

GENERAL NOTES AND SPECIFICATIONS:

1. DOUBLE & SINGLE SERIES LS18 FLUSH/EMBOSSED OUTSWING COMMERCIAL STEEL DOOR W/SERIES "AS" 16 GAGE STEEL FRAME LOUVERED ASSEMBLIES, SHOWN ON THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) HAS BEEN VERIFIED FOR CODE COMPLIANCE IN ACCORDANCE WITH THE 2018 EDITION OF THE INTERNATIONAL BUILDING CODE, (IBC).

DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTION 1609 OF THE INTERNATIONAL BUILDING CODE, FOR A BASIC WIND SPEED AS REQUIRED BY THE JURISDICTION WHERE PRODUCT WILL BE INSTALLED, AND FOR A DIRECTIONALITY FACTOR $K_d = 0.85$, IN ACCORDANCE WITH ASCE 7-16 STANDARD, AND SHALL NOT EXCEED THE DESIGN PRESSURE RATING INDICATED ON SHEETS 1 & 3A.

IN ORDER TO VERIFY THAT ANCHORS ON THIS P.E.D., AS TESTED, WERE NOT OVERSTRESSED, A 33% INCREASE IN ALLOWABLE STRESS FOR WIND LOADS WAS NOT USED IN THEIR ANALYSIS. FASTENERS SPACING TO WOOD HAS BEEN DETERMINED IN ACCORDANCE WITH N.D.S. 2018.

THIS DOOR'S ADEQUACY FOR IMPACT AND CYCLIC RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTION 1609.2 OF THE ABOVE MENTIONED CODE AS PER FLORIDA HIGH VELOCITY HURRICANE ZONE PROTOCOLS TAS-201, TAS-202, TAS-203 AS PER HURRICANE TESTING LABORATORY, INC. REPORT #0279-0719-03 AND AS PER SUBMITTED STRUCTURAL CALCULATIONS, PERFORMED AS PER SECTION 1604 OF THE ABOVE MENTIONED BUILDING CODE.

2. ALL COMPONENTS SHALL BE AS SPECIFIED ON APPLICABLE DETAIL SHEETS AND AT BILL OF MATERIALS (SHEET 19) OF THIS DRAWING.

3. COMPLIANCE OF EGRESS / ESCAPE REQUIREMENTS OF THESE DOORS PER IBC TO BE DETERMINED BY BUILDING OFFICIALS ON A CASE-BY-CASE BASIS.

4. ALL SCREWS INSTALLED TO BE STAINLESS STEEL 304 OR 316 AISI SERIES AND MEET ASTM A167, OR HOT DIPPED GALVANIZED (AFTER FABRICATION) CARBON STEEL AS PER ASTM A 123 OR ASTM A153, OR HOT DIPPED GALVANIZED OR GALVANNEALED (PRIOR TO FABRICATION) AND MEET ASTM A653 WITH 50 ksi YIELD STRENGTH AND 90 hsi TENSILE STRENGTH. BOLTS TO BE ASTM A-307 GALVANIZED STEEL OR AISI 304 SERIES STAINLESS STEEL, WITH 35 ksi ALUMINUM YIELD STRENGTH.

5. ALL WELDING TO CONFORM W/AMERICAN WELDING SOCIETY A.W.S. D.1.3 AND D-19.0 REGULATIONS. USE E 60XX ELECTRODES

6. ALL ANCHORS FOR DOOR FRAME CONNECTIONS TO EXISTING STRUCTURE SHALL BE AS SPECIFIED ON SHEET 17 OF THIS DRAWING. MAXIMUM ANCHORS SPACINGS SHALL BE AS PER SCHEDULE ON SHEET 18 AND ELEVATIONS ON SHEETS 2 & 3 OF THIS DRAWING. SEE SHEET 2, 3 & 7 FOR THRESHOLD ANCHORS, AND SHEET 11 FOR MULLION ANCHORS.

7. PROVIDE MAX. LOAD BEARING SHIM SPACE AS INDICATED ON SHEETS 5, 6, 7 & 17 OF 19.

8. **THIS DOOR WILL NOT REQUIRE A HURRICANE PROTECTION DEVICE.** DOOR MEETS IMPACT RESISTANCE FOR TYPE "D" MISSILE FOR BASIC PROTECTION.

9. SEE MAX. DESIGN PRESSURE RATING REQUIREMENTS FOR WATER INFILTRATION AND LIMITATIONS FOR AIR INFILTRATION FOR ASSEMBLIES ON THIS SHEET.

10. PROVIDE SPECIFIED SEALANT AT ALL DOOR FRAME, THRESHOLD AND VISION LITE COMPONENTS INDICATED ON THIS DRAWING.

11. ALL EXISTING WALLS (STRUCTURE) WHERE DOOR IS TO BE INSTALLED MUST BE BUILT IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE AND SHALL BE DESIGNED TO SUSTAIN THE SUPERIMPOSED LOADS TRANSFERRED BY THE DOOR SYSTEM.

12. ALL ALUMINUM EXTRUSIONS IN CONTACT WITH DISSIMILAR MATERIALS SHALL COMPLY WITH SECTION III-6 OF THE ALUMINUM DESIGN MANUAL 2015 EDITION.

13. (a) THIS P.E.D. PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT; i.e. WHERE THE SITE CONDITIONS DEVIATE FROM THE P.E.D.

(b) CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION INCLUDING LIFE SAFETY OF THIS PRODUCT, BASED ON THIS P.E.D., PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT. CONSTRUCTION SAFETY AT SITE IS THE CONTRACTOR'S RESPONSIBILITY.

(c) THIS P.E.D. WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.

(d) SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.E.D.

(e) ORIGINAL P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.

14. PRODUCT MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION AT PRODUCT IN ACCORDANCE WITH TEXAS DEPARTMENT OF INSURANCE REQUIREMENTS. ONE LABEL SHALL BE PLACED FOR EVERY OPENING.

SHEETS CONTENT:

- SHEET #1 INDEX, COVER SHEET & GENERAL NOTES
- SHEET #2 ASSEMBLY ELEVATIONS No 1, 2, 3.
- SHEET #3 ASSEMBLY ELEVATIONS No 7, 7-EMB.
- SHEET #3A MAX. DESIGN PRESSURE RATING SCHEDULE (PSF)
- SHEET #4 OPTIONAL EMBOSSED DOOR SHEET CONFIGURATIONS.
- SHEET #5 HORIZONTAL SECTIONS A-A & B-B.
- SHEET #6 HORIZONTAL SECTIONS C-C & C'-C'.
- SHEET #7 VERTICAL SECTIONS D-D, E, F, G, H, I AND HORIZONTAL SECTION J-J
- SHEET #8 MODEL 1500-A AIR LOUVER DETAILS.
- SHEET #9 FRAME SECTIONS, & REINFORCING DETAILS AND THRESHOLD DETAIL
- SHEET #10 TYPICAL DOOR SECTION, "Z" ASTRAGAL & ASA STRIKE REINFORCING
- SHEET #11 MULLION INSTALLATION DETAILS.
- SHEET #12 SURFACE BOLT INSTALLATION AND DETAILS.
- SHEET #13 DOOR TOP AND BOTTOM TYPICAL END CHANNEL DETAIL.
DOOR SURFACE CLOSER REINFORCEMENT DETAIL.
DOOR SURFACE CLOSER AND END CHANNEL ASSEMBLY.
- SHEET #14 DOOR SNAP IN TOP CAP DETAILS.
- SHEET #15 HINGE BAR REINFORCING FOR DOOR
ANSI #A115.1 #86 MORTISE LOCK/RIM PANIC REINFORCING
DOOR SURFACE BOLT REINFORCING DETAIL.
- SHEET #16 #161 CYLINDRICAL LOCK AND DEAD BOLT REINFORCEMENT DETAIL.
- SHEET #17 ANCHOR DETAILS.
- SHEET #18 ANCHOR SCHEDULE.
WIRE ANCHOR DETAIL.
2 PIECES COMBINATION STUD ANCHOR DETAIL.
EMA BUTTERFLY ANCHOR DETAIL.
- SHEET #19 BILL OF MATERIALS.

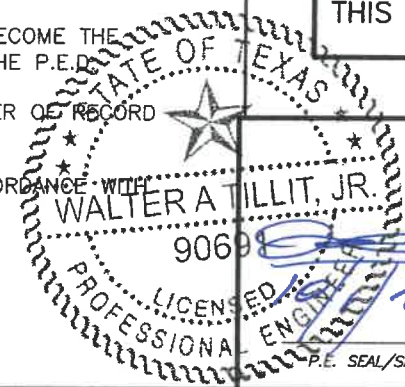
MAX. DESIGN PRESSURE RATINGS (psf) REQUIREMENTS FOR ASSEMBLIES. * * SEE SHEETS 2 & 3 FOR ASSEMBLY DEFINITIONS

ASSEMBLY #	WHERE WATER INFILTRATION REQUIREMENT IS NEEDED **	WHERE WATER INFILTRATION REQUIREMENT IS NOT NEEDED
1	+ 65, - 65	+ 65, - 65
2	+ 65, - 65	+ 65, - 65
3	+ 65, - 65	+ 65, - 65
7	+ 65, - 53.3	+ 65, - 53.3
7-EMB	+ 65, - 53.3	+ 65, - 53.3

** APPROVED ONLY WHEN CANOPY IS PROVIDED IMMEDIATELY ABOVE THE DOOR LOCATION COVERING THE ENTIRE WIDTH OF DOOR AND PROJECTING OUT A DISTANCE EQUAL OR LARGER THAN THE DOORS HEIGHT.
NOT APPROVED IF THE ABOVE CONDITION IS NOT COMPLIED WITH.

