DATE: March 30, 2023 PO No. 3983-22

CUSTOMER COMMERCIAL CONTRACTING, INC.

CONTACT: TOM & MELISSA CUTLER

TEL: 559.297.4550

FAX:

EMAIL: commercialcontracting@live.com

FRESNO COUNTY MAIN JAIL Project Name:

DETENTION HOLLOW METAL DOOR / FRAME SCOPE OF WORK:

4389 FCW Project No.:

FCW Project Mgr: Mark Koeppen mark@fordererdoors.com Debbie McLean debbie@fordererdoors.com FCW Project Engr:

SEE SHEET 1 - BACK TO BACK PULL/FLUSH PULL

#### SUBMITTAL RECORD

Qty	Date	Issue	Description	Sent Via
1	03/30/2023	Approval	Hollow metal submittal	email
1	05/23/2023	Approval	Hollow metal submittal REV. 1	email
1	05/26/2023	Approval	HM submittal - REV. 2	email

## **Forderer Cornice Works**

23052 Bernhardt St. Hayward, CA. 94545 Tel: (510) 783-4200 FAX (510) 783-6646

DOORS · FRAMES · HARDWARE on page 21 of this submittal. Mark Koeppen / **FORDERER** 

> COUNTY OF FRESNO DEPARTMENT OF PUBLIC WORKS AND PLANNING

Date 06/26/2023

Matt Lopez

NO EXCEPTIONS

MAKE CORRECTIONS NOTED

SUBMIT SPECIFIED ITEM(S) REVISE AND RESUBMIT

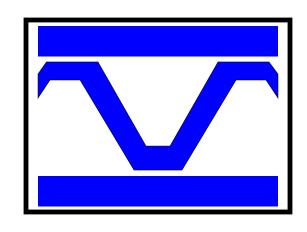
REJECTED. RESUBMIT

COMMENT LETTER ATTACHED

Corrections or Comments made by the County on shop drawings or submittal documents during this review do not relieve the Contractor or his Sub-Contractors of the requirements of the Drawings and Specifications. This Review is only to check for general conformance with the design concept and general compliance with the Contract Documents. The Contractor remains responsible for confirming and correlating all dimensions and quantities; selecting fabrication processes and techniques of construction; coordinating the work of the trades; and preforming the work in a safe and satisfactory manner.

Title Sheet Sheet Title

4389 Date Job No. 03/30/2023 Sheet



# Trussbilt

#### **CORPORATE OFFICE:**

2375 Ariel Street N Maplewood, MN 55109 TEL (651) 633-6100 FAX (651) 633-2350

#### **MANUFACTURING PLANTS:**

555 Lincoln Avenue NW Huron, SD 57350 TEL (605) 352-5283 FAX (605) 352-7141

801 Lincoln Avenue NW Huron, SD 57350 TEL (605) 352-7096 FAX (605) 352-7153

# SECURITY HOLLOW METAI

**JOB:** MAIN JAIL ACCESSIBILITY COMPLIANCE FOR PHYSICAL

BARRIERS - THIRD FLOOR, POD B

FRESNO COUNTY

**ARCHITECT:** MATTHEW B. LOPEZ

**CUSTOMER:** FORDERER CORNICE WORKS

23052 BERNHARDT STREET

HAYWARD, CA 94545

#### **SHOP DRAWING SHEET INDEX**

	MA	TERIAL R	ECAP	
FRAMES	1	TYPE	T'CORE	NON T'CORE
UNITS	0	SHELVES		
DOORS	1	PANELS		

SUBMITTAL NO.

ORDER NO.

DRAWN BY

	P	RINTS ISSUED	
DATE	NO.	TO	FOR
03/30/2023	1	FORDERER CORNICE WORKS	Approval

#### SHIPPING AND INSTALLATION NOTES

- 1. Shipping Damage Material was shipped in first class condition. You must review condition prior to signing for shipment. You will be responsible for damage not reported.
- 2. Warranty/Backcharge Issues None will be paid unless first approved in writing.
- 3. On Site Storage Failure to comply will damage your hollow metal.
- 4. Installation Improper installation will void warranty. See page SP-2 for instructions.

#### SHIPPING DAMAGE

FAILURE TO OBSERVE AND REPORT DAMAGE IN SHIPPING MAY COST YOU MONEY! Trussbilt products are normally shipped FOB Huron, South Dakota. Risk of loss or damage in transit passes to the customer when loaded, subject, of course, to the liability of the carrier. When products are unloaded, any damage must be noted on the delivery documents when signing for the delivery. Any damage or shortage discovered after delivery must be reported immediately to the carrier's regional office, together with a request for inspection of the damage. Unless these steps are taken, the carrier will refuse to pay, and the cost of the damage will be borne by the customer.

#### UNLOADING OF TRUSSBILT PRODUCTS

Whenever possible, Trussbilt products are shipped on pallets for ease of loading and unloading. The use of appropriate equipment intended for moving pallets is recommended for jobsite unloading.

Due to the substantial size, weight or long span of some hollow metal products, pallet loading may not be possible. The use of cranes or forklifts to unload oversize material may cause bending or distortion. Unloading with the use of this equipment is not recommended.

Temporary spreaders installed on hollow metal frames are not intended as unloading points.

TRUSSBILT WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY UNLOADING.

#### WARRANTY/BACKCHARGE CLAIMS

Any claim for deficiency in design or fabrication of hollow metal products must be reported to Trussbilt's Quality Control Manager in writing, before beginning any field correction of the problem. Unless Trussbilt is given notice of any such issues, and a reasonable opportunity to correct them, Trussbilt will not be responsible for the cost of any such corrections.

#### ON SITE STORAGE

The following directions are intended to permit storage of Trussbilt-furnished material without damage to that material.

- 1. By inclusion of these guidelines as a part of the submittal drawings, and as part of the shipping documents, the contractor is officially notified that if these guidelines are not followed, Trussbilt will bear no responsibility for the failure of the primer or damage to hollow metal, and will not bear any of the costs for repair of said primer or hollow metal.
- 2. Unless otherwise stated in the job specifications, all doors and frames are painted with a high quality industrial primer. Because the primer must be porous to properly receive and hold top coats, moisture that comes in contact with the primer will seep through to the steel by capillary action. An electrolytic action then follows resulting in corrosion which causes the paint film to lose adhesion. The presence of oxygen at water-air interface behind the loosed paint film accelerates corrosive action and further prime coat deterioration. It is imperative that primed hollow metal at the job site be stored in accordance with the recommended guidelines for on-site storage. (see primer note)
- 3. It is the responsibility of the contractor to see that any scratches or disfigurement caused in shipping or handling are promptly cleaned and touched up with a rust-inhibitive primer and that materials are properly stored.
- 4. Store doors and frames under cover to protect them from weather and sunlight. The elements will damage the primer and allow rusting to occur.
- 5. Stack doors and frames on skids at least 4" off the ground or floor. This prevents standing water on the job site from contacting the doors and frames and rusting them at their base. The primer is designed for limited protection until the top coat is applied, not for submerged conditions.
- 6. Stack doors and frames in an upright position. Do not store horizontally.
- 7. Place wood spacers between doors and frames no less than ¼" thick. This allows air circulation around the prime coat and prevents moisture from accumulating between the doors and the frames. If this is not done the primer will deteriorate and rusting will occur.

Stack no more than ten doors or single opening frames together, and no more than five multi-opening frames together. Longer stacks will cause an excessive weight burden on the back of doors and frames, and cause warping or bending.

#### **PRIMER**

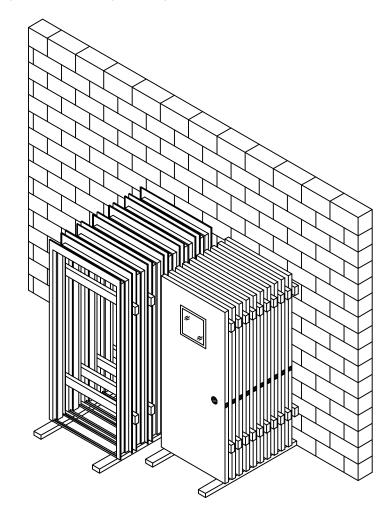
Trussbilt products are coated with a high quality primer. Primers provide limited protection for metal surfaces for a limited time.

#### DO NOT:

- 1. Expose primed steel products to weather.
- 2. Permit foreign materials, especially masonry leachate and other alkalies, to collect on or run onto primed products.
- 3. Permit nicking, chipping, scratching or abrading of primed surfaces.

These conditions will cause primer failure including loss of adhesion for which Trussbilt WILL NOT be responsible.

NOTE: Primer must be scarified (sanded) prior to finish painting to ensure proper cohesion of top coat to primer.



SHIPPING & SCALE N.T.S.

INSTALLATION DATES

CUSTOMER: DATE DATE
Forderer Cornice Works DRAWN BY

Trussbill



SHEET NO.

