controlled per §150.0(o)1Biii&iv. CFI ventilation systems must have controls that track outdoor air ventilation run time, and either open or close the motorized damper(s) for compliance with §150.0(o)1C.		
§ 150.0(o)1C:	Whole-Dwelling Unit Mechanical Ventilation for Single-Family Detached and townhouses. Single-family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow specified in § 150.0(o)1Ci-iii.		
§ 150.0(o)1G:	Local Mechanical Exhaust. Kitchens and bathrooms must have local mechanical exhaust; nonenclosed kitchens must have demand- controlled exhaust system meeting requirements of §150.0(o)1Giii,enclosed kitchens and bathrooms can use demand-controlled or continuous exhaust meeting §150.0(o)1Giii-iv. Airflow must be measured by the installer per §150.0(o)1Gv, and rated for sound per §150.0(o)1Gvi. *		
§ 150.0(o)1H&I:	Airflow Measurement and Sound Ratings of Whole-Dwelling Unit Ventilation Systems. The airflow required per § 150.0(o)1C must be measured by using a flow hood, flow grid, or other airflow measuring device at the fan's inlet or outlet terminals/grilles per Reference Residential Appendix RA3.7. Whole-Dwelling unit ventilation systems must be rated for sound per ASHRAE 62.2 §7.2 at no less than the minimum airflow rate required by §150.0(o)1C.		
§ 150.0(o)2:	Field Verification and Diagnostic Testing. Whole-Dwelling Unit ventilation airflow, vented range hood airflow and sound rating, and HRV and ERV fan efficacy must be verified in accordance with Reference Residential Appendix RA3.7. Vented range hoods must be verified per Reference Residential Appendix RA3.7.4.3 to confirm if it is rated by HVI or AHAM to comply with the airflow rates and sound requirements per §150.0(o)1G		
ool and Spa Sys	tems and Equipment:		
§ 110.4(a):	Certification by Manufacturers. Any pool or spa heating system or equipment must be certified to have all of the following: compliance with the Appliance Efficiency Regulations and listing in MAEDbS; an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting; a permanent weatherproof plate or card with operating instructions; and must not use electric resistance heating. *		
§ 110.4(b)1:	Piping. Any pool or spa heating system or equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future solar heating.		
§ 110.4(b)2:	Covers. Outdoor pools or spas that have a heat pump or gas heater must have a cover.		
§ 110.4(b)3:	Directional Inlets and Time Switches for Pools. Pools must have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.		
§ 110.5:	Pilot Light. Natural gas pool and spa heaters must not have a continuously burning pilot light.		
§ 150.0(p):	Pool Systems and Equipment Installation. Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves. *		
ighting:			
§ 110.9:	Lighting Controls and Components. All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9.*		
§ 150.0(k)1A:	Luminaire Efficacy. All installed luminaires must meet the requirements in Table 150.0-A, except lighting integral to exhaust fans, kitchen range hoods, bath vanity mirrors, and garage door openers; navigation lighting less than 5 watts; and lighting internal to drawers, cabinets, and liner closets with an efficacy of at least 45 lumens per watt.		
150.0(k)1B:	Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8.*		
§ 150.0(k)1C:	Recessed Downlight Luminaires in Ceilings. Luminaires recessed into ceilings must not contain screw based sockets, must be airtight and must be sealed with a gasket or caulk. California Electrical Code § 410.116 must also be met.		
§ 150.0(k)1D:	Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.		
§ 150.0(k)1E:	Blank Electrical Boxes. The number of electrical boxes that are more than five feet above the finished floor and do not contain a luminaire or other device shall be no more than the number of bedrooms. These boxes must be served by a dimmer, vacancy sensor control, low voltage wiring, or fan speed control.		
§ 150.0(k)1F:	Lighting Integral to Exhaust Fans. Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(k).		

5/6/22



500 SQ. FT. MODEL (532 SQ.FT.) W/ ADAPTABLE FEATURES **OPTION #**3 PROJECT ACCESSORY **DWELLING UNIT**

PWP23-003

DEPARTMENT OF PUBLIC WORKS AND PLANNING



CAPITAL PROJECTS DIVISION

2220 Tulare St., Ste. 720, Fresno, CA. 93721 Phone: (559) 262-4212 Fax: (559) 262-4879



UPDATE

JUNE 26, 2023

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE ARCHITECT AND SHALL NOT BE USED ON ANY OTHER PROJECT OR LOCATIONS EXCEPT AS DESCRIBED ON THE DRAWINGS WITHOUT WRITTEN AGREEMENT WITH THE ARCHITECT.

TITLE TITLE 24 MANDATORY **MEASURES**

SCALE	
	MM-1
ISSUE DATE	JOB NUMBER
APRIL 12, 2023	2023_20
DRAWN BY	CHECKED BY
Author	Checker

4