

ACCESSORY DWELLING UNIT *OPTION # 2*

749 SQ. FT. MODEL (746 SQ.FT.)

1-BEDROOM / 1-BATH
COVERED PORCH



OWNER: _____
ADDRESS: _____
TEL. NO.: _____

PROJECT INFORMATION



PROJECT OF:
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)	746 SF
COVERED PORCH	179 SF
TOTAL	925 SF

BUILDING DATA:

OCCUPANCY CLASSIFICATION: R3
GROUP USE : (R-3) SINGLE FAMILY RESIDENCE
TYPE OF CONSTRUCTION: VB
SPRINKLERED: YES

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 FEES FOR THE DEFERRED SUBMITTALS. REFER TO "RIGHTS" AND LIMITATIONS OF USING PRE-APPROVED PLANS" FOR ADDITIONAL INFORMATION.

1. ROOF TRUSSES
2. FIRE SPRINKLERS
3. SOLAR PV - MINIMUM 2.13 kW DC per TITLE 24
4. HVAC (DUCTLESS MINI-SPLIT HEAT PUMP WITH MINIMUM HEATING EFFICIENCY - 8.5 HSPF / COOLING EFFICIENCY- 15 SEER 9 EER) WITH PERMANENTLY INSTALLED WALL MOUNTED THERMOSTAT @ LIVING ROOM.

REQUIREMENTS

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

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

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

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

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8.5" x 11" ATTACHMENTS:
STRUCTURAL ANALYSIS
TITLE 24 DOCUMENTATIONS

ADDITIONAL REQUIREMENTS

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:

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

THE COUNTY OF FRESNO
DEPARTMENT OF PUBLIC WORKS AND PLANNING
DEVELOPMENT SERVICES
2220 TULARE ST. STREET LEVEL
FRESNO, CA. 93721
PHONE (559) 600-4219

NORTH CENTRAL FIRE DEPARTMENT
15850 W. KEARNEY BLVD.
KERMAN, CA. 93630
PHONE (559) 275-5531

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

2. PROVIDE A COMPLETE SITE PLAN AS PART OF THE PLANS, DRAWN TO SCALE, ON A FULL-SIZE SHEET WITH THE FOLLOWING INFORMATION:
 - A. PROVIDE PROPERTY LINE DIMENSIONS.
 - B. INDICATE A NORTH ARROW.
 - C. DIMENSION DISTANCES TO ALL PROPERTY LINES AND ADJACENT BUILDINGS.
 - D. LOCATE THE FOLLOWING:
 - a. ALL STRUCTURES ON-SITE.
 - b. EASEMENTS AND SETBACKS.
 - c. MECHANICAL OR OTHER GROUND MOUNTED EQUIPMENT.
 - d. LPG TANKS OR GAS METER.
 - e. WELLS OR WATER METERS.
 - f. SEPTIC SYSTEMS (INCLUDING 100% EXPANSION AREA FOR LEACHING FIELD) OR SEWER CONNECTIONS.
 - g. DRIVEWAY (MATERIALS TO BE USED FOR THE DRIVEWAY).

3. PROVIDE A DRAINAGE PLAN FOR THE DEVELOPED PORTION OF THE PROPERTY [CRC R300.2].
 - A. FOR VALLEY FLOOR ("FLAT" LAND) PARCELS, 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 Q].
- 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 Q].
- B. SHOW DRAINAGE PATTERNS TO THE STREET OR AN APPROVED DRAINAGE FACILITY (EXISTING AND PROPOSED CONTOURS) INCLUDING:
 - TERRACING.
 - SWALES.
 - RETAINING WALLS.
 - ROOF RAINWATER RUNOFF. SHOW GUTTERS AND DOWNSPOUT DISCHARGE LOCATIONS.

- 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 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].

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 PROPOSED BUILDING FOR A MINIMUM OF FIVE FEET." [FCOC 15.08.020 Q].
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].

APPLICABLE CODE

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

REFER TO G-101, G-102 FOR ADDITIONAL INFORMATION.

GENERAL NOTES:

1. CONSTRUCTION WASTE MANAGEMENT PLAN MUST BE FINALIZED PRIOR TO OCCUPANCY.
2. 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.
3. 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

1. 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.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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.
7. 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.
8. 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.
9. 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.
10. 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

- A. THE BATHROOM SHALL BE PROVIDED WITH REINFORCEMENT INSTALLED IN ACCORDANCE WITH THIS SECTION, WHERE THERE IS NO BATHROOM ON THE ENTIRE LEVEL, AT LEAST ONE BATHROOM ON THE SECOND OR THIRD FLOOR OF THE DWELLING SHALL COMPLY WITH THIS SECTION. [CRC R327.1.1]
 1. REINFORCEMENT SHALL BE SOLID LUMBER OR OTHER CONSTRUCTION MATERIALS APPROVED BY THE ENFORCING AGENCY. [CRC R327.1.1(1)]
 2. 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)]
 3. 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)]
 4. SHOWER REINFORCEMENT SHALL BE CONTINUOUS WHERE WALL FRAMING IS PROVIDED. [CRC R327.1.1(4)]
 5. 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 8 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 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]
- B. DOORBELL BUTTONS SHALL BE PERMITTED, PROVIDED REINFORCEMENT FOR INSTALLATION OF 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]
- C. 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.

749 SQ. FT. MODEL (746 SQ.FT.)

OPTION # 2

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



UPDATE

JULY 12, 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

COVER PAGE

SCALE

As indicated

A-100

ISSUE DATE

JOB NUMBER

MARCH 7, 2023

2023_22

DRAWN BY

CHECKED BY

Author

Checker

1. 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 OTHER DISCREPANCIES 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, CITY ENGINEER AND/OR 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.
- E. 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.
- G. 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.
- I. INSPECTIONS: THE CONTRACTOR SHALL OBTAIN ALL REQUIRED INSPECTIONS FOR HIS WORK AND GIVE THE OWNER TIMELY NOTICE OF HIS INTENT TO HAVE INSPECTION.
- J. 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 ARCHITECT.
- L. 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 SHALL ADVISE 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
FEDERAL AND COUNTY LAWS AND ORDINANCES
- O. 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.
- P. 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.
- Q. 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.
- R. SUBCONTRACTOR SHALL BE OF QUALITY AND REMOVING FROM THE JOB SITE 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 TOTAL WORK. EACH 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 COMPLY 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.
- T. 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.
- U. ALL TRADE NAMES AND MATERIALS CONTAINED HEREIN ESTABLISH QUALITY STANDARDS. SUBSTITUTIONS ARE PERMITTED, WITH PRIOR APPROVAL BY 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.
- V. CONSTRUCTION DOCUMENTS IDENTIFIED A "NOT FOR CONSTRUCTION" WATERMARK ON ANY OR ALL SHEETS MAY BE USED FOR INFORMATION PURPOSES ONLY. NO WORKMANSHIP OR MATERIALS 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 DETAILS CONTAINED HEREIN ARE TYPICAL UNLESS NOTED OTHERWISE.
- X. 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 THIS PROJECT.
- Y. 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 FURNISH A WRITTEN GUARANTEE STATING THAT ALL WORK EXECUTED BY HIM OR HIS EMPLOYEES SHALL BE FREE FROM DEFECTS OF MATERIALS AND WORKMANSHIP FOR 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:**
- A. 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.
 - B. PROTECTION: USE ALL MEANS NECESSARY TO PROTECT EXISTING OBJECTS TO REMAIN AND IN THE EVENT OF DAMAGE, IMMEDIATELY MAKE ALL REPAIRS AND REPLACEMENTS NECESSARY TO THE SATISFACTION OF THE ARCHITECT AND AT NO ADDITIONAL COST TO THE OWNER.
- 7. PREPARATION:**
- A. 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.
 - B. NOTIFICATION: THE CONTRACTOR SHALL INFORM THE OWNER AND ARCHITECT OF THE DATE FOR START OF SITE WORK. THE DATE SHALL BE ACCEPTABLE TO ALL PARTIES.
 - C. SITE INSPECTION:
 - PRIOR TO ANY DEMOLITION, CAREFULLY INSPECT THE ENTIRE SITE & ALL OBJECTS DESIGNATED TO BE REMOVED & TO REMAIN.
 - LOCATE ALL UTILITY LINES AND EQUIPMENT. DETERMINE WHICH UTILITIES MUST BE REMOVED AND WHICH ARE TO REMAIN AS WELL AS ALL REQUIREMENTS FOR DISCONNECTING OR CAPPING.
 - D. PROTECTIVE WORKS:
 - DEMOLITION SHALL NOT PROCEED UNTIL SUCH PROTECTIVE WORKS ARE PLACED AS ARE REQUIRED TO PROTECT THE PROPERTY AND PERSONNEL FROM THAT HAZARDS OF THE 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.
 - E. 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.

8. **DISCONNECTION OF UTILITIES:**
BEFORE STARTING JOB OPERATIONS, DISCONNECT OR ARRANGE FOR THE DISCONNECTION OF ALL UTILITIES TO BE REMOVED, PERFORMING ALL SUCH WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY COMPANY OR AGENCY INVOLVED, AND WITH OWNER.

9. PROTECTION OF UTILITIES:
 - a. 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 OWNER.
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. CLEANINGS UP: THE CONTRACTOR AND SUBCONTRACTORS SHALL AT ALL TIMES KEEP THE PREMISES FREE OF CUMULATIVE DEBRIS AND 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, ETC., EQUIPMENT, FINISHED 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 OR FIELD ENGINEER HAS ANY DOUBTS AS TO THE MEANING OF ANY DETAIL, HE MUST FIRST TRY 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 IN THE FIELD BEFORE DEMOLITION. 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 BE WRITTEN NOTES THEREON BEING GIVEN IN PREFERENCE TO INFORMATION FURNISHED IN THE FORM OF LINES ON DRAWINGS. UNDETAILED 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. DIMENSIONAL DISCREPANCIES: WHEN THERE IS A DISCREPANCY BETWEEN SCALED DIMENSIONS, DIMENSION LINES ARE TO FACE OF STUD UNLESS OTHERWISE UNLESS.
17. PLEASE NOTE THAT ALL SPECIFIED MATERIALS ARE SUBJECT TO CHANGE UPON APPROVAL BY ALL PARTIES WITH AN EQUAL AND COMPARABLE ALTERNATE.

1. REFER TO STRUCTURAL ENGINEERING CALCULATIONS AND THE MOST CURRENT SOILS REPORT FOR THE PERFORMANCE REQUIREMENTS FOR CONCRETE FOUNDATIONS.

2. CONCRETE STRENGTH SHALL BE PER CRC SECTION R402.2 AND TABLE R402.2 REFER TO STRUCTURAL ENGINEERING CALCULATIONS FOR ADDITIONAL INFORMATION.
3. ALL REINFORCING SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION R404.1.3.3.2.
4. CONCRETE PROPORTION SHALL BE PLACED IN ACCORDANCE WITH CRC SECTION R404.1.3.3.4.
5. CONCRETE SHALL BE CURED IN ACCORDANCE WITH CRC CHAPTER 44 D 318-14.
6. ALL FORM WORK SHALL BE DESIGNED, CONSTRUCTED, UTILIZED, AND REMOVED PER CRC SECTION R404.1.3.3.6
7. CONDUIT, PIPES, OR SLEEVES MAY PENETRATE OR BE EMBEDDED IN CONCRETE ONLY IN ACCORDANCE WITH PER G 318-14.
8. CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CRC SECTION R404.1.3.3.7.
9. ALL STEEL REINFORCING OF CONCRETE SHALL BE DONE IN ACCORDANCE WITH CRC SECTION R404.1.3.3.7.1.
10. TOP OF CONCRETE SLABS TO BE MINIMUM 6" (6" 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 LOCATION PRIOR TO 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 806.2.8 & R606.3.5.
3. WATER USED IN MORTAR OR GROUT SHALL BE CLEAN AND FREE OF DELETERIOUS AMOUNTS OF ACID, ALKALIS, OR ORGANIC MATERIAL OR OTHER HARMFUL SUBSTANCES.
4. EXCEPT FOR MORTAR LISTED IN TABLE 703.2.9 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 WITH SECTION R606.2.8.1, R606.2.8.2 AND R606.2.8.3 (CRC SECTION R606.2.8).
5. 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 AS PERMITTED TO BE USED AS GROUT (CRC SEC R606.2.12).
6. CEMENT SHALL BE PORTLAND CEMENT CONFORMING TO ASTM C150-12.
7. ALL BRICK SHALL CONFORM TO ASTM C1068-13 FOR SOLID UNITS OF THIN VENEER BRICK.
8. UNLESS SPECIFICALLY SHOWN OTHERWISE ALL BRICK SHALL BE LAID IN A RUNNING BOND PATTERN.
9. 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) (Craa 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 THE GROUT SHEETING, 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 R703.8.4.2)
10. 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 FLASHING IN ACCORDANCE WITH SECTION 12.1 AND 12.3 OF MS 402 OR SECTION 3.3C OF TOMS 602 OR THE MANUFACTURER'S INSTRUCTIONS. (CRC SECTION R703.12)
11. 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 REQUIREMENTS FOR CURB AND SILL FLASHING (CRC SECTION R703.12).
12. 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 FLASHING. (CRC SECTION R703.8.6)

1. REFER TO STRUCTURAL NOTES AND SPECIFICATIONS FOR STRUCTURAL STEEL AND METAL AND REINFORCING STEEL SPECIFICATIONS

2. ALL STRUCTURAL STEEL SHALL CONFORM TO 2022 CRC, ANSI S100, AISI S200 AND ASTM C955 SEC. 8, AISI S220 AND ASTM C645, SEC. 10 AND AISI S230 FOUNDATION ANCHORAGE, WOOD SILL PLATES AND WOOD WALLS SUPPORTED DIRECTLY ON CONTINUOUS FOUNDATION SHALL BE ANCHORED TO THE FOUNDATION IN ACCORDANCE TO CRC SECTION R403.1.6
3. 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.

LUMBER
1. WOOD AND WOOD-BASE PRODUCTS USED FOR LOAD-SUPPORTING PURPOSES SHALL

1. 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 DCSS P520. IN LIEU OF A GRADE MARK, A CERTIFICATE OF INSPECTION ISSUED BY A LUMBER GRADING OR INSPECTION AGENCY MEETING THE REQUIREMENTS OF THE FOLLOWING SECTION CRC SECTION R302, R 6002.1, R6002.1.1, R6002.1.2, R6002.1.3, R6002.1.4, R6002.1.5, R6002.1.6, R6002.1.7, R6002.1.8, R6002.1.9, R6002.1.10, R6002.1.11, R6002.1.12, R6002.1.13, R6002.1.14, R6002.1.15, R6002.1.16, R6002.1.17, R6002.1.18, R6002.1.19, R6002.1.20, R6002.1.21, R6002.1.22, R6002.1.23, R6002.1.24, R6002.1.25, R6002.1.26, R6002.1.27, R6002.1.28, R6002.1.29, R6002.1.30, R6002.1.31, R6002.1.32, R6002.1.33, R6002.1.34, R6002.1.35, R6002.1.36, R6002.1.37, R6002.1.38, R6002.1.39, R6002.1.40, R6002.1.41, R6002.1.42, R6002.1.43, R6002.1.44, R6002.1.45, R6002.1.46, R6002.1.47, R6002.1.48, R6002.1.49, R6002.1.50, R6002.1.51, R6002.1.52, R6002.1.53, R6002.1.54, R6002.1.55, R6002.1.56, R6002.1.57, R6002.1.58, R6002.1.59, R6002.1.60, R6002.1.61, R6002.1.62, R6002.1.63, R6002.1.64, R6002.1.65, R6002.1.66, R6002.1.67, R6002.1.68, R6002.1.69, R6002.1.70, R6002.1.71, R6002.1.72, R6002.1.73, R6002.1.74, R6002.1.75, R6002.1.76, R6002.1.77, R6002.1.78, R6002.1.79, R6002.1.80, R6002.1.81, R6002.1.82, R6002.1.83, R6002.1.84, R6002.1.85, R6002.1.86, R6002.1.87, R6002.1.88, R6002.1.89, R6002.1.90, R6002.1.91, R6002.1.92, R6002.1.93, R6002.1.94, R6002.1.95, R6002.1.96, R6002.1.97, R6002.1.98, R6002.1.99, R6002.1.100, R6002.1.101, R6002.1.102, R6002.1.103, R6002.1.104, R6002.1.105, R6002.1.106, R6002.1.107, R6002.1.108, R6002.1.109, R6002.1.110, R6002.1.111, R6002.1.112, R6002.1.113, R6002.1.114, R6002.1.115, R6002.1.116, R6002.1.117, R6002.1.118, R6002.1.119, R6002.1.120, R6002.1.121, R6002.1.122, R6002.1.123, R6002.1.124, R6002.1.125, R6002.1.126, R6002.1.127, R6002.1.128, R6002.1.129, R6002.1.130, R6002.1.131, R6002.1.132, R6002.1.133, R6002.1.134, R6002.1.135, R6002.1.136, R6002.1.137, R6002.1.138, R6002.1.139, R6002.1.140, R6002.1.141, R6002.1.142, R6002.1.143, R6002.1.144, R6002.1.145, R6002.1.146, R6002.1.147, R6002.1.148, R6002.1.149, R6002.1.150, R6002.1.151, R6002.1.152, R6002.1.153, R6002.1.154, R6002.1.155, R6002.1.156, R6002.1.157, R6002.1.158, R6002.1.159, R6002.1.160, R6002.1.161, R6002.1.162, R6002.1.163, R6002.1.164, R6002.1.165, R6002.1.166, R6002.1.167, R6002.1.168, R6002.1.169, R6002.1.170, R6002.1.171, R6002.1.172, R6002.1.173, R6002.1.174, R6002.1.175, R6002.1.176, R6002.1.177, R6002.1.178, R6002.1.179, R6002.1.180, R6002.1.181, R6002.1.182, R6002.1.183, R6002.1.184, R6002.1.185, R6002.1.186, R6002.1.187, R6002.1.188, R6002.1.189, R6002.1.190, R6002.1.191, R6002.1.192, R6002.1.193, R6002.1.194, R6002.1.195, R6002.1.196, R6002.1.197, R6002.1.198, R6002.1.199, R6002.1.200, R6002.1.201, R6002.1.202, R6002.1.203, R6002.1.204, R6002.1.205, R6002.1.206, R6002.1.207, R6002.1.208, R6002.1.209, R6002.1.210, R6002.1.211, R6002.1.212, R6002.1.213, R6002.1.214, R6002.1.215, R6002.1.216, R6002.1.217, R6002.1.218, R6002.1.219, R6002.1.220, R6002.1.221, R6002.1.222, R6002.1.223, R6002.1.224, R6002.1.225, R6002.1.226, R6002.1.227, R6002.1.228, R6002.1.229, R6002.1.230, R6002.1.231, R6002.1.232, R6002.1.233, R6002.1.234, R6002.1.235, R6002.1.236, R6002.1.237, R6002.1.238, R6002.1.239, R6002.1.240, R6002.1.241, R6002.1.242, R6002.1.243, R6002.1.244, R6002.1.245, R6002.1.246, R6002.1.247, R6002.1.248, R6002.1.249, R6002.1.250, R6002.1.251, R6002.1.252, R6002.1.253, R6002.1.254, R6002.1.255, R6002.1.256, R6002.1.257, R6002.1.258, R6002.1.259, R6002.1.260, R6002.1.261, R6002.1.262, R6002.1.263, R6002.1.264, R6002.1.265, R6002.1.266, R6002.1.267, R6002.1.268, R6002.1.269, R6002.1.270, R6002.1.271, R6002.1.272, R6002.1.273, R6002.1.274, R6002.1.275, R6002.1.276, R6002.1.277, R6002.1.278, R6002.1.279, R6002.1.280, R6002.1.281, R6002.1.282, R6002.1.283, R6002.1.284, R6002.1.285, R6002.1.286, R6002.1.287, R6002.1.288, R6002.1.289, R6002.1.290, R6002.1.291, R6002.1.292, R6002.1.293, R6002.1.294, R6002.1.295, R6002.1.296, R6002.1.297, R6002.1.298, R6002.1.299, R6002.1.300, R6002.1.301, R6002.1.302, R6002.1.303, R6002.1.304, R6002.1.305, R6002.1.306, R6002.1.307, R6002.1.308, R6002.1.309, R6002.1.310, R6002.1.311, R6002.1.312, R6002.1.313, R6002.1.314, R6002.1.315, R6002.1.316, R6002.1.317, R6002.1.318, R6002.1.319, R6002.1.320, R6002.1.321, R6002.1.322, R6002.1.323, R6002.1.324, R6002.1.325, R6002.1.326, R6002.1.327, R6002.1.328, R6002.1.329, R6002.1.330, R6002.1.331, R6002.1.332, R6002.1.333, R6002.1.334, R6002.1.335, R6002.1.336, R6002.1.337, R6002.1.338, R6002

1. 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 MANUAL BY THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION.

2. 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)
3. REFER TO THE STRUCTURAL ENGINEER'S CURRENT NOTES, CALCULATIONS AND SPECIFICATIONS

1. 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

1. 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.
2. WOOD JOIST OR THE BOTTOM OF WOOD STRUCTURAL FLOOR WHEN CLOSER THAN 18 INCHES OF EXTERIOR GRADE OR 12 INCHES TO THE TOP OF EXTERIOR GRAVE SPACES OR UNEXCAVATED AREAS LOCATED WITHIN THE PERIPHERY OF THE BUILDING FOUNDATION. (CRC SECTION R317.1 (1)).
3. 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 SHALL BE IN DIRECT CONTACT WITH GROUND UNLESS SEPARATED FROM SUCH SLAB BY AN IMPERVIOUS MOISTURE BARRIER. (C.R.C. SEC R317.1 (3)).
4. 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)).
5. 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)).
6. WOOD STRUCTURAL MEMBERS SUPPORTING MOISTURE-PERMEABLE FLOORS OR ROOFS THAT ARE EXPOSED TO THE WEATHER, SUCH AS CONCRETE OR MASONRY SLABS, UNLESS SEPARATED FROM SUCH FLOOR OR ROOF 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 R317.1 (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 WITHIN AN 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:
 - A. HORIZONTAL MEMBERS SUCH AS GIRDERS, JOIST AND DECKING
 - B. VERTICAL MEMBERS SUCH AS POSTS, PILLS, POLES, AND COLUMNS
 - C. BOTH HORIZONTAL AND VERTICAL MEMBERS
8. WOOD COLUMNS SHALL BE APPROVED WOOD OF NATURAL DECAY RESISTANCE OR APPROVED PRESSURE PRESERVATIVE TREATED WOOD. (CRC SECTION R317.1.4)

1. WOOD STRUCTURAL PANEL WALL SHEATHING SHALL CONFORM TO DOS PS 1 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).

2. WOOD STRUCTURAL PANEL USED AS ROOF SHEATHING SHALL CONFORM TO REQUIREMENTS OF CR SECTION 803.2
3. 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
4. REFER TO THE STRUCTURAL ENGINEER'S CURRENT SPECIFICATIONS, CALCULATIONS AND PLANS FOR REQUIRED STRENGTH, GRADE, AND THICKNESS FOR THICKNESS FOR PLYWOOD FLOOR SHEATHING
5. CALLS OUT FOR THE SAME INFORMATION AS REQUIRED FOR ROOF SHEATHING
6. 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

1. 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 BEAMS AND HEADERS, AND ALL RELATED FRAMING ISSUES.

2. 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.

1. ROOF FRAMING SHALL BE PRE-MANUFACTURED ROOF TRUSSES SPACED AT 24 INCHES ON CENTER UNLESS NOTED OTHERWISE.

2. THE MANUFACTURER SHALL SUPPLY TO THE ARCHITECT AND BUILDER CALCULATIONS AND SHOP

4. DRAWINGS FOR APPROVAL OF DESIGN LOADS CONFIGURATION (2 OR 3 POINT BEARING), VOLUME CEILING OPTIONS, AND SHEAR TRANSFER, PRIOR TO FABRICATION
5. ALL CALCULATIONS AND SHOP DRAWINGS SHALL BE SIGNED BY PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHEREIN THE PROJECT IS TO BE BUILT
6. MANUFACTURER IS TO OBTAIN BUILDING DEPARTMENT APPROVAL OF CALCULATIONS AND SHOP DRAWINGS PRIOR TO FABRICATION
7. TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE LATEST BUILDING CODE FOR ALL LOADS IMPOSED, INCLUDING LATERAL LOADS AND MECHANICAL EQUIPMENT LOADS.
8. ALL CONNECTORS SHALL BE ICC APPROVED AND OF ADEQUATE STRENGTH TO RESIST ALL DESIGN LOADS.
9. 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 TO BE PROVIDED AND LOCATED IN A CORRIDOR, HALLWAY OR OTHER READILY ACCESSIBLE LOCATION. THIRTY-ONE 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).

1. ROOF FRAMING SHALL BE PRE-MANUFACTURED ROOF TRUSSES SPACED AT 24 INCHES ON CENTER UNLESS NOTED OTHERWISE.

1. DRAWINGS FOR APPROVAL OF DESIGN LOADS CONFIGURATION (2 OR 3 POINT BEARING), VOLUME CEILING OPTIONS, AND SHEAR TRANSFER, PRIOR TO FABRICATION
2. ALL CALCULATIONS AND SHOP DRAWINGS SHALL BE SIGNED BY PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHEREIN THE PROJECT IS TO BE BUILT
3. **MANUFACTURER IS TO SECURE BUILDING DEPARTMENT APPROVAL OF CALCULATIONS AND SHOP DRAWINGS PRIOR TO FABRICATION**
4. 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
6. 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 READY ACCESSIBLE LOCATION. THIRTY-ONE 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).

1. 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

2. PROVIDED IN A WOOD-FRAMED CONSTRUCTIONS IN THE LOCATIONS SPECIFIED IN CRC SECTIONS 903.7 AND 903.8.
2. FIREBLOCKING SHALL BE PROVIDED IN THE FOLLOWING LOCATIONS:
 - A. IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING CUBBER 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
 - B. AT INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS AND COVE CEILINGS
 - C. 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.
 - D. AT TERMINATIONS OF CHIMNEYS AND FLUEPIPS, GAS 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 TWO-FAMILY DWELLING IS REQUIRED AT THE LINE OF DWELLING UNIT SEPARATION. (CRC SECTION R302.11)
4. FIRE BLOCKING SHALL CONSIST OF 2 INCHES NOMINAL LUMBER OR TWO THICKNESS OF 1-INCH NOMINAL LUMBER WITH BROWN LAP JOINTS OR ONE THICKNESS OF 2x8-3/4" WOOD STRUCTURAL PANELS WITH JOINTS BACKED BY 2X3-1/2" WOOD STRUCTURAL PANELS OR ONE THICKNESS OF 3/4" PARTICLEBOARD WITH JOINTS BACKED BY 2X3-1/2" PARTICLEBOARD OR ONE 1/2"-THICK GYPSUM BOARD OR ONE-QUARTER" MINERAL BASED MIL BOARDS 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).
5. WALLS CONSTRUCTED USING PARALLEL OR STAGGERED STUDS FOR SOUND TRANSMISSION CONTROL HAVE FIRE RATED JOINTS. FIRE RATED JOINTS SHALL BE MADE WITH FIRE RATED SEALANT OR OTHER APPROVED NONRIGID MATERIALS SHALL BE PERMITTED FOR COMPLIANCE WITH HALF-HOUR 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 CLOSED 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)
6. DRAFTSTOPPING MATERIALS SHALL NOT BE LESS THAN 1/2-INCH GYPSUM UNBOARD, 3/8-INCH WOOD STRUCTURAL PANEL OR OTHER APPROVED MATERIALS ADEQUATELY SUBSTANTIATED. 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)

1. PROVIDE ALL FLASHING, COUNTER-FLASHING, BITUMEN, MEMBRANE WATERPROOFING, SHEET METAL CAULKING SEALANTS, ELECTROMERIC WALKING SURFACES, AND RAIN CUTTERS AND/OR

2. 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, AND OTHER FASTENERS, SHALL BE CORROSION RESISTANT OR NON-CORROSIVE.
3. 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-RESISTANT BARRIER SHALL BE APPLIED TO THE EXTERIOR WALL ASSEMBLY 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)
4. 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)
5. CORROSION RESISTANT FLASHING SHALL BE APPLIED SINGLE 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
- B. AT THE INTERSECTION OF CHIMNEYS OR OTHER MASONRY CONSTRUCTION WITH FRAME OR STUCCO WALLS, WITH PROJECTING LIPS ON BOTH SIDES UNDER STUCCO COPINGS.
- C. UNDER AND THE ENDS OF MASONRY, WOOD, OR METAL COPINGS AND SILLS
- D. CONTINUOUSLY ABOVE ALL PROJECTING WOOD TRIMS
- E. WHERE EXTERIOR PORCHES, DECKS OR STAIRS ATTACH TO A WALL OR
- F. FLOOR ASSEMBLY OF WOOD-FRAME CONSTRUCTION
- F. AT WALL AND ROOF INTERSECTIONS
- F. AT BUILD-UP GUTTERS
- D. 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 INCH VERTICAL IN 12 INCHES (2% SLOPE) FOR DRAINAGE (CRC SECTION R311.3.1)
- F. PROVIDE A MINIMUM 2 INCH DRAPO 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 R311.3.1.4)
- E. ELASTOMERIC OR WOOD-GRANULE COPINGS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS AT DECKS AND BALCONIES. COLOR FINISH AND DETAILING SHALL BE APPROVED BY OWNER / BUILDER AND ARCHITECT.
- F. UNLESS DESIGNED TO DRAIN OVER DECK EDGES, DRAINS, AND OVER-FLOWS ADEQUATE SIZE SHALL BE INSTALLED AT THE LOW POINTS OF DECK OR BALCONY.
- F. MEET MINIMUM REQUIREMENTS FOR DRAINAGE 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 - 'SEALANTS: THE PROFESSIONAL'S GUIDE'
11. SHEET METAL, 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 ALLOW 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. ROOF FABRICATING TO THE EXTENT POSSIBLE IN ACCORDANCE WITH APPLICABLE STANDARDS TO PROVIDE A PERMANENTLY WATER-PROOF, WEATHER RESISTANT INSTALLATION 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 (CRC SECTION R905.2.8.1) OR 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)
16. ROOF VALLEY LININGS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS BEFORE APPLYING SHINGLES. VALLEY LINING OF THE FOLLOWING TYPES SHALL BE

- A. 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.
- B. FOR OPEN VALLEYS (VALLEY LINING) OF TWO PLYS OF MINERAL-SURFACED ROOF FLOORING COMPLYING WITH ASTM D 3509 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.
- C. FOR CLOSED VALLEYS (VALLEYS COVERED WITH SHINGLES), VALLEY LINING OF ONE PLY OF SMOOTH ROOF FLOORING 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 CEMENT OR POLYMER MODIFIED ASPHALT CEMENT (TYPE I) 91970 SHALL BE PERMITTED IN LIEU OF THE LINING MATERIAL. (SECTION R905.2.8.2)
17. BASE FLASHING ALONG A VERTICAL SIDEWALL SHALL BE CONTINUOUS OR STEP FLASHING SHALL BE NOT 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. (SECTION R905.2.8.3). FLASHING SHALL BE ROOF FLOORING OR METAL. FLASHING SHALL BE 2 INCHES VERTICAL ONTO THE ROOF, AS WELL AS SOIL STACK, VENT PIPE AND CHIMNEY FLASHING, SHALL BE APPLIED IN ACCORDANCE WITH THE ASPHALT SHINGLE MANUFACTURER'S PRINTED INSTRUCTIONS (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 INCH HEIGHT 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 OVERLAP OF NOT LESS THAN 4 INCHES. FLASHING SHALL BE 2 INCHES 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 OR LESS. METAL VALLEY FLASHING SHALL UNDERLAP THE SHINGLE UNDERLAYMENT 2 INCHES VERTICAL AND 4 INCHES OR MORE LESS THAN SEVEN UNITS VERTICAL IN 12 UNITS HORIZONTAL (58-PERCENT SLOPE) OR BE OF SELF ADHERING POLYMER MODIFIED BITUMEN SHEET. (SECTION R905.3.8)

1. SEE FINISHES IN THESE GENERAL NOTES FOR EXTERIOR PLASTER
2. ALL EXTERIOR MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT EDITION THE CALIFORNIA BUILDING CODE AND ALL STATE AND LOCAL CODES

3. **WATER-RESISTIVE BARRIERS** SHALL BE INSTALLED AS REQUIRED PER CRC SECTION 703.2 AND WHEN APPLIED OVER WOOD BASE SHEATHING, SHALL INCLUDE TWO LAYERS OF GRADE D PAPER (CRC SECTION 703.7.3).
4. **FRAMING 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 ANOTHER APPROVED FLASHING METHOD. PANELS SHALL BE INSTALLED WITH FASTENERS TO COMPLY WITH SECTION 703.1. PANEL SIDING SHALL BE INSTALLED WITH FASTENERS IN ACCORDANCE WITH TABLE 703.3 (1) OR APPROVED MANUFACTURERS' INSTRUCTIONS. (CRC SECTION 703.10.1)
5. **FIBER-CEMENT LAP SIDING** HAVING A MAXIMUM WIDTH OF 12 INCHES 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 FASTENERS TO COMPLY WITH SECTION 703.1. LAP SIDING SHALL BE INSTALLED WITH FASTENERS TO COMPLY WITH TABLE 703.3 (1) OR APPROVED MANUFACTURERS' INSTRUCTIONS. (CRC SECTION 703.10.1)
6. **WOOD SHINGLE SIDING** SHALL BE INSTALLED WITH FASTENERS TO COMPLY WITH SECTION 703.1. LAP SIDING COURSES SHALL BE INSTALLED WITH THE FASTENER HEADS EXPOSED OR COVERED, IN ACCORDANCE WITH TABLE 703.3(1) OR APPROVED MANUFACTURERS' INSTRUCTIONS (CRC 703.10.2)

OPTION
2

**DEPARTMENT OF PUBLIC
WORKS AND PLANNING**



SEAL & SIGNATURE



JULY 12, 2023

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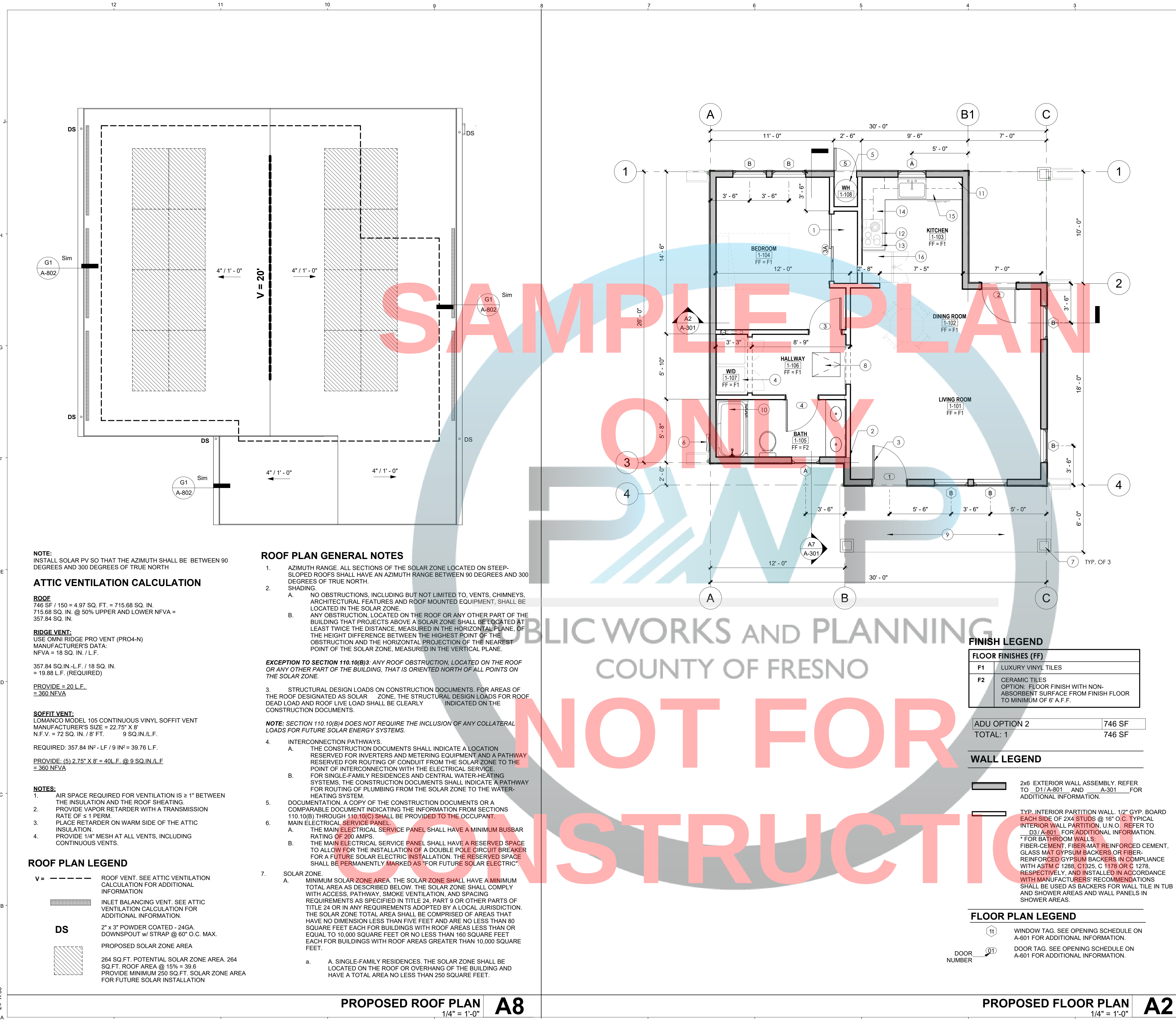
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FLOOR PLAN KEYNOTES

- BUILT-IN CLOSET/DRAWERS WITH CLOTHES ROD.
- ALIGN 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. REFER TO E5/A-804 FOR MORE 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 A6/A-802 & 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.
- BUILT-IN BATH TUB AND SHOWER COMBO.
- UPPER KITCHEN CABINET. REFER TO G6/A-802 FOR ADDITIONAL INFORMATION.
- HOOD WITH FAN OVER ELECTRIC COOKTOP. PROVIDE 30" VERTICAL AND 6" HORIZONTAL CLEARANCE VENT THROUGH ROOF.
- 4 BURNER ELECTRIC COOKTOP. PROVIDE (OPTIONAL GAS) LINE. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- COUNTERTOP WITH BUILT-IN CABINET AND PULL OUT DRAWERS.
- UNDERCOUNTER DISHWASHER.
- REFRIGERATOR SPACE WITH WATER CONNECTION.

FLOOR PLAN GENERAL NOTES:

- 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)
- 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:
 - 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 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.
- DUCT CONSTRUCTED, INSTALLED AND INSULATED PER CURRENT CODE AND TITLE 24.
- 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).
- 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.
- 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.
- THE ENERGY CERTIFICATION OF COMPLIANCE MUST BE SUBMITTED AFTER INSTALLATION OF THE REQUIRED EQUIPMENT AND/OR MATERIAL AND PRIOR TO REQUEST OF FINAL INSPECTION.
- PROVIDE 115V OUTLET (W.P., G.F.I.) WITHIN 25 FEET OF ROOF MOUNTED EQUIPMENT.
- 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**
- WALL AND CEILING FINISHES SHALL HAVE A SMOKE-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-501 FOR ADDITIONAL INFORMATION.
- ALL TUB AND SHOWER VALVES ARE TO BE SINGLE CONTROL PRESSURE BALANCING OR THERMOSTATIC ANTI-SCALD TYPE. 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 LLA OR 11B AND IS NOT PART OF AN ADAPTABLE OR ACCESSIBLE DWELLING UNIT."