SP-1

#### FRAME INSTALLATION

- 1. Door frames are marked at the interior hinge reinforcement location. This hinge contains the Trussbilt opening number to help locate the frame in the proper opening. Borrowed lite frames have a metal tag attached to the frame
- 2. Check frame for loose or missing conduit (conduit can loosen during shipment and/or from job site handling).
- 3. Consult the jobsite plans to ensure correct size and handing before installing
- 4. Set the frame in the proper location and level the header. Shim under jambs as necessary.
- 5. Brace The frame to the structure or to the floor as shown in Figure 1. DO NOT BRACE IN THE DIRECTION OF THE INTENDED WALL. Plumb and square jambs.

The maximum tolerances that should be permitted in respect to squareness, plumbness, alignment and twist of the installation are shown in Figure 2.

**NOTE**: Installer should be careful not to create a tolerance build problem. Tolerance build occurs when more than one dimension is at or almost at its maximum tolerance.

FIGURE 1

- 6. Use temporary wood spreaders cut to accurate dimension, at mid-height and sill, removing the steel spacer angle at the floor (see Figures 3 and 4). The wood spreader must be square and fabricated from lumber no less than 3/4" thick. Correct spreader length is the door opening width between the jambs at the header. Cut clearance notch for frame stops. Spreaders must be nearly as wide as the frame depth for proper installation.
- 7. Check the frame for squareness and alignment, then secure floor anchors to
- 8. Grout the frame in the area of the anchors.

FIGURE 2

- 9. Any gaps in the mortar guards or exposed fasteners should be taped or covered with styrofoam before grouting.
- 10. After frame is permanently built into the wall, with the anchors properly installed, remove the wood spreaders (see Figure 4).
- 11. Precautions must be taken to prevent foreign substances from coming into contact with hollow metal doors and frames during and after installation. WARNING: masonry walls exposed to rain and other elements during construction may become saturated with water. Saturation may cause leaching of soluble salts and other foreign substances. Trussbilt will not be responsible for damage to frames due to contamination. Recommendations for protection of masonry walls are available from the Brick Institute of America, 11490 Commerce Park Drive, Reston, Virginia 22091.

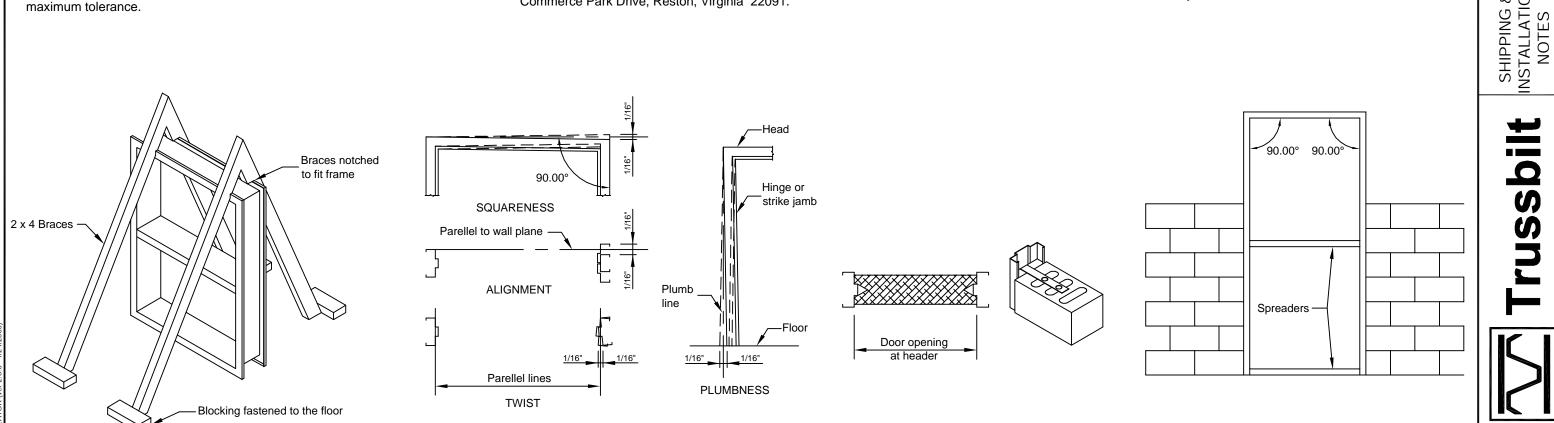
NOTE: Mortar cover caps and boxes are intended to protect tapped holes from masonry grout of a standard consistency which is hand-troweled in. If a light consistency grout is to be pumped into the frames after installation, special precautions must be taken in the field to protect tapped holes and electrical box knock-outs in the frames. We suggest that the field installed spreader at the center of the frame remain in place during the grouting process. Pumping liquified grout into frames under substantial pressure may cause bending, distortion or deformation of hollow metal frames. TRUSSBILT WILL NOT BE RESPONSIBLE for damage caused by pumping of grout at excessive pressures.

Hollow metal frames are not designated or intended to carry structural loads. Trussbilt disclaims any liability or responsibility for load carrying. Trussbilt's warranty and obligation is expressly limited to furnishing (but not dismantling or installing) necessary replacement materials FOB Huron, South Dakota, 57350.

#### DOOR INSTALLATION

- 1. Install hinges to the door.
- 2. Install door into frame by attaching hinge to frame hinge reinforcement. Brace door at bottom to prevent excessive weight on the top hinge.
- 3. Close the door & shim as necessary to maintain a 1/8" nominal clearance at the strike side of the assembly.

FIGURE 4



SHEET NO. SP-2

S

ż

SCALE

% NON

FIGURE 3

#### **SECURITY HOLLOW METAL NOTES**

- 1. Trussbilt does not furnish; Glass or Glazing, Drilling & Tapping for surface hardware, Erection & Finishing painting. Anchor bolts & Shields are provided only for post anchored label frames.
- 2. Application of detention hardware by Trussbilt to include locks, flush pulls, welded-on sliding door hangers and guides. Preperation only for jamb mounted locks, handle pulls and door position switches.
- 3. Doors and Frames are reinforced for surface closers and other surface items only as required by the hardware schedule. Doors only are drilled & tapped for surface prison hinges.
- 4. Welded up frames will be shipped with standard angle spreaders tack welded to frame bottom. Most frames will have fixed 12 ga. angle floor clips (see anchor note #1 on sheet's AN-2 and AN-3) and cover boxes behind hardware cutouts unless otherwise noted. Provide anchors spaced as shown on sheet AN-1 (Trussbilt standard anchor spacings).
- 5. Shipping sizes of materials is subject to limitations of common carrier. Oversize material must be shop spliced.
- 6. Punch for and provide 3 rubber silencers No. GJ64 at each single frame.
- 7. Punch for and provide 2 rubber silencers No. GJ64 at each double frame.
- 8. Door clearance at floor is always 5/8" unless noted otherwise
- 9. Close top and bottom of all doors flush
- 10. Drawing approval, Hardware, Glass and Intercom information (if applicable) is required before we can fabricate.
- 11. This set of drawings was made by us at our own expense for our sole use. Other parties using these drawings do so at their own risk.
- 12. Trussbilt drawings shall not be used to predetermine glass sizes. If used in this matter, risk is with the user, with no recourse to Trussbilt

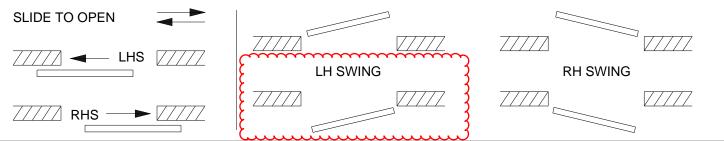
	ABB	REVIATIONS	AFF	ABOVE FINISH FLOOR	<b>Q</b>	CENTERLINE
ı	AN[	O SYMBOLS	TP	TURNING POINT	PL	PLATE
Г			O/A	OVERALL	WP	WELD IN PLACE
	TB	TRUSSBILT	Н	HINGE SIDE	Ø	DIAMETER
ı	NBTB	NOT BY TRUSSBILT	S	STOP SIDE	[##.#]	METRIC DIMENSIONS
ı	SE	SEE ELEVATION	В	BOTH SIDES	A	SHIPPING SECTION SYMBOL
ı	SD	SEE DETAIL	N	NEAR SIDE	P-#	PANEL SYMBOL
ı	GA	GAUGE	F	FAR SIDE	PL-#	PLATE SYMBOL
ı	GV	GALVANIZE	GP	GLAZING POCKET	FB	FROM BOTTOM
ı	UC	UL CONSTR. ONLY	CO	CUTOUT	FE	FROM END
	S.S.	STAINLESS STEEL	O.C.	ON CENTER		
	PV	PLAN VIEW	CP	COVER PLATE		

#### **ERECTOR NOTE: GROUTING OF FRAMES**

Jamb mounted lock pockets and mortar cover boxes are intended to protect hardware mortises and tapped holes from masonry grout of standard consistency which is hand troweled in. If a light consistency grout is to be pumped into frames, special precautions must be taken in the field, by others to protect tapped holes, electrical knockouts, ect., in frames

#### **ADDITIONAL PROJECT NOTES**

# STANDARD DESIGNATION OF DOOR SWING/SLIDE





SHEET NO.