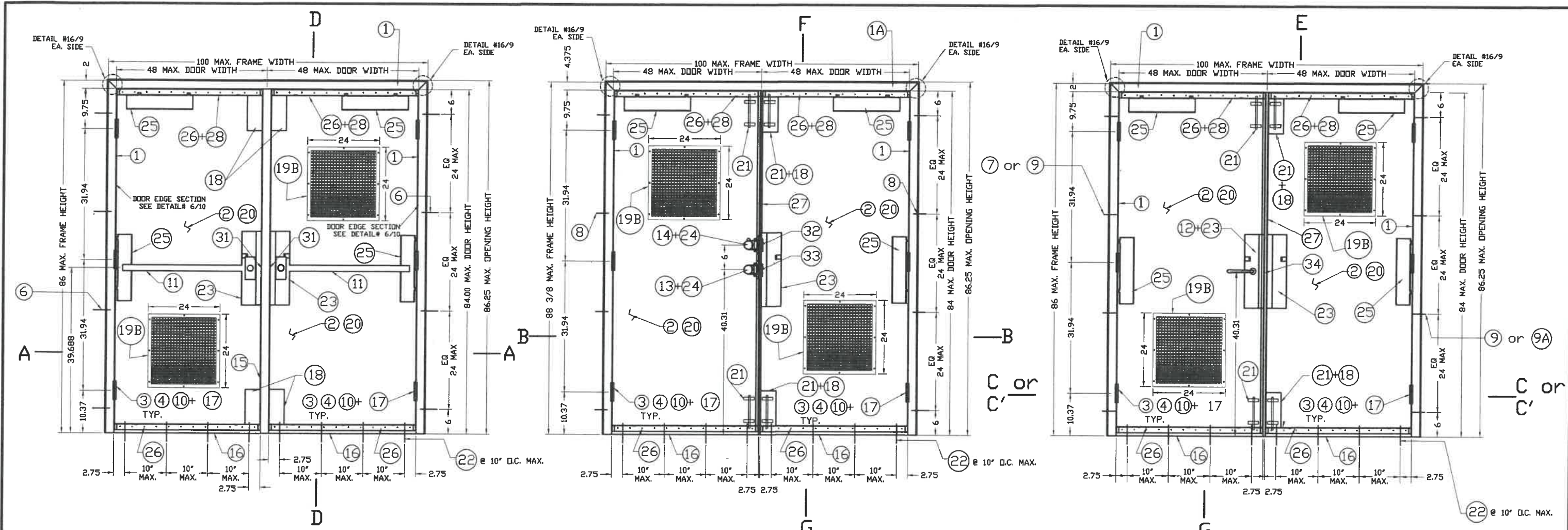
THIS DOOR WAS NOT TESTED FOR AIR INFILTRATION

THIS DRAWING SHALL ONLY BE USED TO OBTAIN PERMITS UNDER THE TEXAS DEPARTMENT OF INSURANCE JURISDICTION



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FIRM REGISTRATION # F-13790

TEXAS DEPARTMENT OF INSURANCE - 2018					
DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL STEEL DOOR W/SERIES "AS" 16 GAGE STEEL FRAME LOUVERED ASSEMBLIES.					DRAWN BY: M.P.
DAYBAR INDUSTRIES LTD 50 WEST DRIVE, BRAMPTON, ON CANADA, L6T 2J4 TEL: 905 625-8000 FAX: 905 625-4204					9/30/2021 DATE
					21-126 DRAWING No
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 17-057	9/30/21	3	-	-
2	-	-	4	-	-



ASSEMBLY #1, * INTERIOR ELEVATION
 PAIR OF OUTSWING DOORS
 WALL CONDITION: MASONRY
 ANCHORS: WIRE (6) DETAIL #21
 VON DUPRIN 98/99L TRIM SERIES RIM EXIT (1)
 AT BOTH DOORS
 4 1/2" HAGER MODEL #BB1168 STEEL BUTT HINGE AND
 4 1/2" STANLEY MODEL #FBB168 STEEL BUTT HINGE (10)
 VON DUPRIN 9954 REMOVABLE MULLION (15)
 (FOR DOUBLE DOOR ONLY)
 DOOR CORE ITEM (21): EXPANDED POLYSTYRENE OR HONEYCOMB
 PAPER FULL FLUSH
 AIR LOUVER INC. METAL LOUVER #1500A (19B) W/24"x24"
 (DOOR CUTOUT) AND LOCATED AT 12" CLEAR FROM TOP OR
 BOTTOM OF DOOR AND CENTERED W/ DOOR

**OUTSWING SINGLE & DOUBLE DOORS
 W/ VON DUPRIN RIM PANIC DEVICES**

ASSEMBLY #2, * INTERIOR ELEVATION
 PAIR OF OUTSWING DOORS
 WALL CONDITION: MASONRY
 ANCHORS: EMA EXISTING MASONRY ANCHOR DET. #22
 SCH-D SERIES CYLINDRICAL LOCK (13) + SCH-B SERIES DEAD BOLT (14)
 HAGER #275D SURFACE BOLTS (2) (TOP & BOTTOM) AT
 TWO DOORS
 4 1/2" HAGER MODEL #BB1279 STEEL BUTT HINGE AND
 4 1/2" STANLEY MODEL #FB179 STEEL BUTT HINGE (10)
 "Z" ASTRAGAL (27) W/ ASA STRIKE
 FOR CYLINDRICAL LOCK AND DEAD BOLT STRIKE
 DOOR CORE (20): EXPANDED POLYSTYRENE OR HONEYCOMB PAPER
 FULL FLUSH
 AIR LOUVER INC. METAL LOUVER #1500A (19B) W/24"x24"
 (DOOR CUTOUT) AND LOCATED AT 12" CLEAR FROM TOP OR
 BOTTOM OF DOOR AND CENTERED W/ DOOR

**OUTSWING SINGLE DOOR W/ TWO SURFACE BOLTS
 & DOUBLE DOORS W/ FOUR SURFACE BOLTS**

ASSEMBLY #3, * INTERIOR ELEVATION
 PAIR OF OUTSWING DOORS
 WALL CONDITION: WOOD STUDS
 ANCHORS: 2 PIECE COMBINATION STUD ANCHOR (7) DETAIL #20
 OR CARRIAGE BOLT (9A) W/ EMA (DET. #22A) OR WOOD SCREW
 LAG BOLT (9) W/ EMA (DETAIL #22B)
 SCH-L9000 SERIES #86 MORTISE LOCK (12) (W/ DEAD BOLT INCLUDED)
 HAGER #275D SURFACE BOLTS (2) (TOP & BOTTOM) AT TWO DOORS
 4 1/2" HAGER MODEL #BB1279 STEEL BUTT HINGE AND
 4 1/2" STANLEY MODEL #FB179 STEEL BUTT HINGE (10)
 "Z" ASTRAGAL (27) W/ ASA STRIKE FOR MORTISE LOCK.
 DOOR CORE (20): EXPANDED POLYSTYRENE OR HONEYCOMB PAPER
 FULL FLUSH
 AIR LOUVER INC. METAL LOUVER #1500A (19B) W/24"x24"
 (DOOR CUTOUT) AND LOCATED AT 12" CLEAR FROM TOP OR
 BOTTOM OF DOOR AND CENTERED W/ DOOR

**OUTSWING SINGLE DOOR W/ TWO SURFACE BOLTS
 & DOUBLE DOORS W/ FOUR SURFACE BOLTS**

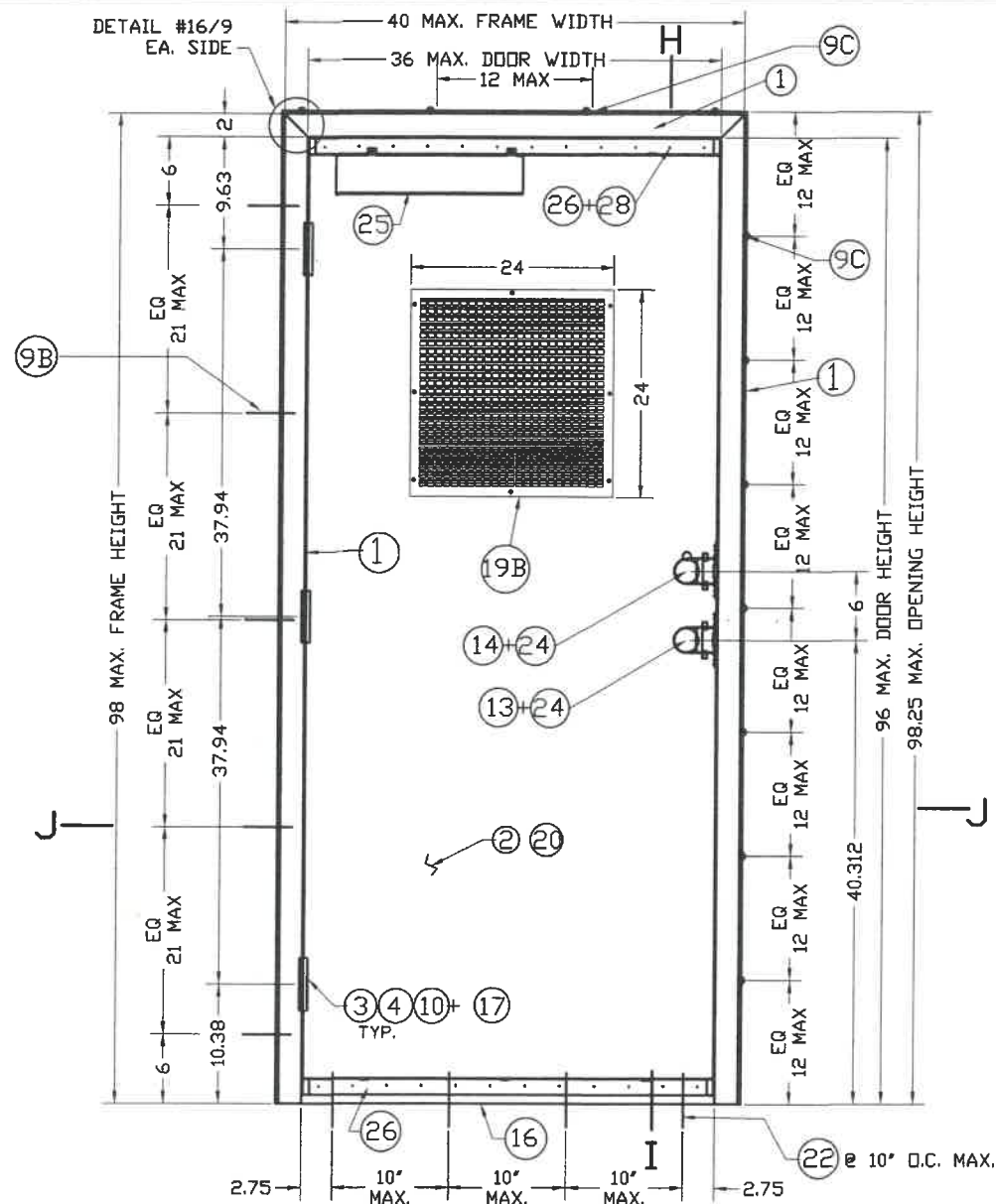
ASSEMBLY ELEVATIONS #1, 2 & 3
 SEE SECTIONS ON SHEETS 5, 6 & 7

- SEE SHEET 1 FOR MAXIMUM DESIGN PRESSURE RATING FOR EACH ASSEMBLY, BASED ON WATER INFILTRATION REQUIREMENTS AND AIR INFILTRATION LIMITATIONS.
 - SEE SHEET 3A FOR MAXIMUM DESIGN PRESSURE RATING SCHEDULE FOR ASSEMBLY COMBINATIONS, BASED ON WATER INFILTRATION REQUIREMENTS AND AIR INFILTRATION LIMITATIONS.