749 SQ. FT. MODEL (746 SQ.FT.)

OPTION # 2

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

UPDATE
JULY 12, 2023

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TITLE

PROPOSED FLOOR PLAN & ROOF PLAN

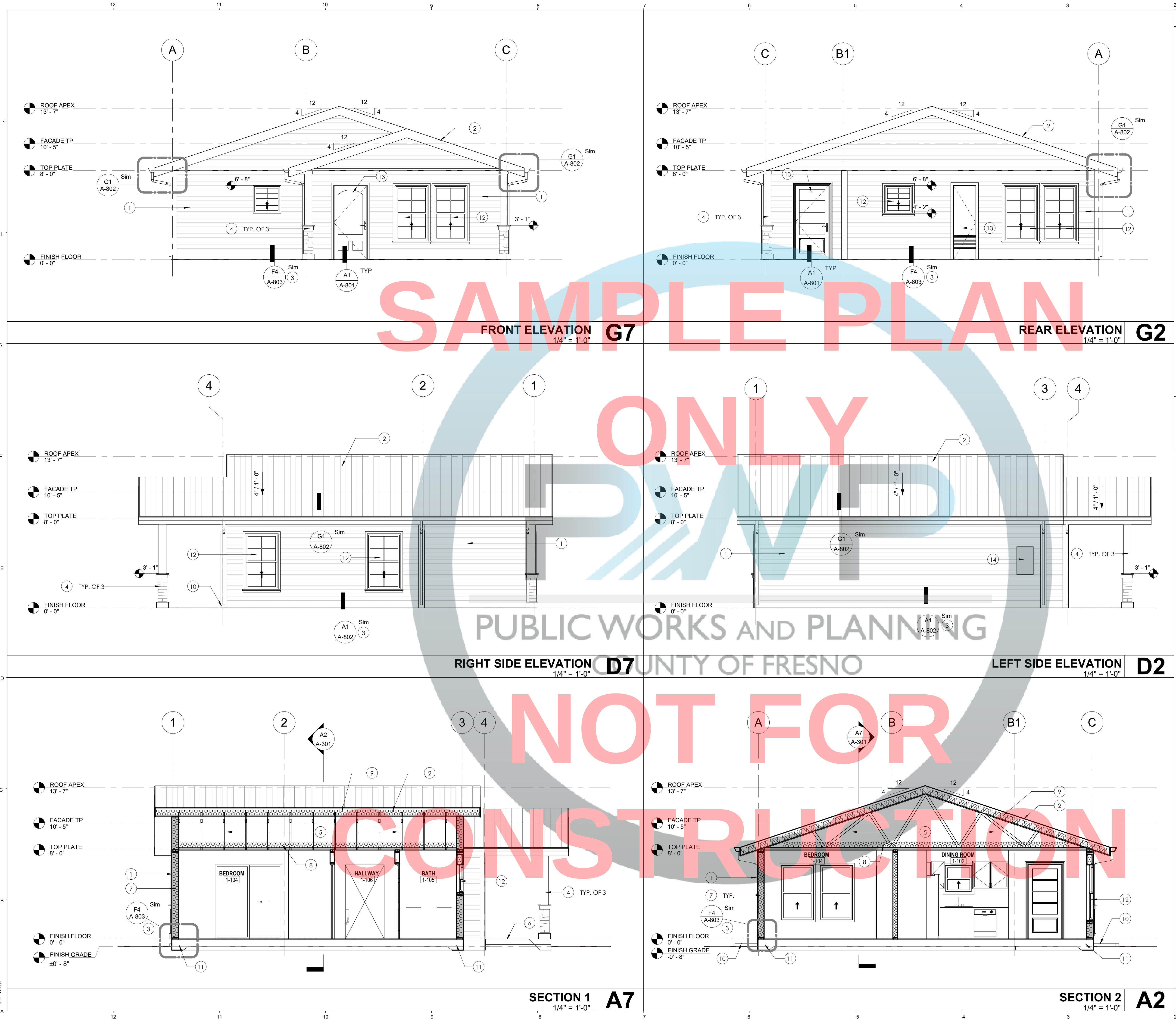
SCALE As indicated

A-201

ISSUE DATE	JOB NUMBER
MARCH 7, 2023	2023_22
DRAWN BY	CHECKED BY
Author	Checker

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24" X 36"



- ELEVATION / SECTIONS KEYNOTES** #
- "HARDIE PLANK" LAP SIDING OVER 2 LAYER GRADE "D" BUILDING PAPER WITH PERIMETER WEEP SCREED. REFER TO A-803 FOR ADDITIONAL INFORMATION. OPTIONAL FINISH: 7/8" STUCCO FINISH OVER 2 LAYERS OF GRADE "D" PAPER INSTALLED OVER PLYWOOD SHEATHING (AS REQUIRED PER STRUCTURAL DRAWING). INSTALL METAL LATH OVER PLYWOOD SHEATHING PER R703.7.1. PROVIDE PERIMETER WEEP SCREED. REFER TO D1/A-801 FOR ADDITIONAL INFORMATION.
 - 25 YEAR ASPHALT COMPOSITION ROOFING WITH MINIMUM CLASS "C" RATING OVER 30# FELT OVER PLYWOOD SHEATHING. REFER TO A8/A-201 FOR ADDITIONAL INFORMATION. OPTION ROOF: GA. 24 STANDING SEAMLESS METAL ROOF.
 - PERIMETER WEEP SCREED FOR STUCCO APPLICATION. REFER TO A4/A-803, F4/A-803, A9/A-802 FOR ADDITIONAL INFORMATION.
 - TREATED WOOD POST WITH OPTIONAL 2X WRAPPED POST OVER CEMENT PLASTER FINISH AND VENEER STONE. REFER TO STRUCTURAL DRAWINGS AND A6/A-802 FOR ADDITIONAL INFORMATION.
 - ENGINEERED ROOF TRUSS AND PLYWOOD SHEATHING.
 - CONCRETE PATIO/LANDING. SLOPED AT 2% MAXIMUM AWAY FRO THE BUILDING.
 - R-21** MINIMUM FIBERGLASS BATTS WALL INSULATION. TYPICAL ON ALL EXTERIOR WALL.
 - R-38** MINIMUM FIBERGLASS BATT INSULATION. TYPICAL ON ATTIC.
 - R-13** 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 A2/A-201 FOR ADDITIONAL INFORMATION.
 - DOOR. SEE SEE A2/A-201 FOR ADDITIONAL INFORMATION.
 - SERVICE PANEL. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.

749 SQ. FT. MODEL (746 SQ.FT.)

OPTION # 2

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



UPDATE
JULY 12, 2023

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TITLE
ELEVATIONS & SECTIONS

SCALE 1/4" = 1'-0"

A-301

ISSUE DATE MARCH 7, 2023	JOB NUMBER 2023_22
DRAWN BY Author	CHECKED BY Checker

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SECTION R327 AGING-IN-PLACE DESIGN AND FALL PREVENTION

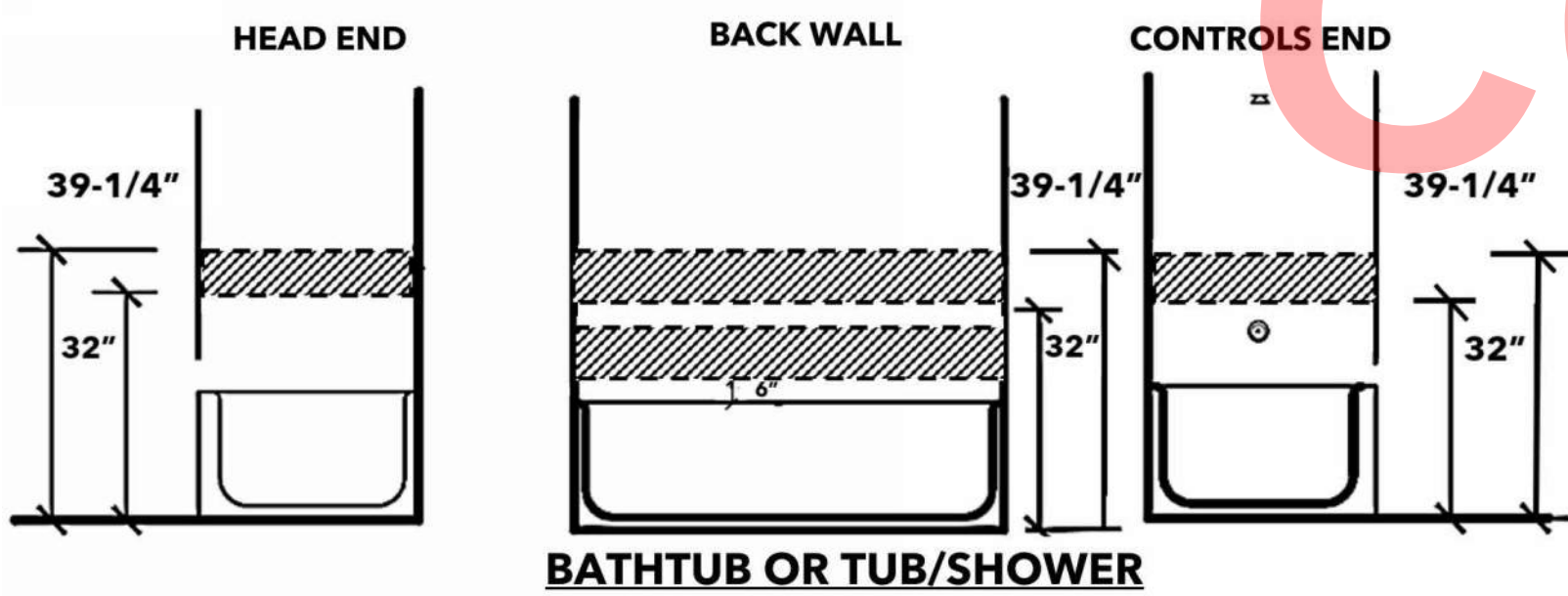
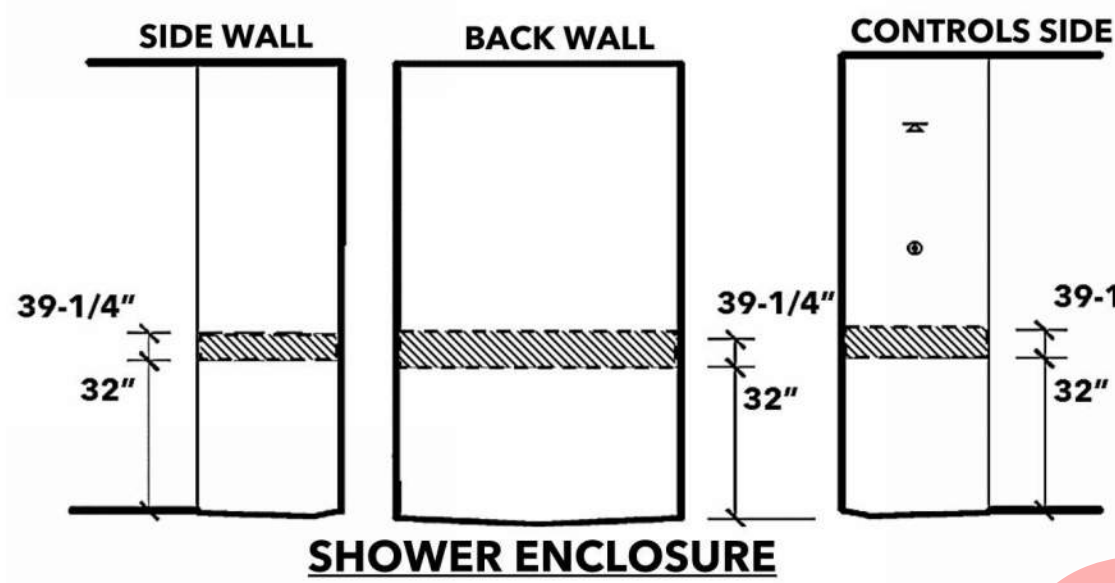
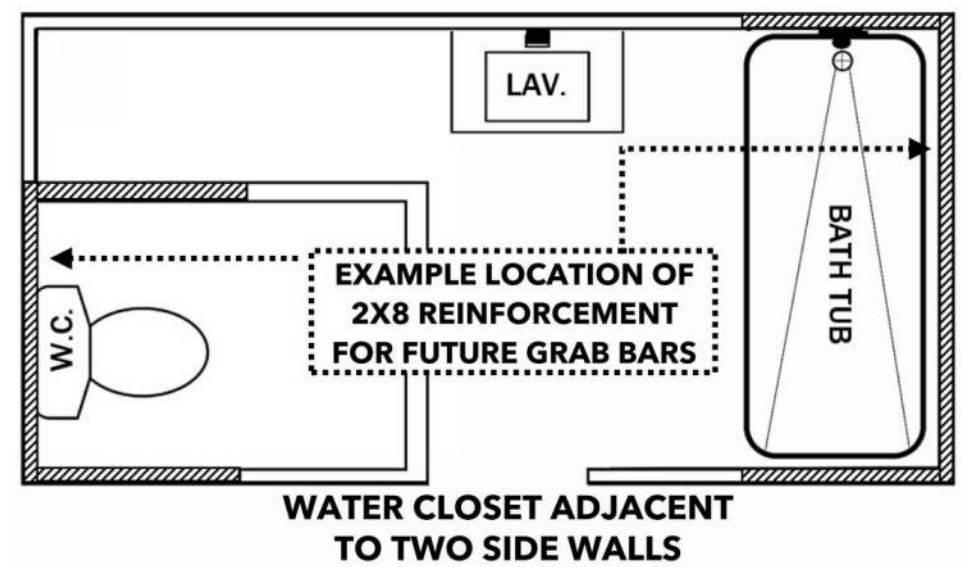
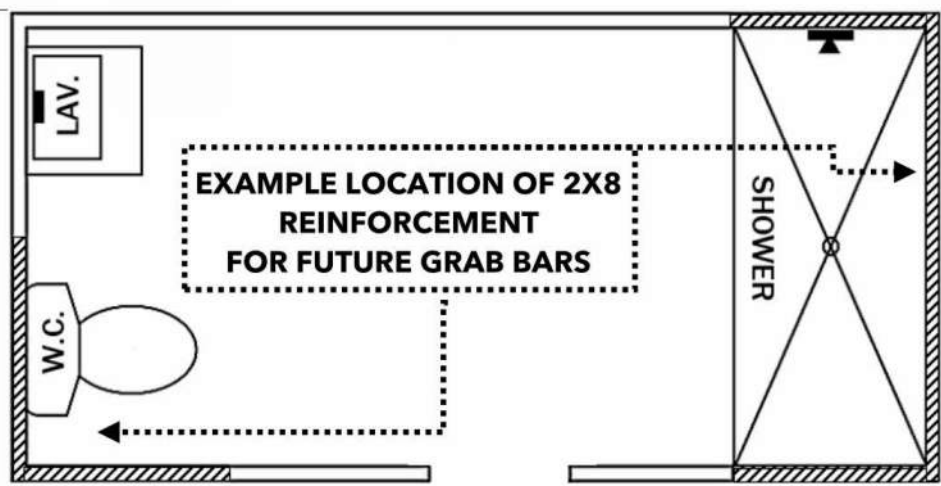
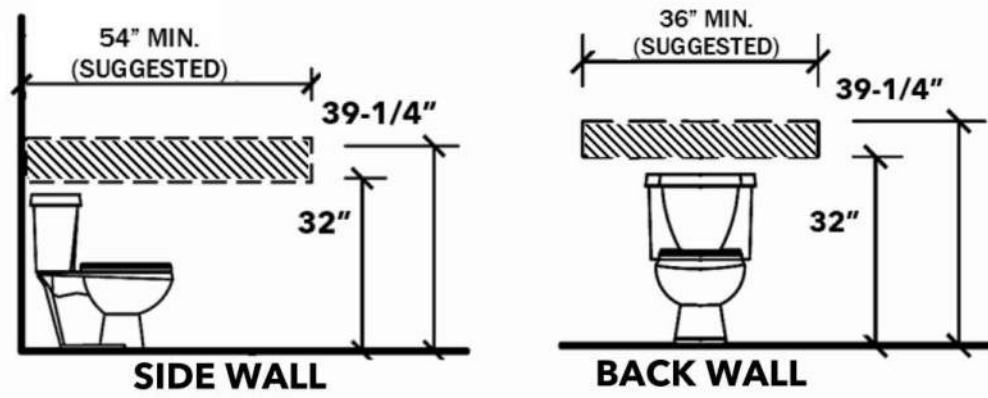
R327.1.1 REINFORCEMENT FOR GRAB BARS

AT LEAST ONE BATHROOM ON THE ENTRY LEVEL 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.

- REINFORCEMENT SHALL BE SOLID LUMBER OR OTHER CONSTRUCTION MATERIALS APPROVED BY THE ENFORCING AGENCY. REINFORCEMENT SHALL NOT BE LESS THAN 2 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 FINISHED FLOOR FLUSH WITH THE WALL FRAMING.
- WATER CLOSET REINFORCEMENT SHALL BE INSTALLED ON BOTH SIDE WALLS OF THE FIXTURE, OR ONE SIDE WALL AND THE BACK WALL.
- SHOWER REINFORCEMENT SHALL BE CONTINUOUS WHERE WALL FRAMING IS PROVIDED.
- BATHTUB AND COMBINATION BATHTUB/SHOWER REINFORCEMENT SHALL BE CONTINUOUS ON EACH END OF THE BATHTUB AND THE BACK WALL.
- ADDITIONAL 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.

EXCEPTIONS:

- WHERE THE WATER CLOSET IS NOT PLACED ADJACENT TO A SIDE WALL CAPABLE OF ACCOMMODATING A GRAB BAR, THE BATHROOM SHALL HAVE PROVISIONS FOR INSTALLATION OF FLOOR-MOUNTED, FOLDAWAY OR SIMILAR ALTERNATE GRAB BAR REINFORCEMENTS APPROVED BY THE ENFORCING AGENCY.
- REINFORCEMENT SHALL NOT BE REQUIRED IN WALL FRAMING FOR PRE-FABRICATED SHOWER ENCLOSURES AND BATHTUB WALL PANELS WITH INTEGRAL FACTORY-INSTALLED GRAB BARS OR WHEN FACTORY-INSTALLED REINFORCEMENT FOR GRAB BARS IS PROVIDED.
- 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.
- 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.
- REINFORCEMENT OF FLOORS SHALL NOT BE REQUIRED FOR BATHTUBS AND WATER CLOSETS INSTALLED ON CONCRETE SLAB FLOORS.



GRAB BAR REINFORCEMENT

12" = 1'-0"

1

SECTION R327 AGING-IN-PLACE DESIGN AND FALL PREVENTION

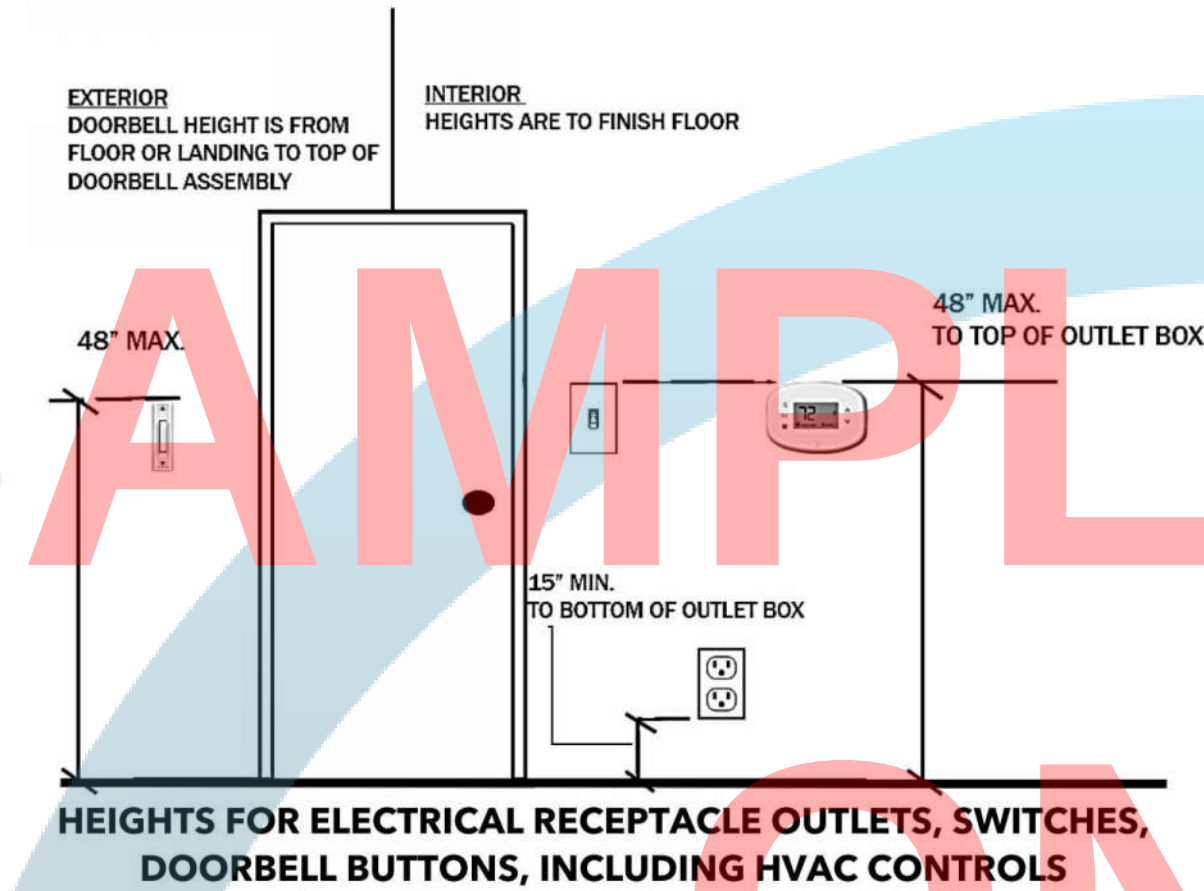
R327.1.2 ELECTRICAL RECEPTACLE OUTLET, SWITCH AND CONTROL HEIGHTS

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 MEASURED FROM THE TOP OF THE OUTLET BOX AND NOT LESS THAN 15 INCHES MEASURED FROM THE BOTTOM OF THE OUTLET BOX ABOVE THE FINISH FLOOR.

- DEDICATED RECEPTACLE OUTLETS; FLOOR RECEPTACLE OUTLETS; CONTROLS MOUNTED ON CEILING FANS AND CEILING LIGHTS; AND CONTROLS LOCATED ON APPLIANCES.
- 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.

R327.1.3 INTERIOR DOORS
EFFECTIVE JULY 1, 2024, AT LEAST ONE BATHROOM AND ONE BEDROOM ON THE ENTRY LEVEL SHALL 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 DWELLING IF A BATHROOM OR BEDROOM IS NOT LOCATED ON THE ENTRY LEVEL.

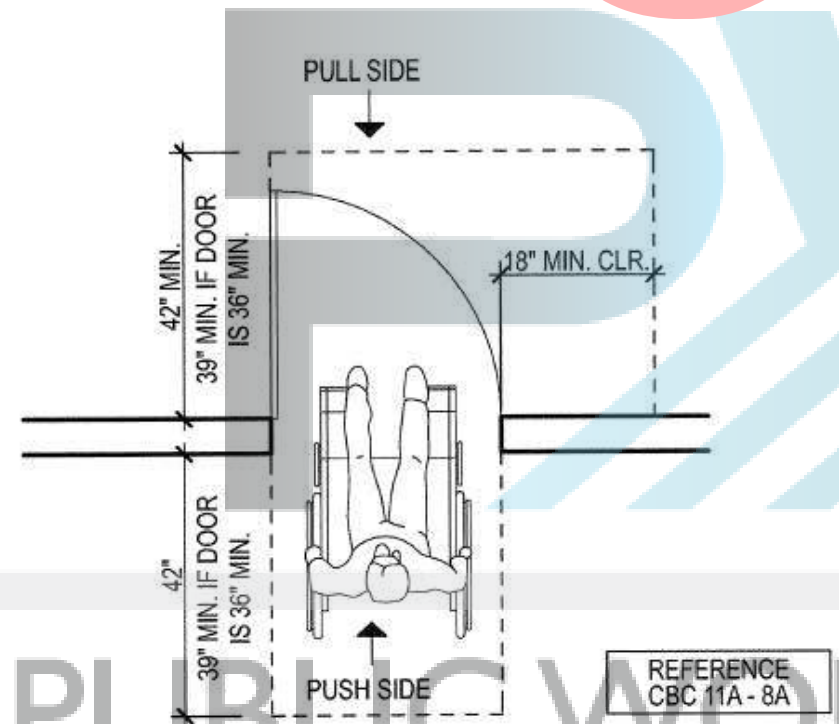
R327.1.4 DOORBELL BUTTONS
DOORBELL BUTTONS OR CONTROLS, WHEN INSTALLED, SHALL NOT EXCEED 48 INCHES ABOVE EXTERIOR FLOOR OR LANDING, MEASURED FROM THE TOP OF THE DOORBELL BUTTON ASSEMBLY. WHERE DOORBELL BUTTONS INTEGRATED WITH OTHER FEATURES ARE REQUIRED TO BE INSTALLED ABOVE 48 INCHES MEASURED FROM THE 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 BUTTON OR CONTROL.



OUTLETS, DOORS & CONTROLS

12" = 1'-0"

2



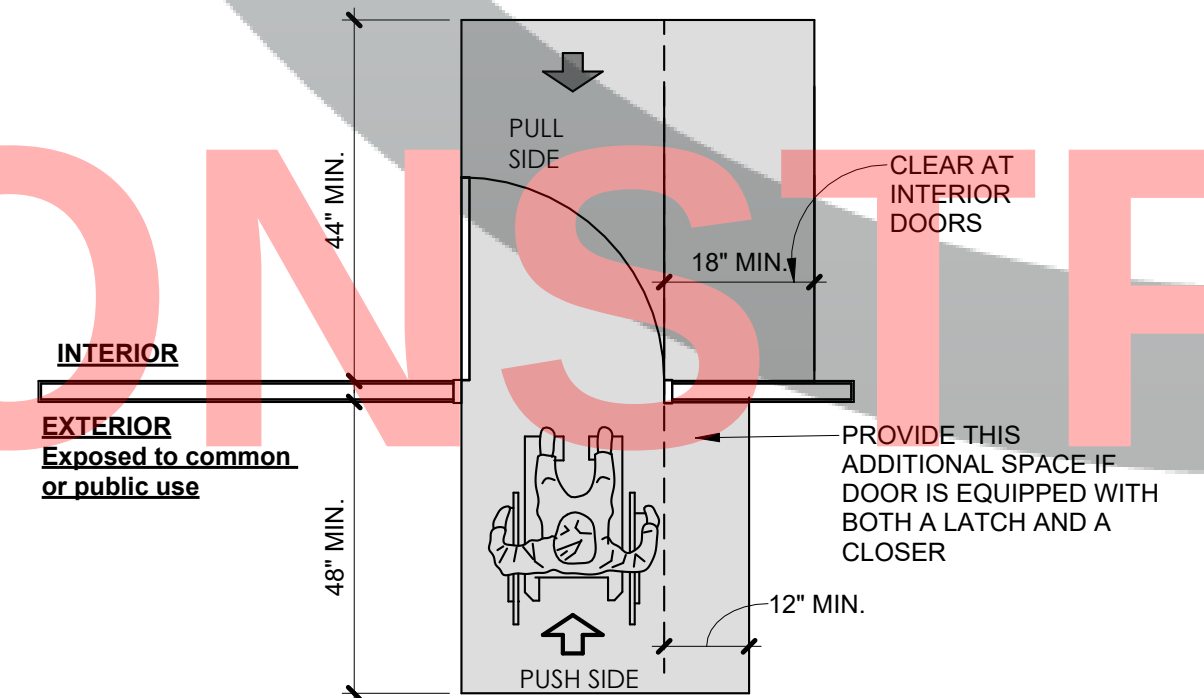
ADAPTABLE FEATURES (OPTIONAL)

DOOR MANUEVERING - INTERIOR UNITS

12" = 1'-0"

3

1132A.5.1 GENERAL
THE FLOOR OR LANDING ON THE DWELLING UNIT SIDE OF THE PRIMARY ENTRY DOOR AND ANY REQUIRED EXIT DOOR SHALL HAVE A MINIMUM LENGTH OF NOT LESS THAN 44 INCHES.
SECTION 1126A.3 SHALL APPLY TO MANEUVERING CLEARANCES AT THE SIDE OF THE DOOR EXPOSED TO COMMON OR PUBLIC USE SPACES.
MANEUVERING CLEARANCES AT INTERIOR DOORS SHALL PROVIDE A MINIMUM LENGTH ON BOTH SIDES OF THE DOOR OF AT LEAST 42 INCHES MEASURED AT A RIGHT ANGLE TO THE PLANE OF THE DOOR IN ITS CLOSED POSITION.
EXCEPTION: A 36-INCH LENGTH IS ACCEPTABLE AT INTERIOR DOORS WHEN A MINIMUM CLEAR OPENING WIDTH OF 34 INCHES IS PROVIDED.



ADAPTABLE FEATURES (OPTIONAL)

PRIMARY DOOR MANUEVERING CLEARANCE

1/4" = 1'-0"

4

SECTION 1134A BATHING AND TOILET FACILITIES (ADAPTABLE)

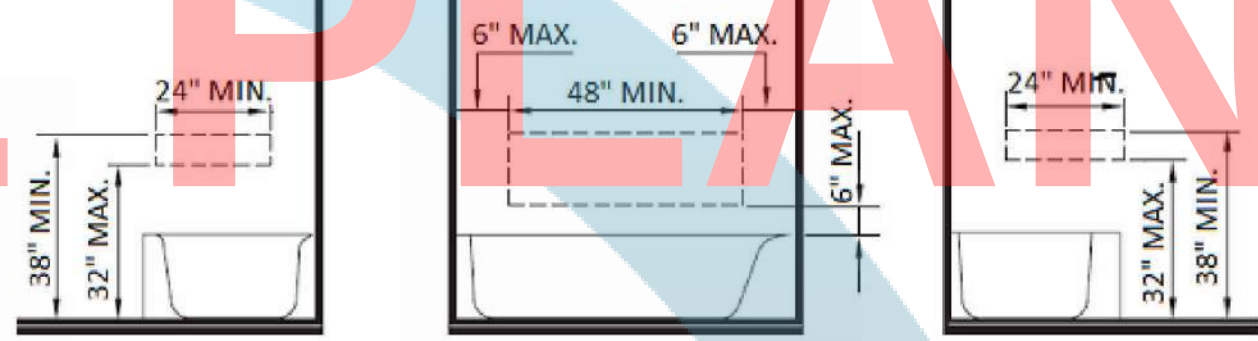
OPTION 2. ONLY ONE BATHROOM WITHIN THE DWELLING UNIT SHALL BE DESIGNED TO COMPLY WITH THE FOLLOWING:

- TOILET, BATHING AND SHOWER FACILITIES SHALL COMPLY WITH SECTION 1134A.4.
- BATHTUBS SHALL COMPLY WITH SECTION 1134A.5.
- SHOWERS SHALL COMPLY WITH SECTION 1134A.6.
- WATER CLOSETS SHALL COMPLY WITH SECTION 1134A.7.
- LAVATORIES, VANITIES, MIRRORS AND TOWEL FIXTURES SHALL COMPLY WITH SECTION 1134A.8.
- WHERE BOTH A TUB AND SHOWER ARE PROVIDED IN THE BATHROOM, AT LEAST ONE SHALL BE MADE ACCESSIBLE. ADDITIONAL REQUIREMENTS APPLY TO DWELLING UNITS CONTAINING TWO OR MORE BATHROOMS WHEN A BATHTUB IS PROVIDED AS THE ACCESSIBLE BATHING FIXTURE.
- WHERE TWO OR MORE BATHROOMS ARE PROVIDED WITHIN THE SAME DWELLING UNIT AND A BATHTUB IS INSTALLED TO COMPLY WITH OPTION 2, ITEM 6 IN ONE BATHROOM AND A SHOWER STALL IS PROVIDED IN A SUBSEQUENT BATHROOM, BOTH THE BATHTUB SELECTED TO COMPLY WITH OPTION 2, ITEM 6 AND AT LEAST ONE SHOWER STALL WITHIN THE DWELLING UNIT SHALL MEET ALL THE APPLICABLE ACCESSIBILITY REQUIREMENTS PROVIDED IN SECTION 1134A. (SEE SECTION 1134A.5 FOR BATHTUBS, OR SECTION 1134A.6 FOR SHOWERS.)
- WHEN TWO OR MORE LAVATORIES ARE PROVIDED, AT LEAST ONE SHALL BE MADE ACCESSIBLE AND COMPLY WITH SECTION 1134A.8.
- BATHROOMS SHALL BE PROVIDED WITH AN ACCESSIBLE ROUTE INTO AND THROUGH THE BATHROOM. IF A DOOR IS PROVIDED, IT SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 1132A.5.
- A MINIMUM 18-INCH CLEAR MANEUVERING SPACE SHALL BE PROVIDED ON THE SWING SIDE OF THE DOOR AT THE STRIKE EDGE OF THE DOOR.
- SWITCHES, OUTLETS AND CONTROLS SHALL COMPLY WITH SECTION 1142A.
- REINFORCED WALLS TO ALLOW FOR THE FUTURE INSTALLATION OF GRAB BARS AROUND THE TOILET, TUB AND SHOWER SHALL COMPLY WITH SECTIONS 1134A.5 FOR BATHTUBS, 1134A.6 FOR SHOWERS AND 1134A.7 FOR WATER CLOSETS. GRAB BARS SHALL COMPLY WITH SECTIONS 1127A.4 AND 1127A.2.2, ITEM 4.

WHEN OPTION 2 IS USED, ALL ADDITIONAL BATHROOMS MUST COMPLY WITH ITEMS 8 THROUGH 12 ABOVE

1134A.4 SUFFICIENT MANEUVERING SPACE.

BATHING AND TOILET FACILITIES REQUIRED TO BE ADAPTABLE SHALL PROVIDE SUFFICIENT MANEUVERING SPACE FOR A PERSON USING A WHEELCHAIR OR OTHER MOBILITY AID TO ENTER AND CLOSE THE DOOR, USE THE FIXTURES, REOPEN THE DOOR AND EXIT. WHERE THE DOOR SWINGS INTO THE BATHROOM OR POWDER ROOM, THERE SHALL BE A CLEAR MANEUVERING SPACE OUTSIDE THE SWING OF THE DOOR OF AT LEAST 30 INCHES BY 48 INCHES WITHIN THE ROOM. THE CLEAR MANEUVERING SPACE SHALL ALLOW THE USER TO POSITION A WHEELCHAIR OR OTHER MOBILITY AID CLEAR OF THE PATH OF THE DOOR AS IT IS CLOSED AND TO PERMIT USE OF FIXTURES. DOORS MAY SWING INTO THE REQUIRED CLEAR SPACE AT ANY FIXTURE WHEN A CLEAR MANEUVERING SPACE IS PROVIDED OUTSIDE THE SWING ARC OF THE DOOR SO IT CAN BE CLOSED. MANEUVERING SPACES MAY INCLUDE ANY KNEE SPACE OR TOE SPACE AVAILABLE BELOW BATHROOM FIXTURES.



GRAB BAR REINFORCEMENT FOR ADAPTABLE BATHTUBS
AREAS OUTLINED IN DASHED LINES REPRESENT LOCATION FOR FUTURE INSTALLATION OF GRAB BARS

1134A.7 WATER CLOSETS.

WATER CLOSETS IN BATHROOMS OR POWDER ROOMS REQUIRED TO BE ACCESSIBLE SHALL COMPLY WITH THIS SECTION.

- FLOOR SPACE AND LOCATION. THE MINIMUM FLOOR SPACE PROVIDED AT A WATER CLOSET SHALL BE 48 INCHES IN CLEAR WIDTH. THE CLEAR FLOOR SPACE SHALL EXTEND PAST THE FRONT EDGE OF THE WATER CLOSET AT LEAST 36 INCHES. SEE FIGURE 11A-9M.
EXCEPTION: THE 48-INCH MINIMUM CLEAR WIDTH MAY BE REDUCED TO 36 INCHES FOR LAVATORIES, CABINETS, WING WALLS OR PRIVACY WALLS LOCATED IMMEDIATELY ADJACENT TO A WATER CLOSET WHICH EXTEND NO MORE THAN 24 INCHES IN DEPTH.

WATER CLOSETS SHALL BE LOCATED WITHIN BATHROOMS IN A MANNER THAT PERMITS A GRAB BAR TO BE INSTALLED ON AT LEAST ONE SIDE OF THE FIXTURE. THE CENTERLINE OF THE WATER CLOSET SHALL BE 17 INCHES MINIMUM TO 18 INCHES MAXIMUM FROM A GRAB BAR WALL OR PARTITION. IN LOCATIONS WHERE WATER CLOSETS ARE ADJACENT TO NON-GRAB BAR WALLS, VANITIES, LAVATORIES OR BATHTUBS, THE CENTERLINE OF THE FIXTURE SHALL BE A MINIMUM OF 18 INCHES FROM THE OBSTACLE.