SP-3

#### **Project Spec Notes:**

- •.75 EMT Inner elevation conduit(i.e. Lock to DPS, Strikes to DPS,ect.). See frame elevation.
- •.75 EMT Conduit for power. See frame elevation.
- Loose Glass stops to be matched drilled and held in place with two(2) security torx head screws. The screw holes in the glass stops to be 1/16 larger than the diameter of the screw to allow for adjustment. Ship remaining screws seperate except if Trussbilt is to install an insert into the opening, i.e. glass, mesh, panel, plate, etc. then all screws shall be installed by Trussbilt.
- Tap all screw holes when glass stop screws are shipped loose.
- Provide Mylar Labels On Doors and Frames At Openings With UL Fire Ratings.

#### Frame Spec Notes:

- All existing opening frames to recieve grout holes.
- All frames to have butt miter frame corners.
- Silencers to be provided at all door frames except where weather-stripping is shown in the hardware schedule.
- Silencers to have metal grout protection.
- Provide metal grout protection at all glass stop screws.
- · Hold throat dimensions at all details.
- Open all intersections for maximum grout fill in field.
- Stop screws for frames to be 1/4-28 x .625" -- Button Head Torx Machine Screw .
- Provide 12 GA channel reinforcing at all frame heads where the jamb width exceeds 48"

#### **Door Spec Notes:**

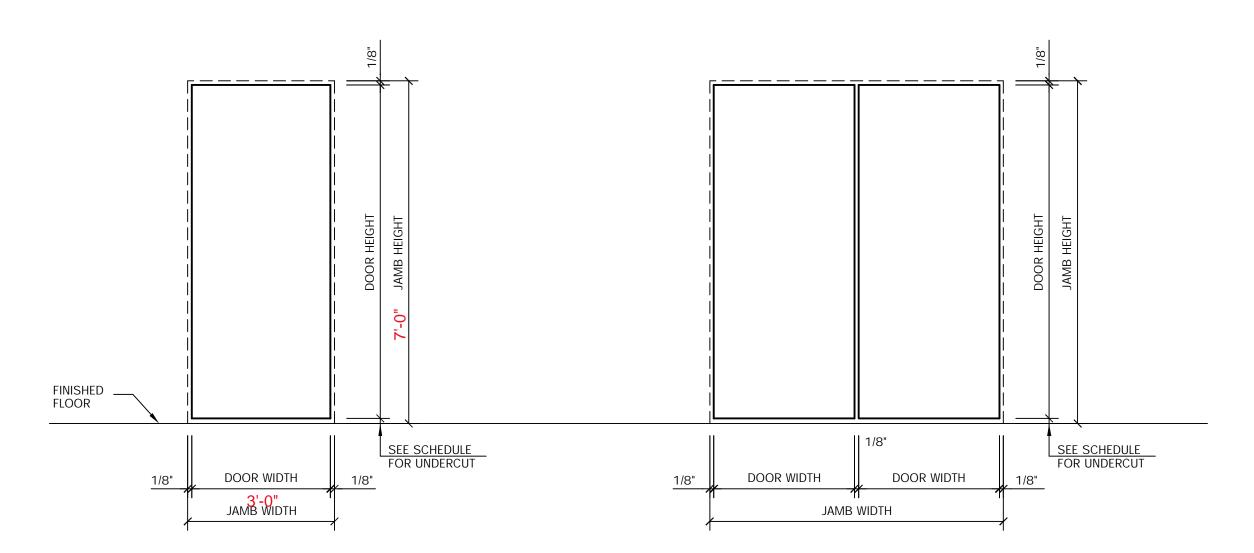
- All loose glass stops to have fully mitered corners.
- All loose glass stops to have corners fully welded together to form a (1) piece glass stop.
- Stop screws for doors to be 1/4-28 x .625" -- Button Head Torx Machine Screw .
- Trussbilt to provide 3/8" thick pull reinforcing for all raised pulls.
- Side Edges Finished Smooth With Bondo. No Visible Seams Allowed.
- See door construction details for special welding requirements to end channels and/or filler channels.

#### **Anchor Spec Notes:**

- •UL anchor to be spaced 8" FB and 16" O\C max in jambs.
- •UL anchor to be spaced 6" FE and 16" O\C max in heads where the overall frame width exceeds 39"
- •UL anchor to be spaced 6" FE and 16" O\C max in sills where the overall frame width exceeds 39"
- •MS anchor to be spaced 8" FE and 16" O\C max in jambs.
- •MS anchor to be spaced 8" FE and 16" O\C max in heads.
- •MS anchor to be spaced 8" FE and 16" O\C max in sills.
- •EO anchor to be spaced 6" FE and 16" O\C max in jambs.
- •EO anchor to be spaced 6" FE and 16" O\C max in heads where the overall frame width exceeds 39"
- •EO anchor to be spaced 6" FE and 16" O\C max in sills where the overall frame width exceeds 39"
- EO anchor bolt size is 0.5"
- EO anchors will be located at 16" O\C with the exception of the lock jamb where the anchors will be spaced accordingly to avoid interference with the lock. Due to this circumstance anchor spacing may exceed 16" O\C.



4389 Fresno Co Jail - recd 5-26-23 ~ REVISE & RESUBMIT



### SINGLE DOORS

USE CLEARANCES SHOWN ABOVE FOR ALL SINGLE DOORS.

SEE DOOR TYPE FOR DESIGN

### **DOUBLE DOORS**

USE CLEARANCES SHOWN ABOVE FOR ALL DOUBLE DOORS.

SEE DOOR TYPE FOR DESIGN

SEE PREFIX IN ELEVATION COLUMN, EXAMPLE: D100D, D200D, D300D ETC.

# TYPICAL DOOR CLEARANCES

JOB NAME:

SAL

JOBLOCATION:

SCALE

ANCE

CUSTOMER:

DATE

DRAWN BY

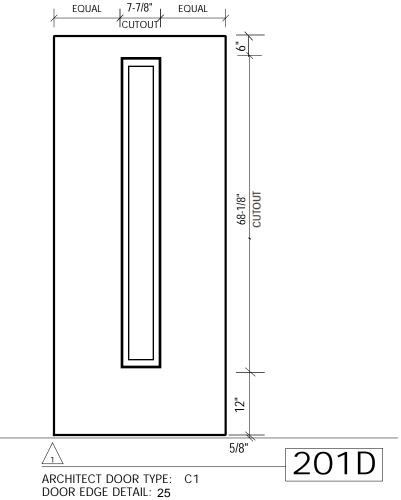
TYPICAL DOOR CLEARANCE

Trussbil



SHEET NO.

D-1



DOOR END DETAIL: 26X

ITEM 1: CUTOUT: 7.875" x 68.175" CLEAR OPENING: 5" X .65.25" GLAZING POCKET: 13/16" GLAZING DETAIL: 21R

#### HARDWARE SCHEDULE - RE-USE EXISTING

- (3) McKinney Hinges 5" x 4½" Heavy Weight
  (1) RR Brink 3022 Electromechanical Deadlocking Latch
- (1) RR Brink 201030 DPS
- (1) Push/Pull per template attached