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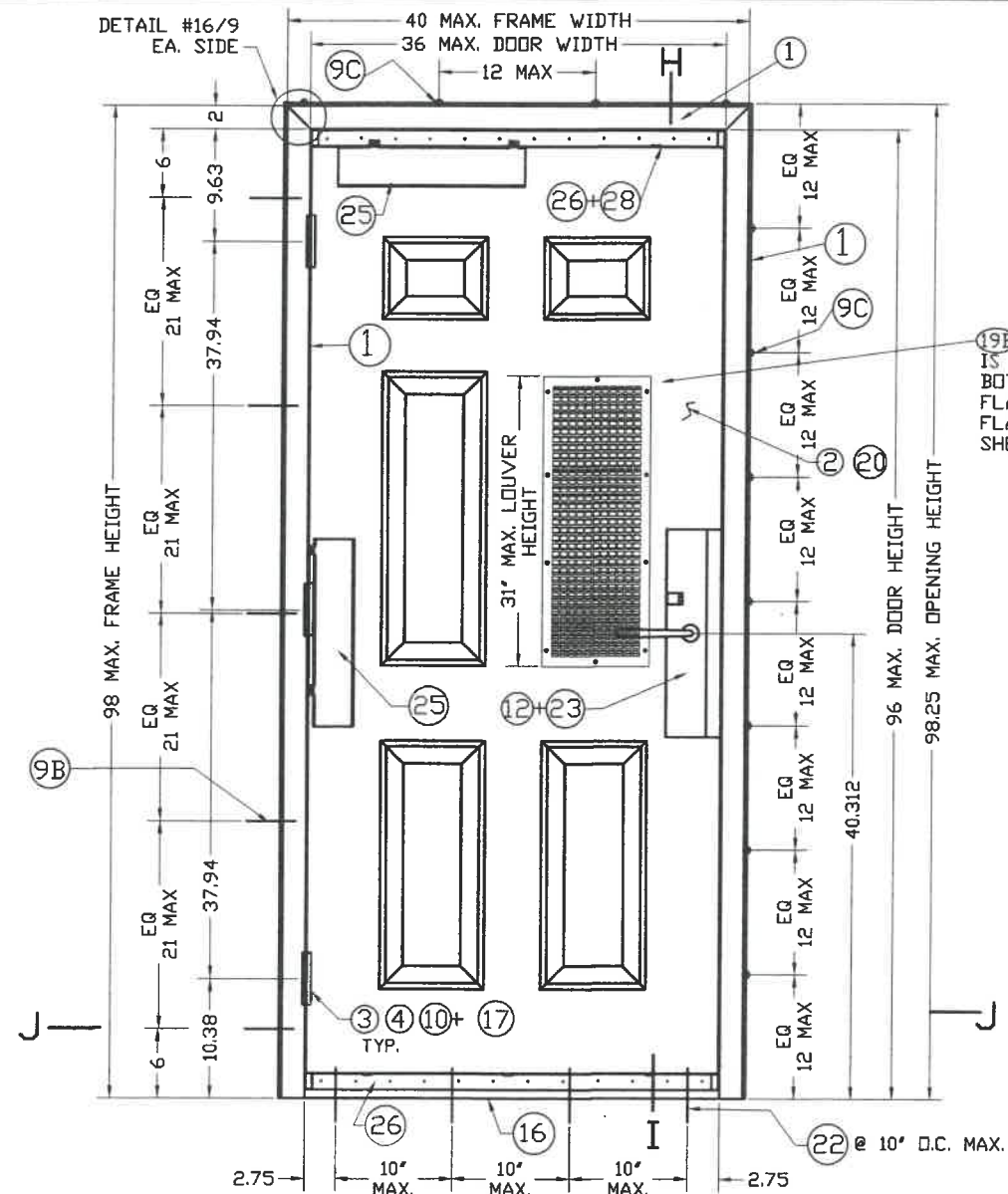
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2	-	-	4	-	-



ASSEMBLY #7 * EXTERIOR ELEVATION
SINGLE DOOR OUTSWING
 WALL CONDITION - WELDED HOT ROLLED

3/8" MIN. THICK STRUCTURAL STEEL CHANNEL FRAME JAMB AND HEAD.
 ANCHORS: 3/8"x3 1/2" FLAT HEAD MACHINE SCREW, LOCK WASHER & NUT W/ EMA (DET #23A), OR FRAME (1) WELDED @ 12" O.C. AT JAMB AND HEAD INCLUDING TOP & BOTTOM OF JAMB (DET #23B).
 SCH-D SERIES CYLINDRICAL LOCK (13)+ SCH-B SERIES DEAD BOLT (14)
 4 1/2" HAGER MODEL # BB1279 STEEL BUTT HINGE (10)
 DOOR CORE (20) EXPANDED POLYSTYRENE OR HONEYCOMB PAPER.
 FULL FLUSH
 AIR LOUVER INC., METAL LOUVER #1500-A (19B) W/ 24"x24" DOOR CUT-OFF, AND LOCATED AT 12" FROM TOP OF DOOR TO TOP OF LOUVER

OUTSWING SINGLE DOORS WITHOUT SURFACE BOLTS



ASSEMBLY #7-EMB EXTERIOR ELEVATION
SINGLE DOOR OUTSWING
 WALL CONDITION - WELDED HOT ROLLED

STRUCTURAL STEEL CHANNEL FRAME JAMB AND HEAD.
 ANCHORS: 3/8"x3 1/2" FLAT HEAD MACHINE SCREW, LOCK WASHER & NUT W/ EMA (DET #23A), OR FRAME (1) WELDED @ 12" O.C. AT JAMB AND HEAD INCLUDING TOP & BOTTOM OF JAMB (DET #23B).
 SCH-L SERIES #86 MORTISE LOCK (12) W/ DEAD BOLT INCLUDED.
 4 1/2" HAGER MODEL # BB1279 STEEL BUTT HINGE (10)
 DOOR CORE (20) EXPANDED POLYSTYRENE OR HONEYCOMB PAPER.
 FULL EMBOSSED
 AIR LOUVER INC., METAL LOUVER #1500-A (19B) W/ 24"x24" DOOR CUT-OFF, AND LOCATED AT 12" FROM TOP OF DOOR TO TOP OF LOUVER

OUTSWING SINGLE DOORS WITHOUT SURFACE BOLTS

(19B) AIR LOUVER INC., METAL LOUVER #1500-A IS PERMITTED ON EMBOSSED DOORS AT TOP OR BOTTOM PROVIDED THE LOUVER'S MOUNTING FLANGE MUST HAVE FULL FLUSH CONTACT WITH FLAT PORTION OF DOOR SKIN. SEE DETAILS ON SHEET 8/19. MAX. AREA = 576 in²=4ft²

ASSEMBLY ELEVATIONS #7-EMB

SEE SECTIONS ON SHEET 7

- SEE SHEET 1 FOR MAXIMUM DESIGN PRESSURE RATING FOR EACH ASSEMBLY, BASED ON WATER INFILTRATION REQUIREMENTS AND AIR INFILTRATION LIMITATIONS.
 - SEE SHEET 3A FOR MAXIMUM DESIGN PRESSURE RATING SCHEDULE FOR ASSEMBLY COMBINATIONS, BASED ON WATER INFILTRATION REQUIREMENTS AND AIR INFILTRATION LIMITATIONS.

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TEL: 905 625-8000 FAX: 905 625-4204				SHEET 3 OF 19	
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 17-057	9/30/21	3	-	-
2	-	-	4	-	-

MAX. DESIGN PRESSURE RATING (psf.) SCHEDULE FOR INSTALLATIONS COMBINING ASSEMBLIES #1 THRU #7-EMB BETWEEN EACH OTHER FOR A GIVEN ANCHOR JAMB TYPE *, **

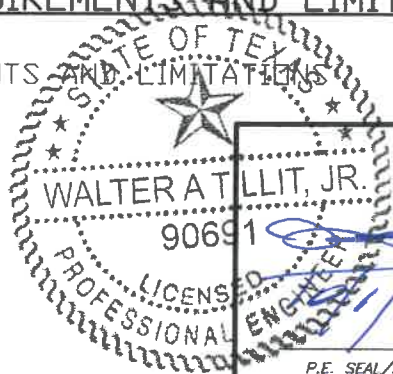
ITEM (SEE SHEET 19)	ANCHOR SPECIFICATIONS AT JAMBS *	ASSEMBLY #1 (SEE SHEET 2) **	ASSEMBLY #2 (SEE SHEET 2) **	ASSEMBLY #3 (SEE SHEET 2) **	ASSEMBLY #7 (SEE SHEET 3) **	ASSEMBLY #7-EMB (SEE SHEET 3) **
6	0.157" DIA.x9 1/2" LONG WIRE ANCHOR (SEE DETAIL 21/17)	+65, -65	+65, -65	+65, -65	+65, -53.3	+65, -53.3
7	2 PIECE COMBINATION STUD ANCHOR (SEE DETAIL 20/17)	+65, -65	+65, -65	+65, -65	+65, -53.3	+65, -53.3
8	EXISTING MASONRY ANCHOR & E.M.A. (SEE DETAIL 22/17)	+65, -65	+65, -65	+65, -65	+65, -53.3	+65, -53.3
9	EXISTING WOOD BUCK ANCHOR W/WOOD SCREW LAG BOLT & E.M.A. (SEE DETAIL 22A/17)	+65, -65	+65, -65	+65, -65	+65, -53.3	+65, -53.3
9A	EXISTING WOOD BUCK ANCHOR W/ STEEL CARRIAGE BOLT & E.M.A. (SEE DETAIL 22B/17)	+65, -65	+65, -65	+65, -65	+65, -53.3	+65, -53.3
9B	CHANNEL IRON THROUGH BOLTING W/3/8" x 3 1/2" STEEL FLAT HEAD MACHINE SCREW & E.M.A. (SEE DETAIL 23A/17)	+65, -53.3	+65, -53.3	+65, -53.3	+65, -53.3	+65, -53.3
9C	CHANNEL IRON W/3/8" STITCH WELD (SEE DETAIL 23B/17)	+65, -53.3	+65, -53.3	+65, -53.3	+65, -53.3	+65, -53.3

*** NOTES ON FRAME HEAD REQUIREMENTS**

- FOR SINGLE & DOUBLE DOORS INSTALLED AT WOOD FRAME BUILDINGS, DOOR HEADS SHALL BE CONTINUOUSLY RETAINED BY EXISTING BUILDINGS WOOD HEADER FOLLOWING DETAILS AS PER SECTION E, SHEET 7.
- FOR SINGLE & DOUBLE DOORS INSTALLED AT STEEL FRAME BUILDINGS, DOOR HEADS SHALL BE CONTINUOUSLY WELDED TO EXISTING BUILDINGS STEEL FRAME HEADER FOLLOWING DETAILS AS PER SECTION H, SHEET 7 & DETAIL 23B ON SHEET 17.
- FOR SINGLE & DOUBLE DOORS INSTALLED AT CONCRETE /MASONRY BUILDINGS, DOOR HEADS NEED NOT BE ATTACHED TO EXISTING BUILDINGS HEADER. APPLICABLE TO SECTIONS D & F, SHEET 7.