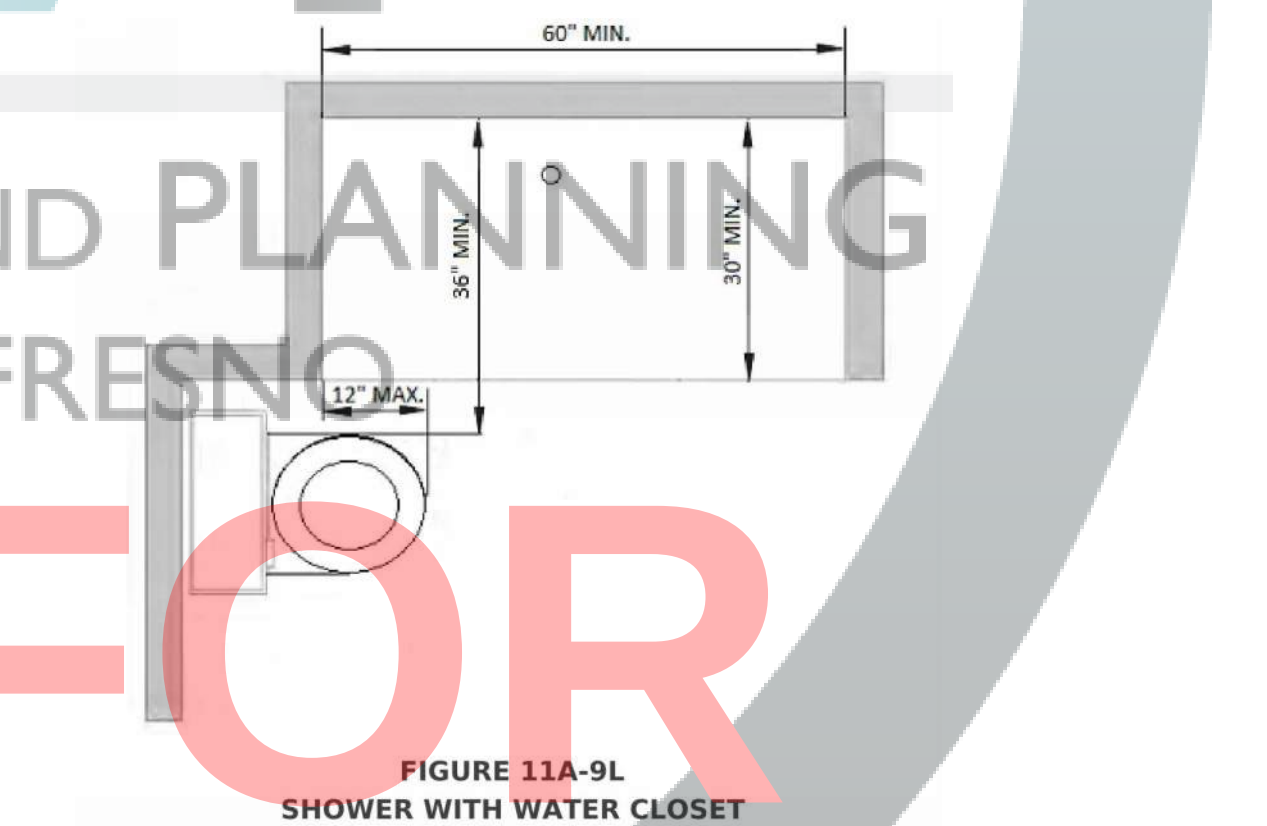
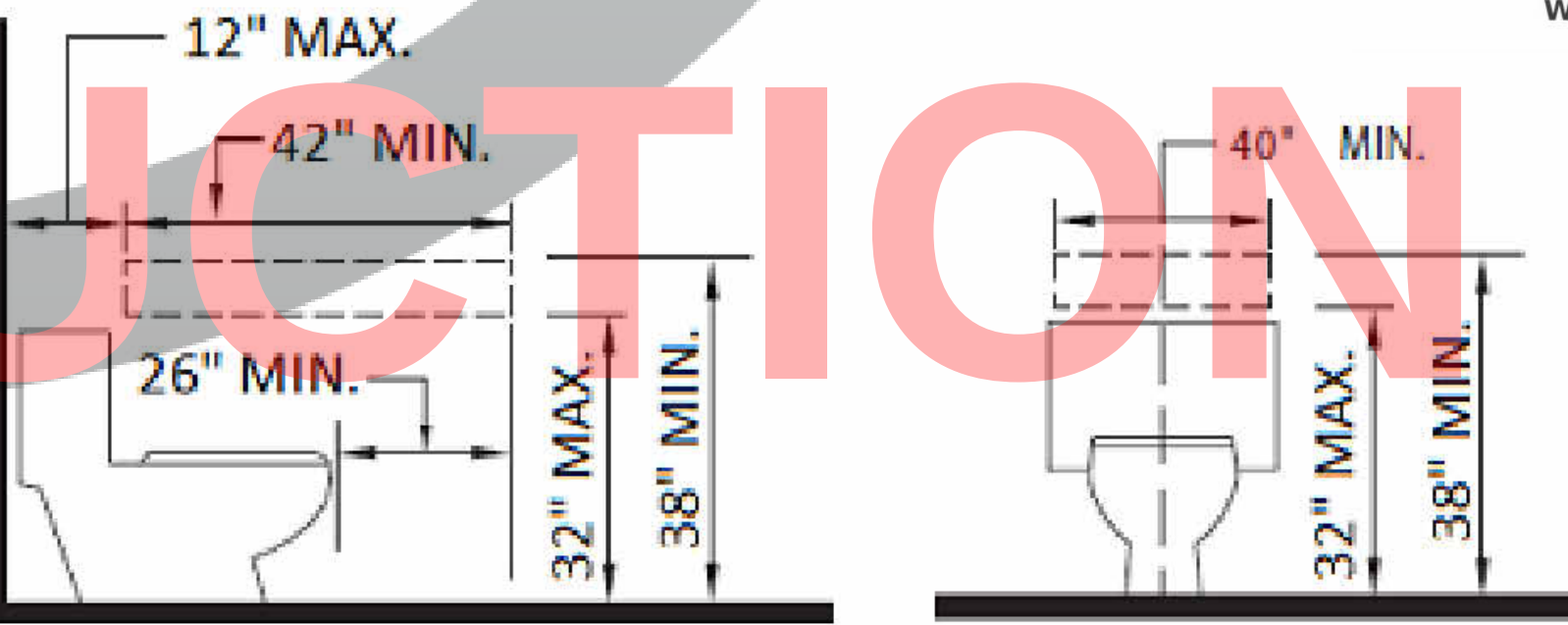


FIGURE 11A-9L
SHOWER WITH WATER CLOSET

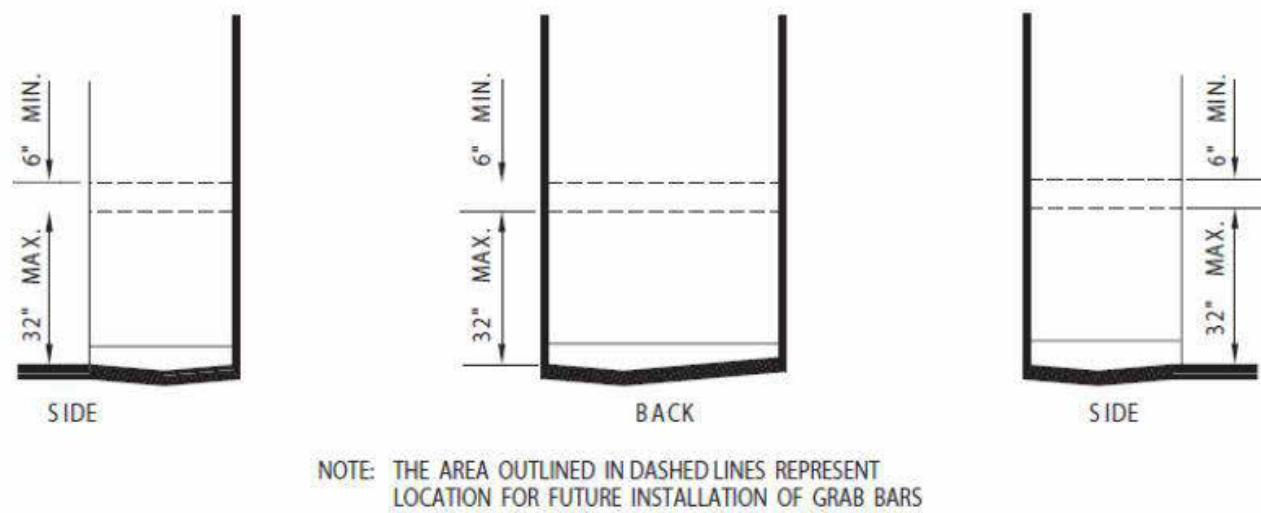


GRAB BAR REINFORCEMENT FOR ADAPTABLE WATER CLOSETS

GRAB BAR REINFORCEMENT (AGING-IN PLACE)

12" = 1'-0"

6



NOTE: THE AREA OUTLINED IN DASHED LINES REPRESENT LOCATION FOR FUTURE INSTALLATION OF GRAB BARS

Location of grab bar reinforcement for adaptable showers

- 1134A.5 BATHTUBS. BATHTUBS REQUIRED TO BE ACCESSIBLE SHALL COMPLY WITH THIS SECTION.
FLOOR SPACE. THERE SHALL BE A MINIMUM CLEAR FLOOR SPACE 48 INCHES PARALLEL BY 30 INCHES PERPENDICULAR TO THE SIDE OF A BATHTUB OR BATHTUB-SHOWER COMBINATION TO PROVIDE FOR THE MANEUVERING OF A WHEELCHAIR AND TRANSFER TO AND FROM THE BATHING FACILITIES. THE CONTROLS SHALL BE ON THE WALL AT THE FOOT OF THE BATHTUB. THE EDGE OF THE CLEAR FLOOR SPACE SHALL BE FLUSH WITH THE CONTROL WALL SURFACE. THE AREA UNDER A LAVATORY LOCATED AT THE CONTROL END OF THE TUB, MAY BE INCLUDED IN THE CLEAR FLOOR SPACE PROVIDED THE LAVATORY IS 19 INCHES MAXIMUM DEEP, AND THE KNEE AND TOE SPACE COMPLY WITH SECTION 1134A.8. CABINETS UNDER LAVATORIES AND TOILETS SHALL NOT ENCRoACH INTO THE CLEAR FLOOR SPACE.
- REINFORCED WALLS FOR GRAB BARS. A BATHTUB INSTALLED WITHOUT SURROUNDING WALLS SHALL PROVIDE REINFORCED AREAS FOR THE INSTALLATION OF FLOOR-MOUNTED GRAB BARS. WHERE A BATHTUB IS INSTALLED WITH SURROUNDING WALLS, GRAB BAR REINFORCEMENT SHALL BE LOCATED ON EACH END OF THE BATHTUB, 32 INCHES TO 38 INCHES ABOVE THE FLOOR, EXTENDING A MINIMUM OF 24 INCHES FROM THE FRONT EDGE OF THE BATHTUB TOWARD THE BACK WALL OF THE BATHTUB. THE GRAB BAR REINFORCEMENT SHALL BE A MINIMUM OF 6 INCHES NOMINAL IN HEIGHT. (SEE FIGURE 11A-9C.)
GRAB BAR REINFORCEMENT SHALL BE INSTALLED ON THE BACK WALL OF THE BATHTUB A MAXIMUM OF 6 INCHES ABOVE THE BATHTUB RIM EXTENDING UPWARD TO AT LEAST 38 INCHES ABOVE THE FLOOR. GRAB BAR BACKING SHALL BE INSTALLED HORIZONTALLY TO PERMIT THE INSTALLATION OF A 48-INCH GRAB BAR WITH EACH END A MAXIMUM OF 6 INCHES FROM THE END WALLS OF THE BATHTUB. THE GRAB BAR REINFORCEMENT SHALL BE A MINIMUM OF 6 INCHES NOMINAL IN HEIGHT.
- BATHTUB CONTROLS. FAUCET CONTROLS AND OPERATION MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 POUNDS. LEVER OPERATED, PUSH-TYPE AND ELECTRONICALLY CONTROLLED MECHANISMS ARE EXAMPLES OF ACCEPTABLE DESIGNS.
- SHOWER UNIT. A SHOWER SPRAY UNIT IS NOT REQUIRED IN BATHTUBS.
- BATHTUB ENCLOSURES. DOORS AND PANELS OF BATHTUB ENCLOSURES SHALL BE SUBSTANTIALLY CONSTRUCTED FROM APPROVED, SHATTER-RESISTANT MATERIALS. HINGED DOORS SHALL OPEN OUTWARD. GLAZING USED IN DOORS AND PANELS OF BATHTUB ENCLOSURES SHALL BE FULLY TEMPERED, LAMINATED SAFETY GLASS OR APPROVED PLASTIC. WHEN GLASS IS USED, IT SHALL HAVE MINIMUM THICKNESS OF NOT LESS THAN 1/8 INCH WHEN FULLY TEMPERED, OR 1/4 INCH WHEN LAMINATED, AND SHALL PASS THE TEST REQUIREMENTS OF THIS PART, CHAPTER 24, GLASS AND GLAZING. PLASTICS USED IN DOORS AND PANELS OF BATHTUB ENCLOSURES SHALL BE OF A SHATTER-RESISTANT TYPE.

ADAPTABLE FEATURES (OPTIONAL)

GRAB BAR REINFORCEMENT

5

- REINFORCED WALLS FOR GRAB BARS. WHERE THE WATER CLOSET IS NOT PLACED ADJACENT TO A SIDE WALL CAPABLE OF ACCOMMODATING A GRAB BAR, THE BATHROOM SHALL HAVE PROVISIONS FOR INSTALLATION OF FLOOR-MOUNTED, FOLDAWAY OR SIMILAR ALTERNATIVE GRAB BARS.
WHERE THE WATER CLOSET IS PLACED ADJACENT TO A SIDE WALL, REINFORCEMENT SHALL BE INSTALLED ON BOTH SIDES OR ONE SIDE AND THE BACK. IF REINFORCEMENT IS INSTALLED AT THE BACK, IT SHALL BE INSTALLED BETWEEN 32 INCHES AND 38 INCHES ABOVE THE FLOOR. THE GRAB BAR REINFORCEMENT SHALL BE A MINIMUM OF 6 INCHES NOMINAL IN HEIGHT. THE BACKING SHALL BE A MINIMUM OF 40 INCHES IN LENGTH. REINFORCEMENT INSTALLED AT THE SIDE OF THE WATER CLOSET SHALL BE INSTALLED 32 INCHES TO 38 INCHES ABOVE THE FLOOR. THE REINFORCEMENT SHALL BE INSTALLED A MAXIMUM OF 12 INCHES FROM THE REAR WALL AND SHALL EXTEND A MINIMUM OF 26 INCHES IN FRONT OF THE WATER CLOSET. THE GRAB BAR REINFORCEMENT SHALL BE A MINIMUM OF 6 INCHES NOMINAL IN HEIGHT.
- SEAT HEIGHT. THE MINIMUM HEIGHT OF WATER CLOSET SEATS SHALL BE 15 INCHES ABOVE THE FLOOR.
- WATER CLOSET CONTROLS. WATER CLOSET CONTROLS SHALL BE MOUNTED NO MORE THAN 44 INCHES ABOVE THE FLOOR. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 POUNDS.

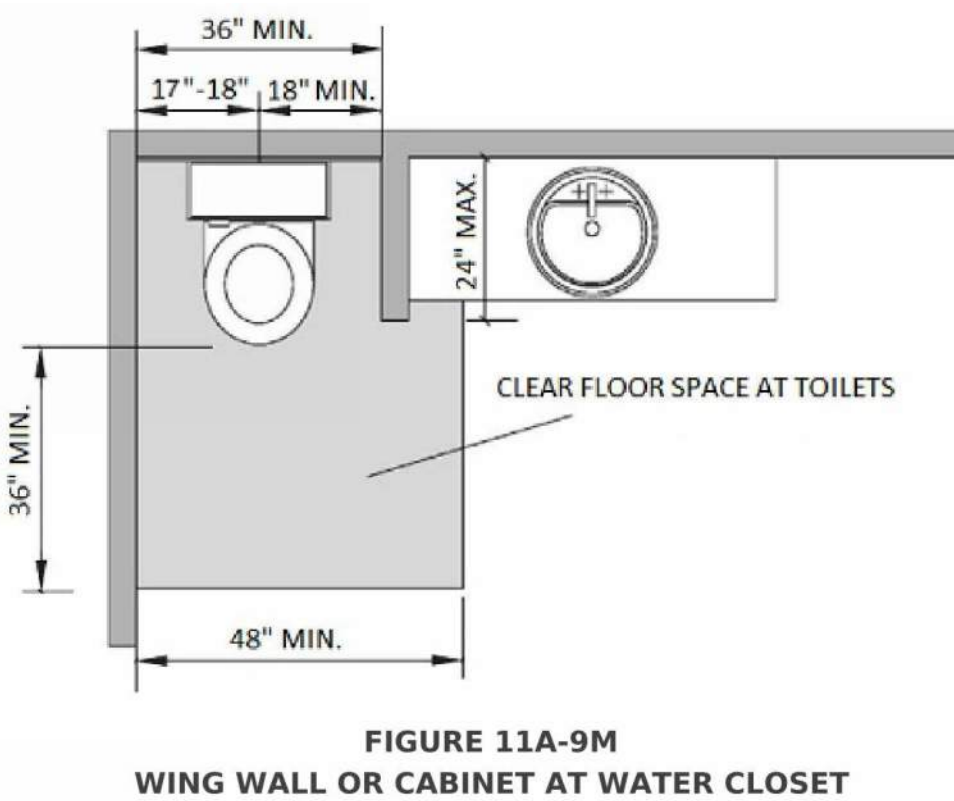


FIGURE 11A-9M
WING WALL OR CABINET AT WATER CLOSET

749 SQ. FT. MODEL (746 SQ.FT.)

OPTION # 2

PROJECT

ACCESSORY DWELLING UNIT

PWP23-003

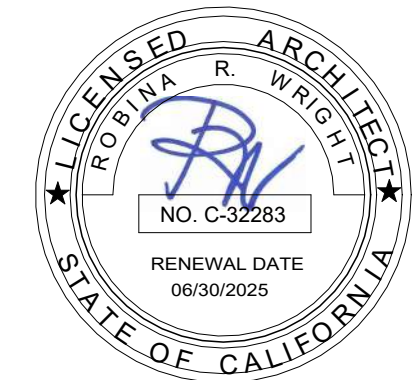
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TITLE

AGING- IN PLACE DESIGN

SCALE

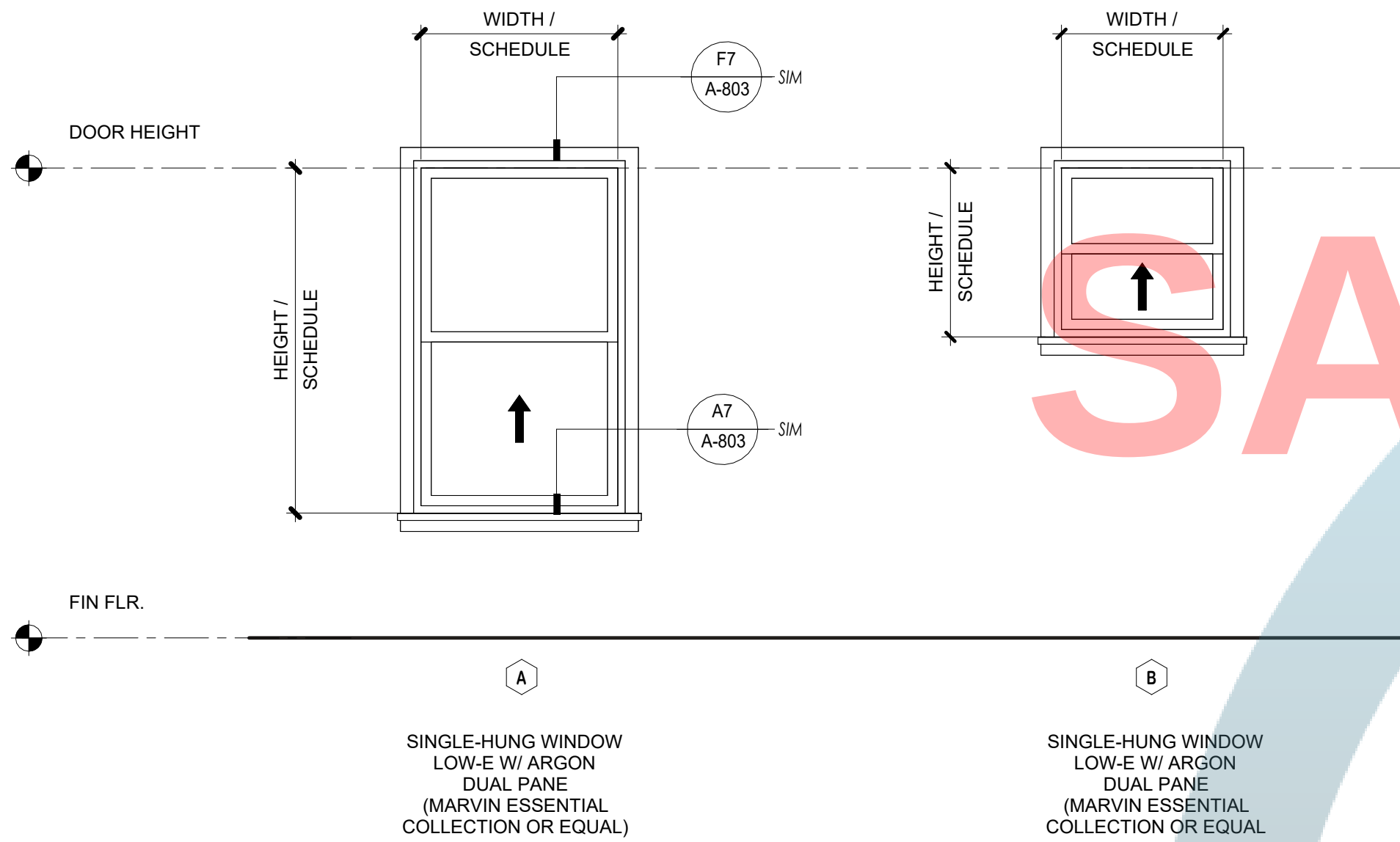
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A-501

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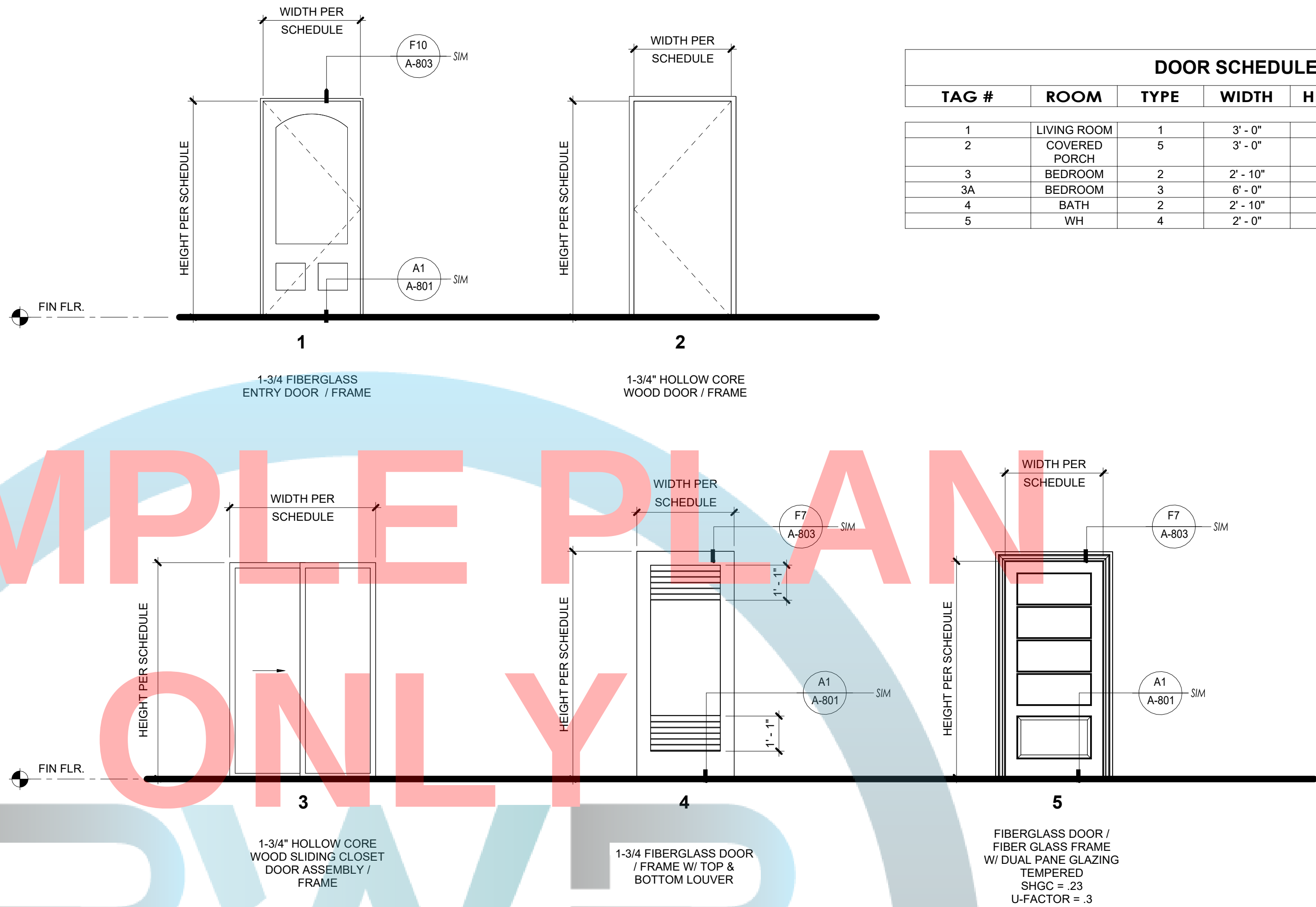
7/12/2023 12:12:28 PM
24" X 36"

WINDOW SCHEDULE						
TYPE MARK	WIDTH	HEIGHT	SILL HEIGHT	SHGC	U-FACTOR	COMMENTS
A	2' - 6"	2' - 6"	4" - 2"	0.23	0.3	
B	3' - 0"	5' - 0"	1' - 8"	0.23	0.3	



WINDOW LEGEND
1/2" = 1'-0"

DOOR SCHEDULE					
TAG #	ROOM	TYPE	WIDTH	HEIGHT	COMMENTS
1	LIVING ROOM	1	3' - 0"	6' - 8"	
2	COVERED PORCH	5	3' - 0"	6' - 8"	
3	BEDROOM	2	2' - 10"	6' - 8"	
3A	BEDROOM	3	6' - 0"	6' - 8"	
4	BATH	2	2' - 10"	6' - 8"	
5	WH	4	2' - 0"	6' - 8"	



DOOR SCHEDULE
3/8" = 1'-0"

PUBLIC WORKS AND PLANNING
COUNTY OF FRESNO

NOT FOR
CONSTRUCTION

749 SQ. FT. MODEL (746 SQ.FT.)

OPTION # 2

PROJECT

ACCESSORY
DWELLING UNIT

PWP23-003

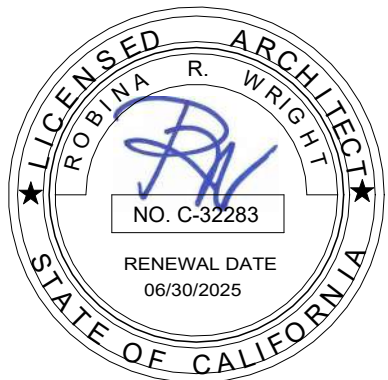
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TITLE

OPENING SCHEDULE

SCALE

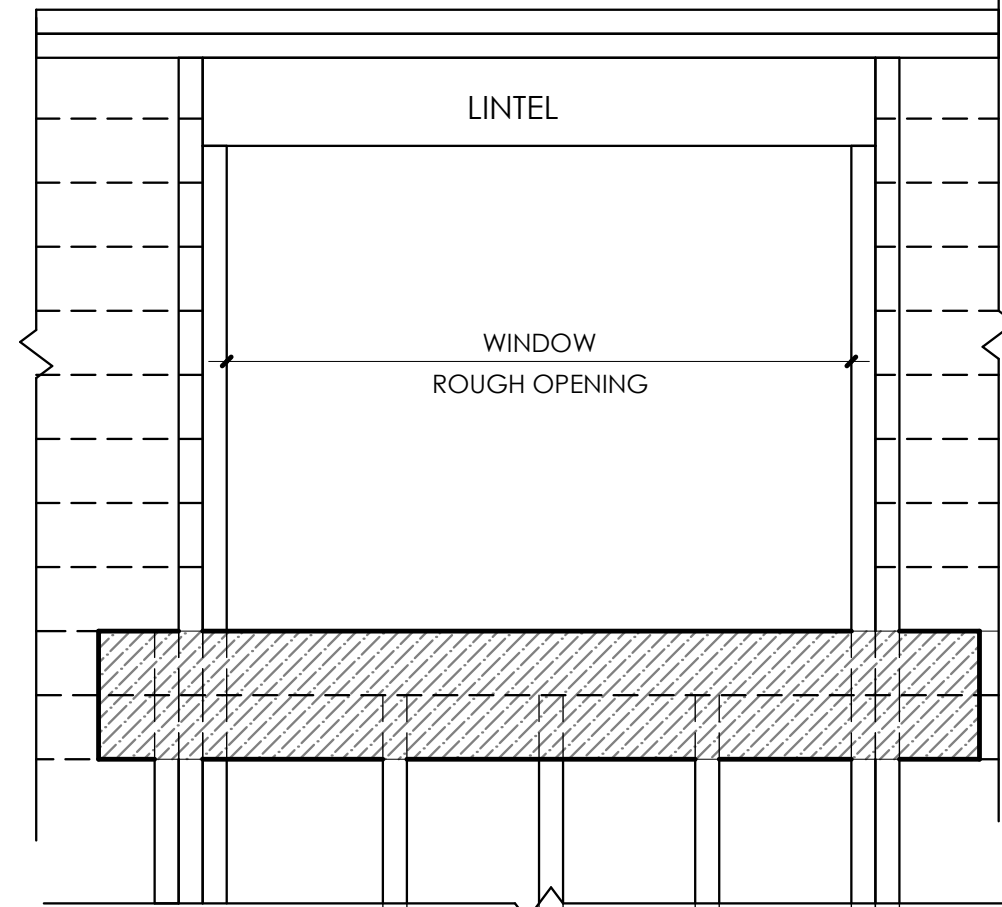
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A-601

ISSUE DATE	JOB NUMBER
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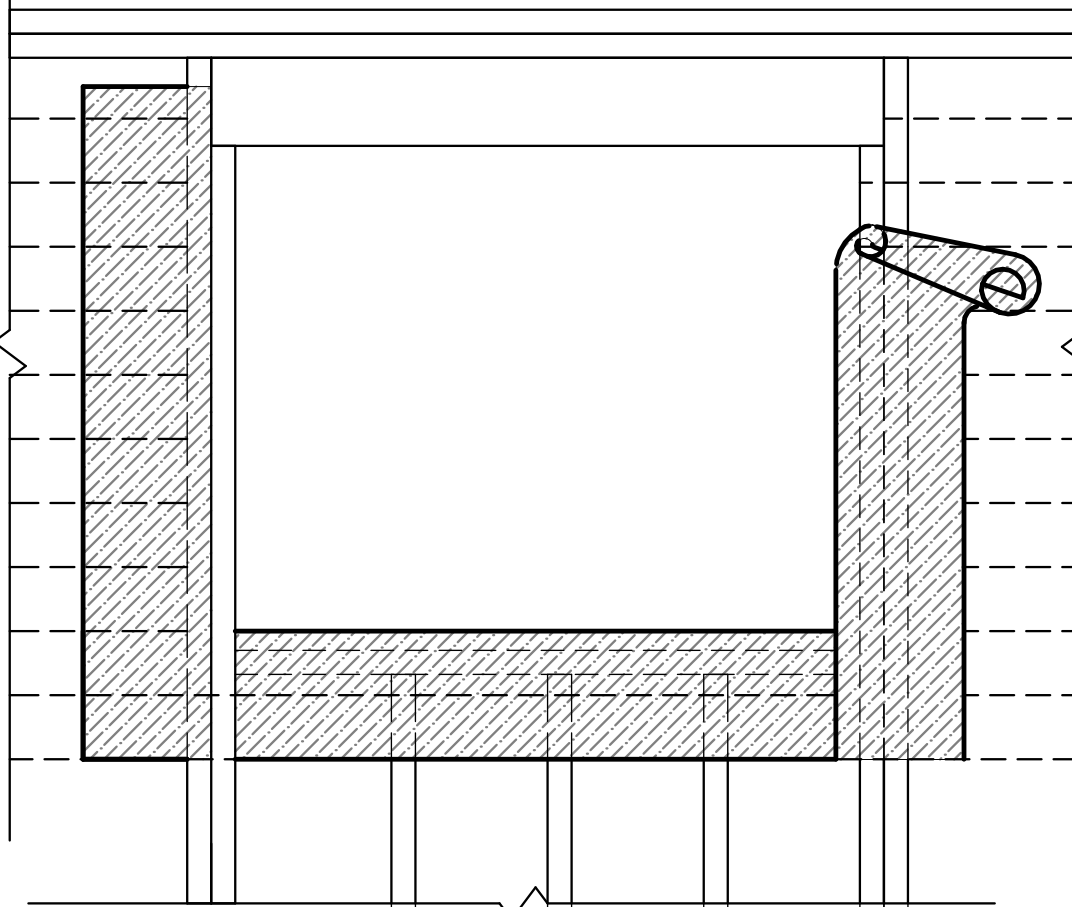
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24" X 36"

STEP 1



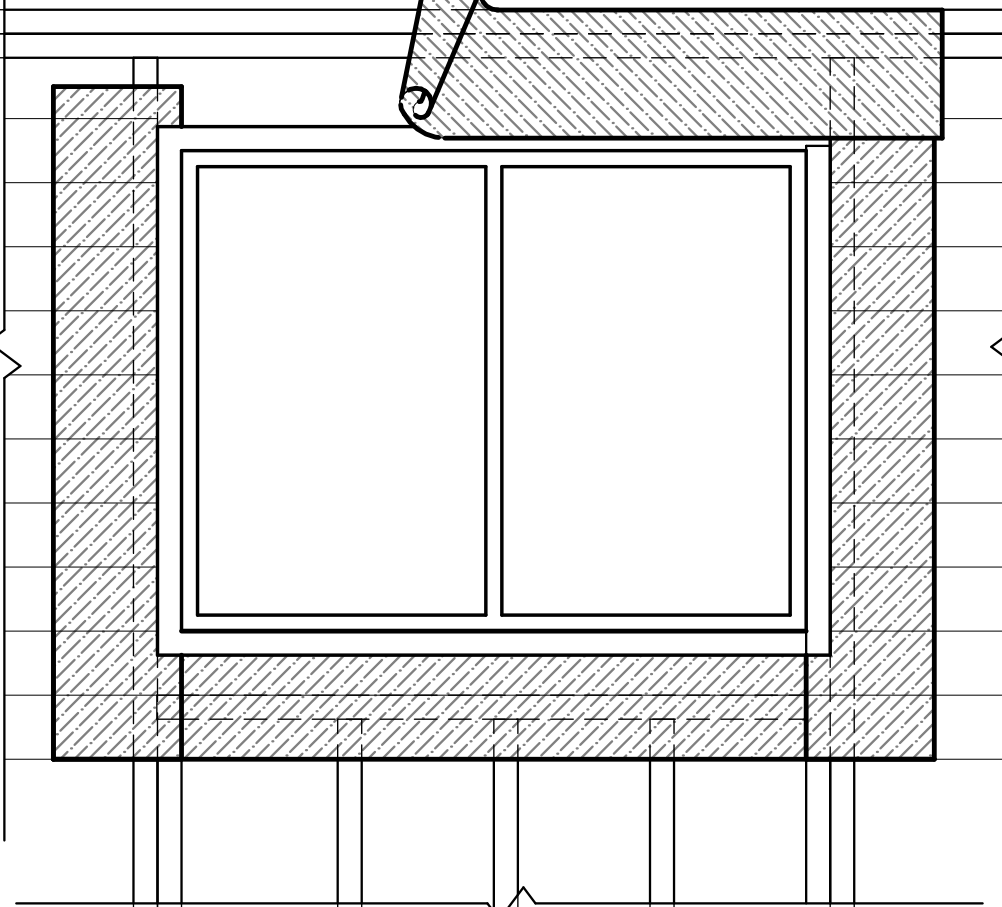
ATTACH A SILL STRIP OF ASPHALT-SATURATED ROOFING FELT PAPER, OR APPROVED FLASHING MATERIAL AT LEAST 8" WIDE WITH THE TOP EDGE EVEN WITH THE TOP EDGE OF THE ROUGH SILL. EXTEND THIS SILL STRIP AT LEAST 8" BEYOND THE EDGE OF THE ROUGH OPENING OF THE WINDOW.

STEP 2



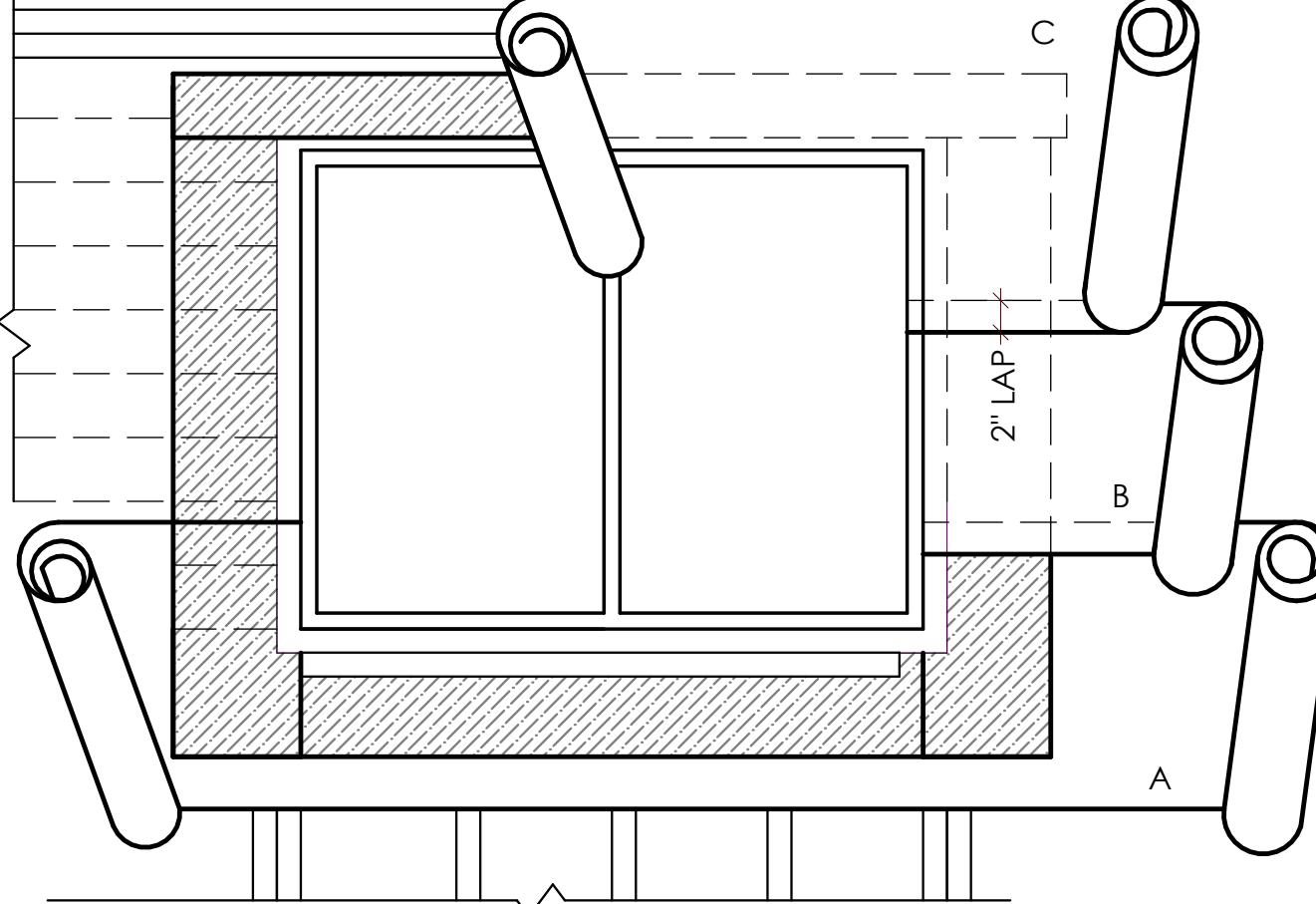
AFTER SILL STRIP IS IN PLACE, ATTACH JAMB STRIP (SIDE OF OPENING) AT LEAST 8" WIDE WITH INSIDE EDGE EVEN WITH EDGE OF WINDOW OPENING. EXTEND JAMB STRIP 4" ABOVE THE TOP OF WINDOW OPENING.

STEP 3



APPLY A BEAD OF CAULKING TO THE BACK SURFACES OF THE WINDOW, THEN PLACE THE WINDOW INTO THE ROUGH OPENING. WITH FLANGES OVER THE INSTALLED FLASHING FELT STRIP. AFTER WINDOW IS PLACED, INSTALL THE HEAD FLASHING OVER THE WINDOW FLANGE. THIS IS ANOTHER STRIP OF FELT AT LEAST 4" WIDE.

STEP 4

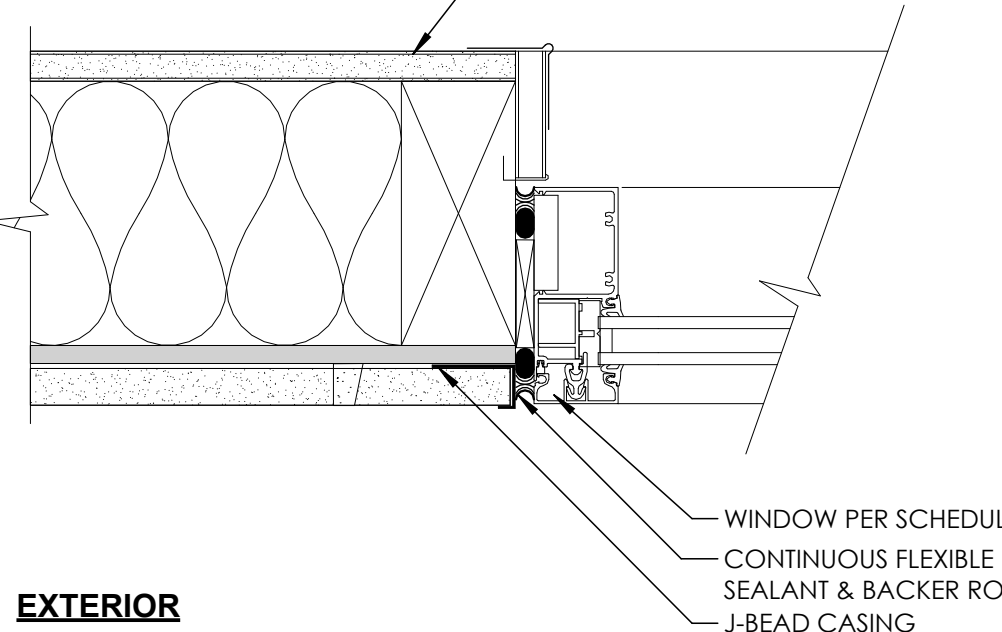


STARTING AT THE BOTTOM OF THE WALL (SOLE PLATE), LAY WATER RESISTANT PAPER UNDER THE SILL STRIP AND CUT TO FIT (A) INSTALL SUCCEEDING COURSES OF WATER RESISTANT PAPER (B,C, ETC.) OVER JAMB AND HEAD FLANGES IN SHINGLE BOARD FASHION.