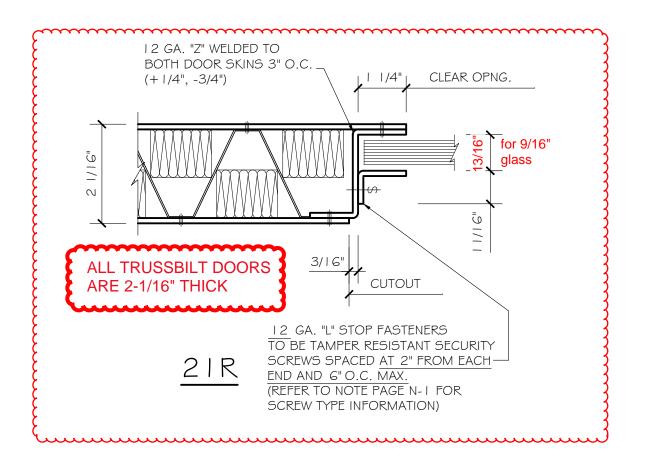
3'0" X 7'0" OPENING RHR

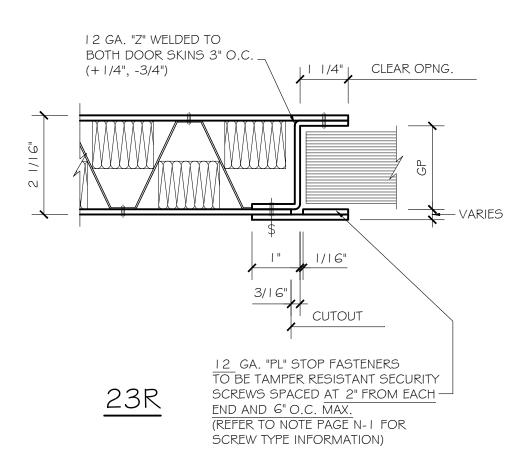
Accessible Cell 3073 & 3074

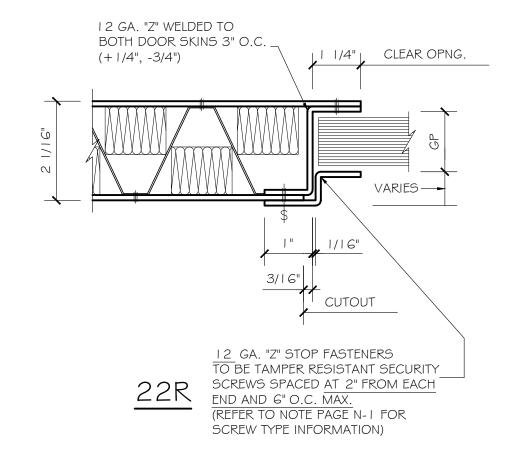
ELEVATIONS DOOR

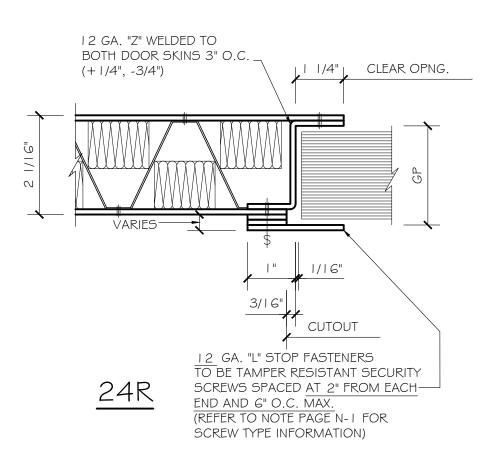
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D-2.2











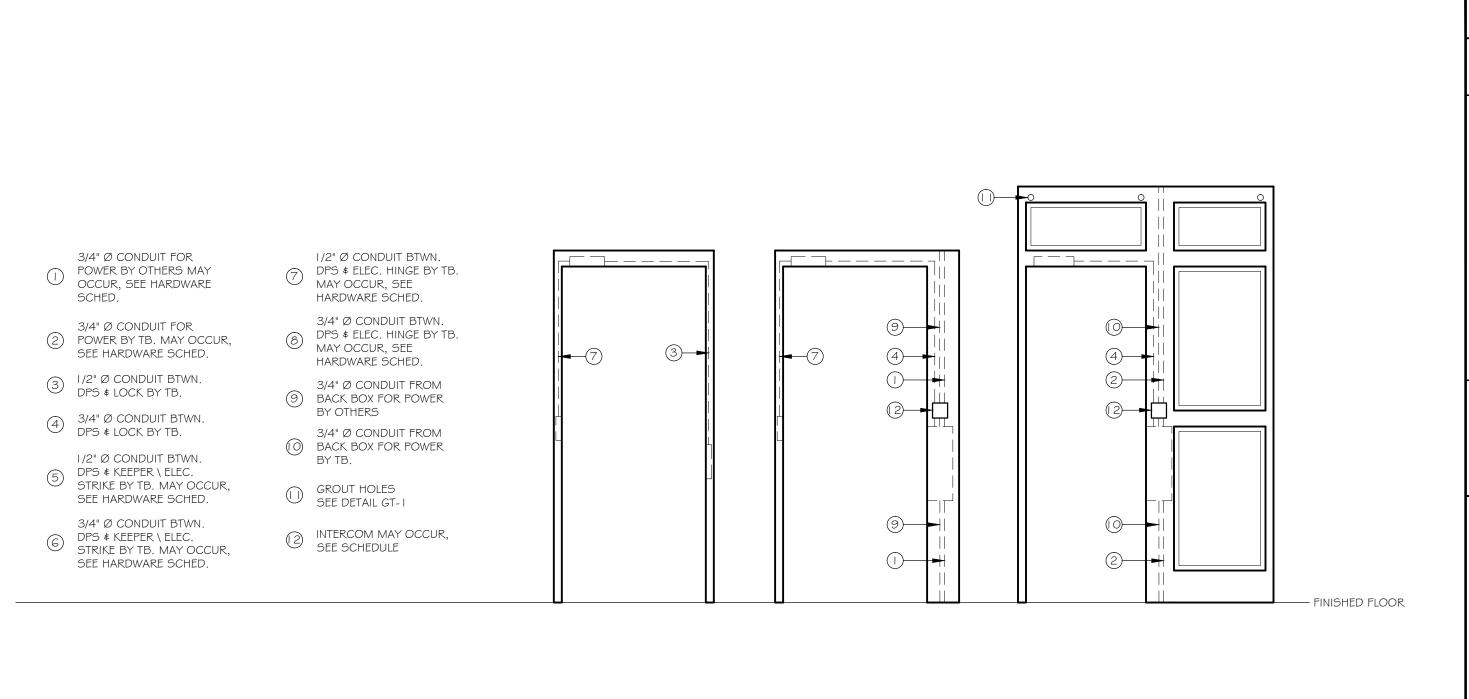
**Trussbilt** 



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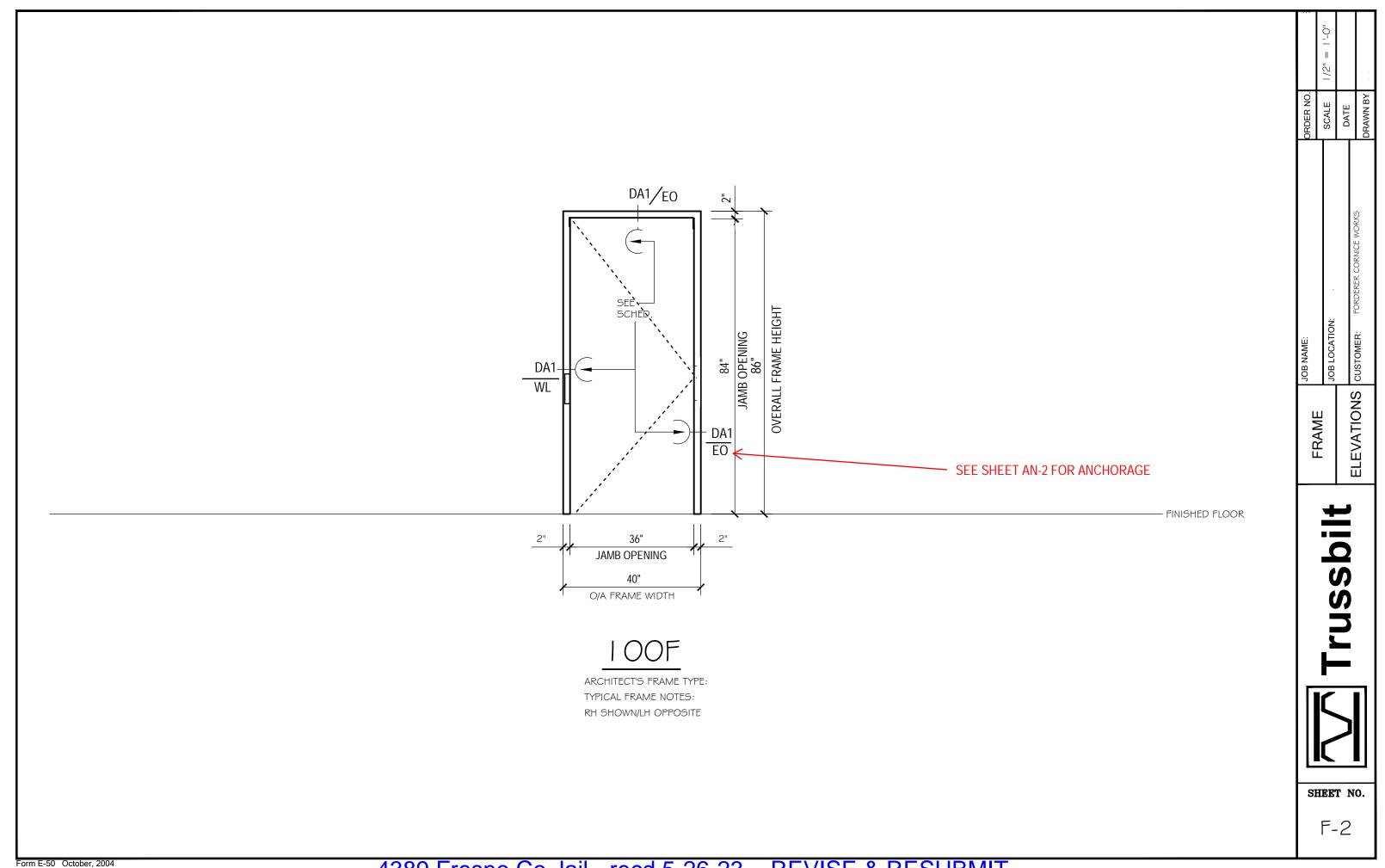
D-3