**** NOTES ON WATER AND AIR INFILTRATION REQUIREMENTS AND LIMITATIONS**

- SEE GENERAL NOTE 9 ON SHEET 1 OF 19 FOR REQUIREMENTS AND LIMITATIONS

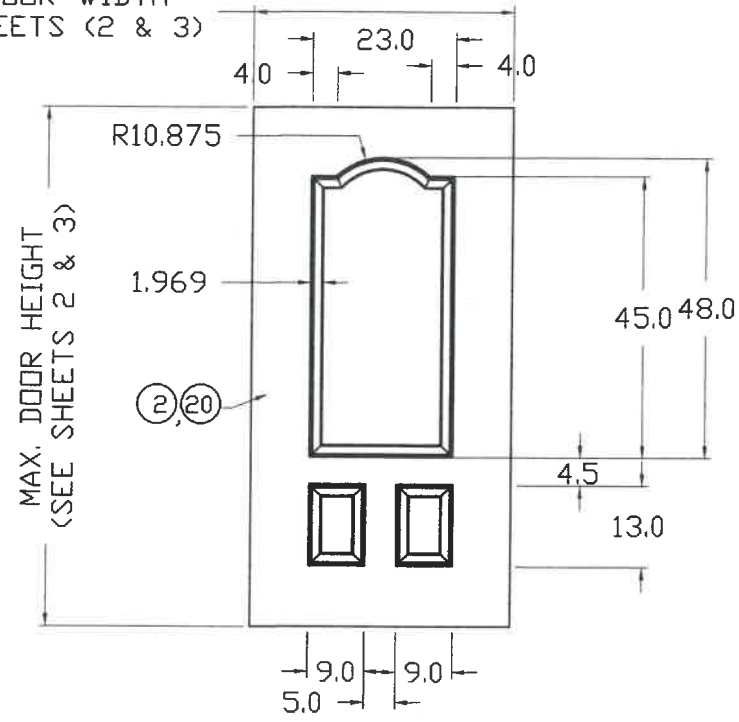


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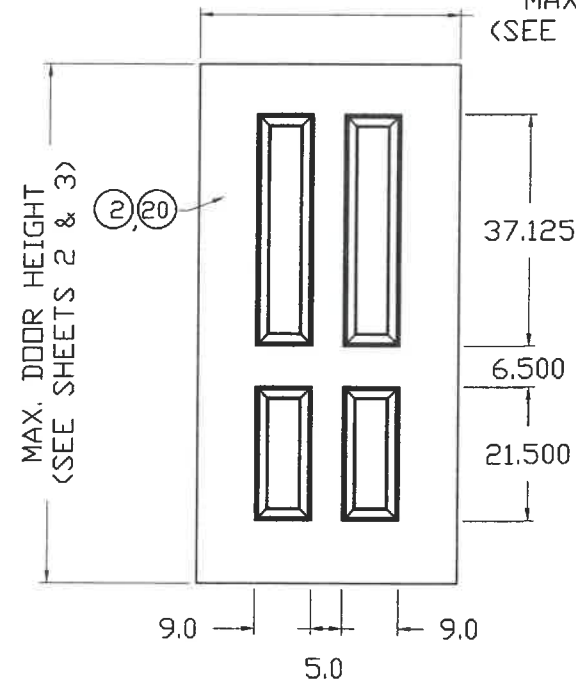
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2	-	-	4	-	-
					SHEET 3A OF 19

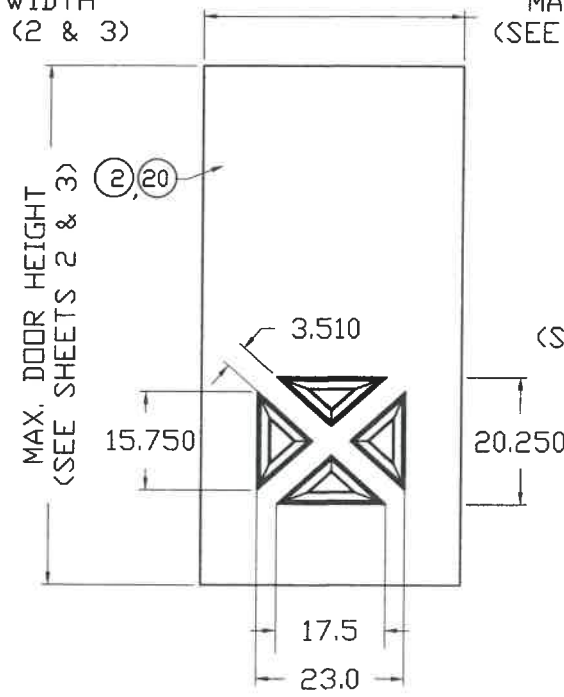
MAX. DOOR WIDTH
(SEE SHEETS (2 & 3))



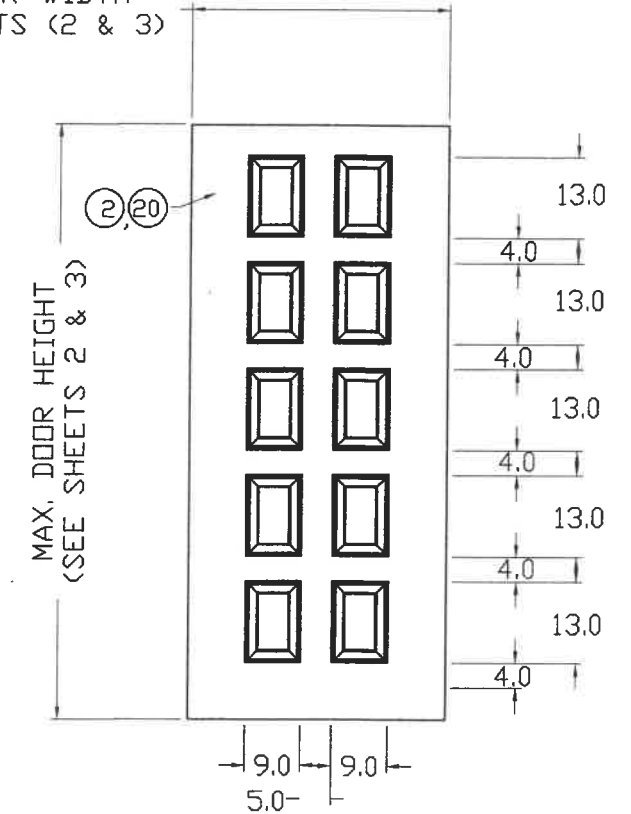
MAX. DOOR WIDTH
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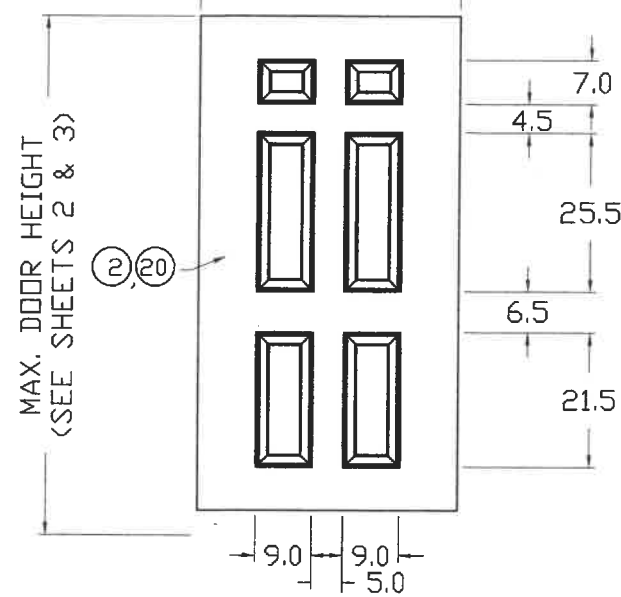
MAX. DOOR WIDTH
(SEE SHEETS (2 & 3))



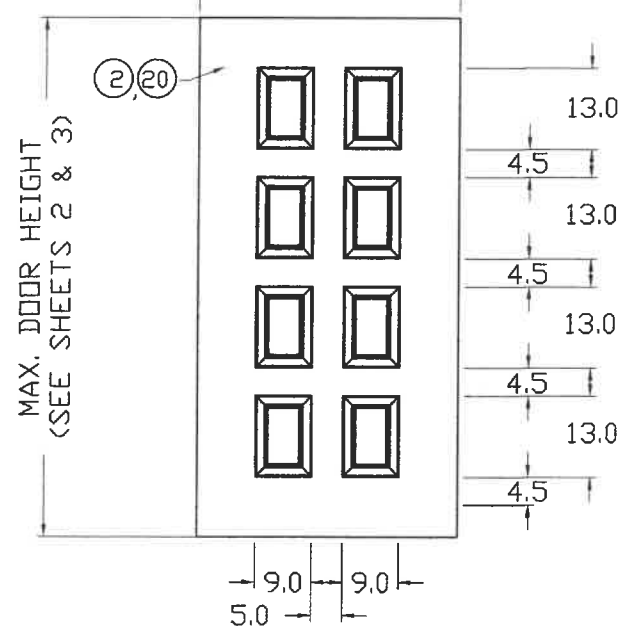
MAX. DOOR WIDTH
(SEE SHEETS (2 & 3))