WINDOW FLASHING DETAIL2
1" = 1'-0"

H1

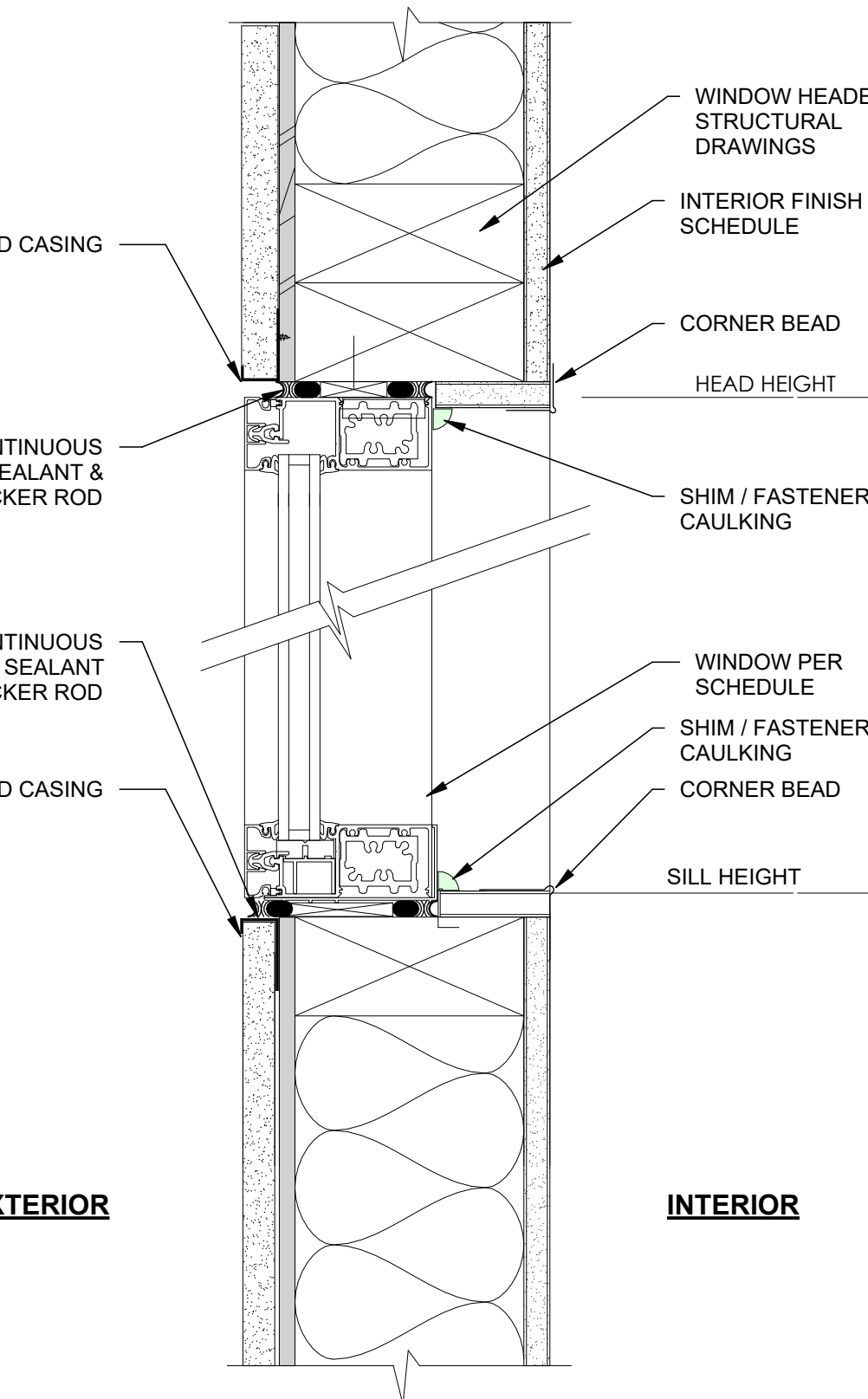
INTERIOR



EXTERIOR

WINDOW DETAIL - EXTERIOR JAMB1
3" = 1'-0"

E10



EXTERIOR

INTERIOR

INTERIOR

EXTERIOR

DOOR HEAD - EXTERIOR
3" = 1'-0"

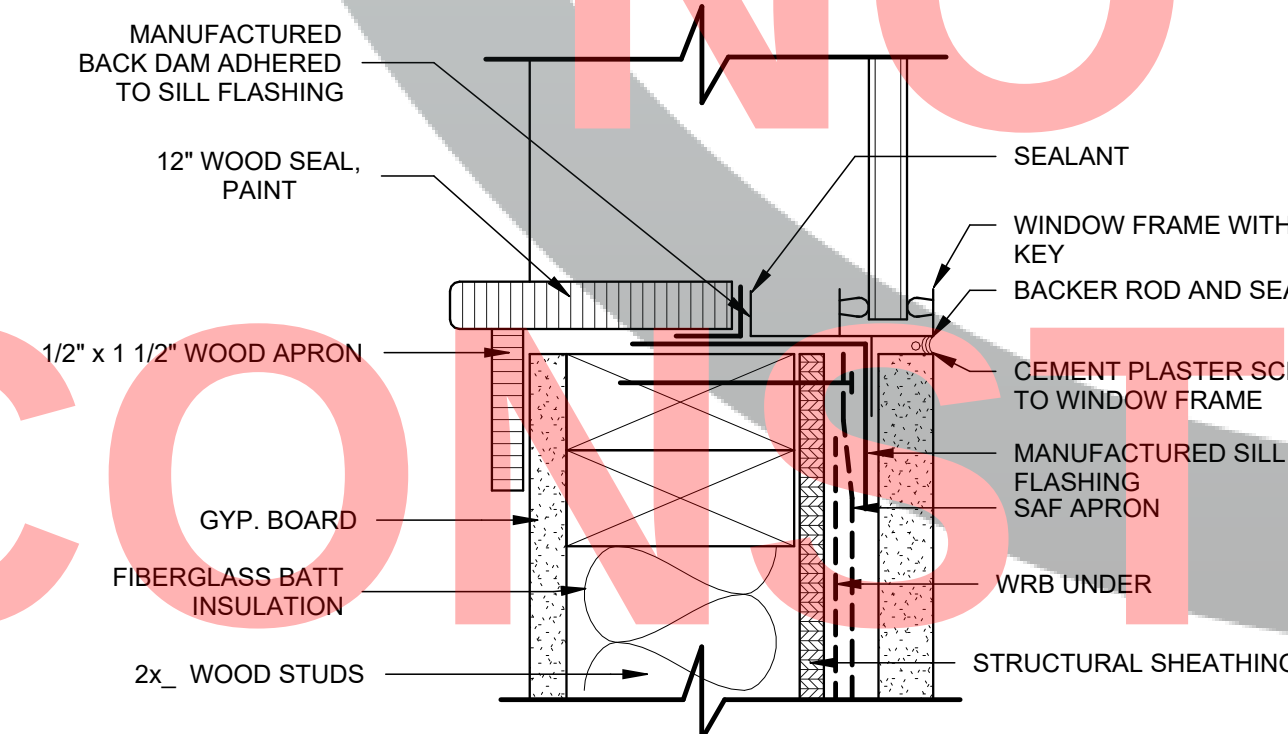
D6

INTERIOR NON- RATED WALL
3" = 1'-0"

D3

TYPICAL EXTERIOR WALL ASSEMBLY1
3" = 1'-0"

D1



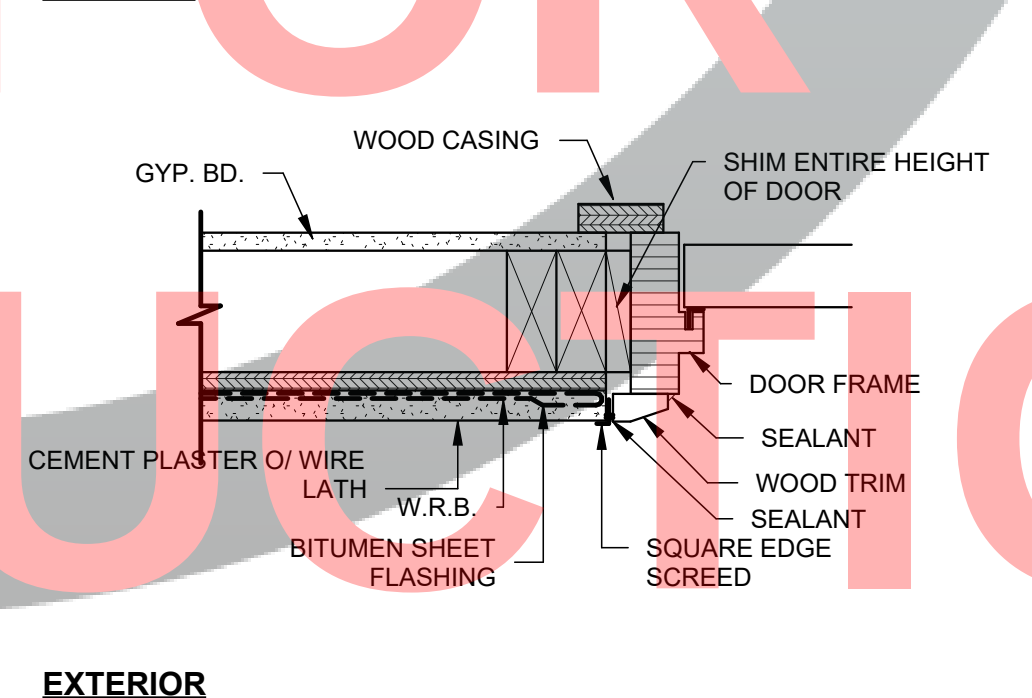
INTERIOR

EXTERIOR

WINDOW SILL AND FLASHING1
3" = 1'-0"

A6

INTERIOR

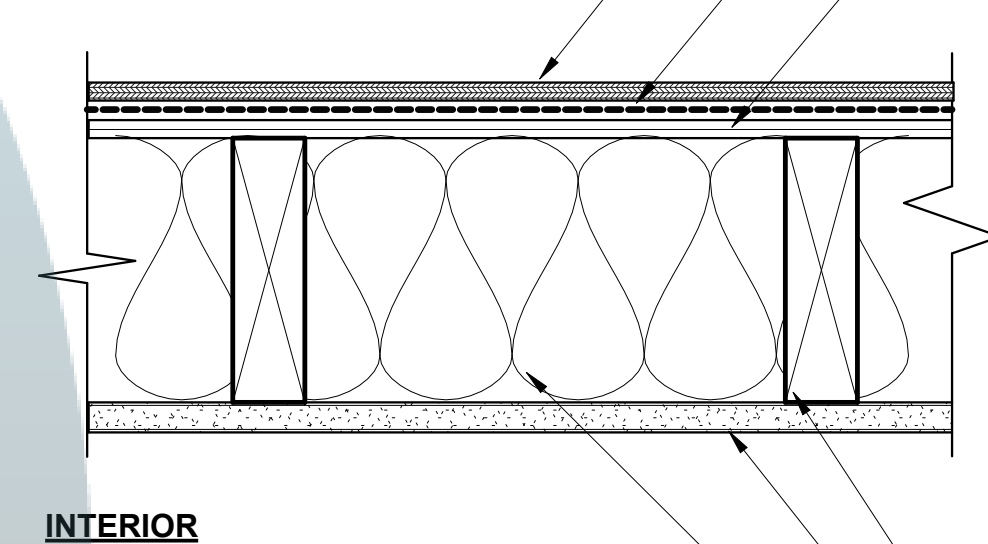


EXTERIOR

EXTERIOR DOOR JAMB @ STUCCO
3" = 1'-0"

A3

EXTERIOR



INTERIOR

HARDI PANEL SIDING
PROVIDE HORIZONTAL FLASHING
(2 METAL) AT JOINTS OF WOOD
SIDINGS

WATER RESISTIVE
BARRIER, HardiWrap or
Equivalent

EXTERIOR PLYWOOD
SHEATHING, REFER TO
STRUCTURAL DRAWINGS.

2X6 WOOD STUD AT
16" O.C.

APPLIED FINISH PER FINISH
SCHEDULE OVER 1/2" GYP.
BOARD.

INSULATION, PER ARCH SECTION

749 SQ. FT. MODEL (746
SQ.FT.)

OPTION
2

PROJECT

ACCESSORY
DWELLING UNIT

PWP23-003

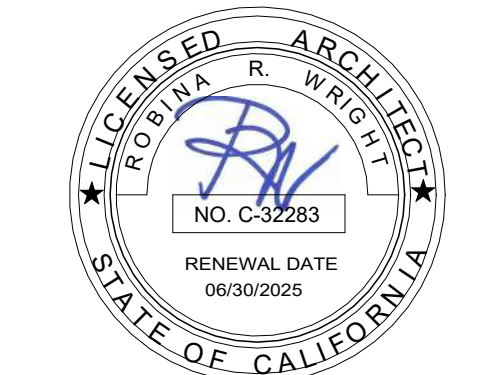
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TITLE

ARCHITECTURAL
DETAILS

SCALE As indicated

A-801

ISSUE DATE MARCH 7, 2023

JOB NUMBER 2023_22

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JULY 12, 2023

E

SCALE As indicated

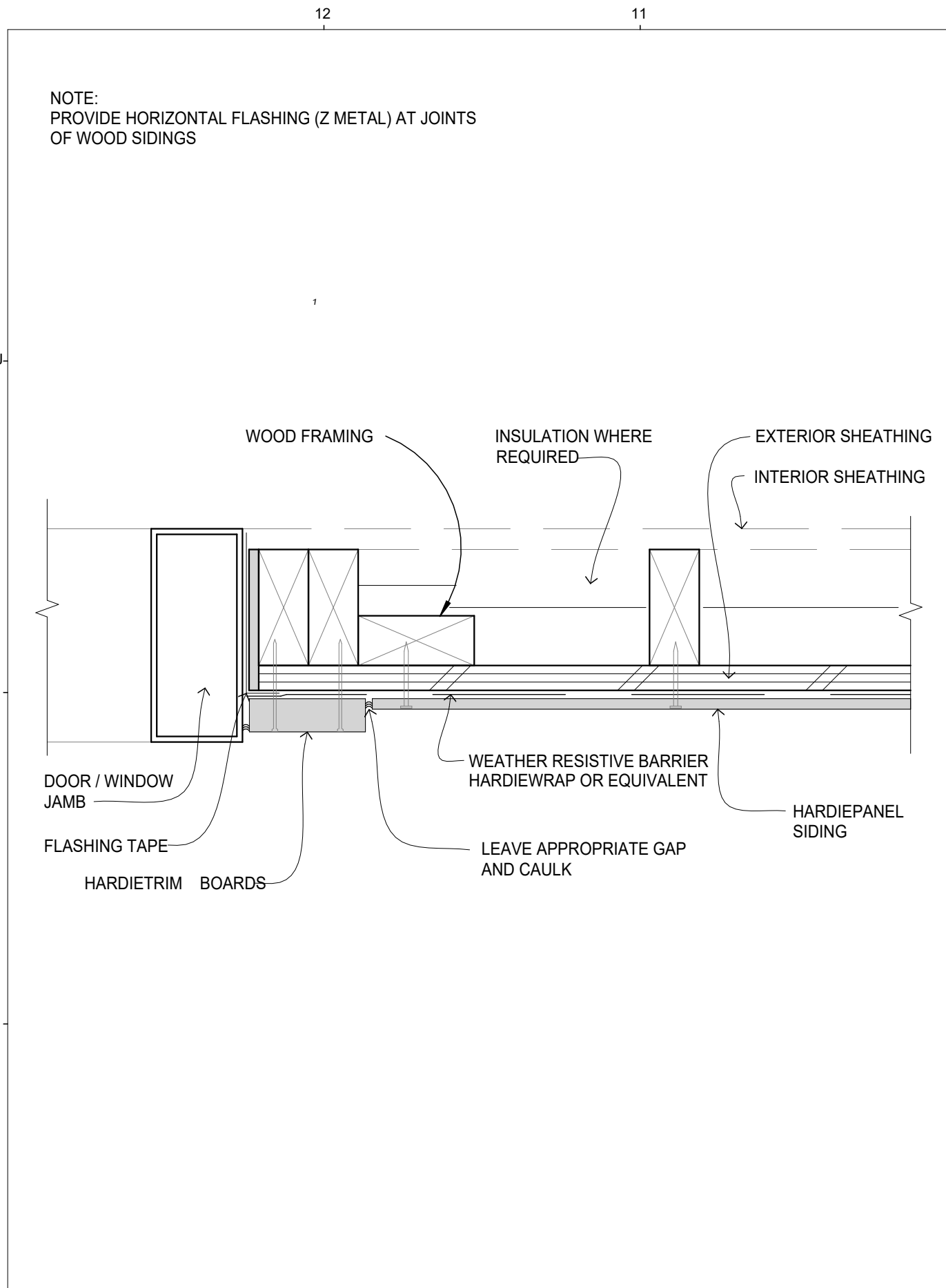
A-802

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Author	Check

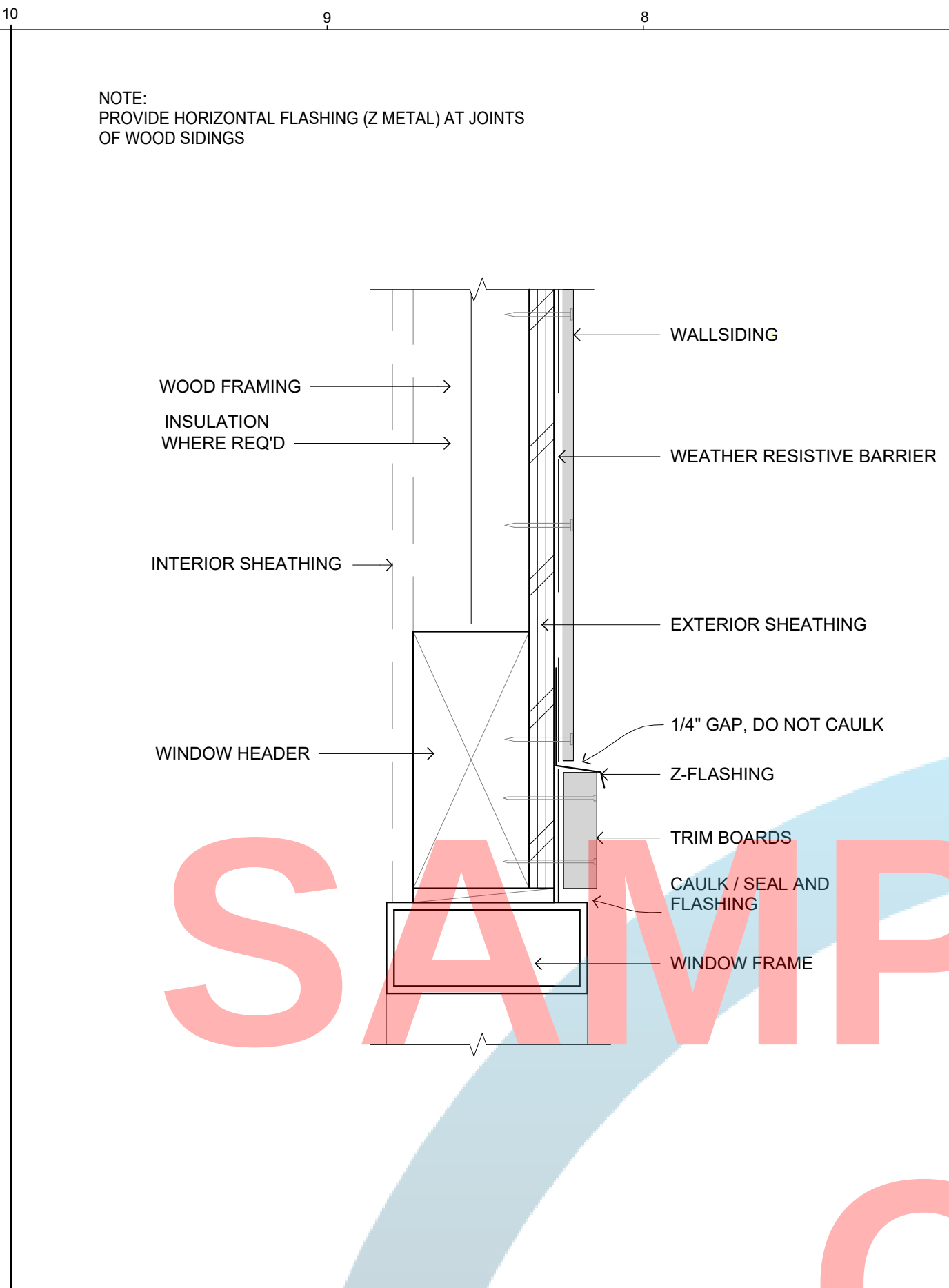


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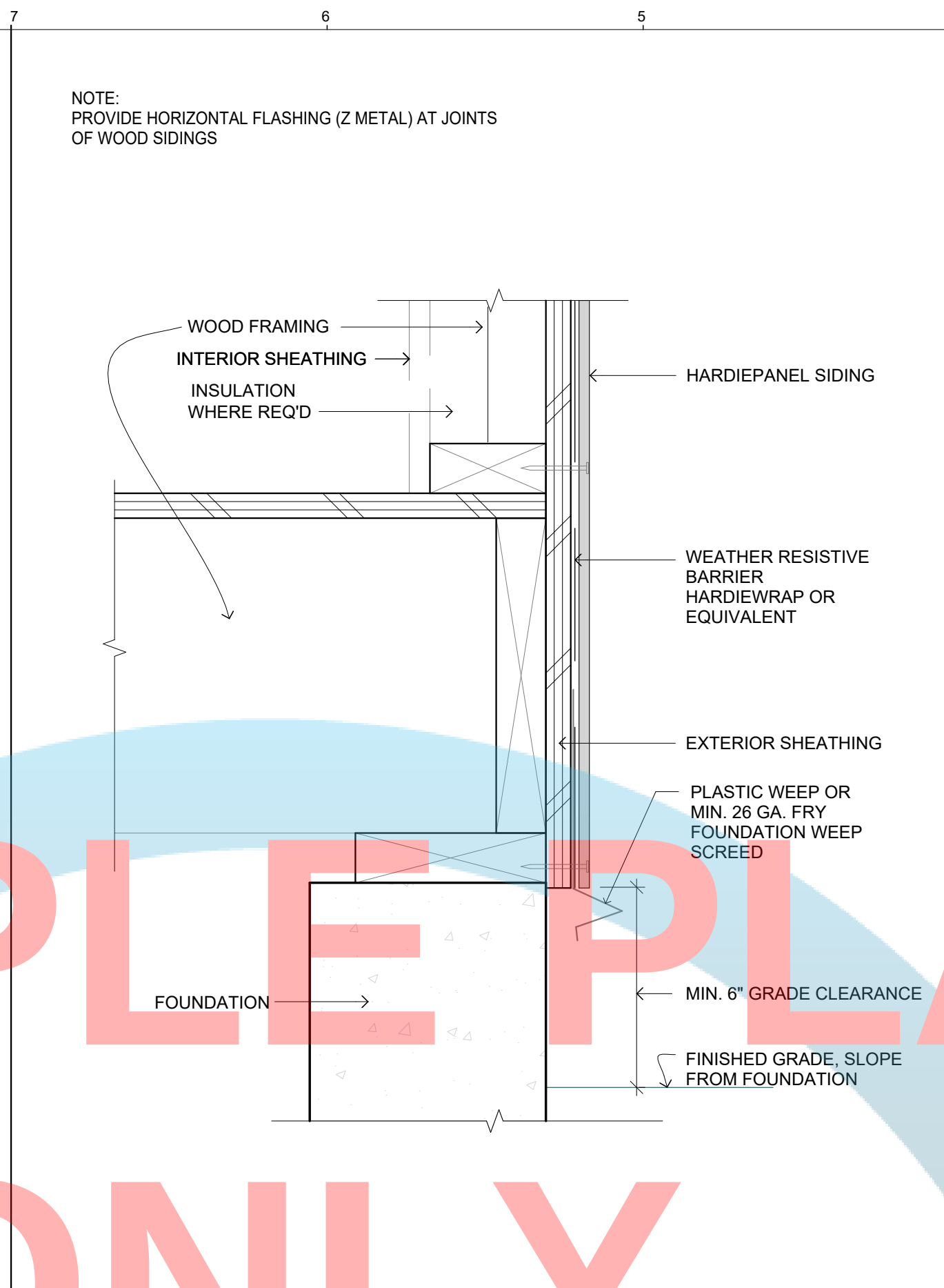
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24" X 36"



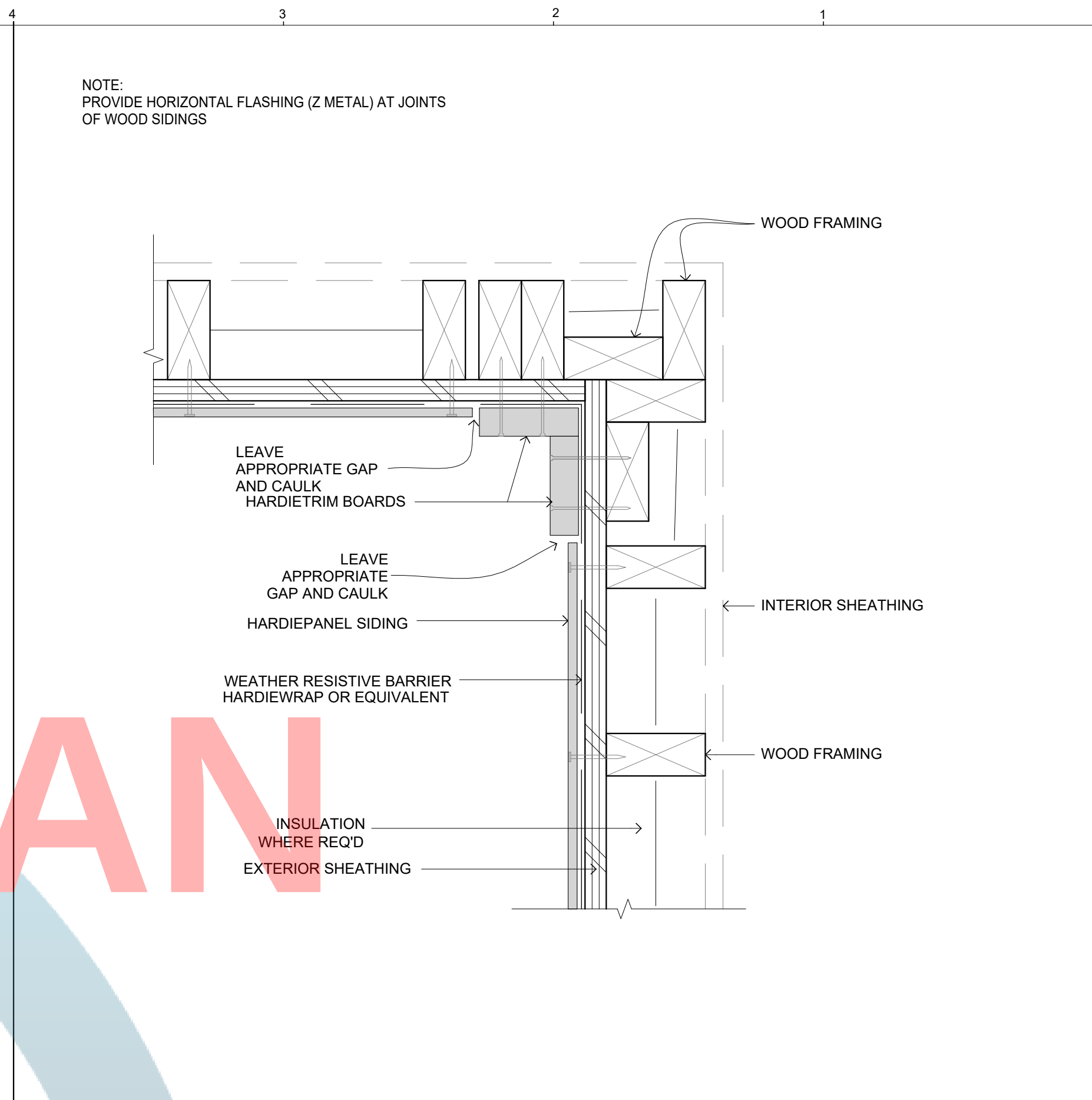
DOOR / WINDOW JAMB DETAIL F10
3" = 1'-0"



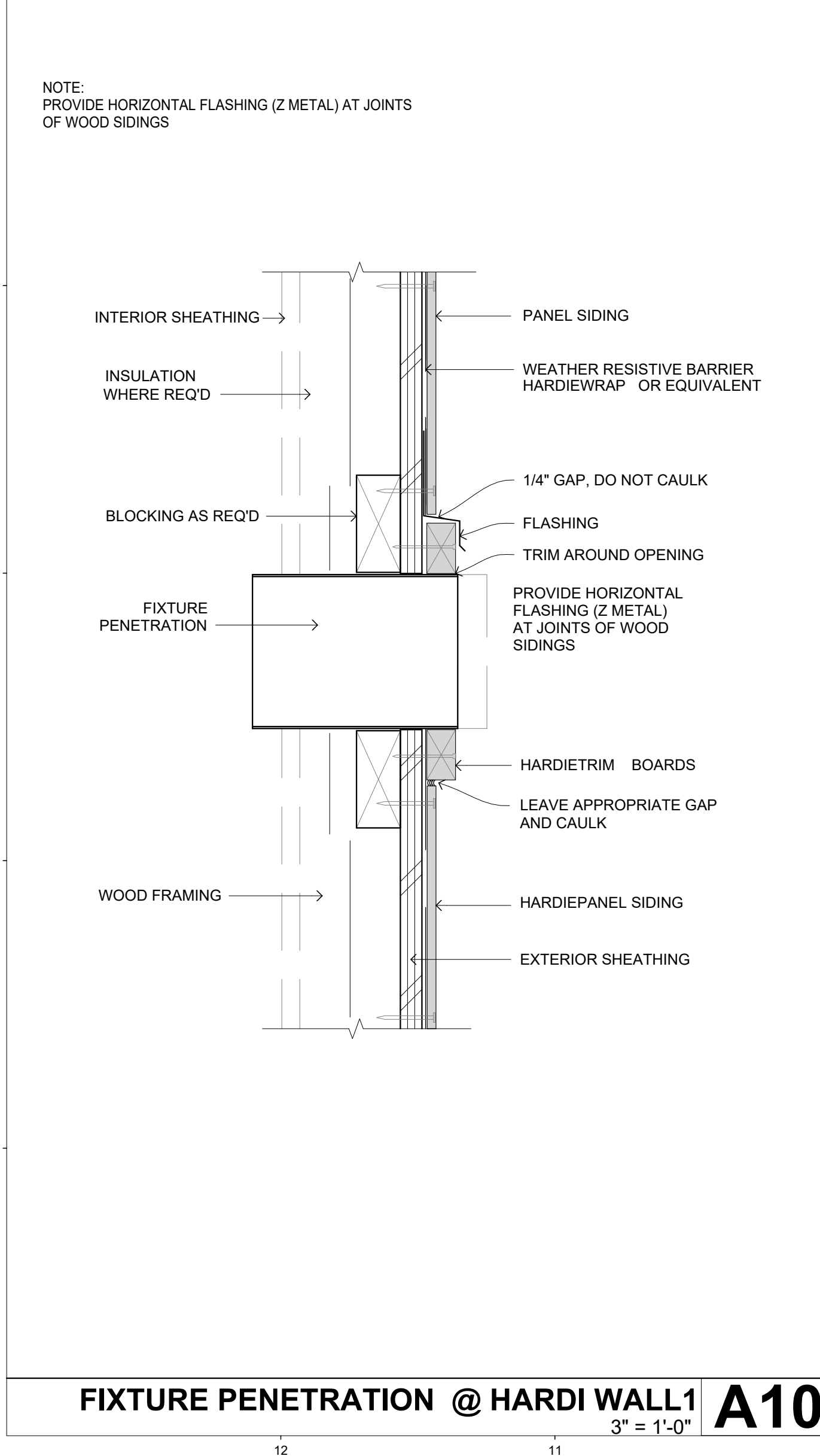
WINDOW / DOOR HEAD F7
3" = 1'-0"



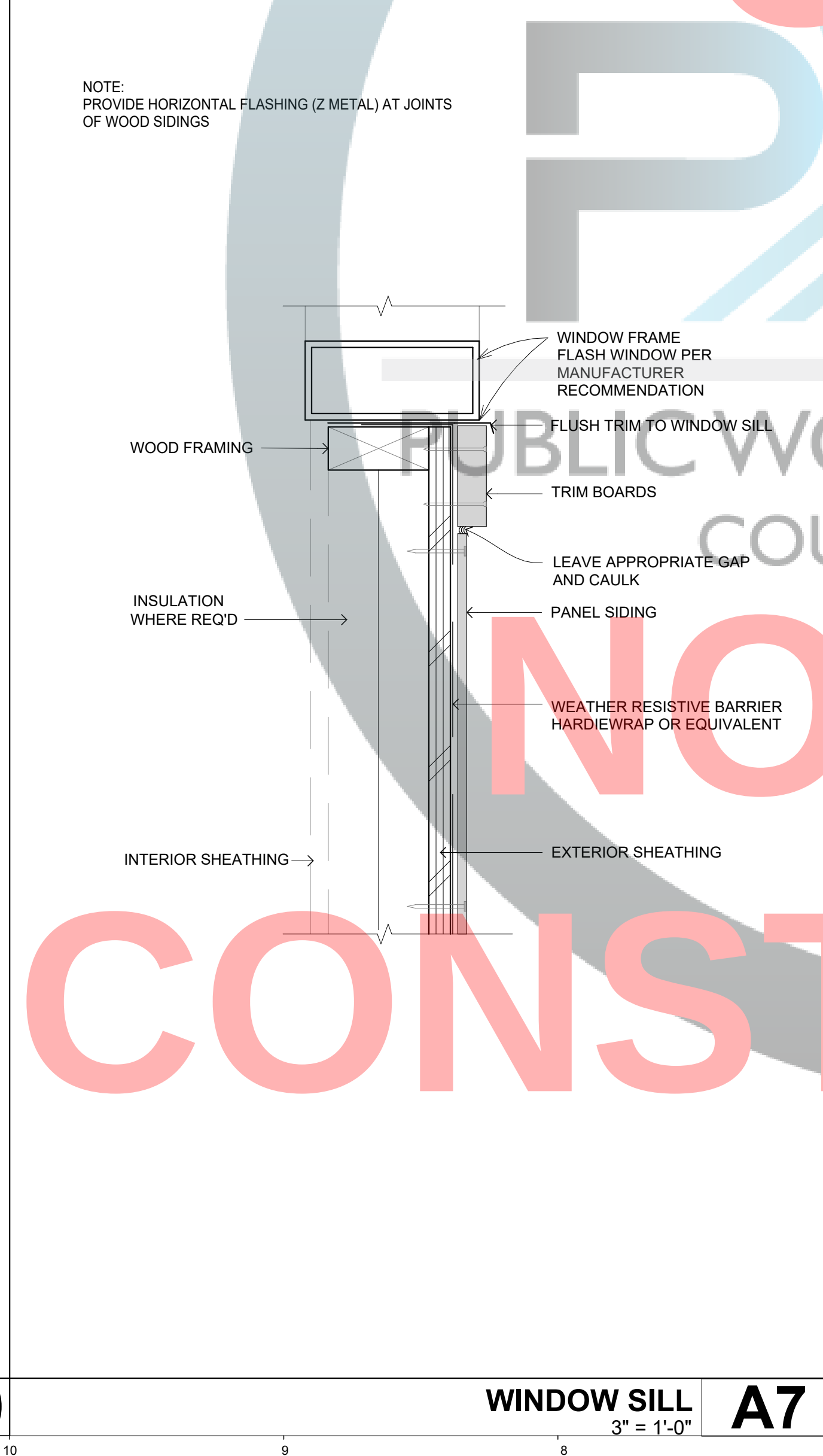
WEEP SCREED AT GRADE (HARDI WALL) F4
3" = 1'-0"



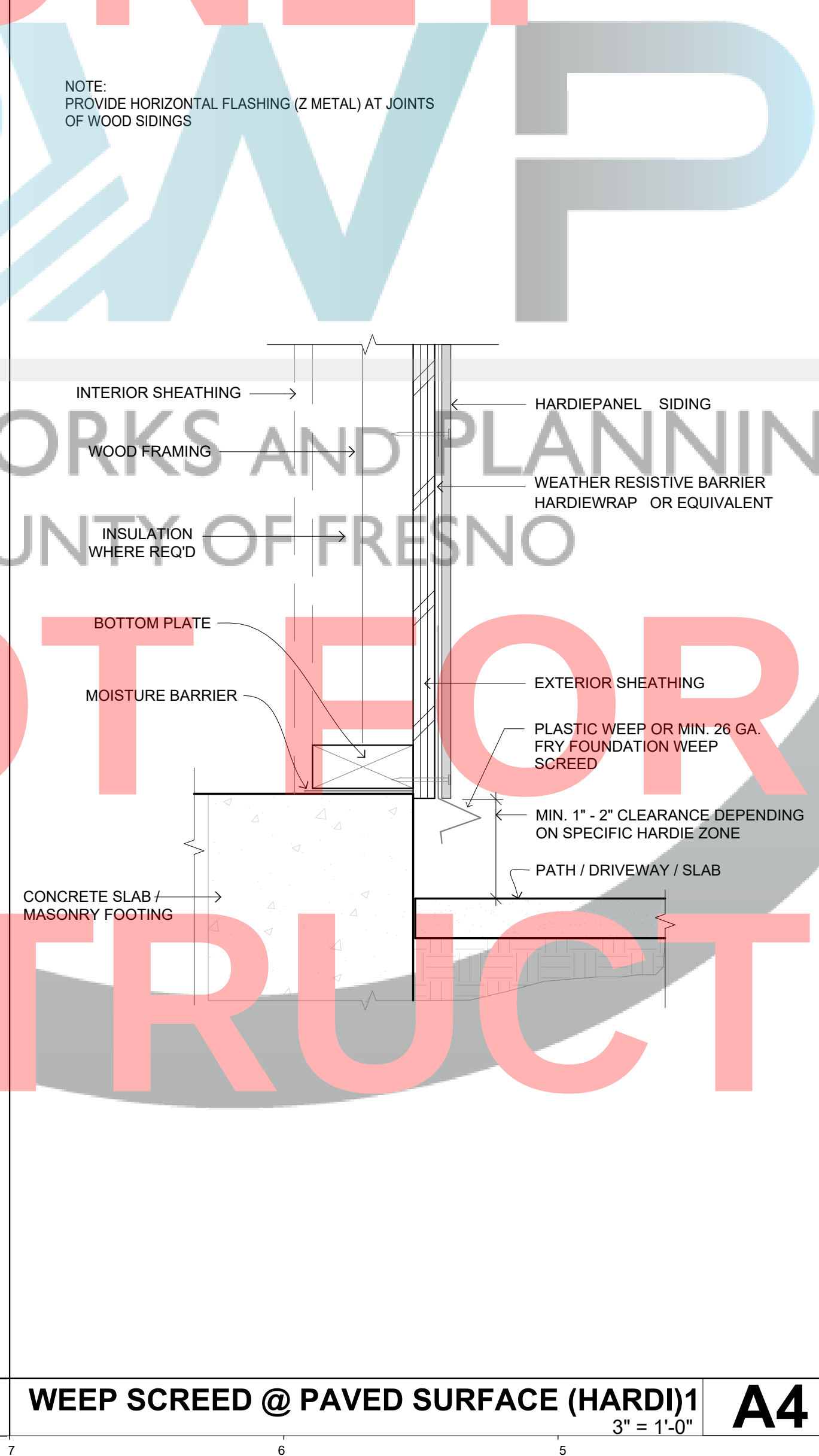
INSIDE CORNER CONDITION AT HARDI WALL F1
3" = 1'-0"



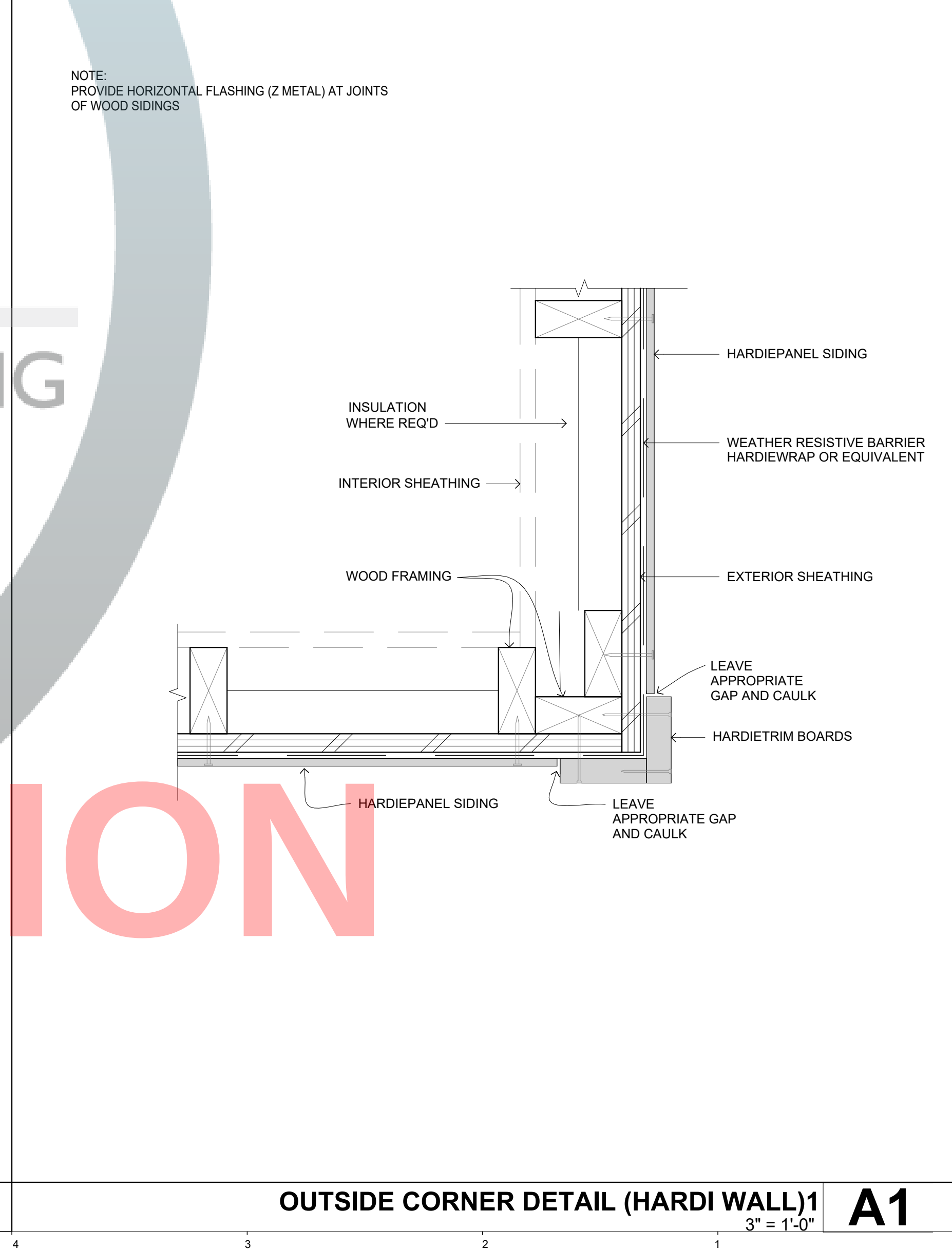
FIXTURE PENETRATION @ HARDI WALL A10
3" = 1'-0"



WINDOW SILL A7
3" = 1'-0"



WEEP SCREED @ PAVED SURFACE (HARDI) A4
3" = 1'-0"



OUTSIDE CORNER DETAIL (HARDI WALL) A1
3" = 1'-0"

749 SQ. FT. MODEL (746 SQ.FT.)

OPTION # 2

PROJECT
ACCESSORY DWELLING UNIT

PWP23-003

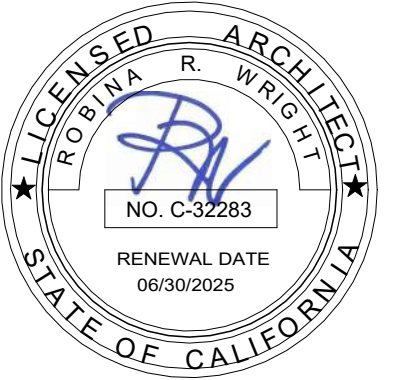
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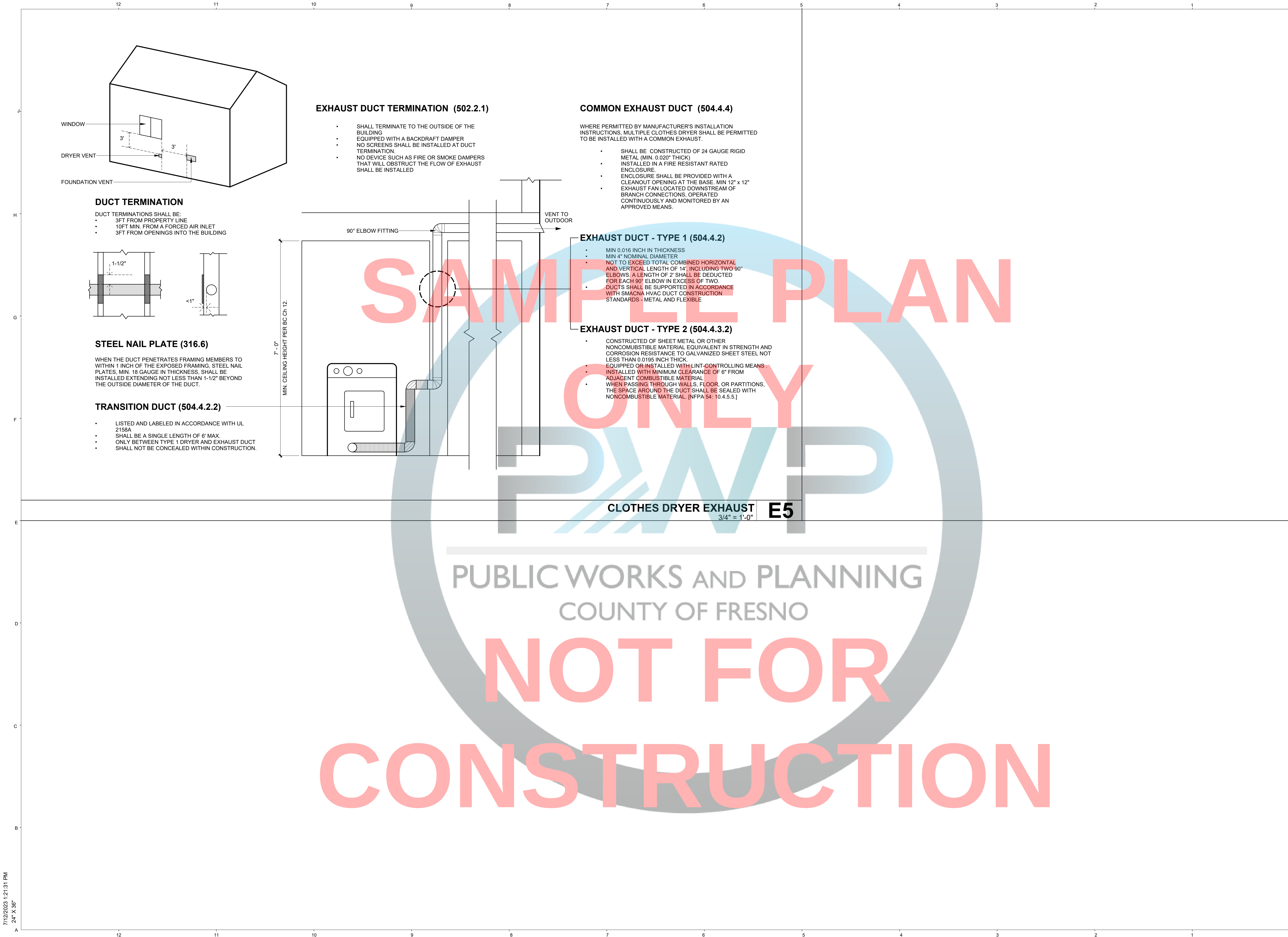
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TITLE
WALL SIDING TYPICAL DETAILS

SCALE 3" = 1'-0"

A-803

ISSUE DATE MARCH 7, 2023	JOB NUMBER 2023_22
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7/12/2023 12:13:11 PM
24" X 36"

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OPTION # 2

PROJECT
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TITLE
CLOTHES DRYER
EXHAUST DETAILS

SCALE 3/4" = 1'-0"

A-804

ISSUE DATE MARCH 7, 2023	JOB NUMBER 2023_22
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RESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2023)

OPTION
2

ACCESSORY DWELLING UNIT



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GREEN BUILDING MANDATORY MEASURES 1

SCALE 12" = 1'-0"

GBC-1

ISSUE DATE MARCH 7, 2023	JOB NUMBER 2023_22
DRAWN BY RW	CHECKED BY R

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

(January 2023)

749 SQ. FT. MODEL (746 SQ.FT.)

OPTION
2

PROJECT

ACCESSORY
DWELLING UNIT

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TITLE

GREEN BUILDING
MANDATORY
MEASURES 2

SCALE

1/2" = 1'-0"

GBC-2

ISSUE DATE	JOB NUMBER
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RW	RW

DIVISION 4.5 ENVIRONMENTAL QUALITY

SECTION 4.501 GENERAL

4.501.1 Scope

The provisions of this chapter shall outline means of reducing the quality of air contaminants that are odorous, irritating and/or harmful to the comfort and well being of a building's installers, occupants and neighbors.