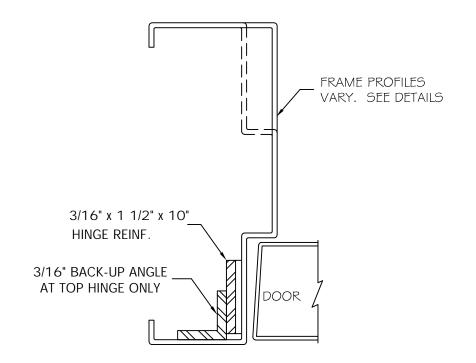
#### ORDER SHEET NO. TEMPLATE DETAILS TRUSSBILT 22340 DESIGN REVISION 12-12-92: CHANGED HINGE REINF. FROM CLOSE DOOR FLUSH WITH 14 GA. 9" TO 10" CHANNEL WELD ACROSS ENDS TO EDGE CHANNELS & THEN 1 1/2" CONT. 10 GA. CHANNEL WITH 3/16" BACKUP LONG WELDS AT 6" CENTERS FILLET WELDED TO EDGE CHANNEL AT EACH 12-7-96: REVISED FILLER CHANNEL NOTE (MAXIMUM) HINGE. SHIM BETWEEN DOOR EDGE AND CONT. 28 GA. TRUSSCORE CHANNEL FOR HINGE THICKNESS. SPOTWELD 2 3/4" O.C. HORZ. & 3" O.C. MAX. VERT. (2) PLUGWELDS AT HARDWARE LOCATIONS. 7-30-98 (TT): REVISED FILLER CHANNEL PLUGWELDS (2) PER HINGE; WELD NOTE - INSULATION ALL SPACES & ADDED THICKNESS CHART CONTINUOUS SEAM WELD. 2-16-01 (TT): ADDED ASTM AND HMMA CONT. 10 GA. CHANNEL. SPOTWELD 3" O.C. MAX. CONTINUOUS 10 GA. CHANNEL TO BOTH SIDES AT BOTH SIDES. WELD TO TOP 12-30-03 (TT): DRAWN TO SCALE; ADDED & BOTTOM END CHANNELS. ADDITIONAL WELD INFORMATION SPOTWELD TO FACE SHEET STAGGERED 3" O.C., + 1/4" / -3/4" 01-28-09 (RG): REVISED EDGE SEAM MIN. 1/2" FILLET 1" THICK 8# CU. FT. DENSITY WELD AT EACH END. CONT. ROCKWOOL INSUL. 1/8" IN 2" BEVEL 04-08-13 (RG): ADDED BEVEL NOTE & FOR SOUND DEADENING **BOTH EDGES** REMOVED ASTM & HMMA REFERENCES PROJECT REVISION DOOR DOOR **DETAIL 25** $X1^{2/11/23}$ (CE): CHANGED FILLER CHANNEL WELDS TO 1-1/2" LONG @ 6" O.C. JAMB CONT. 10 GA. CHANNEL. SPOTWELD 3" O.C. MAX. SHOP NOTE: TO BOTH SIDES MORTISE ONE LEAF OF X2 TYPICAL DOOR CONST. WITH HINGE INTO DOOR CLOSE DOOR FLUSH WITH 14 GA. CHANNEL WELD ACROSS ENDS 10 GA. PERIMETER CHANNELS TO EDGE CHANNELS & THEN 1 1/2" LONG WELDS AT 6" CENTERS HINGE EDGE CHANNEL HAS FLAT BAR \* SEE H.M. DOOR SCHEDULE FOR UNDERCUT **BACKUP AT HINGE LOCATIONS DETAIL 26X** STANDARD DOOR THICKNESS DRAWN BY CHECK BY DOOR GAUGE 1 11/16" CORE 1 27/32" CORE 10-8-92 JAE RG 16 GA. 1 13/16" 1 31/32" TEMPLATE NO. 14 GA. 1 27/32" 2" 25-26X 1 29/32" 2 1/16" 12 GA. TEMPLATE SHT. NO. 1 31/32" 2 1/8" 10 GA. OF



# TYPICAL FRAME NOTES

NOTES SHOWN ABOVE ARE FOR REFERENCE ONLY. SEE ACTUAL FRAME ELEVATIONS FOR APPLICABLE NOTES.





3/8" x FULL WIDTH" x 10"
PLATE AT EACH HINGE

HINGE REINF. FOR MORTISED HINGES HINGE REINF. FOR SURFACE HINGES

TYPICAL HINGE REINFORCEMENT

#### NOTE:

ERECTOR TO DRILL AND TAP FOR SURFACE HINGES IN FIELD IF REQUIRED.

Works		SCALE	DATE	DRAWN BY
		JOB LOCATION: SC		

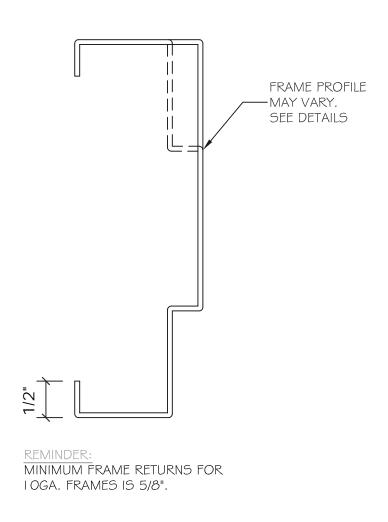
TYPICAL HINGE REINF.

Trussbilt

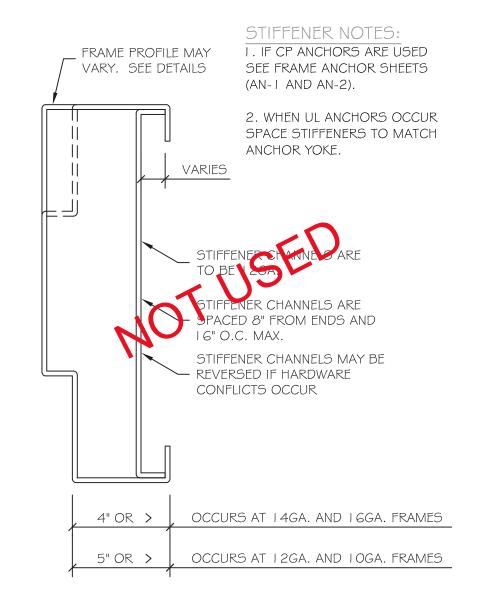


SHEET NO.

DT-1



TYPICAL FRAME RETURN DIMENSION



TYPICAL STIFFENER **CHANNELS** 

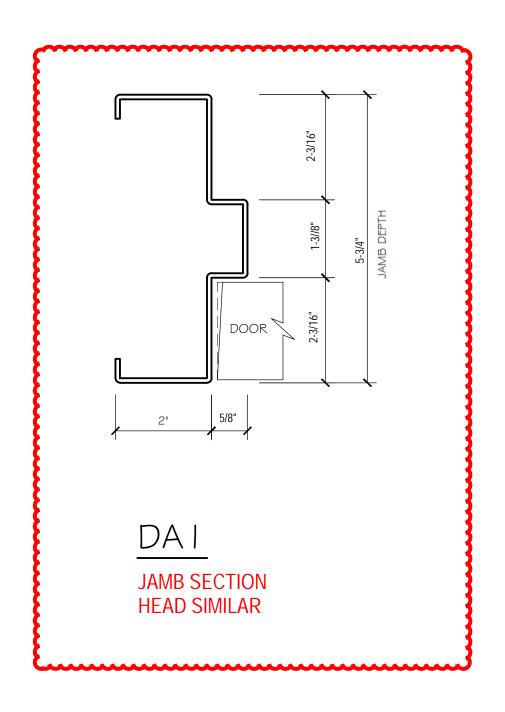
NOTE: ALL INFORMATION SHOWN ABOVE IS TYPICAL UNLESS NOTED OTHERWISE

TYPICAL
JOBLOCATION
CUSTOMER:
Forderer Cornis ussbilt

SHEET NO.