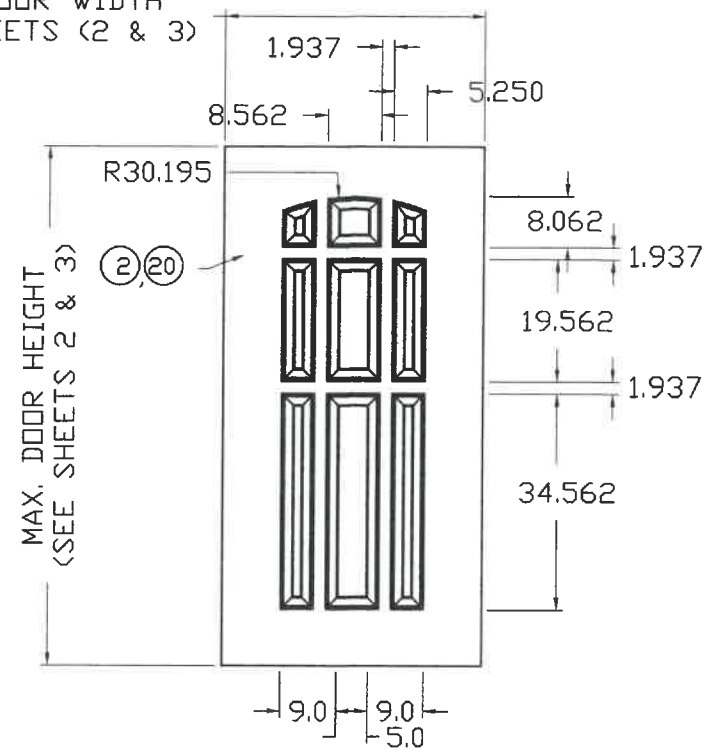
MAX. DOOR WIDTH
(SEE SHEETS (2 & 3))



MAX. DOOR WIDTH
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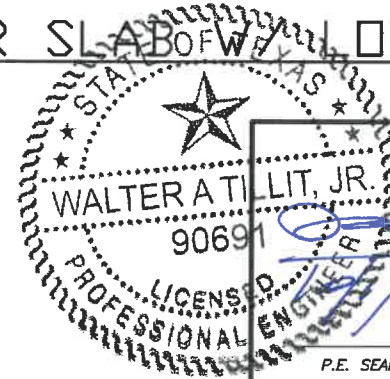


MAX. DOOR WIDTH
(SEE SHEETS (2 & 3))



OPTIONAL EMBOSSED DOOR SLAB OF W/ LOUVERS SHEET CONFIGURATIONS

NOTE:
EMBOSSED DOORS W/ LOUVERS PERMITTED
IN SINGLES & PAIRS LIMITED TO DESIGN
PRESSURES NOTED FOR EACH ASSEMBLY



P.E. SEAL/SIGNATURE/DATE

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DOUBLE & SINGLE SERIES LS18 OUTSWING
COMMERCIAL STEEL DOOR W/SERIES "AS" 16 GAGE
STEEL FRAME LOUVERED ASSEMBLIES.

DRAWN BY:
M.P.

DAYBAR INDUSTRIES LTD

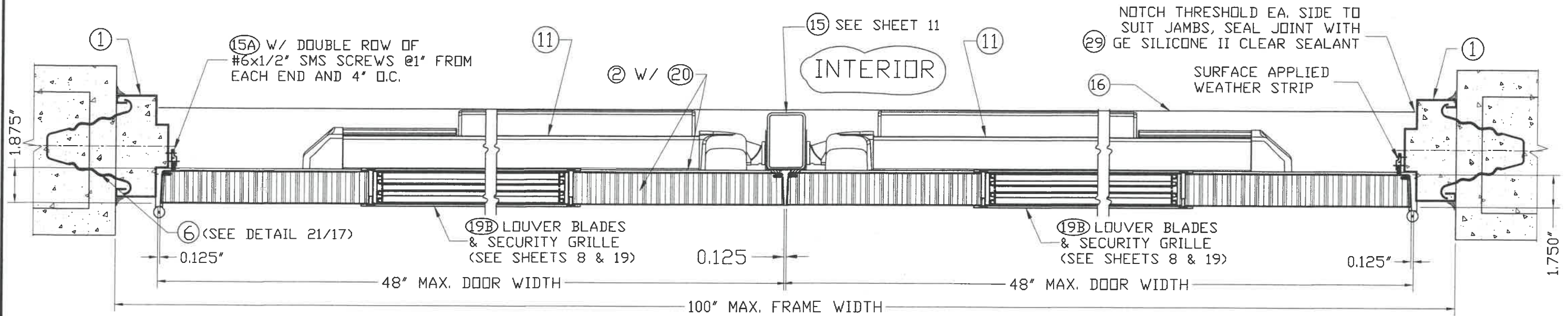
9/30/2021
DATE

50 WEST DRIVE, BRAMPTON,
ON CANADA, L7J 4J4
TEL: 905 625-8000 FAX: 905 625-4204

21-126
DRAWING No

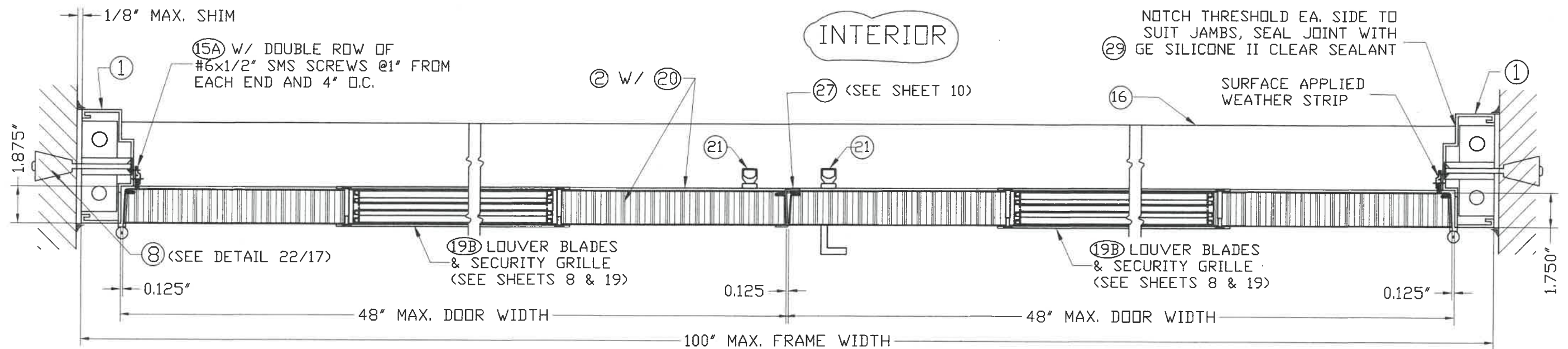
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1	OLD 17-057	9/30/21	3	-	-
2	-	-	4	-	-

SHEET 4 OF 19

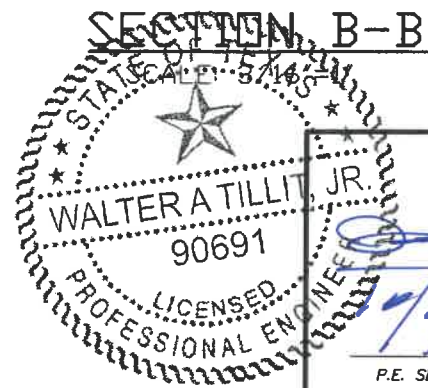


SECTION A-A

SCALE: 3/16"=1"



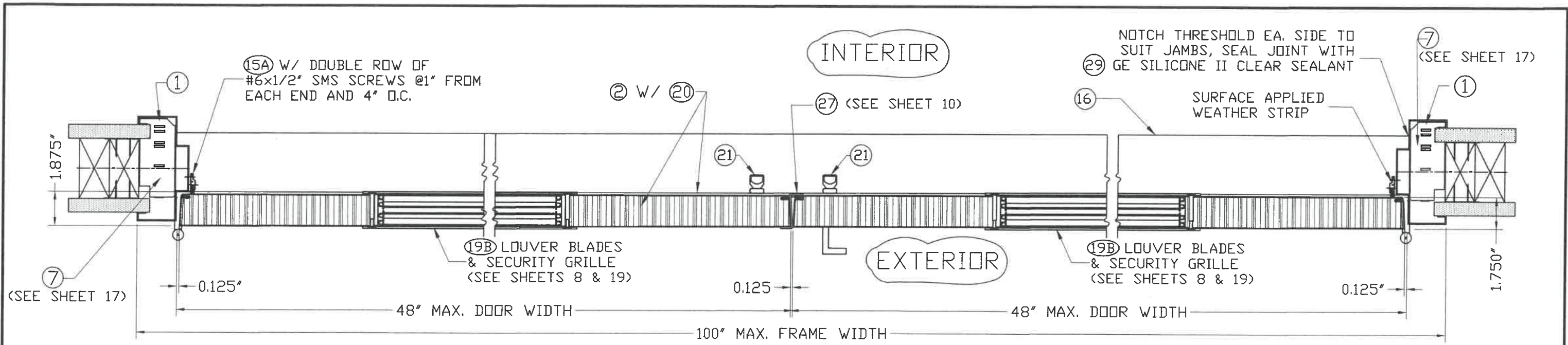
SECTION B-B



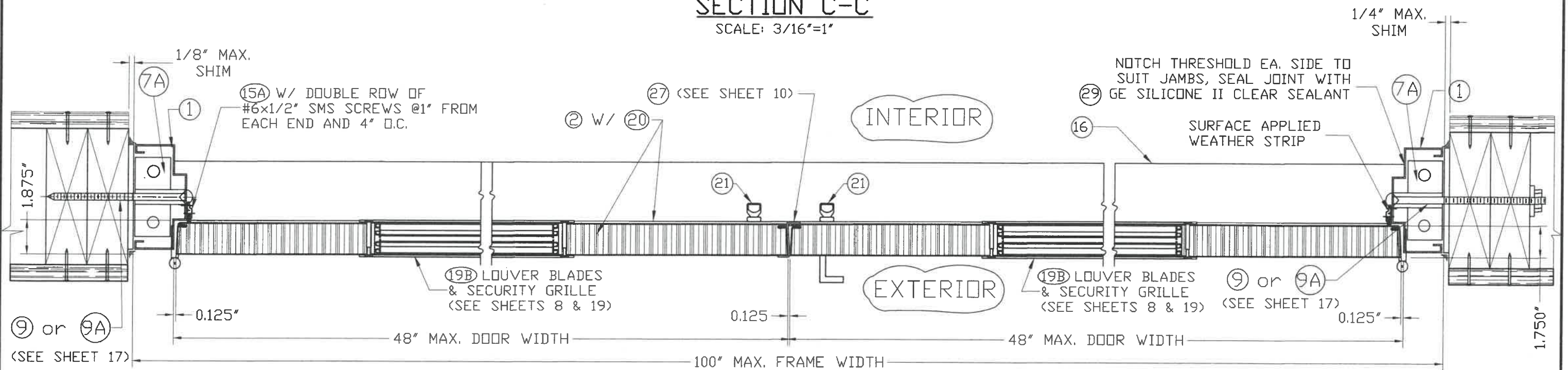
Walter A. Tillit Jr.
P.E. SEAL/SIGNATURE/DATE