SECTION 4.502 DEFINITIONS

5.102.1 DEFINITIONS
The following terms are defined in Chapter 2 (and are included here for reference)

AGRIFIBER PRODUCTS. Agrifiber products include wheatboard, strawboard, panel substrates and door cores, not including furniture, fixtures and equipment (FF&E) not considered base building elements.

COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and medium density fiberboard. "Composite wood products" does not include hardboard, structural plywood, structural panels, structural composite lumber, oriented strand board, glued laminated timber, prefabricated wood I-joists or finger-jointed lumber, all as specified in California Code of regulations (CCR), title 17, Section 93120.1.

DIRECT-VENT APPLIANCE. A fuel-burning appliance with a sealed combustion system that draws all air for combustion from the outside atmosphere and discharges all flue gases to the outside atmosphere.
MAXIMUM INCREMENTAL REACTIVITY (MIR). The maximum change in weight of ozone formed by adding a compound to the "Base Reactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundredths of a gram (g O₃/g ROG).
Note: MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700 and 94701.

MOISTURE CONTENT. The weight of the water in wood expressed in percentage of the weight of the oven-dry wood.

PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging).
Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521 (a).

REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere.

VOC. A volatile organic compound (VOC) broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a).

4.503 FIREPLACES

4.503.1 GENERAL. Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.

4.504 POLLUTANT CONTROL

4.504.1 COVERING OF DUCT OPENINGS & PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION. At the time of rough installation, during storage on the construction site and until final startup of the heating, cooling and ventilating equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheet metal or other methods acceptable to the enforcing agency to reduce the amount of water, dust or debris which may enter the system.

4.504.2 FINISH MATERIAL POLLUTANT CONTROL. Finish materials shall comply with this section.

4.504.2.1 Adhesives, Sealants and Caulks. Adhesives, sealant and caulks used on the project shall meet the requirements of the following standards unless more stringent local or regional air pollution or air quality management district rules apply:

- Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable or SCAQMD Rule 1168 VOC limits, as shown in Table 4.504.1 or 4.504.2, as applicable. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroethylene), except for aerosol products, as specified in Subsection 2 below.
- Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than 1 pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, prohibitions on use of certain toxic compounds, of California Code of Regulations, Title commencing with section 94507.

4.504.2.2 Paints and Coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 4.504.3 shall be determined by classifying the coating as a Flat, Nonflat or Nonflat-High Gloss coating, based on its gloss, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 California Air Resources Board, Suggested Control Measure, and the corresponding Flat, Nonflat or Nonflat-High Gloss VOC limit in Table 4.504.3 shall apply.

4.504.2.3 Aerosol Paints and Coatings. Aerosol paints and coatings shall meet the Product-weighted MIR Limits for ROC in Section 94522(a)(2) and other requirements, including prohibitions on use of certain compounds and ozone depleting substances, in Sections 94522(e)(1) and (f)(1) of California Code of Regulations, Title 17, commencing with Section 94520, and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation 8, Rule 49.

4.504.2.4 Verification. Verification of compliance with this section shall be provided at the request of the enforcing agency. Documentation may include, but is not limited to, the following:

- Manufacturer's product specification.
- Field verification of on-site product containers.

TABLE 4.504.1 - ADHESIVE VOC LIMIT ^{1,2}	
(Less Water and Less Exempt Compounds in Grams per Liter)	
ARCHITECTURAL APPLICATIONS	VOC LIMIT
INDOOR CARPET ADHESIVES	50
CARPET PAD ADHESIVES	50
OUTDOOR CARPET ADHESIVES	150
WOOD FLOORING ADHESIVES	100
RUBBER FLOOR ADHESIVES	60
SUBFLOOR ADHESIVES	50
CERAMIC TILE ADHESIVES	65
VCT & ASPHALT TILE ADHESIVES	50
DRYWALL & PANEL ADHESIVES	50
COVE BASE ADHESIVES	50
MULTIPURPOSE CONSTRUCTION ADHESIVE	70
STRUCTURAL GLAZING ADHESIVES	100
SINGLE-PLY ROOF MEMBRANE ADHESIVES	250
OTHER ADHESIVES NOT LISTED	50

CONT.

TABLE 4.504.1 - ADHESIVE VOC LIMIT ^{1,2}	
(Less Water and Less Exempt Compounds in Grams per Liter)	
SPECIALTY APPLICATIONS	VOC LIMIT
PVC WELDING	510
CPVC WELDING	490
ABS WELDING	325
PLASTIC CEMENT WELDING	250
ADHESIVE PRIMER FOR PLASTIC	550
CONTACT ADHESIVE	80
SPECIAL PURPOSE CONTACT ADHESIVE	250
STRUCTURAL WOOD MEMBER ADHESIVE	140
TOP & TRIM ADHESIVE	250
SUBSTRATE SPECIFIC APPLICATIONS	VOC LIMIT
METAL TO METAL	30
PLASTIC FOAMS	50
POROUS MATERIAL (EXCEPT WOOD)	50
WOOD	30
FIBERGLASS	80

- IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.
- FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.

TABLE 4.504.2 - SEALANT VOC LIMIT	
(Less Water and Less Exempt Compounds in Grams per Liter)	
SEALANTS	VOC LIMIT
ARCHITECTURAL	250
MARINE DECK	760
NONMEMBRANE ROOF	300
ROADWAY	250
SINGLE-PLY ROOF MEMBRANE	450
OTHER	420
SEALANT PRIMERS	VOC LIMIT
ARCHITECTURAL	250
NON-POROUS	775
POROUS	775
MODIFIED BITUMINOUS	500
MARINE DECK	760
OTHER	750

Adhesives, sealant and caulks used on the project shall meet the

TABLE 4.504.3 - VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS ^{2,3}	
GRAMS OF VOC PER LITER OF COATING, LESS WATER & LESS EXEMPT COMPOUNDS	
COATING CATEGORY	VOC LIMIT
FLAT COATINGS	50
NON-FLAT COATINGS	100
NONFLAT-HIGH GLOSS COATINGS	150
SPECIALTY COATINGS	VOC LIMIT
ALUMINUM ROOF COATINGS	400
BASEMENT SPECIALTY COATINGS	400
BITUMINOUS ROOF COATINGS	50
BITUMINOUS ROOF PRIMERS	350
BOND BREAKERS	350
CONCRETE CURING COMPOUNDS	350
CONCRETE/MASONRY SEALERS	100
DRIVEWAY SEALERS	50
DRY FOG COATINGS	150
FAUX FINISHING COATINGS	350
FIRE RESISTIVE COATINGS	350
FLOOR COATINGS	100
FORM-RELEASE COMPOUNDS	250
GRAPHIC ARTS COATINGS (SIGN PAINTS)	500
HIGH TEMPERATURE COATINGS	420
INDUSTRIAL MAINTENANCE COATINGS	250
LOW SOLIDS COATINGS ¹	120
MAGNESITE CEMENT COATINGS	450
MASTIC TEXTURE COATINGS	100
METALLIC PIGMENTED COATINGS	500
MULTICOLOR COATINGS	250
PRETREATMENT WASH PRIMERS	420
PRIMERS, SEALERS, & UNDERCOATERS	100
REACTIVE PENETRATING SEALERS	350
RECYCLED COATINGS	250
ROOF COATINGS	50
RUST PREVENTATIVE COATINGS	250
SHELLACS	
CLEAR	730
OPAQUE	550
SPECIALTY PRIMERS, SEALERS & UNDERCOATERS	100
STAINS	250

Adhesives, sealant and caulks used on the project shall meet the

TABLE 4.504.3 - VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS ^{2,3}	
GRAMS OF VOC PER LITER OF COATING, INCLUDING WATER & EXEMPT COMPOUNDS	
SPECIALTY COATINGS (CONT.)	VOC LIMIT
STONE CONSOLIDANTS	450
SWIMMING POOL COATINGS	340
TRAFFIC MARKING COATINGS	100
TUB & TILE REFINISH COATINGS	420
WATERPROOFING MEMBRANES	250
WOOD COATINGS	275
WOOD PRESERVATIVES	350
ZINC-RICH PRIMERS	340

TABLE 4.504.5 - FORMALDEHYDE LIMITS ¹	
MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION	
PRODUCT	CURRENT LIMIT
HARDWOOD PLYWOOD VENEER CORE	0.05
HARDWOOD PLYWOOD COMPOSITE CORE	0.05
PARTICLE BOARD	0.09
MEDIUM DENSITY FIBERBOARD	0.11
THIN MEDIUM DENSITY FIBERBOARD ²	0.13

1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIF. AIR RESOURCES BOARD, AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E 1333. FOR ADDITIONAL INFORMATION, SEE CALIF. CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH 93120.12.

2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16" (8 MM).

DIVISION 4.5 ENVIRONMENTAL QUALITY (CONT.)

4.504.3 CARPET SYSTEMS. All carpet installed in the building interior shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350).

See California Department of Public Health's website for certification programs and testing labs.

<https://www.cdph.ca.gov/Programs/CDC/PHP/DEODC/EHLB/IAQ/Pages/VOC.aspx>.

4.504.3.1 Carpet cushion. All carpet cushion installed in the building interior shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350).

See California Department of Public Health's website for certification programs and testing labs.

<https://www.cdph.ca.gov/Programs/CDC/PHP/DEODC/EHLB/IAQ/Pages/VOC.aspx>.

4.504.3.2 Carpet adhesive. All carpet adhesive shall meet the requirements of Table 4.504.1.

4.504.4 RESILIENT FLOORING SYSTEMS. Where resilient flooring is installed, at least 80% of floor area receiving resilient flooring shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350).

See California Department of Public Health's website for certification programs and testing labs.

<https://www.cdph.ca.gov/Programs/CDC/PHP/DEODC/EHLB/IAQ/Pages/VOC.aspx>.

4.504.5 COMPOSITE WOOD PRODUCTS. Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the buildings shall meet the requirements for formaldehyde as specified in ARB's Air Toxics Control Measure for Composite Wood (17 CCR 93120 et seq.), by or before the dates specified in those sections, as shown in Table 4.504.5

4.504.5.1 Documentation. Verification of compliance with this section shall be provided as requested by the enforcing agency. Documentation shall include at least one of the following:

- Product certifications and specifications.
- Chain of custody certifications.
- Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, et seq.).
- Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered Wood Association, the Australian AS/NZS 2269, European 636 3S standards, and Canadian CSA 0121, CSA 0151, CSA 0153 and CSA 0325 standards.
- Other methods acceptable to the enforcing agency.

4.505 INTERIOR MOISTURE CONTROL

4.505.1 General. Buildings shall meet or exceed the provisions of the California Building Standards Code.

4.505.2 CONCRETE SLAB FOUNDATIONS. Concrete slab foundations required to have a vapor retarder by California Building Code Chapter 19, or concrete slab-on-ground floors required to have a vapor retarder by the California Residential Code, Chapter 5, shall also comply with this section.

4.505.2.1 Capillary break. A capillary break shall be installed in compliance with at least one of the following:

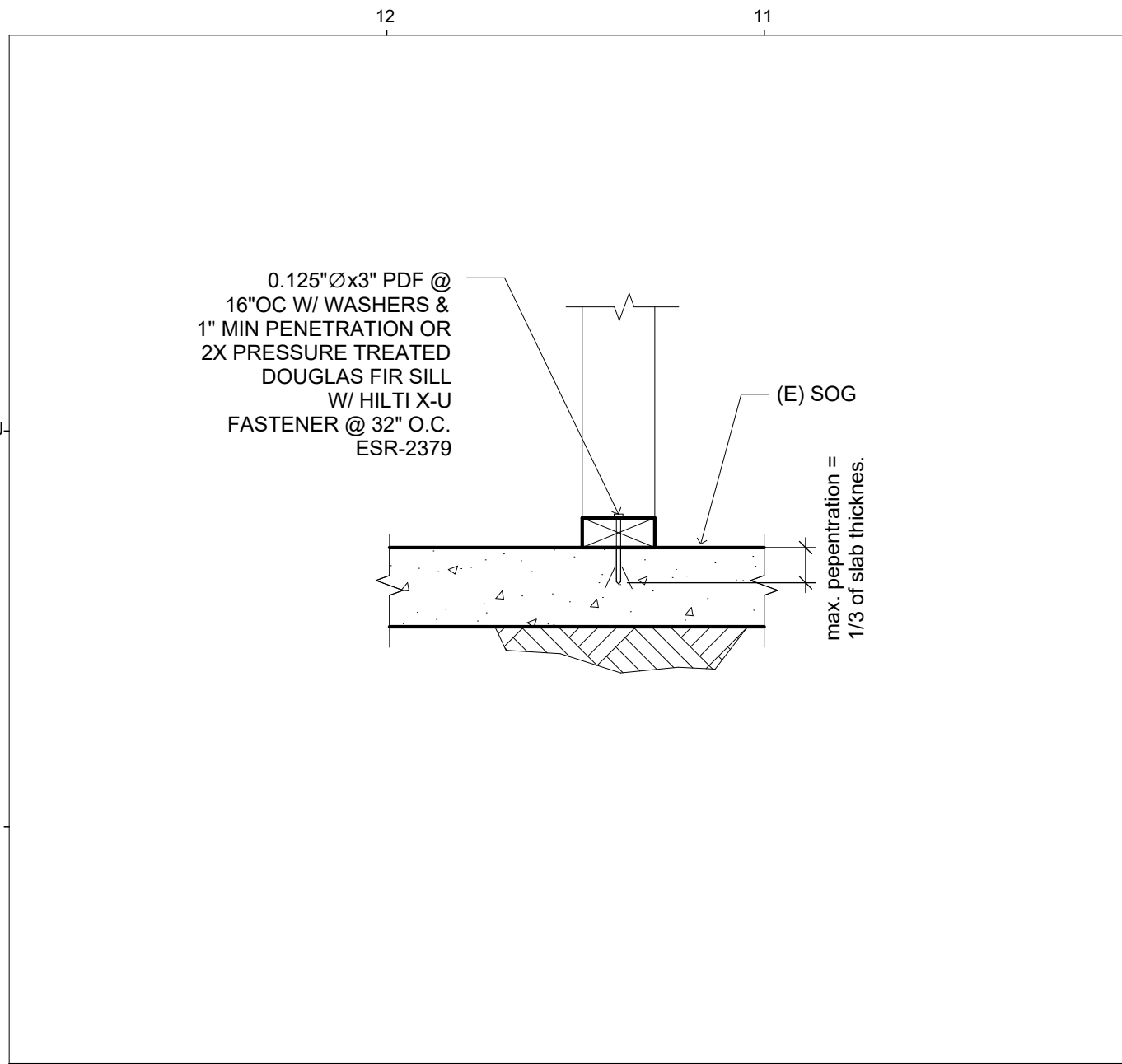
- A 4-inch (101.6 mm) thick base of 1/2 inch (12.7mm) or larger clean aggregate shall be provided with a vapor barrier in direct contact with concrete and a concrete mix design, which will address bleeding, shrinkage, and curling, shall be used. For additional information, see American Concrete Institute, ACI 302.2R-06.
- Other equivalent methods approved by the enforcing agency.
- A slab design specified by a licensed design professional.

4.505.3 MOISTURE CONTENT OF BUILDING MATERIALS. Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19 percent moisture content. Moisture content shall be verified in compliance with the following:

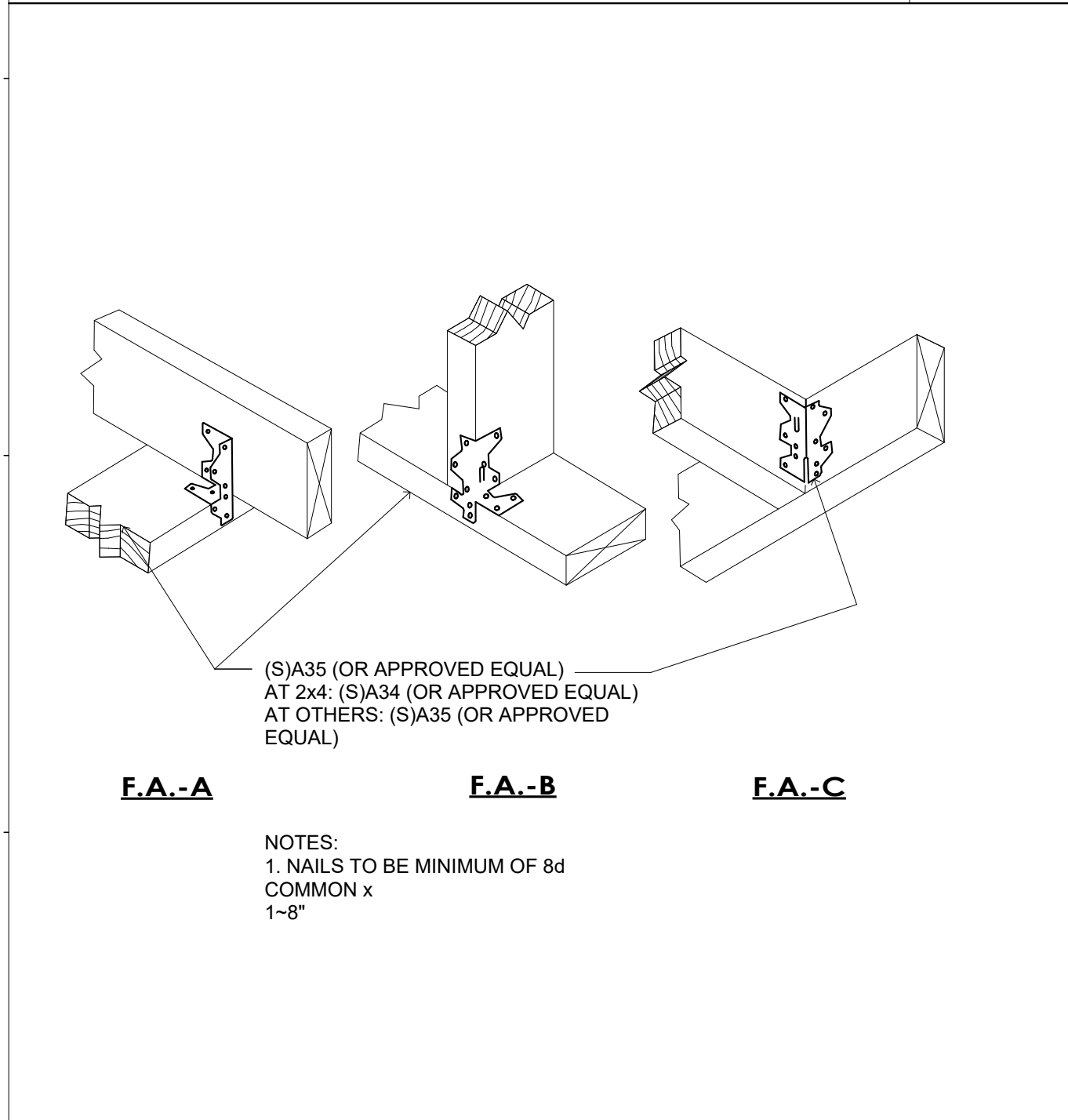
- Moisture content shall be determined with either a probe-type or contact-type moisture meter. Equivalent moisture verification methods may be approved by the enforcing agency and shall satisfy requirements found in Section 101.8 of this code.
- Moisture readings shall be taken at a point 2 feet (610 mm) to 4 feet (1219 mm) from the grade stamped end of each piece verified.
- At least three random moisture readings shall be performed on wall and floor framing with documentation acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing.

Insulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Wet-applied insulation products shall follow the manufacturers' drying recommendations prior to enclosure.

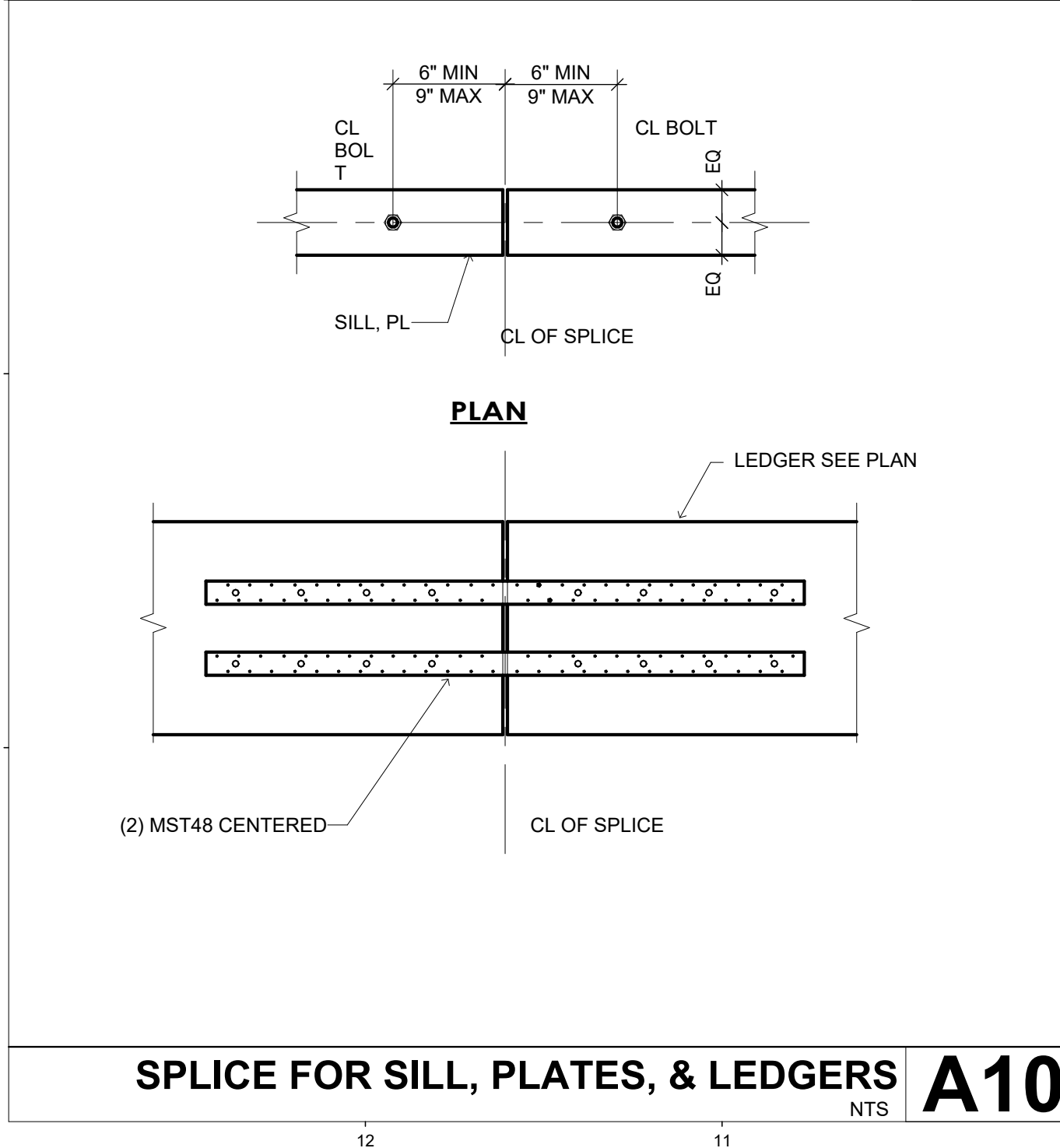
7/12/2023 12:13:35 PM
24" X 36"



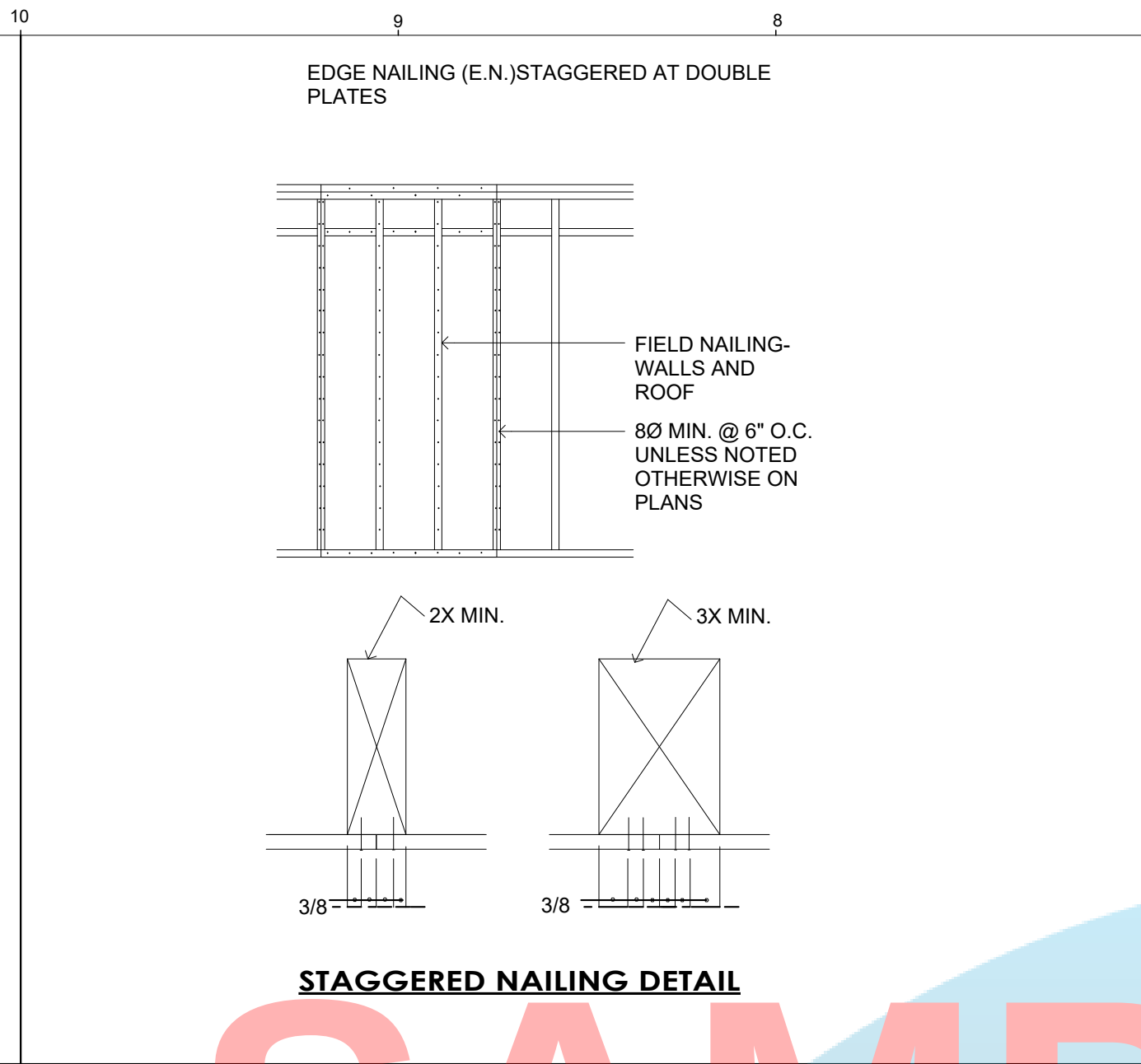
SILL PLATE @ NON-LOAD BEARING WALL NTS **E10**



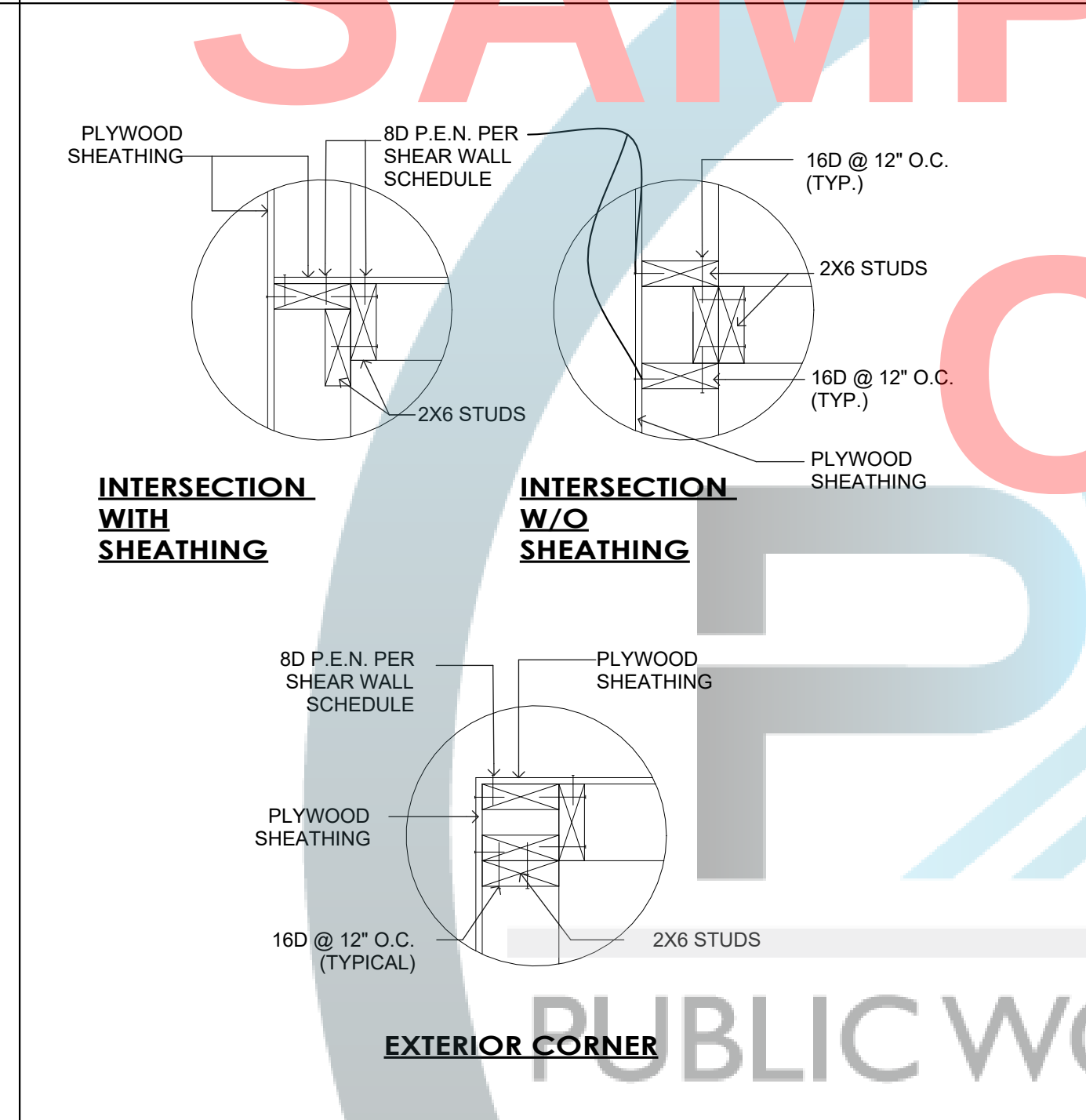
TYPICAL FRAMING ANCHOR CONFIGURATION NTS **D10**



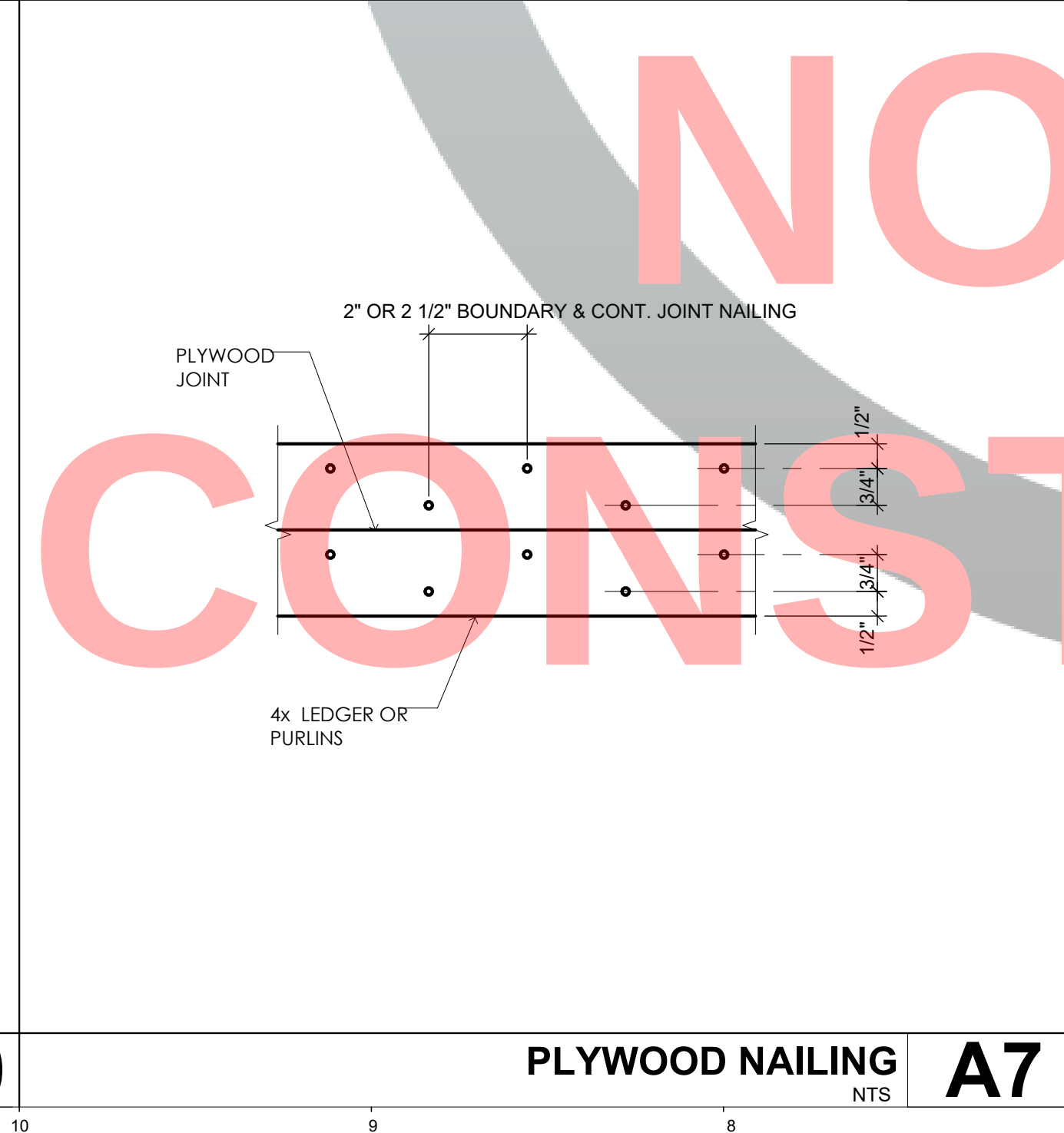
SPLICE FOR SILL, PLATES, & LEDGERS NTS **A10**