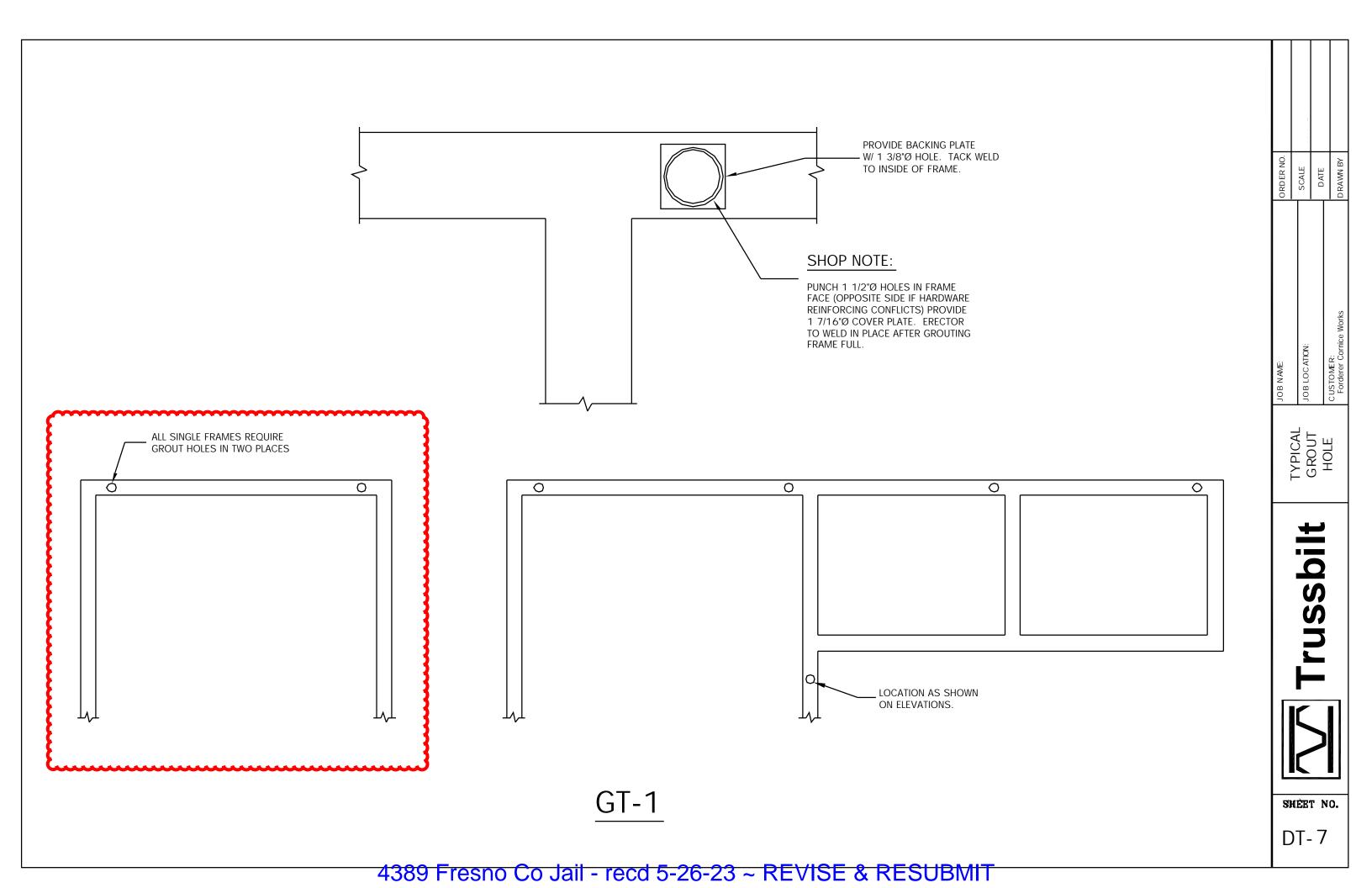
DT-2

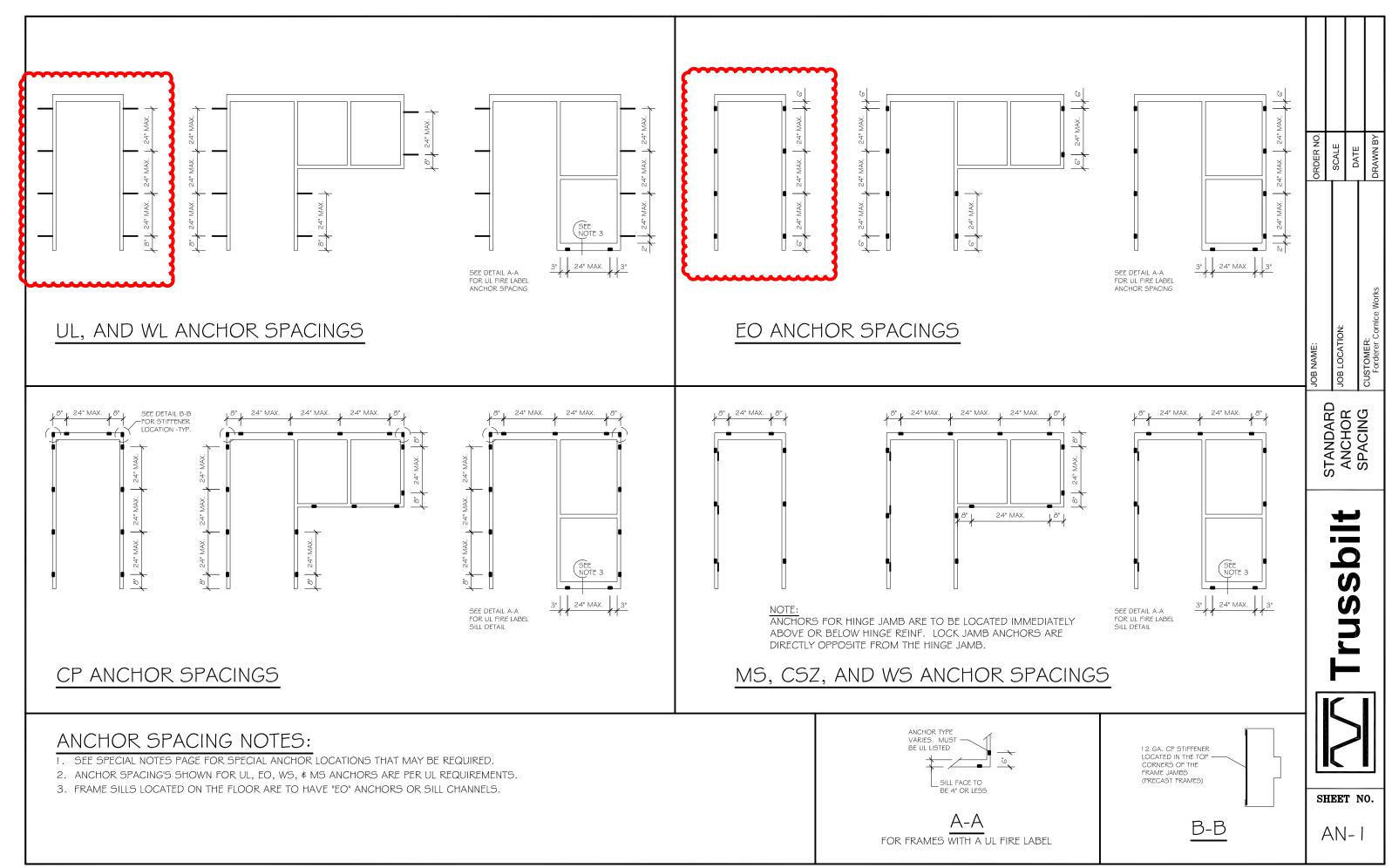
JOB NAME

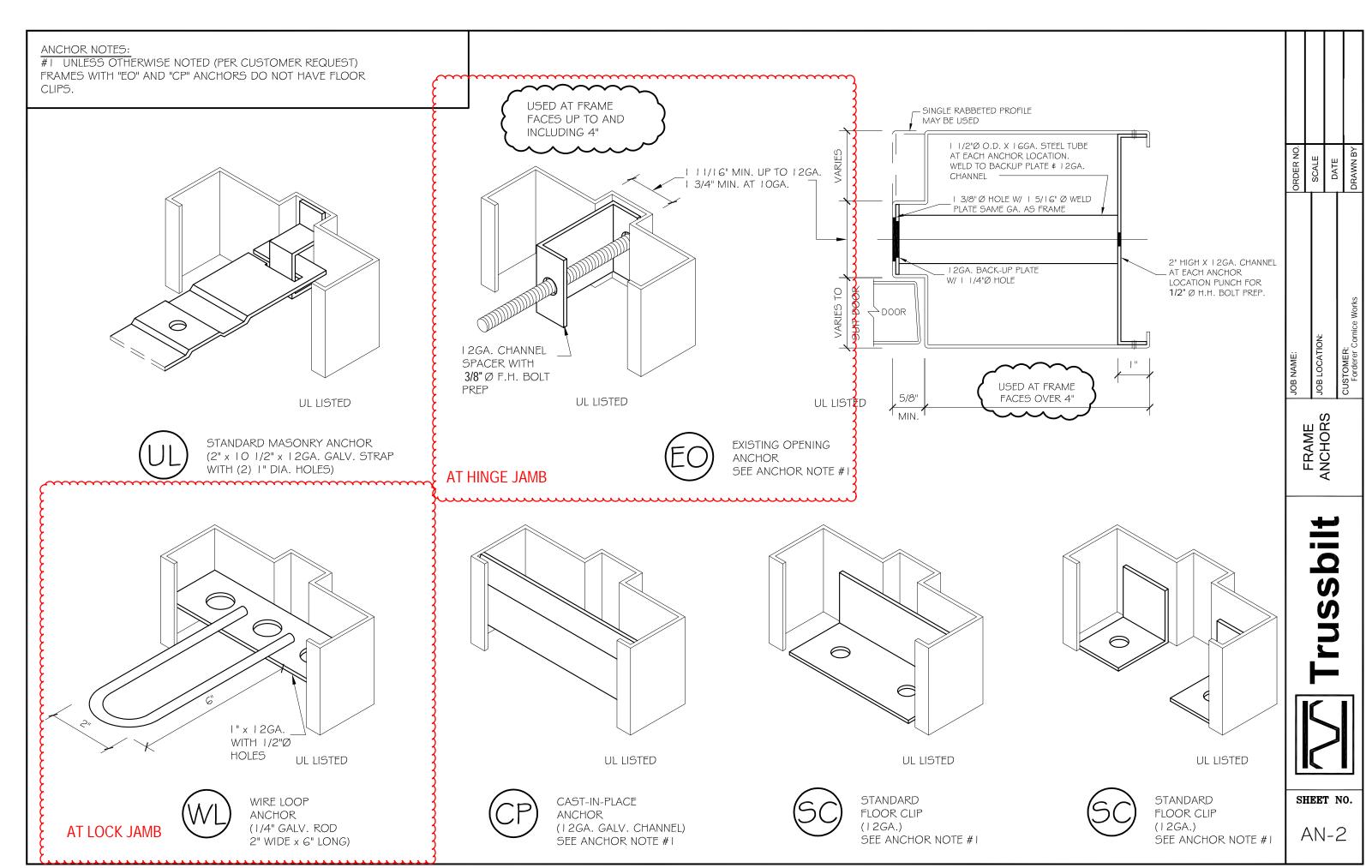