WALTER A. TILLIT Jr P.E.
PROFESSIONAL ENGINEER
6355 N.W 36 STREET, STE. 305
VIRGINIA GARDENS, FL 33166
PHONE(305) 871-1530 FAX (305) 871-1531
TEXAS LIC. # 90691
FIRM REGISTRATION # F-13790

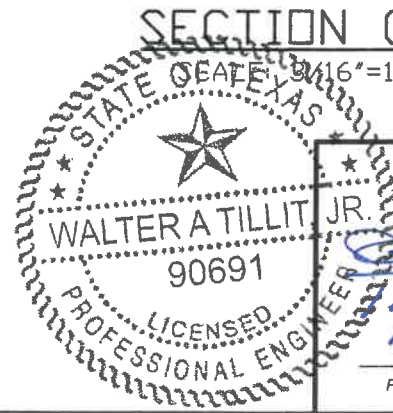
TEXAS DEPARTMENT OF INSURANCE - 2018					
DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL STEEL DOOR W/SERIES "AS" 16 GAGE STEEL FRAME LOUVERED ASSEMBLIES.				DRAWN BY: M.P.	
DAYBAR INDUSTRIES LTD				9/30/2021 DATE	
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REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
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2	-	-	4	-	-



SECTION C-C
SCALE: 3/16"=1"



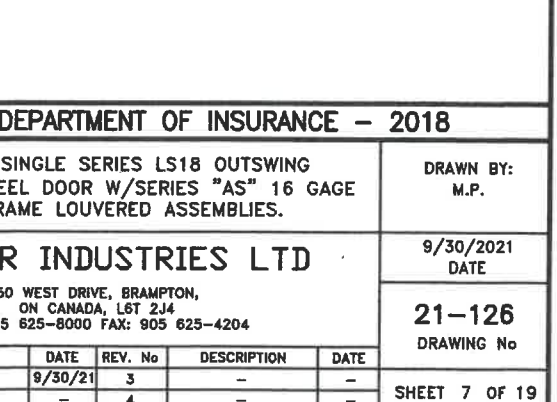
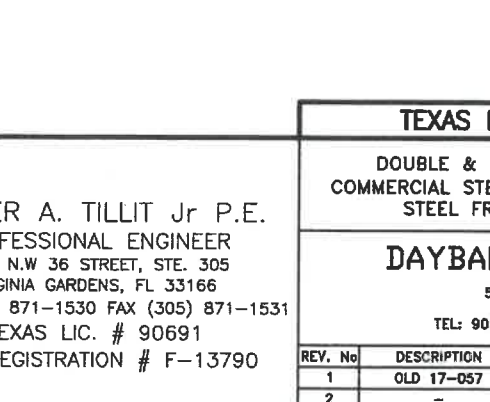
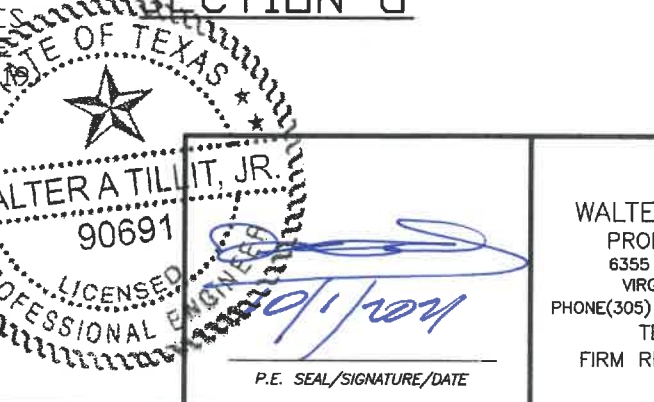
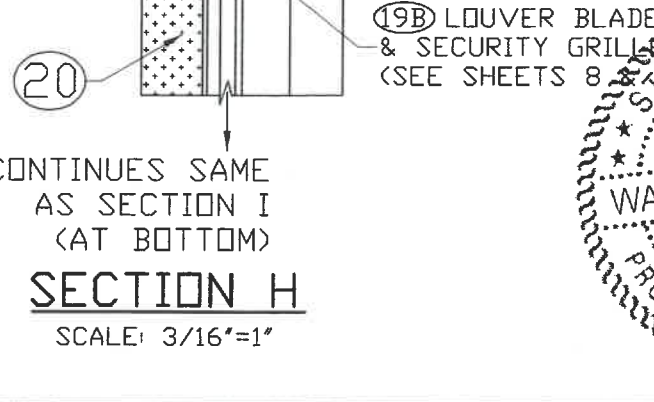
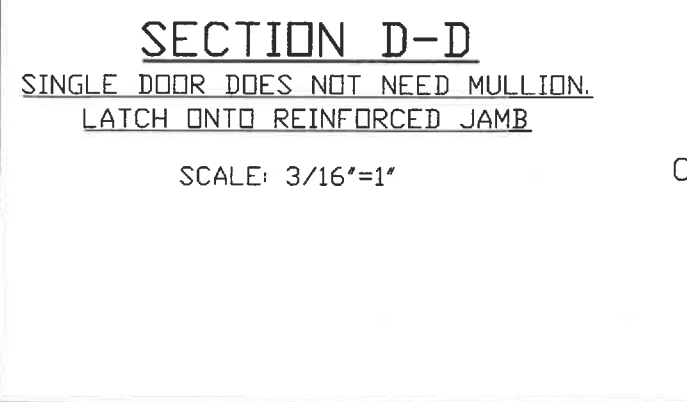
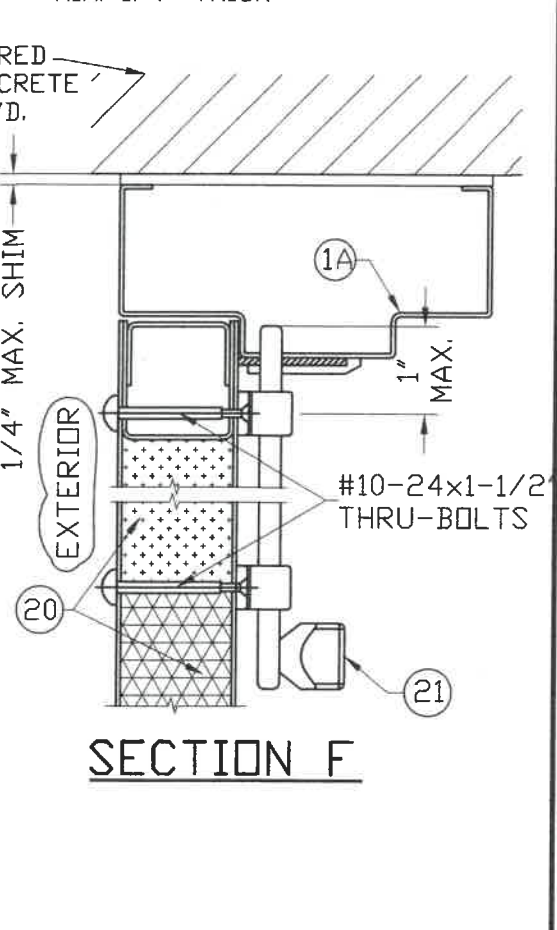
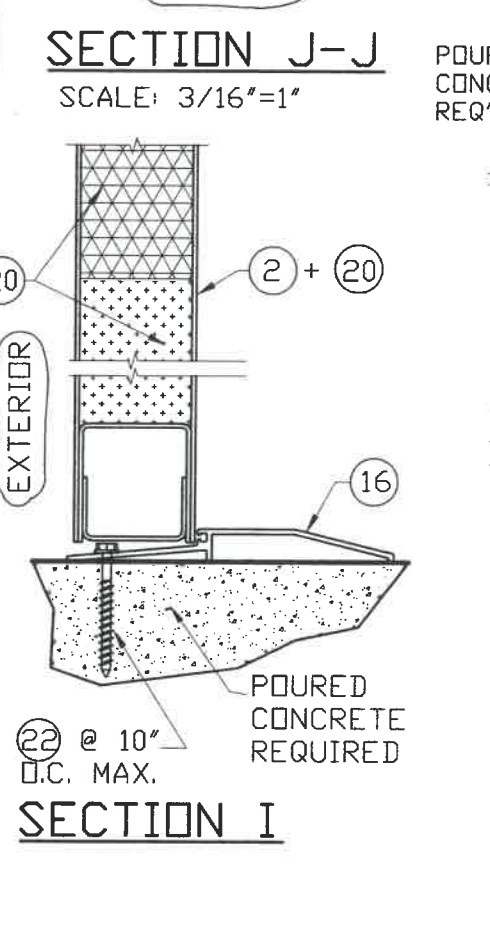
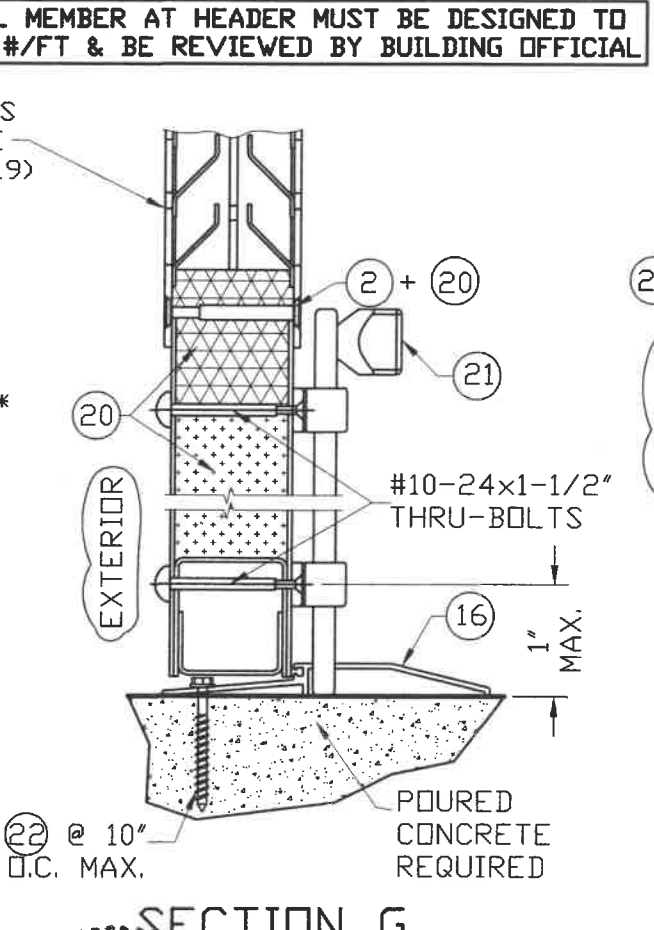
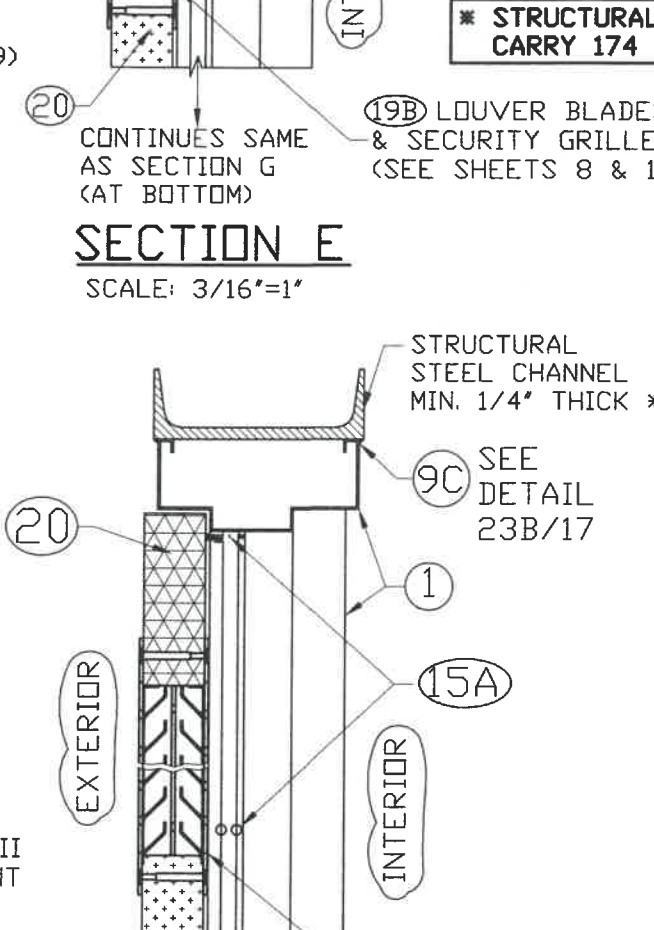
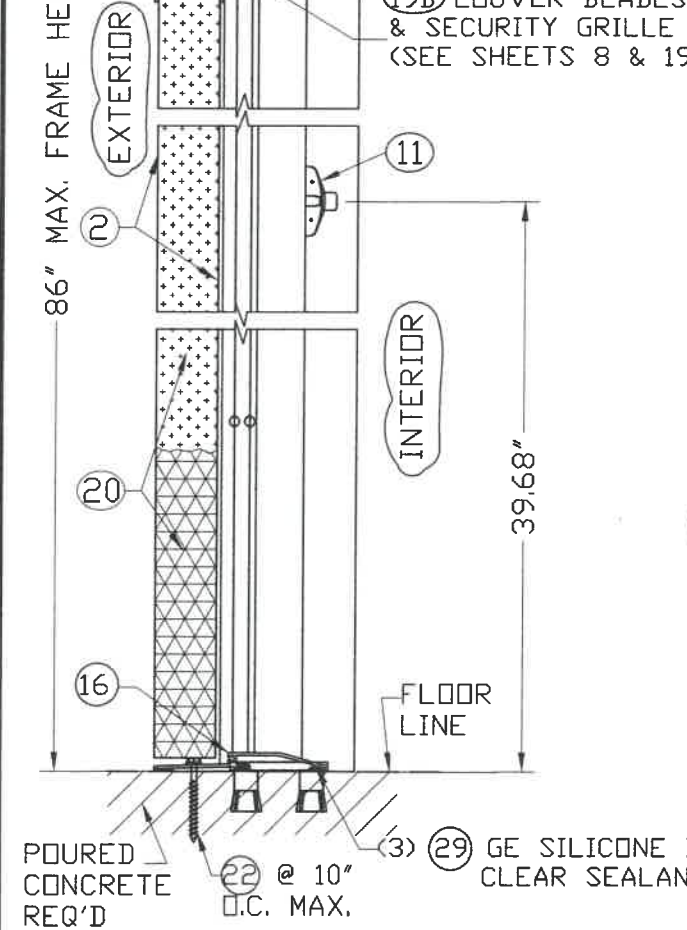
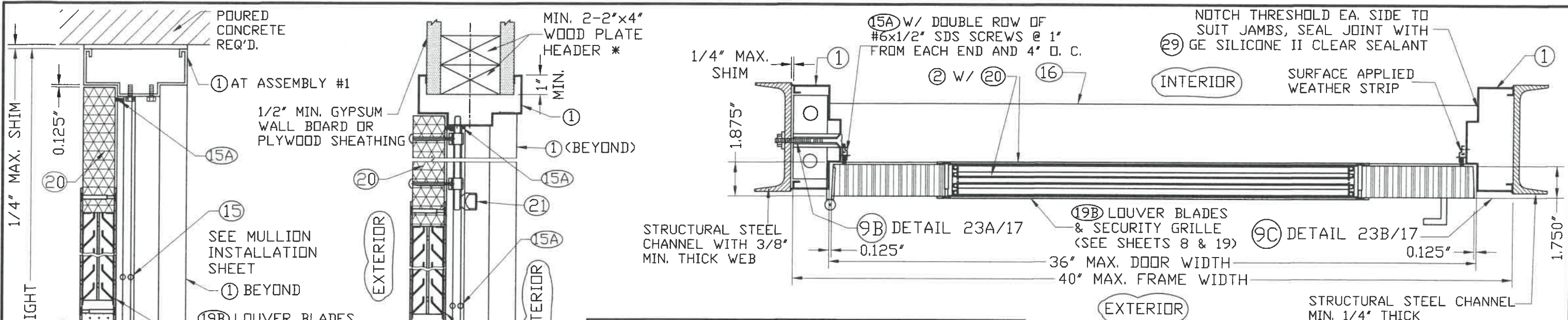
SECTION C'-C'
SCALE: 3/16"=1"