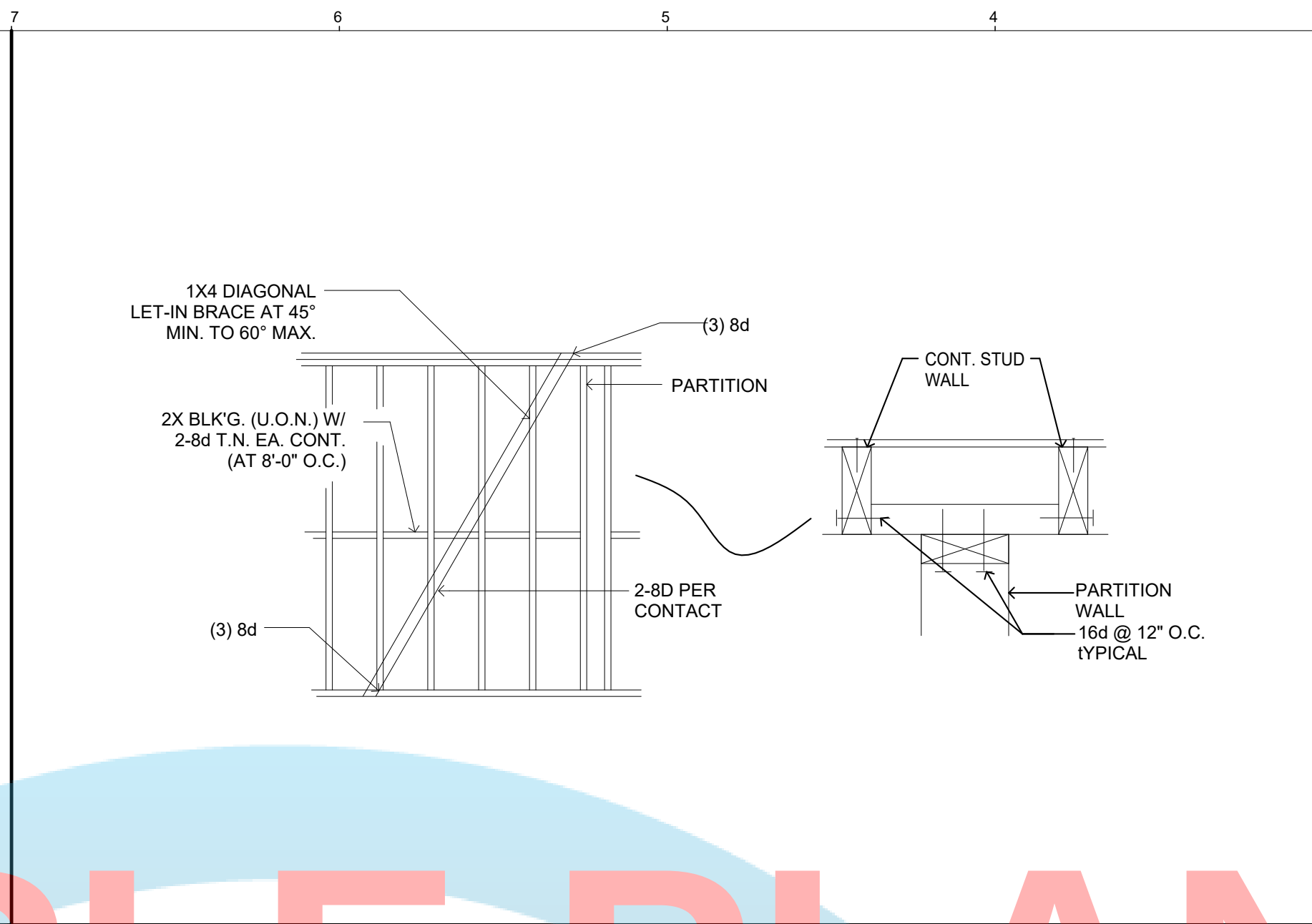
PLYWOOD SIDING NAILS NTS **E7**



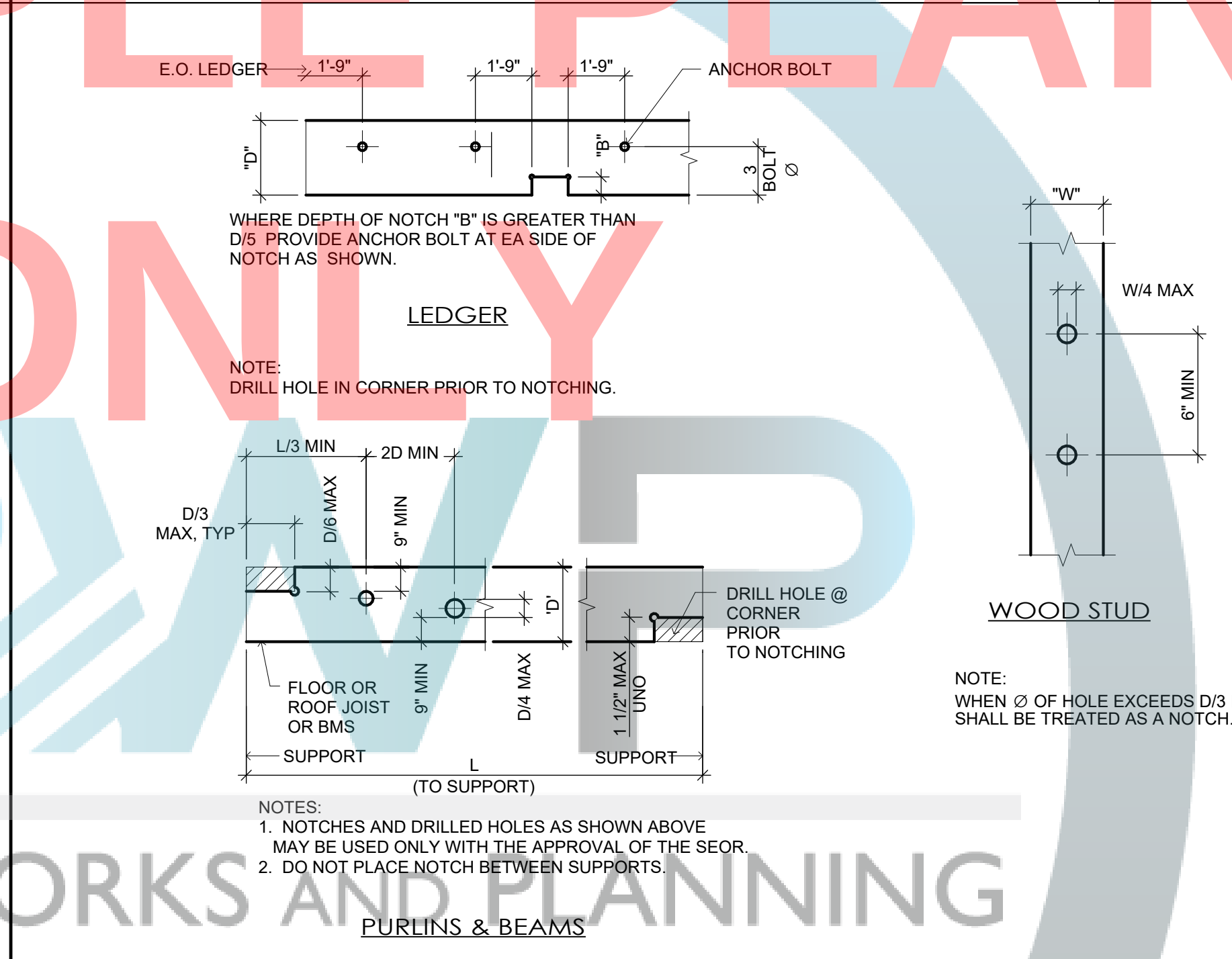
TYPICAL STUD ANGLES & CORNERS, U.O.N. NTS **D7**



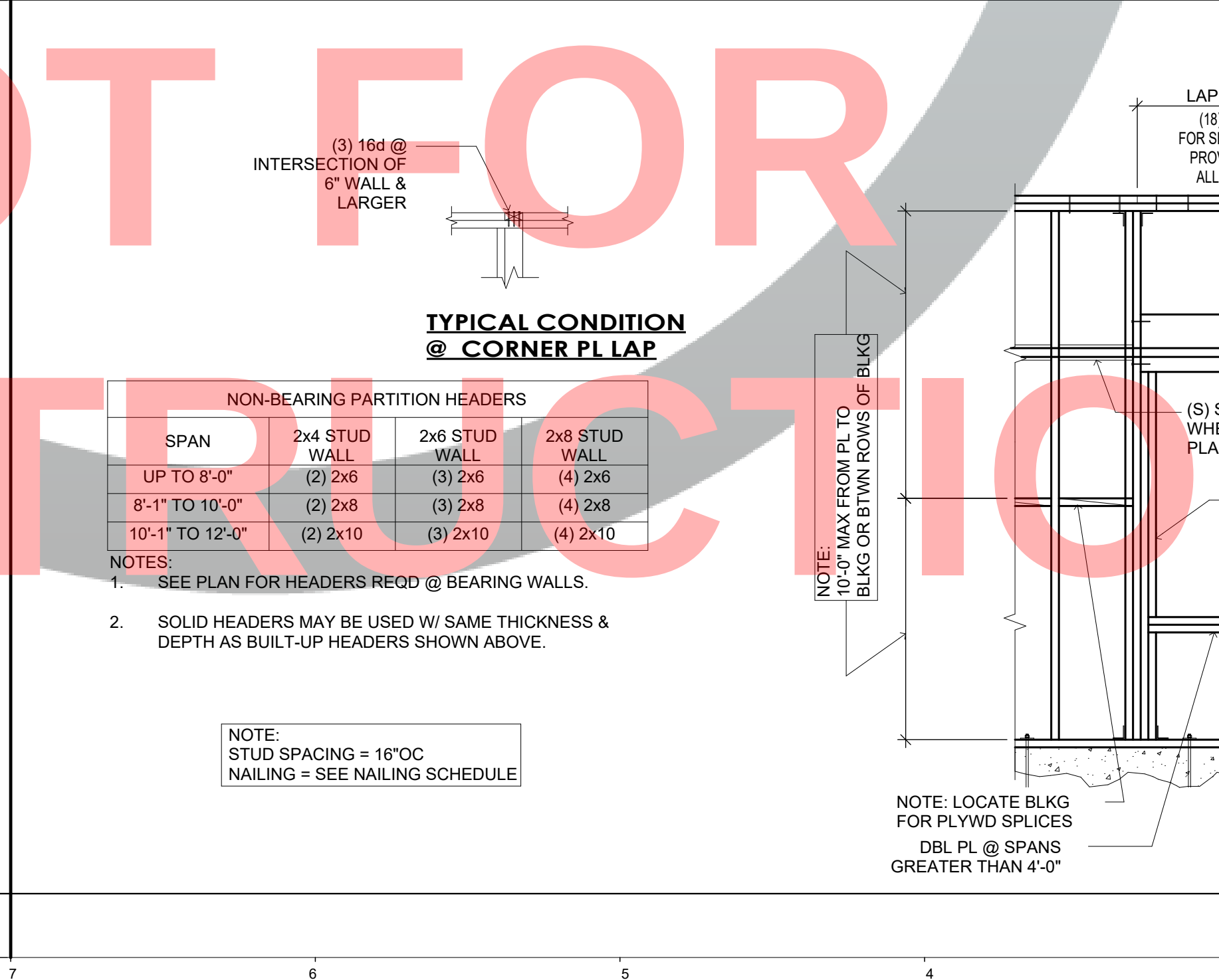
PLYWOOD NAILING NTS **A7**



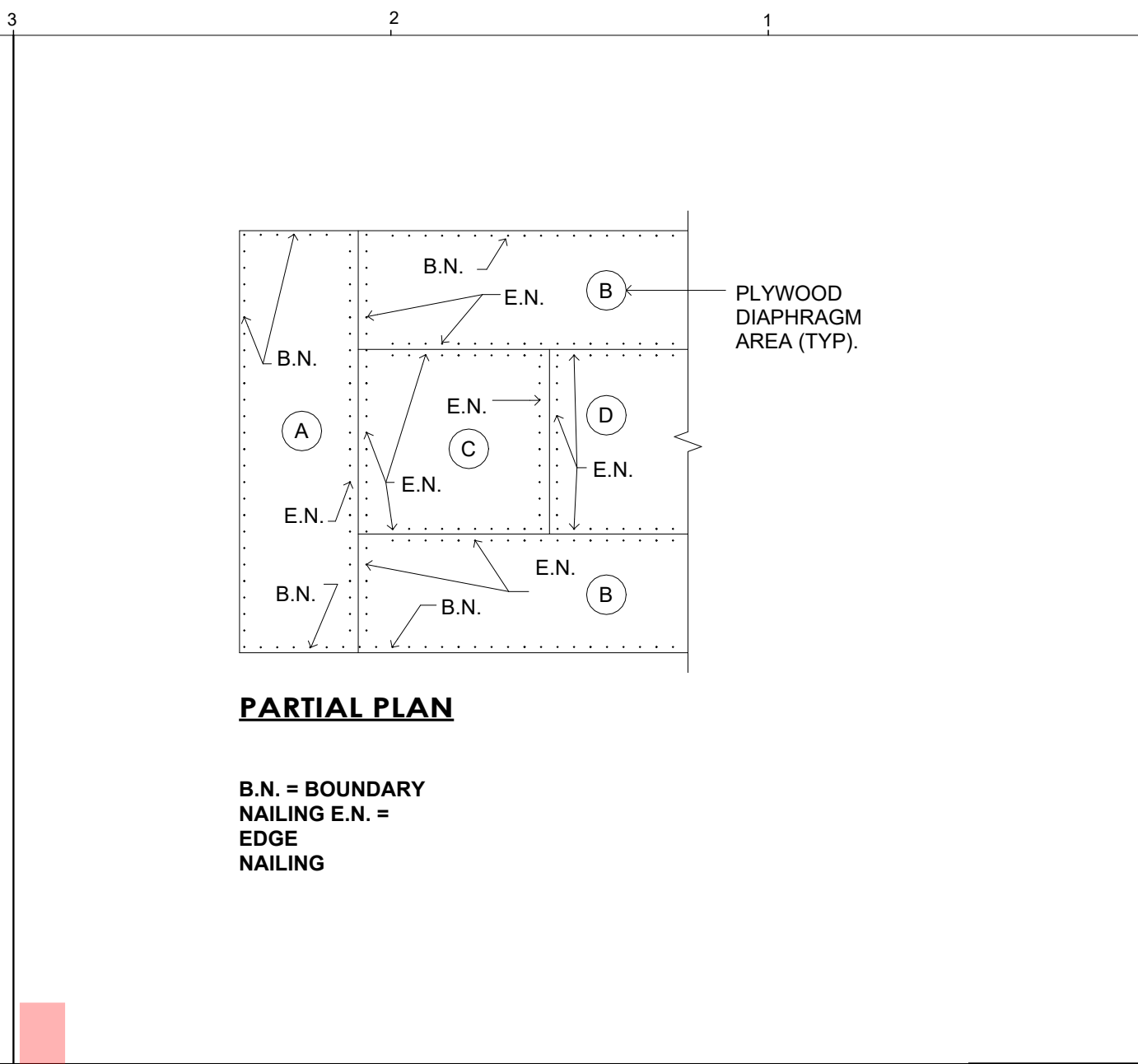
TYPICAL WALL ELEVATION NTS **E6**



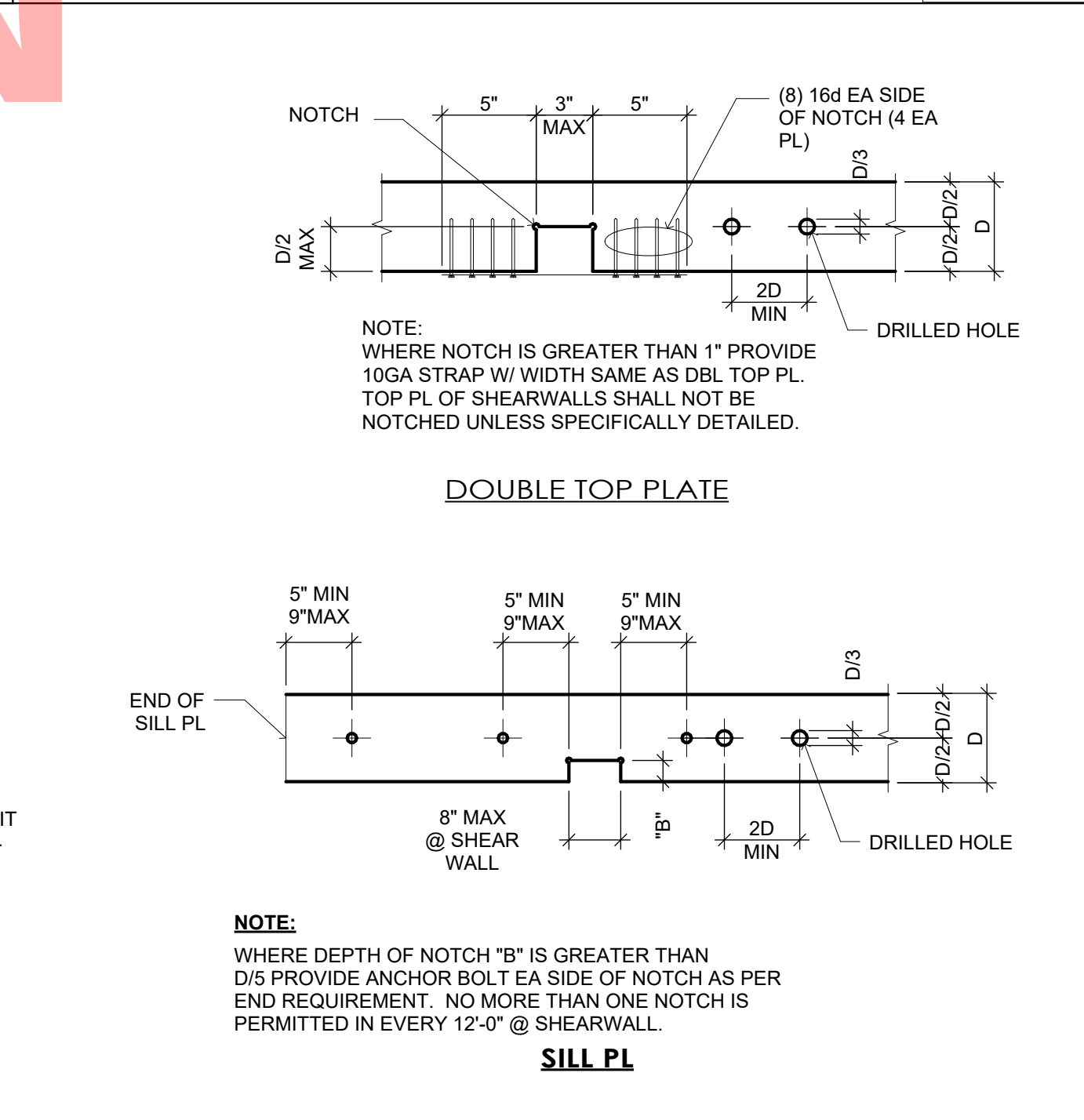
HOLES & NOTCHING IN WOOD FRAMING NTS **D1**



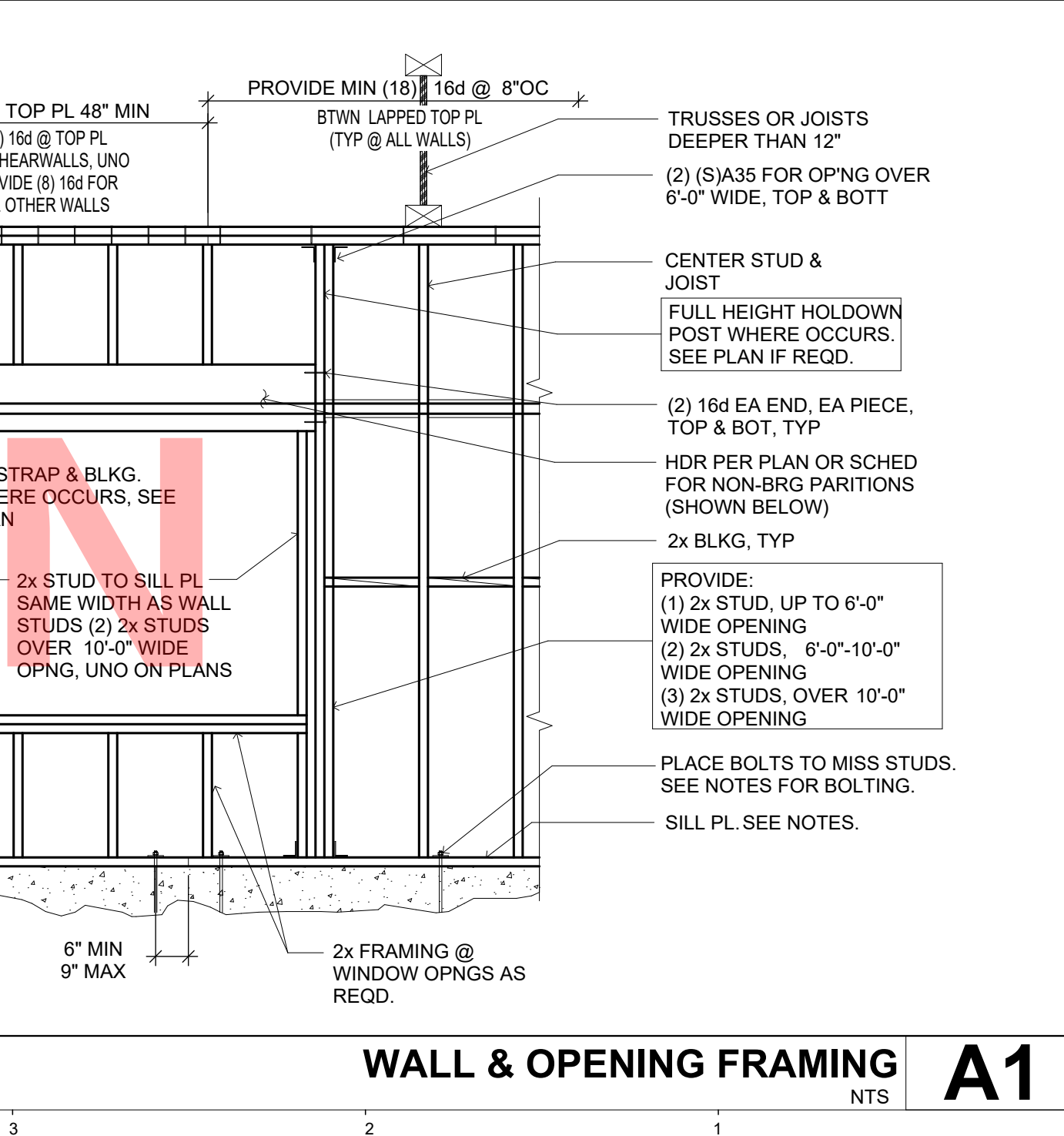
WALL & OPENING FRAMING NTS **A1**



PLYWOOD NAILING NTS **E1**



DOUBLE TOP PLATE SILL PL NTS **SILL PL**



TYPICAL WOOD FRAMING DETAILS NTS **S-101**

749 SQ. FT. MODEL (746 SQ.FT.)

OPTION # 2

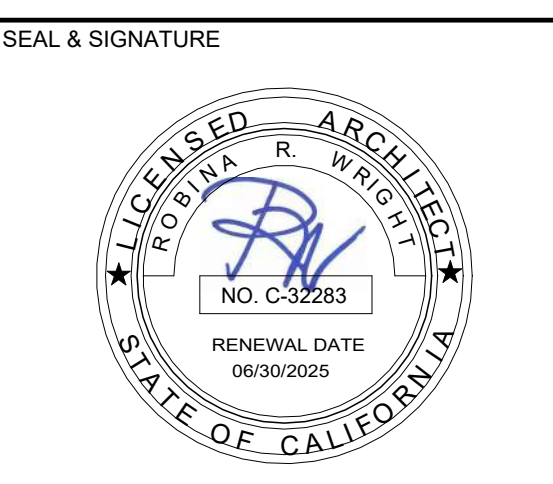
PROJECT
ACCESSORY DWELLING UNIT

PWP23-003

DEPARTMENT OF PUBLIC WORKS AND PLANNING



CAPITAL PROJECTS DIVISION
2220 Tulare St., Ste. 720, Fresno, CA. 93721
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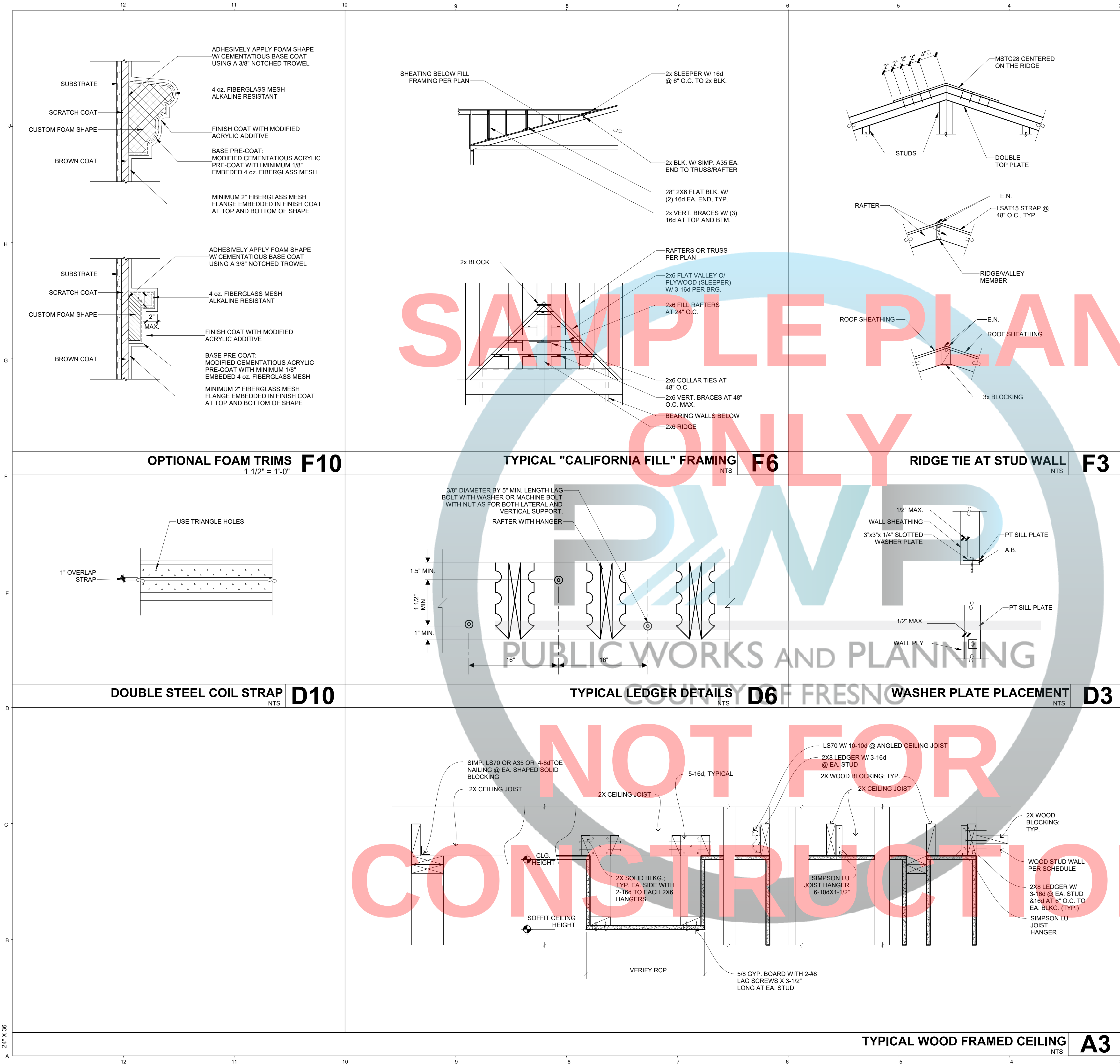
TITLE
TYPICAL WOOD FRAMING DETAILS

SCALE 1/4" = 1'-0"

ISSUE DATE MARCH 7, 2023
JOB NUMBER 2023_22

DRAWN BY RL
CHECKED BY RW

7/12/2023 12:13:55 PM
24" X 36"



- 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 OR THE SUBMERGED ARC WELDING PROCESS (SAW) WITH E7X-EXXX ELECTRODES OR THE FLUX-CORED ARC WELDING PROCESS (FCAW WITH E71T-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:
 - WIDE FLANGE MEMBERS (W, S, AND HP SHAPES) ARE TO BE ASTM A992 (Fy=50ksi) IN ACCORDANCE WITH AISC.
 - CHANNELS, ANGLES, TEES, AND MISCELLANEOUS AISC STEEL SHAPES ARE TO BE ASTM A36, Fy=36 KSI MIN. UNO
 - 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
 - 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.
 - ANCHOR BOLTS: ASTM A307 TYPICAL.
 - HEADED STUDS: ASTM A108.
 - WELDING ELECTRODES: E70XX
 - 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.
- ALL ENDS OF EXPOSED STRUCTURAL SHAPES AND TUBE STEEL MEMBERS SHALL HAVE 1/4" CAP PLATE WITH WELDS GRIND SMOOTH.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- ALL SHOP AND FIELD BOLTED CONNECTIONS SHALL BE IN ACCORDANCE WITH ASTM A-307 USING UNFINISHED AMERICAN STANDARD REGULAR BOLTS, UNLESS OTHERWISE NOTED.
- WHERE STEEL MEMBERS BEAR IN CONCRETE OR MASONRY WALLS, OPENINGS SHALL BE DRY-PACKED AFTER STEEL IS IN PLACE.
- 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.

749 SQ. FT. MODEL (746 SQ.FT.)

OPTION # 2

PROJECT

ACCESSORY DWELLING UNIT

PWP23-003

DEPARTMENT OF PUBLIC WORKS AND PLANNING



CAPITAL PROJECTS DIVISION

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TITLE

STRUCTURAL DETAILS

SCALE

As indicated

S-102

ISSUE DATE

MARCH 7, 2023

DRAWN BY

Author

JOB NUMBER

2023_22

CHECKED BY

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TABLE R602.3(2) ALTERNATE ATTACHMENTS TO TABLE R602.3(1)			
NOMINAL MATERIAL THICKNESS (inches)	DESCRIPTION ^{a,b} OF FASTENER AND LENGTH (inches)	SPACING ^c OF FASTENERS	
		EDGES (inches)	INTERMEDIATE SUPPORTS (inches)
WOOD STRUCTURAL PANELS SUBFLOOR, ROOF AND WALL SHEATHING TO FRAMING AND PARTICLEBOARD WALL SHEATHING TO FRAMING ^d			
UP TO 1/2	STAPLE 15 GA. 13/4	4	8
	0.097 - 0.099 NAIL 21/4	3	6
	STAPLE 16 GA. 13/4	3	6
19/32 AND 5/8	0.113 NAIL 2	3	6
	STAPLE 15 AND 16 GA. 2	4	8
	0.097 - 0.99 NAIL 21/4	4	8
23/32 AND 3/4	STAPLE 14 GA. 2	4	8
	STAPLE 15 GA. 13/4	3	6
	0.097 - 0.099 NAIL 21/4	4	8
I	STAPLE 16 GA. 2	4	8
	STAPLE 14 GA. 21/4	4	8
	0.113 NAIL 21/4	3	6
	STAPLE 15 GA. 21/4	4	8
	0.097 - 0.099 NAIL 21/2	4	8
NOMINAL MATERIAL THICKNESS (inches)	DESCRIPTION ^{a,b} OF FASTENER AND LENGTH (inches)	SPACING ^c OF FASTENERS	
		EDGES (inches)	BODY OF PANEL ^d (inches)
FLOOR, UNDERLAYMENT; PLYWOOD-HARDBOARD-PARTICLEBOARD-FIBER-CEMENT ^h			
FIBER-CEMENT			
1/4	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
	1 1/4 LONG X .121 SHANK x .375 HEAD DIAMETER CORROSION-RESISTANT (GALVANIZED OR STAINLESS STEEL) ROOFING NAILS (FOR TILE FINISH)		8
1 1/4 LONG,	NO. 8 x .375 HEAD DIAMETER, RIBBED WAFER- HEAD (FOR TILE FINISH)	SCREWS	8
PLYWOOD			
1/4 AND 5/16	1 1/4 RING OR SCREW SHANK NAIL-MINIMUM 12 1/2 GA. (0.099") SHANK DIAMETER	3	6
	STAPLE 18 GA., 7/8, 3/16 CROWN WIDTH	2	5
11/32, 3/8, 15/32, AND 1/2	1 1/4 RING OR SCREW SHANK NAIL-MINIMUM 12 1/2 GA. (0.099") SHANK DIAMETER	6	8*
19/32, 5/8, 23/32 AND 3/4	1 1/2 RING OR SCREW SHANK NAIL-MINIMUM 12 1/2 GA. (0.099") SHANK DIAMETER	6	8
	STAPLE 16 GA. 1 1/2	6	8
HARDBOARD ⁱ			
0.200	1 1/2 LONG RING- GROOVED UNDERLAYMENT NAIL	6	6
	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	6	10
	STAPLE 16 GA., 1 1/8 LONG, 3/8 CROWN	3	6
1/2, 5/8	6D RING-GROOVED UNDERLAYMENT NAIL	6	10
	STAPLE 16 GA., 1 5/8 LONG, 3/8 CROWN	3	6
FOR SI: 1 inch = 25.4 mm.			
a. NAIL IS A GENERAL DESCRIPTION AND SHALL BE PERMITTED TO BE T-HEAD, MODIFIED ROUND HEAD OR ROUND HEAD.			
b. STAPLES SHALL HAVE A MINIMUM CROWN WIDTH OF 7/16-INCH ON DIAMETER EXCEPT AS NOTED.			
c. NAILS OR STAPLES SHALL BE SPACES AT NOT MORE THAN 6 INCHES IN CENTER AT ALL SUPPORTS WHERE SPANS ARE 48 INCHES OR GREATER. NAILS OR STAPLES SHALL BE SPACED AT NOT MORE THAN 12 INCHES ON CENTER AT INTERMEDIATE SUPPORTS FOR FLOORS.			
d. FASTENERS SHALL BE PLACE IN A FRID PATTERN THROUGHOUT THE BODY OF THE PANEL.			
e. FOR 5-PLY PANELS, INTERMEDIATE NAILS SHALL BE SPACED NOT MORE THAN 12 INCHES ON CENTER EACH WAY.			
f. HARDBOARD UNDERLAYMENT SHALL CONFORM TO CPA/ANSI A135.4			
g. SPECIFICAD ALTERNATE ATTACHEMENTS FOR ROOF SHEATHING SHALL BE PERMITTED WHERE THE ULTIMATE DESIGN WIND SPEED IS LESS THAN 130 MPH. FASTENERS ATTACHING WOOD STRUCTURAL PANEL ROOF SHEATHING TO GABLE END WALL FRAMING SHALL BE INSTALLED USING THE SPACING LISTED FOR PANEL EDGES.			
h. FIBER-CEMENT UNDERLAYMENT SHALL CONFORM TO ASTM C 1288 OR ISO 8336, CATEGORY C.			

TABLE R702.3.5 MINIMUM THICKNESS AND APPLICATION OF GYPSUM BOARD AND GYPSUM PANEL PRODUCTS						
THICKNESS OF GYPSUM BOARD OR GYPSUM PANEL PRODUCTS (inches)	APPLICATION	ORIENTATION OF GYPSUM BOARD OR GYPSUM PANEL PRODUCT TO FRAMING	MAXIMUM SPACING OF FRAMING MEMBERS (inches O.C.)	MAXIMUM SPACING OF FASTENERS (inches)	SIZE OF NAILS FOR APPLICATION TO WOOD FRAMING ^a	
					NAILS ^a	SCREWS
APPLICATION WITHOUT ADHESIVE						
3/8	CEILING ^d	PERPENDICULAR	16	7	12	13 GAGE, 1 1/4" LONG, 1964" HEAD, 0.086" DIAMETER, 1 1/4" LONG, ANNULAR-RINGED; OR 4d COOLER NAIL, 0.086" DIAMETER, 13/8" LONG, 7/32" HEAD.
	WALL	EITHER DIRECTION	16	8	16	
1/2	CEILING ^d	EITHER DIRECTION	16	7	12	13 GAGE, 1 3/8" LONG, 1964" HEAD, 0.086" DIAMETER, 1 1/4" LONG, ANNULAR-RINGED; OR 5d COOLER NAIL, 0.086" DIAMETER, 15/8" LONG, 15/64" HEAD, OR GYPSUM BOARD NAIL, 0.086" DIAMETER, 15/8" LONG, 9/32" HEAD.
	WALL	EITHER DIRECTION	24	7	12	
	WALL	EITHER DIRECTION	24	8	12	
5/8	CEILING	EITHER DIRECTION	16	7	12	13 GAGE, 15/8" LONG, 1964" HEAD, 0.086" DIAMETER, 13/8" LONG, ANNULAR-RINGED; OR 6d COOLER NAIL, 0.086" DIAMETER, 17/8" LONG, 1/4" HEAD, OR GYPSUM BOARD NAIL, 0.0915" DIAMETER, 17/8" LONG, 1964" HEAD.
	CEILING	PERPENDICULAR	24	7	12	
	TYPE X AT GARAGE BENEATH HABITABLE ROOMS	PERPENDICULAR	24	6	6	17/8" LONG 6d COATED NAILS OR EQUIVALENT DRYWALL SCREWS. SCREWS SHALL COMPLY WITH SECTION R702.3.5.1
3/8	WALL	EITHER DIRECTION	24	8	12	13 GAGE, 15/8" LONG, 1964" HEAD, 0.086" DIAMETER, 13/8" LONG, ANNULAR-RINGED; OR 6d COOLER NAIL, 0.086" DIAMETER, 17/8" LONG, 1/4" HEAD, OR GYPSUM BOARD NAIL, 0.0915" DIAMETER, 17/8" LONG, 1964" HEAD.
	WALL	EITHER DIRECTION	16	8	16	
APPLICATION WITH ADHESIVE						
3/8	CEILING ^d	PERPENDICULAR	16	16	16	SAME AS ABOVE FOR 3/8" GYPSUM BOARD AND GYPSUM PANEL PRODUCTS.
	WALL	EITHER DIRECTION	16	16	24	
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
	WALL	EITHER DIRECTION	24	16	24	
TWO 3/8 LAYERS	CEILING	PERPENDICULAR	16	16	16	BASE PLY NAILED AS ABOVE FOR 1/2" GYPSUM BOARD AND GYPSUM PANEL PRODUCTS; FACE PLY INSTALLED WITH ADHESIVE.
	WALL	EITHER DIRECTION	24	24	24	
FOR SI: 1 inch = 25.4 mm.						
a. FOR APPLICATION WITHOUT ADHESIVE, A PAIR OF NAILS SPACED NOT LESS THAN 2 INCHES APART OR MORE THAN 2 1/2 INCHES APART SHALL BE PERMITTED TO BE USED WITH THE PAIR OF NAILS SPACED 12 INCHES ON CENTER.						
b. SCREWS SHALL BE IN ACCORDANCE WITH SECTION R702.3.5.1. SCREWS FOR ATTACHING GYPSUM BOARD OR GYPSUM PANEL PRODUCTS TO STRUCTURAL INSULATED PANELS SHALL PENETRATE THE WOOD STRUCTURAL PANEL, FACING NOT LESS THAN 7/16 INCH.						
c. WHERE COLD FORMED STEEL FRAMING IS USED WITH A CLINCHING DESIGN TO RECEIVE NAILS BY TWO EDGES OF METAL, THE NAILS SHALL BE NOT LESS THAN 5/8 INCH LONGER THAN THE GYPSUM BOARD OR GYPSUM PANEL PRODUCT THICKNESS AND SHALL HAVE RINGED SHANKS. WHERE THE COLD-FORMED STEEL FRAMING HAS A NAILING GROOVE FORMED TO RECEIVE THE NAILS, THE NAILS SHALL HAVE BARBED SHANKS OR BE SD, 13 1/2 GAGE, 15/8 INCHES LONG, 1564-INCH HEAD FOR 12-INCH GYPSUM BOARD OR GYPSUM PANEL PRODUCT; AND 6D, 13 GAGE, 17/8 INCHES LONG, 1564-INCH HEAD FOR 5/8-INCH GYPSUM BOARD OR GYPSUM PANEL PRODUCT.						
d. THREE-EIGHTH-INCH-THICK SINGLE-PLY GYPSUM BOARD OR GYPSUM PANEL PRODUCT SHALL NOT BE USED ON A CEILING WHERE A WATER-BASED TEXTURED FINISH IS TO BE APPLIED, OR WHERE IT WILL BE REQUIRED TO SUPPORT INSULATION ABOVE A CEILING. ON CEILING APPLICATIONS TO RECEIVE A WATER-BASED TEXTURE MATERIAL, EITHER HAND OR SPRAY APPLIED, THE GYPSUM BOARD OR GYPSUM PANEL PRODUCT SHALL BE APPLIED PERPENDICULAR TO FRAMING. WHERE APPLYING A WATER-BASED TEXTURE MATERIAL, THE MINIMUM GYPSUM BOARD THICKNESS SHALL BE INCREASED FROM 3/8 INCH TO 1/2 INCH FOR 16-INCH ON CENTER FRAMING, AND FROM 1/2 INCH TO 5/8 INCH FOR 24-INCH ON CENTER FRAMING OR 12-INCH SAG-RESISTANT GYPSUM CEILING BOARD SHALL BE USED.						