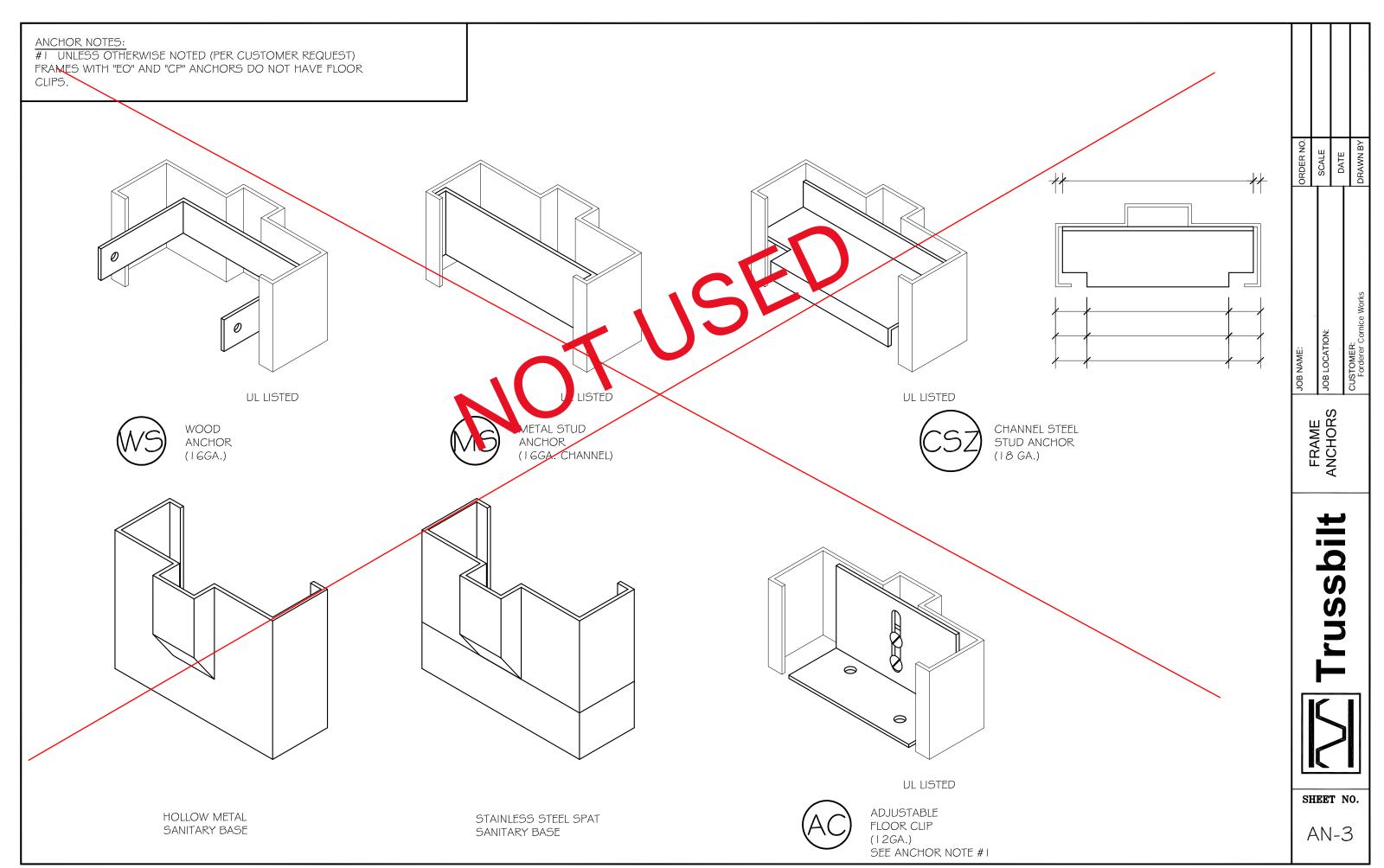
		JOB NAME:	ORDER NO.	
+1:400		JOB LOCATION:	SCALE	
			DATE	
	DETAILS	CUSTOMER: CONTRACT WORNS	DRAWN BY	