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TEXAS LIC. # 90691
FIRM REGISTRATION # F-13790

TEXAS DEPARTMENT OF INSURANCE - 2018					
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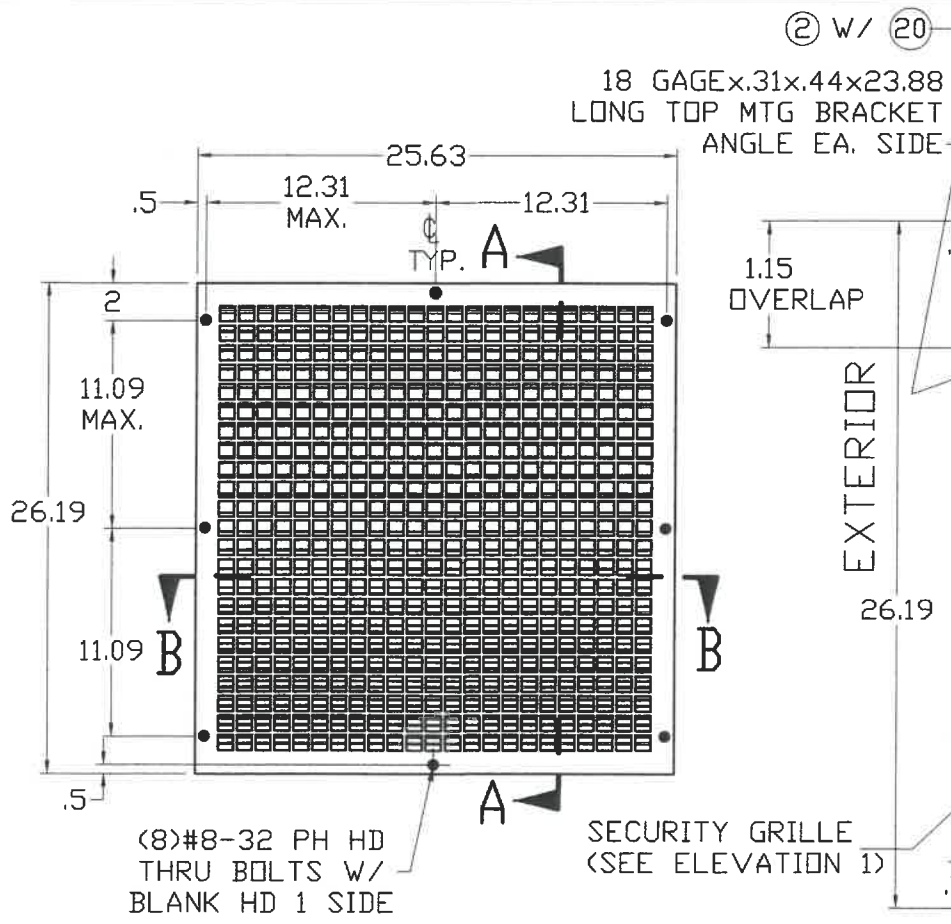


*** STRUCTURAL MEMBER AT HEADER MUST BE DESIGNED TO CARRY 174 #/FT & BE REVIEWED BY BUILDING OFFICIAL**

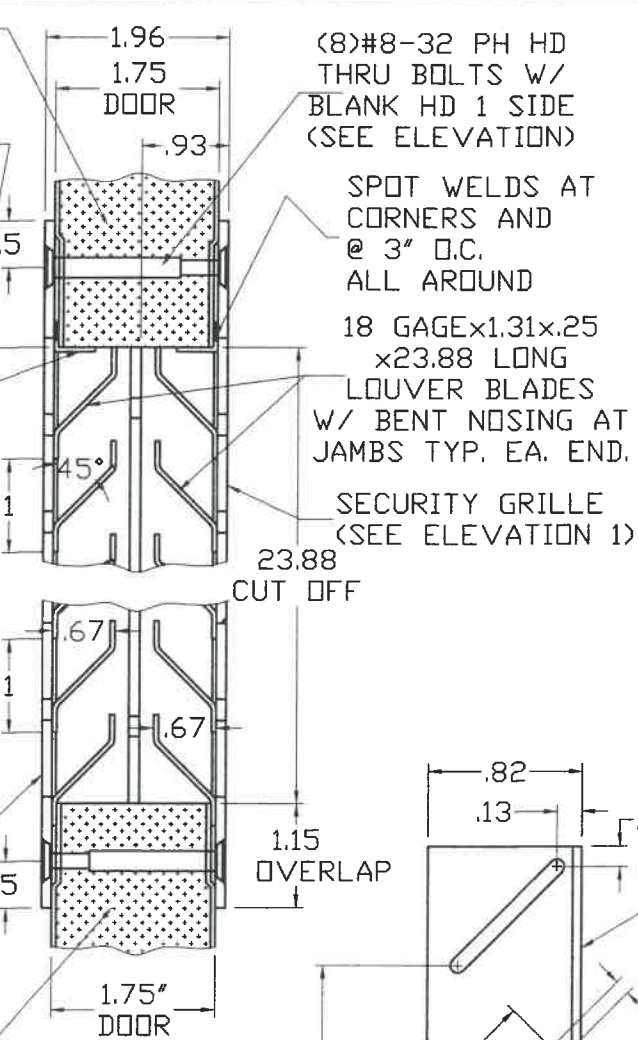
STATE OF TEXAS
 WALTER A. TILLIT, JR.
 90691
 LICENSED PROFESSIONAL ENGINEER
 P.E. SEAL/SIGNATURE/DATE