TABLE R602.3(3) REQUIREMENTS FOR WOOD STRUCTURAL PANEL WALL SHEATHING USED TO RESIST WIND PRESSURES									
MINIMUM NAIL		MINIMUM WOOD STRUCTURAL PANEL SPAN RATING	MINIMUM NOMINAL PANEL THICKNESS (inches)	MAXIMUM WALL STUD SPACING (inches)	PANEL NAIL SPACING		PANEL NAIL SPACING		
SIZE	PENETRATION (inches)				EDGES (inches o.c.)	FIELD (inches o.c.)	WIND EXPOSURE CATEGORY		
							B	C	D
6d COMMON (2.0" x 0.113")	1.5	24/0	3/8	3/8	16	12	140	115	110
8d COMMON (2.5" x 0.131")	1.75	24/16	7/16	7/16	16	12	170	140	135
				7/16	24	12	140	115	110
FOR SI: 1 inch = 25.4 mm, 1 MILE PER HOUR = 0.447 m/s									
a. PANEL STRENGTH AXIS PARALLEL OR PERPENDICULAR TO SUPPORTS. THREE-PLY PLYWOOD SHEATHING WITH STUDS SPACED MORE THAN 16 INCHES ON CENTER SHALL BE APPLIED WITH PANEL STRENGTH AXIS PERPENDICULAR TO SUPPORTS.									
b. TABLE IS BASED ON WIND PRESSURES ACTING TOWARD AND AWAY FROM BUILDING SURFACES IN ACCORDANCE WITH SECTION R301.2. LATERAL BRACING REQUIREMENTS SHALL BE IN ACCORDANCE WITH SECTION R602.10.									
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.									

TABLE R602.3(4) ALLOWABLE SPANS FOR PARTICLE BOARD WALL SHEATHING			
THICKNESS (inches)	GRADE	STUD SPACING (inches)	
		WHEN SIDING IS NAILED TO STUDS	WHEN SIDING IS NAILED TO SHEATHING
3/8	M-1 EXTERIOR GLUE	16	-----
1/2	M-2 EXTERIOR GLUE	16	16
FOR SI: 1 inch = 25.4 mm.			
a. WALL SHEATHING NOT EXPOSED TO THE WEATHER. IF THE PANELS ARE APPLIED HORIZONTALLY, THE END JOINTS OF THE PANEL SHALL BE OFFSET SO THAT FOUR PANEL CORNERS WILL NOT MEET. ALL PANEL EDGES MUST BE SUPPORTED. LEAVE A 1/16-INCH GAP BETWEEN PANELS AND NAIL NOT LESS THAN 3/8 INCH FROM PANEL EDGES.			

TABLE R602.3 (1) FASTENING SCHEDULE			
ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENERS ^{a,b,c}	SPACING AND LOCATION
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
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
3	CEILING JOIST NOT ATTACHED TO PARALLERL RAFTERS, LAPS OVER PARTITION (SEE SECTION R802.3.1, 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 0.127"); OR 3-10d BOX (3" x 0.128"); OR 4-3" x 0.131" NAILS	FACE NAIL
4	CEILING JOIST ATTACHE TO PARALLEL RAFTER (HEEL JOINT) (SEE SECTION R802.3.1 AND R802.3.2 AND TABLE R802.5.1 (9))	TABLE R802.5.1 (9)	FACE NAIL
5	COLLAR TIE TO RAFTER, FACE NAIL OR 1 1/4" x 20ga.	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
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 ONE TOE NAIL ON OPPOSITE SIDE OF EACH RAFTER OR TRUSS
7	ROOF RAFTERS TO RIDGR, VALLET OR HIP RAFTERS OR ROOF RAFTER TO MINIMUM 2" RIDGE BEAM	4-16d 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	TOE NAIL
		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 4-3" x 0.131" NAILS	END NAIL
WALL			
8	STUD TO STUD (NOT AT BRACED WALL PANELS)	16d COMMON (3 1/2" x 0.162") OR 10d BOX (3" x 0.128"); OR 3" x 0.131" NAILS	24" O.C. FACE NAIL
9	STUD TO STUD AND ABUTTING STUDS AR INTERSECTING WALL CORNERS (AT BRACED WALL PANELS)	16d BOX (3 1/2" x 0.135"); OR 3" x 0.131" NAILS	12" O.C. FACE NAIL
10	BUILT-UP HEADER (2" TO 2" HEADER WITH 1/2" SPACER)	16d COMMON (3 1/2" x 0.162")	16" O.C. EACH EDGE
11	CONTINOUSE HEADER TO STUD	16d BOX (3" x 0.135")	FACE NAIL 12" O.C. EACH EDGE
12	TOP PLATE TO TOP PLATE	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
		16d COMMON (3 1/2" x 0.162")	16" O.C. FACE NAIL
		10d BOX (3" x 0.128"); OR 3" x 0.131" NAILS	12" O.C. FACE NAIL
13	DOUBLE TOP PLATE SPLICE FOR SDOs A-D2 WITH SEISMIC BRACED WALL LINE SPACING <25'	8-16d BOX (3 1/2" x 0.135") 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
14	DOUBLE TOP PLATE SPLICE FOR SDOs D0, D1, D2, AND BRACED WALL LINE SPACING >25'	12-16d (3 1/2" x 0.135")	FACE NAIL ON EACH SIDE OF END JOINT (MIN. 24" LAP SPLICE LENGTH EACH SIDE OF END JOINT)
15	BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (NOT AT BRACED WALL PANELS)	16d COMMON (3 1/2" x 0.162")	16" O.C. FACE NAIL
		16d BOX (3 1/2" x 0.135"); OR 3" x 0.131" NAILS	12" O.C. FACE NAIL
		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 4" EA. 16" O.C. FACE NAIL
16	TOP OR BOTTOM PLATE TO STUD	4-8d BOX (2 1/2" x 0.113") OR 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 4-3" x 0.131" NAILS	TOE NAIL
		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 4-3" x 0.131" NAILS	END NAIL
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
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 0.131"); OR 2-10d BOX (3" x 0.128"); OR 2 STAPLES, 1" CROWN, 16ga. 1 3/4" LONG	FACE NAIL
19	1" x6" SHEATHING TO EACH BEARING	3-8d BOX (2 1/2" x 0.113") OR 2-8d COMMON (2 1/2" x 0.131"); OR 2-10d BOX (3" x 0.128"); OR 2 STAPLES, 1" CROWN, 16ga. 1 3/4" LONG	FACE NAIL
20	1" x 8" WIDER SHEATHING TO EACH BEARING	3-8d 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	FACE NAIL

TABLE R602.3 (2) SINGLE TOP-PLATE SPLICE CONNECTION DETAILS			
CONDITION	TOP - PLATE SPLICE CONNECTION DETAILS		
	CORNERS AND INTERSECTING		BUTT JOINTS IN A STRAIGHT WALL
	SPLICE PLATE SIZE	MINIMUM NAILS EACH SIDE OF JOINT	SPLICE PLATE SIZE
STRUCTURE IN SDC D0, D1A AND D2, WITH BRACED WALL LINE SPACING GREATER THAN OR EQUAL TO 25 FEET	3" x 6" x 0.036" GALVANIZED STEEL PLATE OR EQUIVALENT	(12) 8d BOX (2 1/2" x 0.113") NAILS	MINIMUM NAILS EACH SIDE OF JOINT.
STRUCTURE IN SDC A-C; AND IN SDC D0, D1 AND D2 WITH BRACED WALL LINE SPACING LESS THAN 25 FEET	3" x 8" x 0.036" GALVANIZED STEEL PLATE OR EQUIVALENT	(9) 8d BOX (2 1/2" x 0.113") NAILS	(18) 8d BOX (2 1/2" x 0.113") NAILS
FOR SI: 1 inch = 25.4 mm, 1 FOOT = 304.8 mm.			

749 SQ. FT. MODEL (746 SQ.FT.)

OPTION # 2

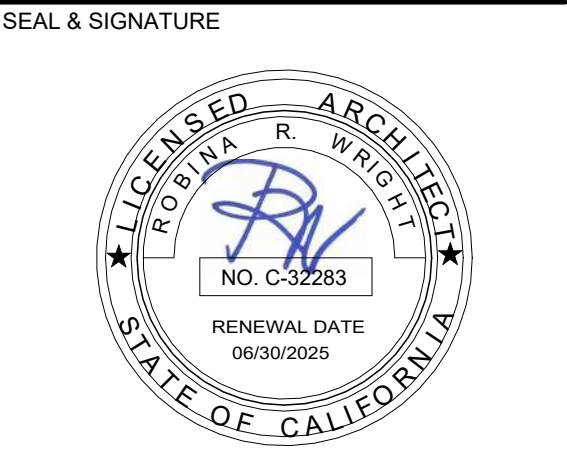
PROJECT
ACCESSORY DWELLING UNIT

PWP23-003

DEPARTMENT OF PUBLIC WORKS AND PLANNING



CAPITAL PROJECTS DIVISION
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SEAL & SIGNATURE
UPDATE
JULY 12, 2023

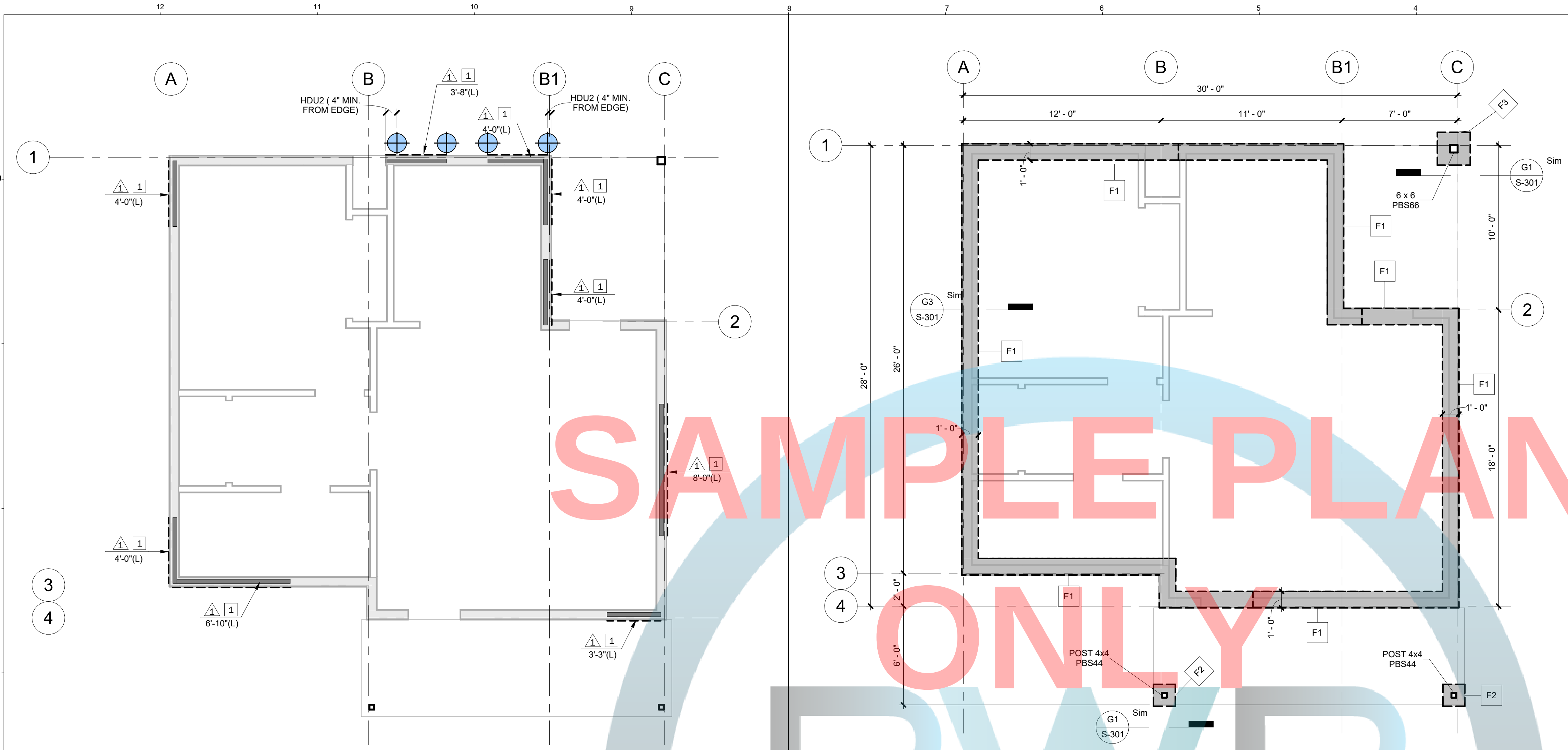
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FASTENING SCHEDULE (RESIDENTIAL)

SCALE 12" = 1'-0"

S-103

7/12/2023 12:13:38 PM
24" X 36"



SHEAR WALL PLAN
1/4" = 1'-0" **E8**

FOUNDATION PLAN
1/4" = 1'-0" **E3**

LEGEND

ALL SHEAR WALL

SHEAR WALL TYPE

ANCHOR BOLT TYPE

SHEAR WALL LENGTH

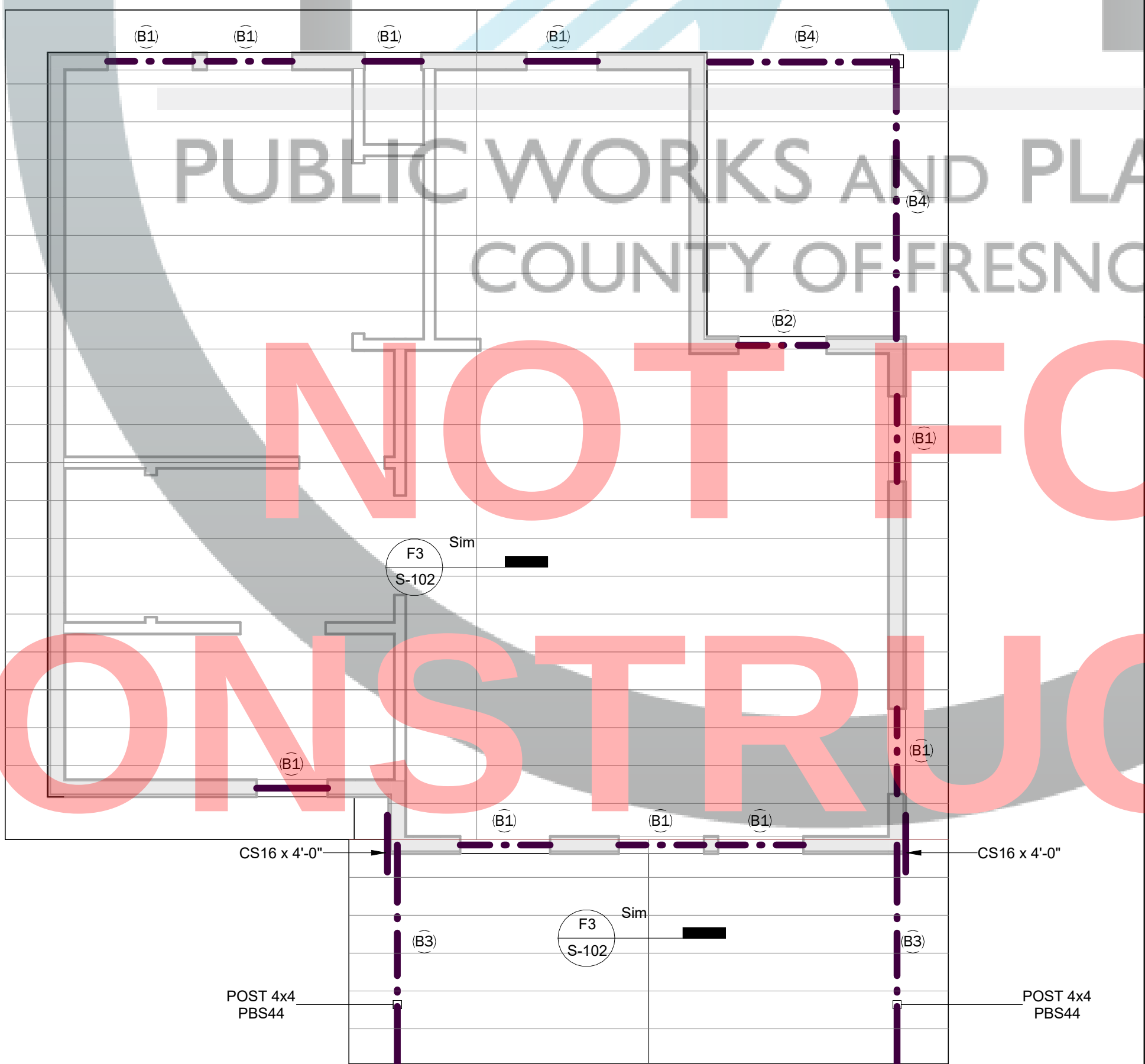
SIMPSON HDU2
SDS 2.5
REFER TO _D6/ S-301

SHEAR WALL SCHEDULE			CAPACITY	
TYPE	SHEATHING	Nailing EN & FN	Seismic	Wind
1	3/8" APA STRUCTURAL PANEL	8d @ 6" o.c.	260 plf	365 plf
	24/0 CDX or OSB	8d @ 12" o.c.		

- NOTE:**
- ALL PANEL EDGES TO BE BLKED UNO
 - NAILS TO BE COMMON NAILS UNO
 - **PROVIDE 3X OR DBL STUDS AT ADJOINING EDGES
 - ** STAGGER NAILS

ANCHOR BOLT SCHEDULE			
TYPE	ANCHOR BOLTS	ALLOWABLE LOADS (PLF)	
		2x Sill	3x Sill
1	1/2" Ø x 10" @ 6'-0" o.c.	173	205

- NOTE:**
- PROVIDE 3" SQX 0.299" WASHERS AT ANCHOR BOLTS
 - PROVIDE 2AB MIN PER SHEAR WALL PANEL.
 - PROVIDE 7" MIN. EMBEDMENT IN CONCRETE.
 - SILL PLATES TO BE PRESSURE TREATED DF.
 - FASTENERS IN P.T. WOOD SHALL BE HOT-DIPPED ZINC-COATED GAL-STEEL.



ROOF FRAMING PLAN
1/4" = 1'-0" **A3**

ROOF BEAM SCHEDULE		
BEAM ID	SIZE	LUMBER GRADE
B1	6 x 8	DF NO. 2
B2	6 x 8	DF NO. 2
B3	4 x 8 or 6 x 8	DF NO. 2
B4	6 x 12	DF NO. 2

- TRUSS NOTES**
- STRUCTURAL CALCULATIONS SHALL BE PROVIDED BY TRUSS MANUFACTURER FOR ALL TRUSS TYPES AND SHALL INCLUDE SUPPORT FOR MECHANICAL UNIT, PLATFORM AND ACCESS CATWALK.
 - TRUSS FABRICATOR SHALL PROVIDE A SCHEMATIC LAYOUT OF ALL TRUSSES SEQUENCE OF ERECTION AND INSTALLATION TO THE DESIGNER FOR REVIEW PRIOR TO PROCEEDING WITH CONSTRUCTION.
 - TRUSS-TO-TRUSS CONNECTIONS AND OTHER DETAILS RELATED TO TRUSSES SHALL BE VERIFIED BY TRUSS FABRICATOR, INCLUDING BRACING, STRONG BACKS AND ERECTION DETAILS.
 - ALL TRUSSES AND TRUSS DRAWINGS SHALL BE IN ACCORDANCE WITH APPLICABLE CODES AND DRAWINGS.
 - THE TRUSS DRAWINGS AND STRUCTURAL CALCULATIONS SHALL BE SUPPLIED BY THE TRUSS MANUFACTURER AND SUBMITTED FOR APPROVAL PRIOR TO BUILDING PERMITS BEING ISSUED.
 - TRUSS MANUFACTURER SHALL VERIFY ALL DIMENSIONS AT JOB SITE AND BRING ANY DISCREPANCIES WITH THESE PLANS TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO TRUSS FABRICATION.
 - THE GENERAL CONTRACTOR SHALL NOT PERMIT DRILLING, CUTTING OR ANY OTHER DAMAGE TO TRUSSES.
 - 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. (MAX) AT SUCH LOCATION.
 - PROVIDE 2 X 4 CONTINUOUS BRACING AT 10'-0" O.C. MAX. TO BOTTOM CHORDS OR AS REQUIRED BY TRUSS MANUFACTURER.
 - THE CONTRACTOR SHALL INSTALL TEMPORARY HORIZONTAL AND CROSS BRACING TO HOLD TRUSSES PLUMB AND IN SAFE CONDITION.
 - INSTALL PERMANENT BRACING PRIOR TO LOADING TRUSSES PROVIDE SIMPSON CONNECTORS AT E.A. TRUSS END (TYPICAL).
 - INSTALL X BRACE AT BOTH ENDS AND AT 20' O.C. PER PLANS.
 - APPROVED TRUSS DRAWINGS MUST BE ON JOB SITE FOR INSPECTION PURPOSES

FOOTING SCHEDULE				
FOOTING ID	PAD SIZE	LUMBER GRADE		H inches
		# REQ'D	BAR #	
F1	1'-0" WIDE CONT. FOOTING	2	4	SEE DETAIL
F2	1' - 4" SQUARE	2	4	(not used)
F3	2' - 0" SQUARE	3	4	SEE DETAIL

- FOUNDATION NOTES**
- THE CONTRACTOR MUST READ & UNDERSTAND ALL STANDARDS NOTES & DETAILS BEFORE BEGINNINGS CONSTRUCTION OR FABRICATION.
 - ALL UNCLEAR AND / OR MISSING DETAILS OR INFO. SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION BEFORE PROCEEDING W/ CONSTRUCTION.
 - ALL CONCRETE PLACEMENT SHALL MEET WITH THE 2022 CALIFORNIA BUILDING CODE REQUIREMENTS.
 - CONCRETE SHALL BE PROTECTED ADEQUATELY FROM INJURIOUS ACTION BY THE SUN, RAIN, WIND, FLOWING WATER AND MECHANICAL INJURY, AND SHALL NOT BE ALLOWED TO DRY OUT FROM THE TIME IT IS PLACED UNTIL THE EXPIRATION OF THE MINIMUM CURING PERIOD. A FINE FOG SPRAY SHALL BE USED TO REDUCE PLASTIC SHRINKAGE CRACKS AFTER FINISHING OPERATIONS. IMMEDIATELY AFTER THE NET CONCRETE HAS BEEN BROUGHT TO A FLAT SURFACE AND THE SHINY SURFACE HAS DISAPPEARED, ADDITIONAL MOISTURE SHALL BE APPLIED TO RESTORE SHINE, USING AN ATOMIZING TYPE FOG SPRAYER. FREQUENT LIGHT APPLICATION OF MOISTURE SHALL BE PROVIDED AS REQUIRED BY NEITHER CONDITIONS.
 - SLOPE ALL LANDINGS AND WALKWAYS AWAY FROM THE BUILDING.
 - FOUNDATION WALLS SHALL EXTEND AT LEAST 8" ABOVE THE FINISHED GRADE ADJACENT TO THE FOUNDATION AT ALL POINTS. FOR MASONRY OR CONCRETE CONSTRUCTION, THE MINIMUM FOUNDATION WALL WILL BE 6 INCHES.
 - WOOD SOLE PLATES AT ALL EXTERIOR WALLS ON MONOLITHIC SLABS, WOOD SOLE PLATES OF BRACED WALL PANELS AT BUILDING INTERIORS ON MONOLITHIC SLABS AND ALL WOOD SILL PLATES SHALL BE ANCHORED TO THE FOUNDATION WITH MINIMUM 1/2-INCH-DIAMETER ANCHOR BOLTS SPACED NOT GREATER THAN 6 FEET ON CENTER OR APPROVED ANCHORS OR ANCHOR STRAPS SPACED AS REQUIRED TO PROVIDE EQUIVALENT ANCHORAGE TO 1/2-INCH-DIAMETER ANCHOR BOLTS.
 - BOLTS SHALL EXTEND NOT LESS THAN 7 INCHES INTO CONCRETE OR GROUTED CELLS OF CONCRETE MASONRY UNITS. THE BOLTS SHALL BE LOCATED IN THE MIDDLE THIRD OF THE WIDTH OF THE PLATE. A NUT AND WASHER SHALL BE TIGHTENED ON EACH ANCHOR BOLT. THERE SHALL BE NOT FEWER THAN TWO BOLTS PER PLATE SECTION WITH ONE BOLT LOCATED NOT MORE THAN 12 INCHES OR LESS THAN SEVEN DIAMETERS FROM THE END OF THE PLATE SECTION.
 - INTERIOR BEARING WALL SOLE PLATES ON MONOLITHIC SLAB FOUNDATION THAT ARE NOT PART OF A BRACED WALL PANEL SHALL BE POSITIVELY ANCHORED WITH APPROVED FASTENERS. SILL PLATES AND SOLE PLATES SHALL BE PROTECTED AGAINST DECAY AND TERMITES WHERE REQUIRED BY SECTIONS R317 AND R318. ANCHOR BOLTS SHALL BE PERMITTED TO BE LOCATED WHILE CONCRETE IS STILL PLASTIC AND BEFORE IT HAS SET, WHERE ANCHOR BOLTS RESIST PLACEMENT OR THE CONSOLIDATION OF CONCRETE AROUND ANCHOR BOLTS IS IMPEDED, THE CONCRETE SHALL BE VIBRATED TO ENSURE FULL CONTACT BETWEEN THE ANCHOR BOLTS AND CONCRETE.
 - ALL DISTURBED OR FILL SOIL UNDERLING CONCRETE SHALL BE COMPACTED TO A MINIMUM OF 40 % RELATIVE PER ASTM STANDARD D-1557, INCLUDING RETAINING WALL BACKFILL.
 - ***CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND BRING ANY OMISSIONS OR DISCREPANCIES TO THE ATTENTION OF THE ENGINEER. *
 - HOLDDOWN HARDWARE MUST BE SECURED IN FACE PRIOR TO FOUNDATION INSPECTION
 - FINISH GRADE FOR THE FIRST 1 FOOT FROM THE FOUNDATION SHALL SLOPE MINIMUM OF 5% ON ALL SIDES. THIS INCLUDES ANY IMPERVIOUS SURFACES.
 - WOOD FRAMING MEMBERS THAT REST ON EXTERIOR FOUNDATION WALL AND ARE LESS THAN 8" FROM EXPOSED EARTH SHALL BE ON NATURALLY DURABLE OR PRESERVATIVE-TREATED WOOD.
 - PONDER DRIVEN FASTENERS SHALL NOT BE USED IN STEM WALLS LESS THAN 5 1/2" WIDE OR GREATER THAN 5 1/2" HIGH
 - THE FASTENERS AND CONNECTORS IN DIRECT CONTACT WITH PRESERVATIVE-TREATED WOOD SHALL BE HOT DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER

- 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.

- TRUSSES ARE UNDER A DEFERRED SUBMITTAL.**
- 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.
 - THE OWNER IS RESPONSIBLE IN SELECTING A TRUSS COMPANY TO SUPPLY THE TRUSSES. THE TRUSS COMPANY THAT WILL SUPPLY THE TRUSSES SHALL PROVIDE ADDITIONAL DOCUMENTS AND INFORMATION AS REQUIRED BY RELEVANT AUTHORITIES.
 - ALL TRUSS MANUFACTURERS SHALL HAVE AN "IN PLANT" INSPECTION BY AN APPROVED AGENCY PER CRC R106.1. SUBMIT CERTIFICATION TO THE FRESNO COUNTY DEVELOPMENT SERVICES DIVISION.

749 SQ. FT. MODEL (746 SQ.FT.)

OPTION # 2

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



UPDATE
JULY 12, 2023

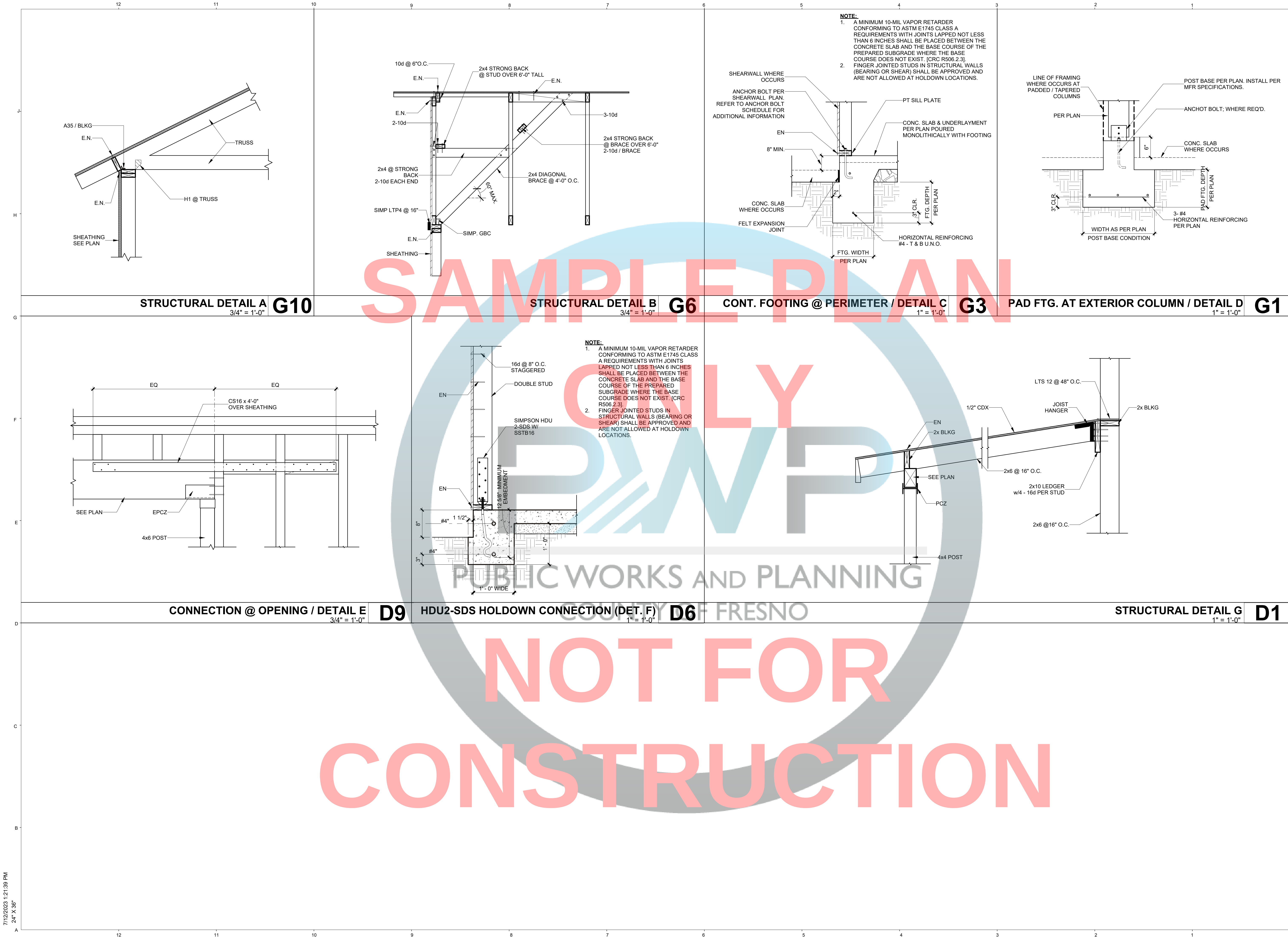
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STRUCTURAL EVALUATION PLANS

SCALE As indicated

S-201	
ISSUE DATE	JOB NUMBER
MARCH 7, 2023	2023_22
DRAWN BY	CHECKED BY
Author	Checker

7/12/2023 12:13:39 PM
24" X 36"



749 SQ. FT. MODEL (746 SQ.FT.)

OPTION # 2

PROJECT
ACCESSORY
DWELLING UNIT

PWP23-003

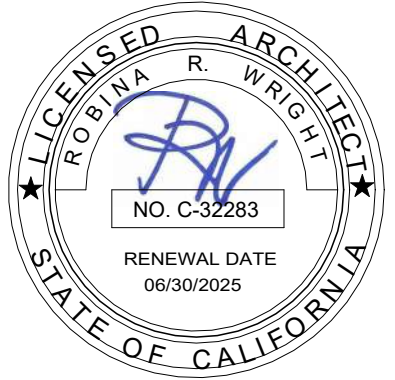
DEPARTMENT OF PUBLIC
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TITLE

STRUCTURAL DETAILS

SCALE As indicated

S-301

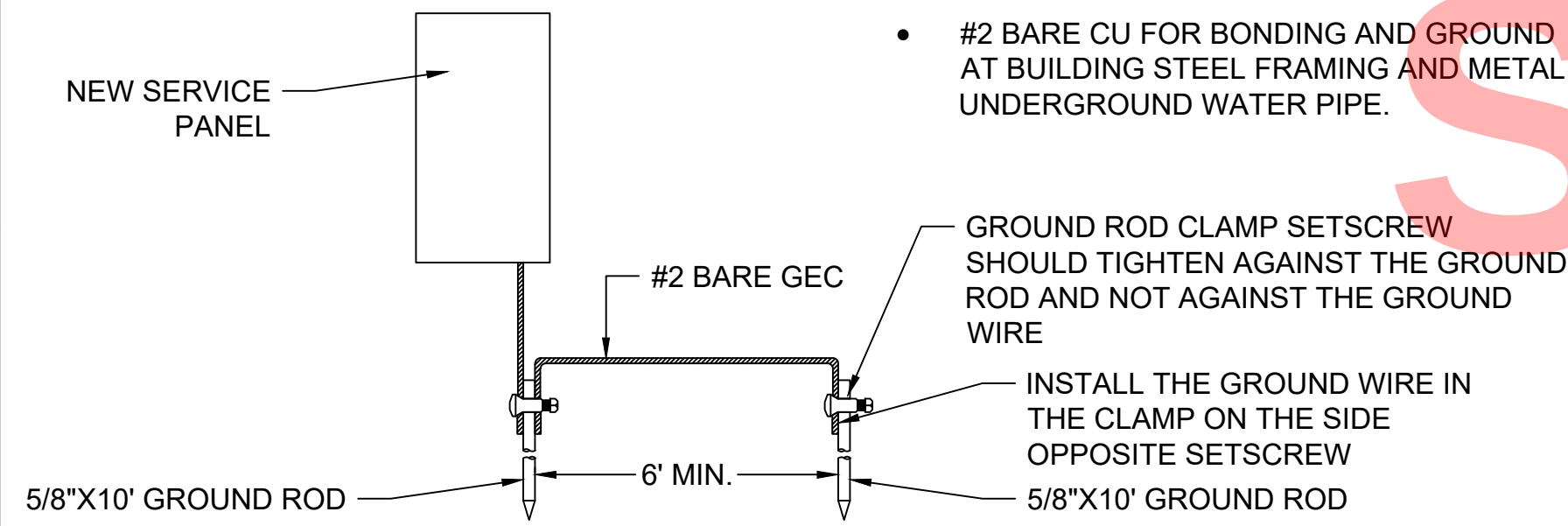
ISSUE DATE	JOB NUMBER
MARCH 7, 2023	2023_22
DRAWN BY	CHECKED BY
Author	Checker

©

SMOKE/CARBON MONOXIDE NOTES

R314.2 SMOKE DETECTION SYSTEMS
R314.3 LOCATION. SMOKE ALARMS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS:
1. IN EACH SLEEPING ROOM.
2. OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS.
R314.4 POWER SOURCE. SMOKE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING PROVIDED THAT SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND SHALL BE EQUIPPED WITH A BATTERY BACKUP. SMOKE ALARMS WITH INTEGRAL STROBES THAT ARE NOT EQUIPPED WITH BATTERY BACKUP SHALL BE CONNECTED TO AN EMERGENCY ELECTRICAL SYSTEM. SMOKE ALARMS SHALL EMIT A SIGNAL WHEN THE BATTERIES ARE LOW.
R314.5 INTERCONNECTION.
WHERE MORE THAN ONE SMOKE ALARM IS REQUIRED TO BE INSTALLED WITHIN AN INDIVIDUAL DWELLING OR SLEEPING UNIT, THE SMOKE ALARM SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT. THE ALARMS SHALL BE CLEARLY AUDIBLE IN ALL BEDROOMS OVER BACKGROUND NOISE LEVELS WITH ALL INTERVENING DOORS CLOSED.
R315.1 CARBON MONOXIDE ALARMS.
R315.1.1 POWER SUPPLY. FOR NEW CONSTRUCTION REQUIRED CARBON MONOXIDE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING
WHERE SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND SHALL BE EQUIPPED WITH A BATTERY BACK-UP.
R315.1.2 INTERCONNECTION. WHERE MORE THAN ONE CARBON MONOXIDE ALARM IS REQUIRED TO BE INSTALLED WITHIN THE DWELLING UNIT OR WITHIN A SLEEPING UNIT THE ALARMS SHALL BE INTERCONNECTED IN A MANNER THAT ACTIVATION OF ONE ALARM SHALL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT.
R315.3 ALARM REQUIREMENTS. CARBON MONOXIDE ALARMS REQUIRED BY SECTION R315.1 AND R315.2 SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS:
1. OUTSIDE OF EACH SEPARATE DWELLING UNIT SLEEPING AREA. IN THE IMMEDIATE VICINITY OF THE BEDROOM(S).
2. AT EVERY LEVEL OF A DWELLING UNIT INCLUDING BASEMENTS.

GROUND ROD DETAIL



UNIT FIXTURE SCHEDULE

SYMB.	TYPE	MAKE AND MODEL	MNTG.	LAMP / BULB	VOLT	NOTES
	'D1'	AIRE DELUXE #FP6285B	J-BOX	20W LED	120	
	'D2'	LITHONIA# WF6ELED-30K-90CRI-MW-M6	REC.	11W LED	120	DIM, WET RATD.
	'D3'	PROJECT SOURCE MOD# 42007 ITEM# 1362638	SURF.	60W LED	120	DAMP RATED
	'D4'	C-LITE# C-DS4-650-27	SURF.	11W LED	120	DIM, WET RATD.
	'D7'	DESIGNHOUSE# MOD#587238 ITEM#1004060081	FLUSH	60W LED	120	DAMP RATD.

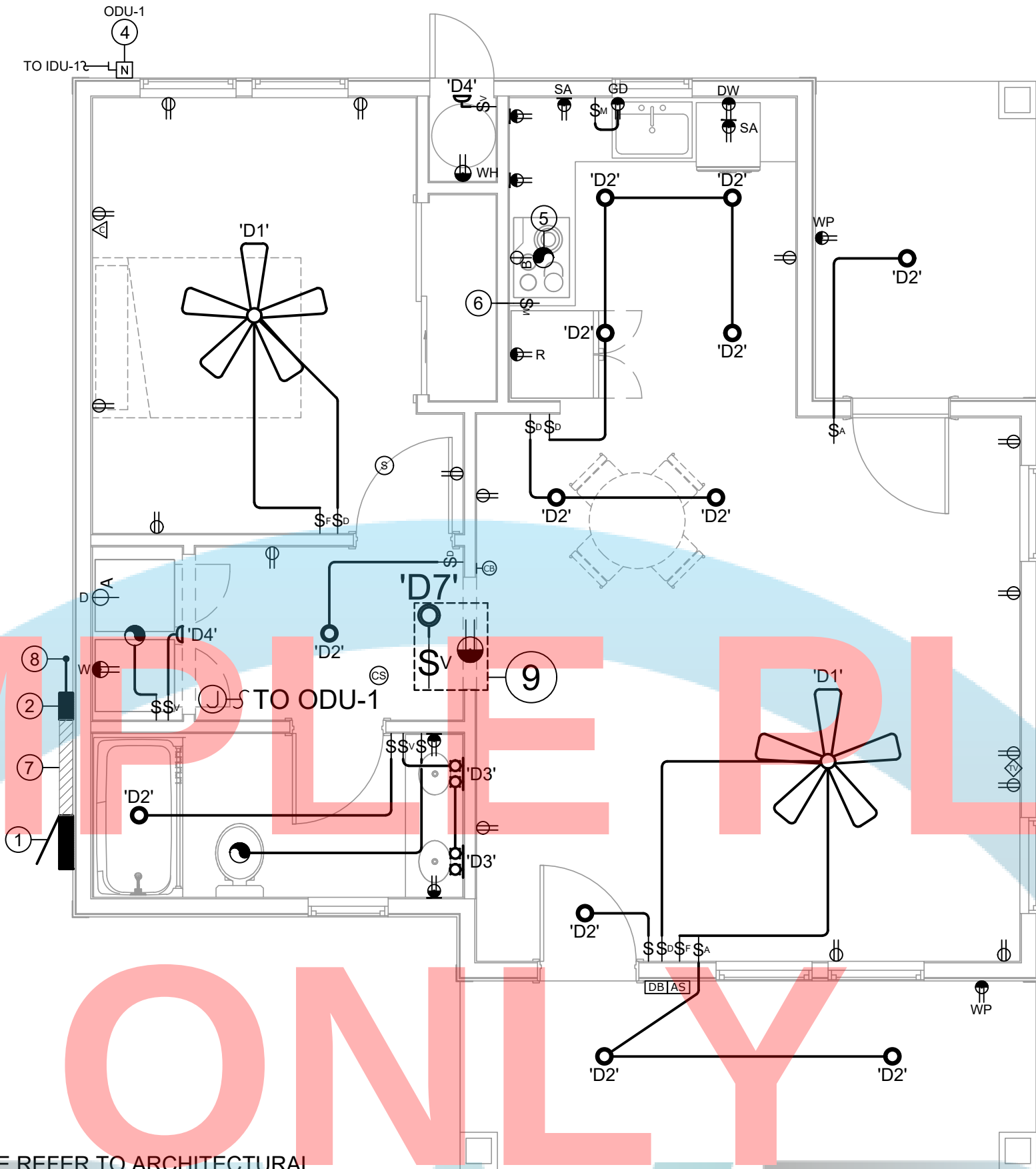
LIGHTING FIXTURE SCHEDULE

N.T.S

FLOOR NOTES:

- FOR ADAPTABLE UNITS, PLEASE REFER TO ARCHITECTURAL DRAWINGS FOR REACH RANGE REQUIREMENTS.
- ELECTRICAL RECEPTACLE OUTLETS, SWITCHES, AND CONTROLS (INCLUDING CONTROLS FOR HEATING AND VENTILATION AND AIR CONDITIONING) INTENDED TO BE USED BY THE OCCUPANTS SHALL BE LOCATED NO MORE THAN 48 INCHES MEASURED FROM THE TOP OF THE OUTLET BOX AND NOT LESS THAN 15 INCHES MEASURE FROM THE BOTTOM OF THE OUTLET BOX ABOVE THE FINISH FLOOR.