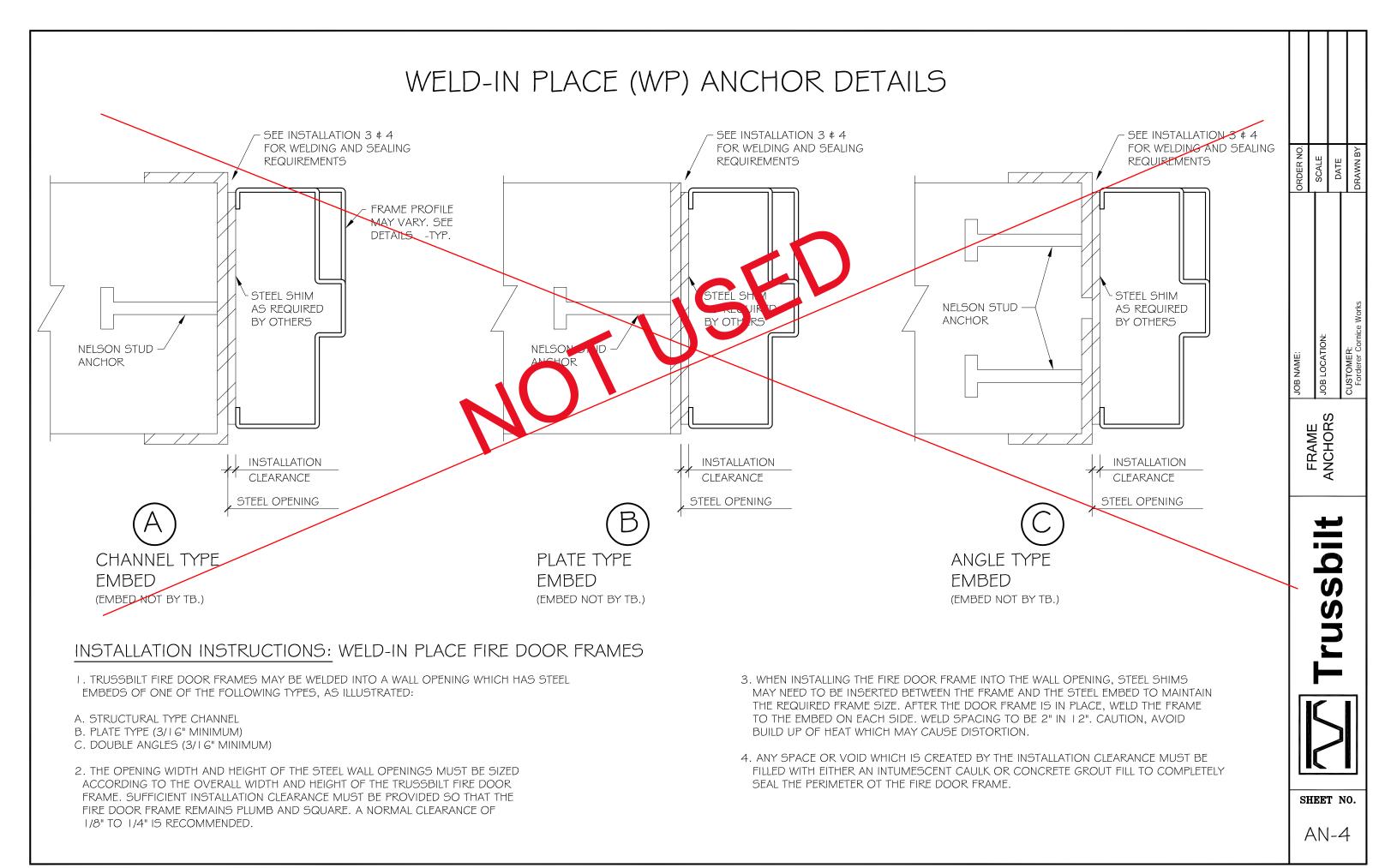
DT-3

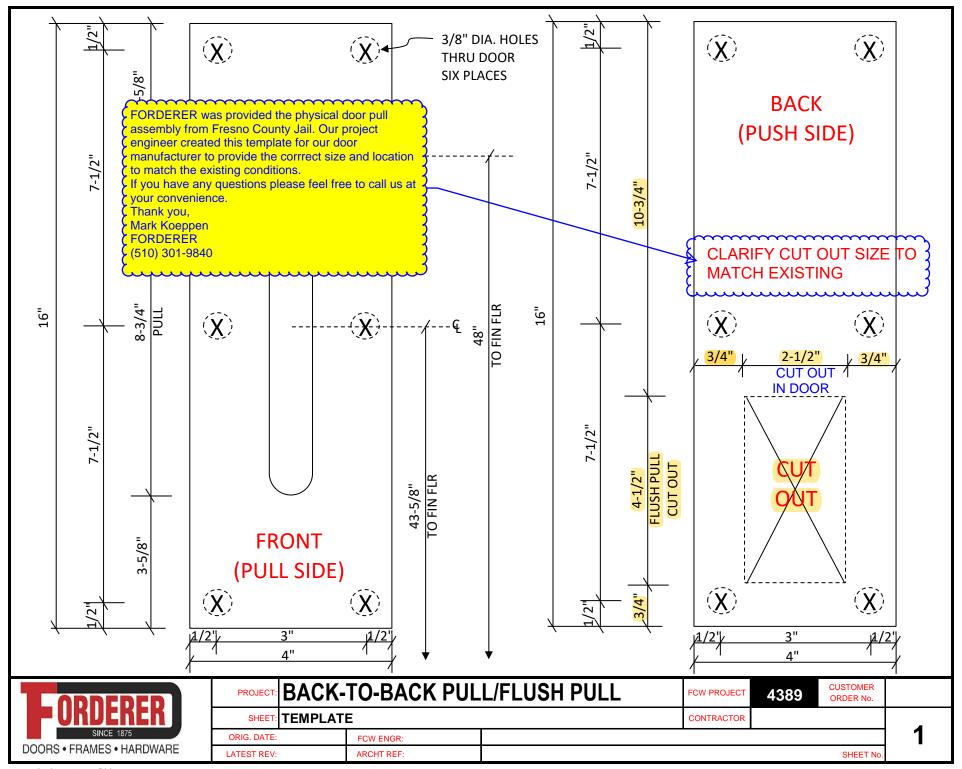














# Detention Security Doors

Trussbilt doors are fabricated using Trusscore, a unique internal reinforcement system invented by Trussbilt in 1926. The Trusscore design gives us the ability to manufacture the strongest door in the marketplace at a weight 20% lighter than competing brands. Because of this innovative, lightweight construction, our doors will not overly fatigue expensive hardware and locking mechanisms, reducing lost time and costs associated with repairs and maintenance.

Trusscore is a truncated, triangular, roll-formed steel section extending continuously from one door face to the other. It spans the full length and width of the door. Trusscore is spot welded every 3" vertically and every 2 3/4" horizontally.

Special welding machines fuse the door face sheets to the Trusscore, forming a single welded structure. This design gives the door strength analogous to the structural strength of an I-beam. A typical Trusscore door has over 800 weld points, nearly 50% more than competing brands. This unified structure

results in the strongest door on the market, one that will not delaminate over time.

Trussbilt doors are custom built to architectural specifications and can accommodate requirements for:

- · larger size
- bullet resistance
- vision and hardware configurations
- · security level
- fire rating, including temperature rise
- cuff and shackle ports, with plate, flush and sliding options
- electrical or mechanical intercoms
- Trussbilt's Safe-T-Feed device
- lead lining
- additional vision reinforcement using wire mesh or bar grille
- speakers
- · louvers
- · shutters

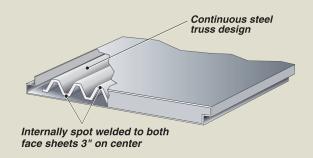
All options are available for both sliding and swing doors.

Trussbilt also offers the following value-added options to minimize field costs:

- · factory hardware installation
- factory glass/glazing installation
- factory hanger and guide installation



The Trusscore design
gives us the ability
to manufacture the
strongest door in the
marketplace at a weight
20% lighter than
competing brands.





# Detention Security Frames

Trussbilt door frames, borrowed light frames, exterior window frames and curtain wall frames are fabricated using the most up-to-date equipment and software in the industry. Trussbilt's experience, flexibility and superior quality lead to on-time submittal drawings and deliveries, virtually guaranteeing a successful hollow metal installation.

Trussbilt frames are custom built to architectural specifications and can accommodate any requirement for:

- size and shape (includes arches, trapezoidal and tilt-out variations)
- vision and hardware configurations
- · security level
- · fire rating
- bullet resistance
- electrical or mechanical intercoms
- glazing, infill, panel or wire mesh applications
- speak-through frame jambs for visitation areas
- lead lining
- key/paper pass
- · transaction drawers
- thermobreak frames

- rough buck frames
- · split frames
- round bars, mild steel or TR steel
- · receiver columns

When inmate supervision is a concern, size does matter, and Trussbilt can fabricate borrowed light and curtain walls to the designer's maximum size. Entire walls can be designed as glazed window frames to maximize visual supervision in day rooms, recreation yards and visitation areas. These frames, as well as those in control rooms, can be additionally reinforced with heat treated bar or security wire mesh.

Our standard primer is specially formulated to withstand the rigors of the typical construction site.

We also focus on preventing grout leaks by first covering hardware preps and screw holes with standard grout protection, then caulking them for double protection.



Flexibility and
superior quality
lead to on-time
submittal drawings
and deliveries
to assure
successful
installations.



# Detention Hollow Metal Finishes

Trussbilt uses a high solid, low V.O.C. two-part urethane primer specially formulated for us by Four Seasons, a Diamond Vogel company. Our five stage cleaning system for frames uses a high pressure wash and phosphatizing station complete with an RO seal/rinse final stage. Doors are pressure sanded over the entire surface to ensure 100% primer adhesion.

Trussbilt recommends that all exterior doors and frames be fabricated using A60 galvannealed steel. Galvannealed steel has been successfully used by the auto industry for many years. For highly corrosive conditions our stainless steel series 409 is recommended, and series 304 is available.

# Code and Specification Complance Testing

Trussbilt pioneered many of the standard test methods used today. We belong to both HMMA and ASTM and comply with the following standards:

#### HMMA 863

Guide Specifications for Detention Security Hollow Metal Doors and Frames

#### ASTM F 2322

Standard Test Methods for Physical Assault on Vertical Fixed Barriers for Detention and Correctional Facilities

#### ASTM F 1450

Standard Test Methods for Hollow Metal Swinging Door Assemblies for Detention and Correctional Facilities (Passes Security Level 1)

- Door Assembly Impact Load Test
- · Door Static Load Test
- Door Rack Test
- · Door Edge Crush Test

#### · ASTM F 1592

Standard Test Methods for Detention Hollow Metal Vision Systems (Passes Security Level 1) – Single Light and Multi Light Assembly Impact Test

- Fire rating with UL and ITS, Intertech
   Testing Services
- Bullet Resistance Test UL-752