SPACE RECEPTACLES EVERY 2FT



ADU OPTION 2

746 SF

TOTAL: 1

746 SF

PROPOSED FLOOR PLAN

1/4" = 1'-0"

E1

- INDOOR LUMINAIRES SHALL HAVE A COLOR RENDERING INDEX (CRI) OF AT LEAST 90.
- ALL INSTALLED LUMINAIRES SHALL MEET THE REQUIREMENTS OF CALIFORNIA ENERGY CODE TABLE 150.0-A. SEE SECTION 150(K)1A FOR EXCEPTIONS.
- SCREW-BASED LUMINAIRES SHALL CONTAIN LAMPS THAT COMPLY WITH REFERENCE JOINT APPENDIX JA8.
- RECESSED DOWNLIGHT LUMINAIRES IN CEILINGS. LUMINAIRES RECESSED INTO CEILINGS SHALL MEET ALL OF THE FOLLOWING REQUIREMENTS:
 - I. SHALL NOT CONTAIN SCREW-BASE LAMP SOCKETS; AND
 - II. HAVE A LABEL THAT CERTIFIES THE LUMINAIRE IS AIRTIGHT WITH AIR LEAKAGE LESS THAN 2.0 CFM AT 75 PASCALS WHEN TESTED IN ACCORDANCE WITH ASTM E283. AN EXHAUST FAN HOUSING WITH INTEGRAL LIGHT SHALL NOT BE REQUIRED TO BE CERTIFIED AIRTIGHT; AND
 - III. BE SEALED WITH A GASKET OR CAULK BETWEEN THE LUMINAIRE HOUSING AND CEILING, AND HAVE ALL AIR LEAK PATHS BETWEEN CONDITIONED AND UNCONDITIONED SPACES SEALED WITH A GASKET OR CAULK, OR BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS TO MAINTAIN AIR TIGHTNESS BETWEEN THE LUMINAIRE HOUSING AND CEILING; AND
 - IV. MEET THE CLEARANCE AND INSTALLATION REQUIREMENTS OF CALIFORNIA ELECTRICAL CODE SECTION 410.116 FOR RECESSED LUMINAIRES.
- BLANK ELECTRICAL BOXES. THE NUMBER OF ELECTRICAL BOXES THAT ARE MORE THAN 5 FEET ABOVE THE FINISHED FLOOR AND DO NOT CONTAIN A LUMINAIRE OR OTHER DEVICE SHALL BE NO GREATER THAN THE NUMBER OF BEDROOMS. THESE ELECTRICAL BOXES MUST BE SERVED BY A DIMMER, VACANCY SENSOR CONTROL, LOW VOLTAGE WIRING OR FAN SPEED CONTROL.
 - EXCEPTION TO SECTION 150.0(K)2A: CEILING FANS MAY PROVIDE CONTROL OF INTEGRATED LIGHTING VIA A REMOTE CONTROL.
- NO CONTROLS SHALL BYPASS A DIMMER, OCCUPANT SENSOR OR VACANCY SENSOR FUNCTION WHERE THAT DIMMER OR SENSOR HAS BEEN INSTALLED TO COMPLY WITH SECTION 150.0(K).
- AUTOMATIC-OFF CONTROLS.
 - I. IN BATHROOMS, GARAGES, LAUNDRY ROOMS, UTILITY ROOMS AND WALK-IN CLOSETS, AT LEAST ONE INSTALLED LUMINAIRE SHALL BE CONTROLLED BY AN OCCUPANCY OR VACANCY SENSOR PROVIDING AUTOMATIC-OFF FUNCTIONALITY.
 - II. FOR LIGHTING INTERNAL TO DRAWERS AND CABINETRY WITH OPAQUE FRONTS OR DOORS, CONTROLS THAT TURN THE LIGHT OFF WHEN THE DRAWER OR DOOR IS CLOSED SHALL BE PROVIDED.
- VACANCY SENSOR CONTROLS SHALL USE A NEUTRAL CONDUCTOR FOR OPERATING CURRENT.
- DIMMING CONTROLS. LIGHTING IN HABITABLE SPACES, INCLUDING BUT NOT LIMITED TO LIVING ROOMS, DINING ROOMS, KITCHENS AND BEDROOMS, SHALL HAVE READILY ACCESSIBLE WALL-MOUNTED DIMMING CONTROLS THAT ALLOW THE LIGHTING TO BE MANUALLY ADJUSTED UP AND DOWN.
- INDEPENDENT CONTROLS. INTEGRATED LIGHTING OF EXHAUST FANS SHALL BE CONTROLLED INDEPENDENTLY FROM THE FANS.
- FOR SINGLE-FAMILY RESIDENTIAL BUILDINGS, OUTDOOR LIGHTING PERMANENTLY MOUNTED TO A RESIDENTIAL BUILDING OR TO OTHER BUILDINGS ON THE SAME LOT SHALL MEET THE REQUIREMENT IN ITEM I AND THE REQUIREMENTS IN EITHER ITEM II OR ITEM III:
 - I. CONTROLLED BY A MANUAL ON AND OFF CONTROL SWITCH THAT PERMITS THE AUTOMATIC ACTIONS OF ITEMS II OR III BELOW; AND
 - II. CONTROLLED BY A PHOTOCELL AND EITHER A MOTION SENSOR OR AN AUTOMATIC TIME SWITCH CONTROL; OR
 - III. CONTROLLED BY AN ASTRONOMICAL TIME CLOCK CONTROL.
- CONTROLS THAT OVERRIDE TO ON SHALL NOT BE ALLOWED UNLESS THE OVERRIDE AUTOMATICALLY RETURNS THE AUTOMATIC CONTROL TO ITS NORMAL OPERATION WITHIN 6 HOURS. AN ENERGY MANAGEMENT CONTROL SYSTEM THAT PROVIDES THE SPECIFIED LIGHTING CONTROL FUNCTIONALITY AND COMPLIES WITH ALL REQUIREMENTS APPLICABLE TO THE SPECIFIED CONTROLS MAY BE USED TO MEET THESE REQUIREMENTS.
- ILLUMINATED ADDRESS SIGN SHALL NOT CONSUMER NO MORE THAN 5 WATTS OF POWER.
- ENERGY STORAGE SYSTEMS (ESS) READY. AT LEAST ONE OF THE FOLLOWING SHALL BE PROVIDED:
 - A. ESS READY INTERCONNECTION EQUIPMENT WITH A MINIMUM BACKED-UP CAPACITY OF 60 AMPS AND A MINIMUM OF FOUR ESS-SUPPLIED BRANCH CIRCUITS, OR
 - B. A DEDICATED RACEWAY FROM THE MAIN SERVICE TO A PANELBOARD (SUBPANEL) THAT SUPPLIES THE BRANCH CIRCUITS IN SECTION 150.0(S)(2). ALL BRANCH CIRCUITS ARE PERMITTED TO BE SUPPLIED BY THE MAIN SERVICE PANEL PRIOR TO THE INSTALLATION OF AN ESS. THE TRADE SIZE OF THE RACEWAY SHALL BE NOT LESS THAN ONE INCH. THE PANELBOARD THAT SUPPLIES THE BRANCH CIRCUITS (SUBPANEL) MUST BE LABELED "SUBPANEL SHALL INCLUDE ALL BACKED-UP LOAD CIRCUITS."
- A MINIMUM OF FOUR BRANCH CIRCUITS SHALL BE IDENTIFIED AND HAVE THEIR SOURCE OF SUPPLY COLLOCATED AT A SINGLE PANELBOARD SUITABLE TO BE SUPPLIED BY THE ESS. AT LEAST ONE CIRCUIT SHALL SUPPLY THE REFRIGERATOR, ONE LIGHTING CIRCUIT SHALL BE LOCATED NEAR THE PRIMARY EGRESS, AND AT LEAST ONE CIRCUIT SHALL SUPPLY A SLEEPING ROOM RECEPTACLE OUTLET.
- THE MAIN PANELBOARD SHALL HAVE A MINIMUM BUSS BAR RATING OF 225 AMPS.
- SUFFICIENT SPACE SHALL BE RESERVED TO ALLOW FUTURE INSTALLATION OF A SYSTEM ISOLATION EQUIPMENT/TRANSFER SWITCH WITHIN 3 FEET OF THE MAIN PANELBOARD. RACEWAYS SHALL BE INSTALLED BETWEEN THE PANELBOARD AND THE SYSTEM ISOLATION EQUIPMENT/TRANSFER SWITCH LOCATION TO ALLOW THE CONNECTION OF BACKUP POWER SOURCE.
- EXHAUST FANS SHALL BE CONTROLLED INDEPENDENTLY.
- ASTRONOMICAL TIME-SWITCH CONTROLS SHALL:
 - HAVE SUNRISE AND SUNSET PREDICTION ACCURACY WITHIN PLUS-OR-MINUS 15 MINUTES AND TIMEKEEPING ACCURACY WITHIN 5 MINUTES PER YEAR;
 - BE CAPABLE OF DISPLAYING DATE, CURRENT TIME, SUNRISE TIME, SUNSET TIME, AND SWITCHING TIMES FOR EACH STEP DURING PROGRAMMING;
 - BE CAPABLE OF AUTOMATICALLY ADJUSTING FOR DAYLIGHT SAVINGS TIME; AND
 - HAVE THE ABILITY TO INDEPENDENTLY OFFSET THE ON AND OFF FOR EACH CHANNEL BY AT LEAST 90 MINUTES BEFORE AND AFTER SUNRISE OR SUNSET.

CALIFORNIA ENERGY CODE T24 NOTES

N.T.S.

E2

ELECTRICAL PLAN KEYNOTES

- 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.
- POSSIBLE LOCATION OF FUTURE. EV CHARGING STATION. VERIFY EXACT LOCATION DURING INSTALLATION.
- 240V-30A-2P-N3R DISCONNECT FOR CONDENSING UNIT.
- ABOVE IN CABINET FOR HOOD EXHAUST.
- SWITCH FOR HOOD FAN.
- 3 FT OF ALLOCATED SPACE RESERVED FOR FUTURE SYSTEM ISOLATION/TRANSFER EQUIPMENT. DEDICATED RACEWAY SHALL BE BEHIND CLEARANCE.
- INTERCONNECTION PATHWAY. REFER TO ARCHITECTURAL PLANS FOR SOLAR ZONE AREA.
- LIGHT FIXTURE AND RECEPTACLE IN ATTIC. SEE BUILDING SECTIONS.

ELECTRICAL LEGEND

- SINGLE POLE SWITCH
- 3 WAY SWITCH
- DIMMER SWITCH
- FAN SPEED SWITCH
- MOTOR RATED SWITCH
- VACANCY SWITCH
- ASTRONOMICAL SWITCH
- 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)
- RECEPTACLE - 30A. 120/240V. NEMA 14-30R (CLOTHES DRYER TYPE)
- RECEPTACLE - 50A. 120/240V. NEMA 14-50R (DOMESTIC RANGE TYPE)
- COMMUNICATION DATA
- TV DATA AND DUPLEX - + 60" (FIELD VERIFY HEIGHT)
- DISCONNECT
- 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.

749 SQ. FT.
W/ ADAPTABLE FEATURES

PLAN
2

PROJECT

ACCESSORY
DWELLING UNIT

PWP23-003

DEPARTMENT OF PUBLIC
WORKS AND PLANNING



CAPITAL PROJECTS
DIVISION

2220 Tulare St., Ste. 720, Fresno, CA. 93721
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JULY 10, 2023

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TITLE

PROPOSED FLOOR
PLAN

SCALE

1/4" = 1'-0"

E-101

ISSUE DATE

JOB NUMBER

APRIL 12, 2023

2023_20

DRAWN BY

CHECKED BY

Author

Checker

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD Project Name: Option # 2 ADU Calculation Date/Time: 2023-05-30T10:10:47+05:30 Input File Name: 4411_Prototypical ADU Designs for Fresno County_Energy Analysis_V9.1 - Unit 22-rb2d22x C21R-PHF-01E (Page 1 of 12) <table><tr><td colspan="12">GENERAL INFORMATION</td></tr><tr><td>01</td><td colspan="11">Project Name: Option # 2 ADU</td></tr><tr><td>02</td><td colspan="11">Run Title: Title 24 Analysis</td></tr><tr><td>03</td><td colspan="11">Project Location: Option # 2</td></tr><tr><td>04</td><td colspan="11">City: Fresno County</td></tr><tr><td>05</td><td colspan="11">Zip code: 05</td></tr><tr><td>06</td><td colspan="11">Standards Version: 2022</td></tr><tr><td>07</td><td colspan="11">Software Version: EnergyPro 9.1.1</td></tr><tr><td>08</td><td colspan="11">Climate Zone: 13</td></tr><tr><td>09</td><td colspan="11">Front Orientation (deg/Cardside): All orientations</td></tr><tr><td>10</td><td colspan="11">Building Type: Single family</td></tr><tr><td>11</td><td colspan="11">Number of Dwelling Units: 1</td></tr><tr><td>12</td><td colspan="11">Project Scope: Newly Constructed</td></tr><tr><td>13</td><td colspan="11">Number of Bedrooms: 1</td></tr><tr><td>14</td><td colspan="11">Addition Cond. Floor Area (ft²): 0</td></tr><tr><td>15</td><td colspan="11">Number of Stories: 1</td></tr><tr><td>16</td><td colspan="11">Existing Cond. Floor Area (ft²): n/a</td></tr><tr><td>17</td><td colspan="11">Penetration Average U-factor: 0.3</td></tr><tr><td>18</td><td colspan="11">Total Cond. Floor Area (ft²): 746</td></tr><tr><td>19</td><td colspan="11">Glazing Percentage (%): 15.10%</td></tr><tr><td>20</td><td colspan="11">ADU Bedroom Count: n/a</td></tr><tr><td colspan="12">COMPLIANCE RESULTS</td></tr><tr><td>01</td><td colspan="11">Building Complies with Computer Performance</td></tr><tr><td>02</td><td colspan="11">This building incorporates features that require field testing and/or verification by a certified HERS rater under the supervision of a CEC-approved HERS provider.</td></tr><tr><td>03</td><td colspan="11">This building incorporates one or more Special Features shown below:</td></tr></table>												GENERAL INFORMATION												01	Project Name: Option # 2 ADU											02	Run Title: Title 24 Analysis											03	Project Location: Option # 2											04	City: Fresno County											05	Zip code: 05											06	Standards Version: 2022											07	Software Version: EnergyPro 9.1.1											08	Climate Zone: 13											09	Front Orientation (deg/Cardside): All orientations											10	Building Type: Single family											11	Number of Dwelling Units: 1											12	Project Scope: Newly Constructed											13	Number of Bedrooms: 1											14	Addition Cond. Floor Area (ft²): 0											15	Number of Stories: 1											16	Existing Cond. Floor Area (ft²): n/a											17	Penetration Average U-factor: 0.3											18	Total Cond. 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CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD Project Name: Option # 2 ADU Calculation Date/Time: 2023-05-30T10:10:47+05:30 Input File Name: 4411_Prototypical ADU Designs for Fresno County_Energy Analysis_V9.1 - Unit 22-rb2d22x C21R-PHF-01E (Page 5 of 12) <table><tr><td colspan="12">ENERGY USE INTENSITY</td></tr><tr><td></td><td>Standard Design (kWh/ft²-yr)</td><td>Proposed Design (kWh/ft²-yr)</td><td>Compliance Margin (kWh/ft²-yr)</td><td>Margin Percentage</td></tr><tr><td>North Facing</td><td></td><td></td><td></td><td></td></tr><tr><td>Gross EU¹</td><td>26.94</td><td>23.98</td><td>2.96</td><td>10.99</td></tr><tr><td>Net EU¹</td><td>11.48</td><td>8.53</td><td>2.95</td><td>25.7</td></tr><tr><td>East Facing</td><td></td><td></td><td></td><td></td></tr><tr><td>Gross EU¹</td><td>26.94</td><td>24.46</td><td>2.48</td><td>9.21</td></tr><tr><td>Net EU¹</td><td>11.48</td><td>9.01</td><td>2.47</td><td>21.52</td></tr><tr><td>South Facing</td><td></td><td></td><td></td><td></td></tr><tr><td>Gross EU¹</td><td>26.94</td><td>23.92</td><td>3.02</td><td>11.21</td></tr><tr><td>Net EU¹</td><td>11.48</td><td>8.46</td><td>3.02</td><td>26.31</td></tr><tr><td>West Facing</td><td></td><td></td><td></td><td></td></tr><tr><td>Gross EU¹</td><td>26.94</td><td>24.43</td><td>2.51</td><td>9.32</td></tr><tr><td>Net EU¹</td><td>11.48</td><td>8.97</td><td>2.51</td><td>21.86</td></tr><tr><td colspan="12">Notes 1. Gross EU is Energy Use Total (not including PV) Total Building Area. 2. Net EU is Energy Use Total (including PV) Total Building Area.</td></tr></table>												ENERGY USE INTENSITY													Standard Design (kWh/ft²-yr)	Proposed Design (kWh/ft²-yr)	Compliance Margin (kWh/ft²-yr)	Margin Percentage	North Facing					Gross EU¹	26.94	23.98	2.96	10.99	Net EU¹	11.48	8.53	2.95	25.7	East Facing					Gross EU¹	26.94	24.46	2.48	9.21	Net EU¹	11.48	9.01	2.47	21.52	South Facing					Gross EU¹	26.94	23.92	3.02	11.21	Net EU¹	11.48	8.46	3.02	26.31	West Facing					Gross EU¹	26.94	24.43	2.51	9.32	Net EU¹	11.48	8.97	2.51	21.86	Notes 1. Gross EU is Energy Use Total (not including PV) Total Building Area. 2. Net EU is Energy Use Total (including PV) Total Building Area.												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(%)</td><td>Solar Access (%)</td></tr><tr><td>2.13</td><td>NA</td><td>Standard (14-17%)</td><td>Fixed</td><td>none</td><td>true</td><td>150-270</td><td>n/a</td><td>n/a</td><td><=7:12</td><td>96</td><td>98</td></tr><tr><td colspan="12">REQUIRED SPECIAL FEATURES</td></tr><tr><td colspan="12">The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.</td></tr><tr><td colspan="12">• Variable capacity heat pump compliance option (verification details from VCHP SHIP report, Appendix B, and RA3)</td></tr><tr><td colspan="12">• Northeast Energy Efficiency Alliance (NEEA) rated heat pump water heater, specific brand/model, or equivalent, must be installed</td></tr><tr><td colspan="12">HERS FEATURE SUMMARY</td></tr><tr><td colspan="12">The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. 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Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry.</td></tr><tr><td colspan="12">• Indoor air quality ventilation</td></tr><tr><td colspan="12">• Kitchen range hood</td></tr><tr><td colspan="12">• Verified Refrigerant Charge</td></tr><tr><td colspan="12">• Airflow in habitable rooms (SC1.4.1.7)</td></tr><tr><td colspan="12">• Verified heat pump rated heating capacity</td></tr><tr><td colspan="12">• Wall-mounted thermostat in zones greater than 150 ft² (SC4.3)</td></tr><tr><td colspan="12">• Ductless indoor units located entirely in conditioned space (SC3.1.4.1.8)</td></tr><tr><td colspan="12">BUILDING - FEATURES INFORMATION</td></tr><tr><td>01</td><td>02</td><td>03</td><td>04</td><td>05</td><td>06</td><td>07</td></tr><tr><td>Project Name</td><td>Conditioned Floor Area (ft²)</td><td>Number of Dwelling Units</td><td>Number of Bedrooms</td><td>Number of Zones</td><td>Number of Ventilation Cooling Systems</td><td>Number of Water Heating Systems</td></tr><tr><td>Option # 2 ADU</td><td>746</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></tr></table>												REQUIRED PV SYSTEMS												01	02	03	04	05	06	07	08	09	10	11	12	DC System Size (kWdc)	Exception	Module Type	Array Type	Power Electronics	CFI	Asimuth (deg)	Tilt Input	Array Angle (deg)	Tilt: (x in 12)	Inverter Eff. (%)	Solar Access (%)	2.13	NA	Standard (14-17%)	Fixed	none	true	150-270	n/a	n/a	<=7:12	96	98	REQUIRED SPECIAL FEATURES												The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.												• Variable capacity heat pump compliance option (verification details from VCHP SHIP report, Appendix B, and RA3)												• Northeast Energy Efficiency Alliance (NEEA) rated heat pump water heater, specific brand/model, or equivalent, must be installed												HERS FEATURE SUMMARY												The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building tables below. 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The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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• Wall-mounted thermostat in zones greater than 150 ft² (SC4.3)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
• Ductless indoor units located entirely in conditioned space (SC3.1.4.1.8)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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C.</td><td>R-13</td><td>None / None</td><td>0.092</td><td>Inside Finish: Gypsum Board Cavity / Frame: R-13 / 2x4 Other Side Finish: Gypsum Board</td></tr><tr><td>Attic Roof/Living Area ADU</td><td>Attic Roofs</td><td>Wood Framed Ceiling</td><td>2x4 @ 24 in. O. C.</td><td>R-0</td><td>None / 0</td><td>0.644</td><td>Roofing: Light Roof (Asphalt Shingles) Roof Deck: Wood Siding/Sheathing/Decking Cavity / Frame: no insul. / 2x4 Inside Finish: Gypsum Board</td></tr><tr><td>R-38 Roof Attic</td><td>Ceilings (Below attic)</td><td>Wood Framed Ceiling</td><td>2x4 @ 24 in. O. C.</td><td>R-38</td><td>None / None</td><td>0.023</td><td>Over Ceiling Joists: R-38 9 Insul. Cavity / Frame: R-38 / 2x4 Inside Finish: Gypsum Board</td></tr><tr><td colspan="12">BUILDING ENVELOPE - HERS VERIFICATION</td></tr><tr><td>01</td><td>02</td><td>03</td><td>04</td><td>05</td></tr><tr><td>Quality Insulation Installation (QI)</td><td>High R-value Spray Foam Insulation</td><td>Building Envelope Air Leakage</td><td>CFM50</td><td>CFM50</td></tr><tr><td>Not Required</td><td>Not Required</td><td>N/A</td><td>n/a</td><td>n/a</td></tr><tr><td colspan="12">WATER HEATING SYSTEMS</td></tr><tr><td>01</td><td>02</td><td>03</td><td>04</td><td>05</td><td>06</td><td>07</td><td>08</td><td>09</td></tr><tr><td>Name</td><td>System Type</td><td>Distribution Type</td><td>Water Heater Name</td><td>Number of Units</td><td>Solar Heating System</td><td>Compact Distribution</td><td>HERS Verification</td><td>Water Heater Name (#)</td></tr><tr><td>DHW Sys 1</td><td>Domestic Hot Water (DHW)</td><td>Standard</td><td>DHW Heater 1</td><td>1</td><td>n/a</td><td>None</td><td>n/a</td><td>DHW Heater 1 (1)</td></tr></table>												OPAQUE SURFACE CONSTRUCTIONS												01	02	03	04	05	06	07	08	Construction Name	Surface Type	Construction Type	Framing	Total Cavity Insulation	Interior / Exterior R-value	U-factor	Assembly Layers	R-21 Wall + OS	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-21	None / None	0.068	Inside Finish: Gypsum Board Cavity / Frame: R-21 / 2x6 Exterior Finish: All Other Siding	R-13 Wall	Interior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-13	None / None	0.092	Inside Finish: Gypsum Board Cavity / Frame: R-13 / 2x4 Other Side Finish: Gypsum Board	Attic Roof/Living Area ADU	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-0	None / 0	0.644	Roofing: Light Roof (Asphalt Shingles) Roof Deck: Wood Siding/Sheathing/Decking Cavity / Frame: no insul. / 2x4 Inside Finish: Gypsum Board	R-38 Roof Attic	Ceilings (Below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-38	None / None	0.023	Over Ceiling Joists: R-38 9 Insul. 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R-13 Wall	Interior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-13	None / None	0.092	Inside Finish: Gypsum Board Cavity / Frame: R-13 / 2x4 Other Side Finish: Gypsum Board																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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R-38 Roof Attic	Ceilings (Below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-38	None / None	0.023	Over Ceiling Joists: R-38 9 Insul. Cavity / Frame: R-38 / 2x4 Inside Finish: Gypsum Board																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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Name	System Type	Distribution Type	Water Heater Name	Number of Units	Solar Heating System	Compact Distribution	HERS Verification	Water Heater Name (#)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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Name	# of Units	Tank Vol. (gal)	NEEA Heat Pump Model	NEEA Heat Pump Model	Tank Location	Duct Inlet Air Source	Duct Outlet Air Source																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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Therefore, CHERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document. CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Schema Version: rev 20220901 Registration Date/Time: 05/30/2023 05:54 HERS Provider: CHEERS Report Generated: 2023-05-29 21:41:52												Registration Number: 423-P010091390A-000-000-0000000-0000 NOTICE: This document has been generated by California Home Energy Efficiency Rating Service (CHERS) using information submitted by third parties not affiliated with or related to CHERS. Therefore, CHERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document. 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1. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design identified on this Certificate of Compliance.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
2. I certify that the energy features and performance specifications identified on this Certificate of Compliance conform to the																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			

OPTION # 2

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



UPDATE

JULY 5, 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 REQUIREMENTS

SCALE

MM-1

ISSUE DATE	JOB NUMBER
MARCH 7, 2023	2023_22
DRAWN BY	CHECKED BY
Author	Checker



2022 Single-Family Residential Mandatory Requirements Summary

§ 150.0(m)13:	Space Conditioning System Airflow Rate and Fan Efficiency. 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 be ≥ 350 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficiency ≤ 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 efficiency ≤ 0.62 watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3.3. *
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Ventilation and Indoor Air Quality:

§ 150.0(a)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 specified in § 150.0(a)1. *
§ 150.0(a)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(a)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(a)1B(ii)(k). 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(a)1C.
§ 150.0(a)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(a)1C-4.
§ 150.0(a)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(a)1G and enclosed kitchens and bathrooms can use demand-controlled or continuous exhaust meeting § 150.0(a)1G-ii. Airflow must be measured by the installer per § 150.0(a)1Gv, and rated for sound per § 150.0(a)1Gw. *
§ 150.0(a)1H&I:	Airflow Measurement and Sound Ratings of Whole-Dwelling Unit Ventilation Systems. The airflow required per § 150.0(a)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(a)1C.
§ 150.0(a)2:	Field Verification and Diagnostic Testing. Whole-Dwelling Unit ventilation airflow, vented range hood airflow and sound rating, and HRV and ERV fan efficiency 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(a)1G.

Pool and Spa Systems 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 MAEDS; 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.
§ 160.0(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.
Lighting:	
§ 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(a)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 linen closets with an efficacy of at least 45 lumens per watt.
§ 150.0(a)1B:	Screw-based Luminaires. Screw-based luminaires must contain lamps that comply with Reference Joint Appendix JAB. *
§ 150.0(a)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(d):	Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with the JAB elevated temperature requirements, including marking requirements, must not be installed in recessed luminaires.
§ 150.0(d)1:	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(a)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(a).

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2022 Single-Family Residential Mandatory Requirements Summary

§ 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 and spa heaters. *
§ 150.0(h)1:	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(h)3C:	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(h)3D:	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 resistant and protected from UV light (no 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 and non-crushable casing or sleeve.
§ 150.0(h)3E:	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(h)3F:	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.

Ducts and Fans:

§ 110.8(a)3:	Ducts. Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.
§ 150.0(m)1:	CMC Compliance. All air-distribution system ducts and plenums must meet CMC § 607.0-605.0 and ANSI/SMACNA 206-2006 HVAC Duct Construction Standards Metal and Flexible, 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to R-6.0 or higher; ducts located entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3) 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 723. The combination of mastic and either metal tape must be used to seal openings greater than 1/4", 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 or 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)2:	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 gasket 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)8:	Gravity Ventilation Fans. Gravity ventilating systems serving conditioned space must have either automatic or manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.
§ 150.0(m)9:	Protection of Insulation. Insulation must be protected from damage due to sunlight, 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)10:	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 an 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 on equivalent systems must have a one inch depth or can be one inch if used in 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 prevent air from bypassing the filter. *

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2022 Single-Family Residential Mandatory Requirements Summary

NOTE: Single-family residential buildings subject to the Energy Codes must comply with all applicable mandatory measures, regardless of the compliance approach used. Review the respective section for more information.
(04/2022)

Building Envelope:

§ 110.6(a)1:	Air Leakage. Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CFM per square foot or less when tested per NFRC-400, ASTM E283, or AIAA/WMA/CSA 1011.5.2/A440-2011. *
§ 110.6(a)5:	Labeling. Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a).
§ 110.6(b):	Field fabricated exterior doors and fenestration products must use U-factors and solar heat gain coefficient (SHGC) values from Tables 110.6-A, 110.6-B, or J4.4.5 for exterior doors. They must be caulked and/or weather-stripped.
§ 110.7:	Air Leakage. All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, gasketed, or weather stripped.
§ 110.8(a):	Insulation Certification by Manufacturers. Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (BHGS).
§ 110.8(b):	Insulation Requirements for Heated Slab Floors. Heated slab floors must be insulated per the requirements of § 110.8(g).
§ 110.8(c):	Roofing Products Solar Reflectance and Thermal Emittance. The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per § 10-113 when the installation of a cool roof is specified on the CTRIS.
§ 110.8(i):	Radiant Barrier. When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs.
§ 150.0(a):	Roof Deck, Ceiling and Rafter Roof Insulation. Roof decks in newly constructed attics in climate zones 4 and 5-16 area-weighted average U-factor not exceeding U-0.184. Ceiling and rafter roofs minimum R-22 insulation in wood-frame ceiling, or area-weighted average U-factor must not exceed 0.043. Rafter roof alterations minimum R-19 or area-weighted average U-factor of 0.054 or less. Attic access doors must have permanently attached insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a roof or ceiling which is sealed to limit infiltration and exfiltration, as specified in § 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling.
§ 150.0(b):	Loose-fill Insulation. Loose fill insulation must meet the manufacturer's required density for the labeled R-value.
§ 150.0(c):	Wall Insulation. Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood framing or have a U-factor of 0.071 or less. Opposite non-raftered assemblies must have an overall assembly U-factor not exceeding 0.102. Masonry walls must meet Tables 150.1-4 or 6. *
§ 150.0(d):	Raised-Floor Insulation. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor. *
§ 150.0(f):	Slab Edge Insulation. Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone without facings, no greater than 0.3 percent; have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical damage and UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
§ 150.0(g)1:	Vapor Retarder. In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to § 150.0(d).
§ 150.0(g)2:	Vapor Retarder. In climate zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.
§ 150.0(g):	Fenestration Products. Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.45, or area-weighted average U-factor of fenestration must not exceed 0.45.

Fireplaces, Decorative Gas Appliances, and Gas Log:

§ 110.5(f):	Pilot Light. Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.
§ 150.0(e)1:	Closable Doors. Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.
§ 150.0(e)2:	Combustion Intake. Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and light-tighting damper or combustion-air control device. *
§ 150.0(e)3:	Flue Damper. Masonry or factory-built fireplaces must have a flue damper with a readily accessible control. *
Space Conditioning, Water Heating, and Plumbing System:	
§ 110.5(f) & 110.3:	Certification. Heating, ventilation, and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the California Energy Commission.
§ 110.2(a):	HVAC Efficiency. Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-N. *
§ 110.2(b):	Controls for Heat Pumps with Supplementary Electric Resistance Heaters. Heat pumps with supplementary electric resistance heaters must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone, and in which the cut-on temperature for compression heating is higher than the cut-off temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating.
§ 110.2(c):	Thermostats. All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat. *
§ 110.2(c):	Insulation. Unfired service water heater storage tanks and solar water-heating backup tanks must have adequate insulation, or tank surface heat loss rating.
§ 110.3(c):	Isolation Valves. Instantaneous water heaters with an input rating greater than 6.5 kBTU per hour (2 kW) must have isolation valves with hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.

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2022 Single-Family Residential Mandatory Requirements Summary

§ 150.0(a):	Energy Storage System (ESS) Ready. All single-family residences must meet all of the following: Either ESS-ready interconnection equipment with backed up capacity of 60 amps or more and four or more ESS supplied branch circuits, or a dedicated receptacle from the main service to a subpanel that supplies the branch circuits in § 150.0(a), at least four branch circuits must be identified and have their source collocated at a single panelboard suitable to be supplied by the ESS, with one circuit supplying the refrigerator, one lighting circuit near the primary exit, and one circuit supplying a sleeping room receptacle outlet; main panelboard must have a minimum busbar rating of 225 amps; sufficient space must be reserved to allow future installation of a system isolation equipment/transfer switch within 3' of the main panelboard, with receptacles installed between the panelboard and the switch location to allow the connection of backup power source.
§ 150.0(b):	Heat Pump Space Heater Ready. Systems using gas or propane furnaces to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready"; and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."
§ 150.0(c):	Electric Cooktop Ready. Systems using gas or propane cooktops to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors rated at least 50 amps with the blank cover identified as "240V ready"; and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."
§ 150.0(d):	Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plumbing to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer location with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready"; and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."

*Exceptions may apply.



2022 Single-Family Residential Mandatory Requirements Summary

Project Name Option # 2 ADU	Building Type Single Family	□ Addition Alone	Date 30-05-2023
Project Address Option # 2 Fresno County	California Energy Climate Zone CA Climate Zone 13	□ Existing+ Addition/Alteration	# of Units 1
	Total Cond. Floor Area 746	Addition	n/a

Insulation Construction Type	Cavity	Area (ft²)	Special Features	Status
Wall	Wood Framed	R 20	766	New
Demising	Wood Framed	R 13	68	New
Slab	Unheated Slab-on-Grade	- no insulation	746 Perim = 115'	New
Roof	Wood Framed Attic	R 38	746	New

FENESTRATION		Total Area:	143	Glazing Percentage:	19.1%	New/Altered Average U-Factor:	0.30
Orientation	Area(ft ²)	U-Fac	SHGC	Overhang	Sidefins	Exterior Shades	Status
Front (W)	36.3	0.300	0.23	none	none	N/A	New
Front (E)	20.0	0.300	0.23	none	none	N/A	New
Rear (E)	36.3	0.300	0.23	none	none	N/A	New
Rear (E)	20.0	0.300	0.23	none	none	N/A	New
Right (S)	30.0	0.300	0.23	none	none	N/A	New

HVAC SYSTEMS						
Qty.	Heating	Min. Eff	Cooling	Min. Eff	Thermostat	Status
1	Electric Heat Pump	8.50 HSPF	Split Heat Pump	15.0 SEER	Setback	New

HVAC DISTRIBUTION	Location	Heating	Cooling	Duct Location	Duct R-Value	Status
HVAC System	Ductless	with Fan	Ductless	n/a	n/a	New

WATER HEATING					
Qty.	Type	Gallons	Min. Eff	Distribution	Status
1	Heat Pump	40	3.10	Standard	New

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2022 Single-Family Residential Mandatory Requirements Summary

§ 150.0(a)1G:	Screw-based luminaires. Screw-based luminaires must contain lamps that comply with Reference Joint Appendix JAB. *
§ 150.0(a)1H:	Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with the JAB elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(a)1I:	Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinet or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.
§ 150.0(a)2A:	Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 150.0(a)2B:	Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems. *
§ 150.0(a)2A:	Accessible Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned on and off.
§ 150.0(a)2B:	Multiple Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sensor is installed to comply with § 150.0(a).
§ 150.0(a)2C:	Mandatory Requirements. Lighting controls must comply with the applicable requirements of § 110.9.
§ 150.0(a)2D:	Energy Management Control Systems. An energy management control system (EMCS) may be used to comply with dimming, occupancy, and control requirements if it provides the functionality of the specified control per § 110.9 and the physical controls specified in § 150.0(a)2A.
§ 150.0(a)2E:	Automatic Shutoff Controls. In bathrooms, garages, laundry rooms, utility rooms and walk-in closets, at least one installed luminaire must be controlled by an occupancy or vacancy sensor providing automatic off functionality. Lighting inside drawers and cabinets with opaque fronts or doors must have controls that turn the light off when the drawer or door is closed.
§ 150.0(a)2F:	Dimmers. Lighting in habitable spaces (e.g., living rooms, dining rooms, kitchens, and bedrooms) must have readily accessible wall-mounted dimming controls that allow the lighting to be manually adjusted up and down. Forward phase cut dimmers controlling LED light sources in these spaces must comply with NEMA SSL 7A.
§ 150.0(a)3A:	Independent controls. Integrated lighting of exhaust fans shall be controlled independently from the fans. Lighting under cabinets or shelves, lighting in display cabinets, and switched outlets must be controlled separately from ceiling-installed lighting.
§ 150.0(a)3A:	Residential Outdoor Lighting. For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to other buildings on the same lot, must have a manual on/off switch and either a photocell and motion sensor or automatic time switch control) or an astronomical time clock. An energy management control system that provides the specified control functionality and meets all applicable requirements may be used to meet these requirements.
§ 150.0(a)4:	Internally Illuminated address signs. Internally illuminated address signs must either comply with § 140.9 or consume no more than 5 watts of power.
§ 150.0(a)5:	Residential Garages for Eight or More Vehicles. Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in §§ 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0.

Solar Readiness:

§ 110.10(a)1:	Single-family Residences. Single-family residences located in subdivisions with 10 or more single-family residences and where the application for a tentative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which do not have a photovoltaic system installed, must comply with the requirements of § 110.10(a).
§ 110.10(a)1A:	Minimum Solar Zone Area. The solar zone must have a minimum total area as described below. The solar zone must 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 must be comprised of areas that have no dimension less than 5 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. For single-family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet. *
§ 110.10(a)2:	Azimuth. All sections of the solar zone located on steep-sloped roofs must have an azimuth between 90-300° of true north.
§ 110.10(a)3A:	Shading. The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roof mounted equipment.
§ 110.10(a)3B:	Shading. Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the horizontal distance 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. *
§ 110.10(a)4:	Structural Design Loads on Construction Documents. For areas of the roof designated as a solar zone, the structural design loads for roof dead load and roof live load must be clearly indicated on the construction documents.
§ 110.10(a)5:	Interconnection Pathways. The construction documents must 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; and for single-family residences and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system. Documentation. A copy of the construction documents or a comparable document indicating the information from § 110.10(a)5 must be provided to the occupant.
§ 110.10(a)6:	Main Electrical Service Panel. The main electrical service panel must have a minimum busbar rating of 200 amps.
§ 110.10(a)7:	Main Electrical Service Panel. The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric."

Electric and Energy Storage Ready:

5/6/22

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HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name Option # 2 ADU		Date 30-05-2023			
System Name HVAC System		Floor Area 746			
ENGINEERING CHECKS		SYSTEM LOAD			
Number of Systems		1			
Heating System				COIL COOLING PEAK	
Output per System		24,000		CFM Sensible Latent	
Total Output (Btu/h)		24,000		394 8,400 370 266	
Output (Btu/h)(ft)		32.2			
Cooling System				COIL HTG. PEAK	
Output per System		24,000		CFM Sensible Latent	
Total Output (Btu/h)		24,000		394 8,400 370 266	
Total Output (Tons)		2.0			
Total Output (Btu/h)(ft)		32.2			
Total Output (eqg/Ton)		373.0			
Air System				TOTAL SYSTEM LOAD	
CFM per System		500		8,400 370	
Airflow (cfm)		1,007			
Airflow (cfm)(ft)		4.00			
Airflow (cfm/Ton)		1.00			
Outside Air (%)		0.0%			
Outside Air (cfm)(ft)		0.0%			
Total Adjusted System Output (Adjusting for Peak Design conditions)				19,948 1,384	
Note: values above given atARI conditions		TIME OF SYSTEM PEAK		Aug 3 PM	
HEATING SYSTEM PSYCHROMETRICS		Alrstroom Temperatures at Time of Heating Peak)		Jan 1 AM	