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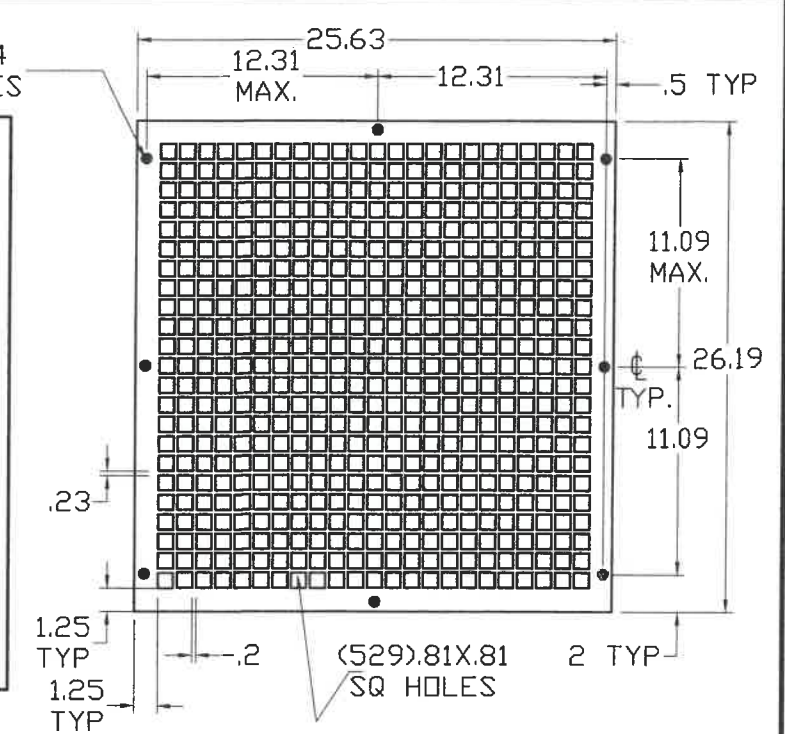


SECURITY GRILLE & LOUVER ASSEMBLY (ELEVATION)

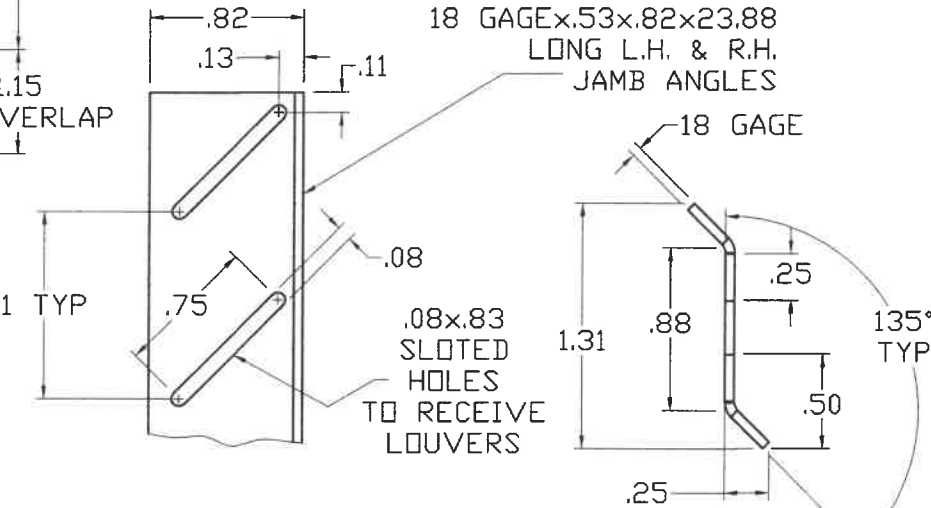


SECTION A-A N.T.S.

AIR LOUVERS, INC. MODEL 1500-A LOUVER & SECURITY GRILLE SPECIFICATIONS
 MODEL: #1500-A
 MATERIAL: 18 GAUGE CRS FRAME (MIN. Fy=45 ksi) AND LOUVER BLADES; 12 GAUGE (MIN. Fy=45 ksi) CRS SECURITY GRILLE
 CONSTRUCTION: MITERED AND WELDED CORNERS; SECURITY GRILLE ON INTERIOR AND EXTERIOR OF LOUVER WITH 13/16" SQUARE OPENING 1" ON CENTER.
 FINISH: BAKED ON POWDER COAT.
 FASTENERS: #8-32 PHILIPS HEAD THRU BOLTS WITH BLANK HEAD ONE SIDE.
 FREE FLOW AREA: 40 % FREE AREA.

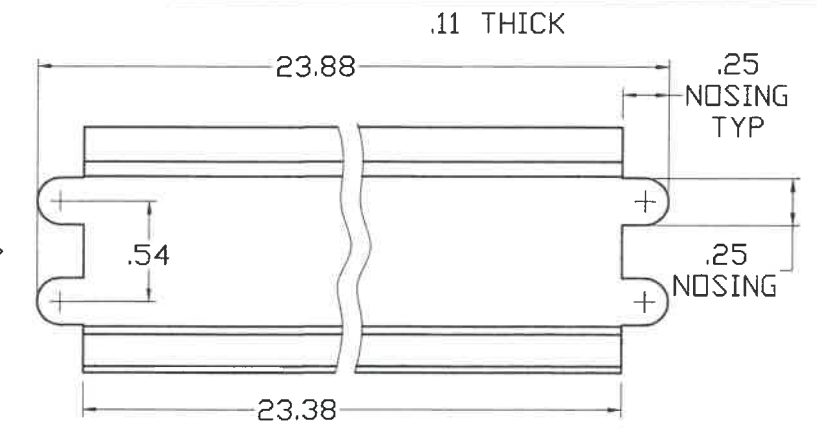


SECURITY GRILLE ELEVATION 1



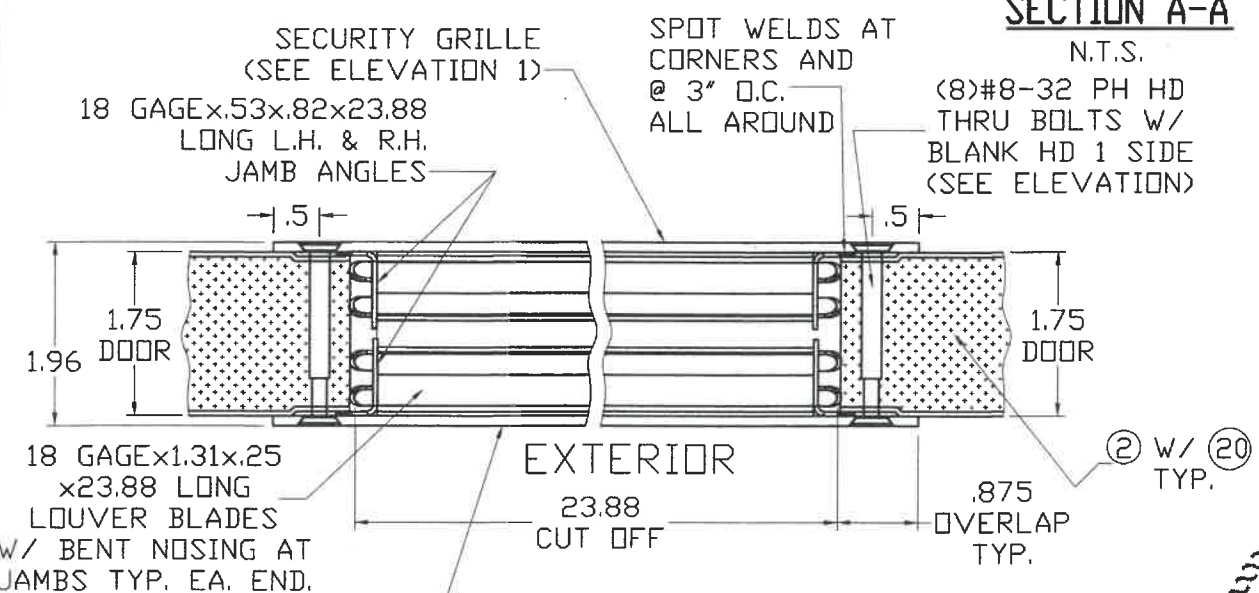
TYP. SLOTTED HOLES FOR LOUVER BLADE @ JAMBS

SCALE 1 : 1



TYP. LOUVER BLADE DETAIL

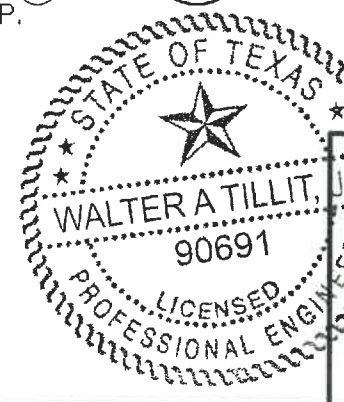
SCALE 1 : 1



SECTION B-B N.T.S.

19B MODEL 1500-A LOUVER 24"W X 24"H (MAX. 4 Ft² AREA) INVERTED "Y" BLADES C/W SECURITY GRILLE

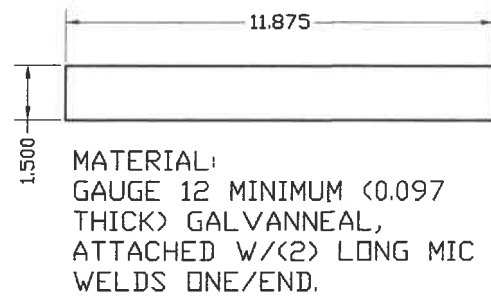
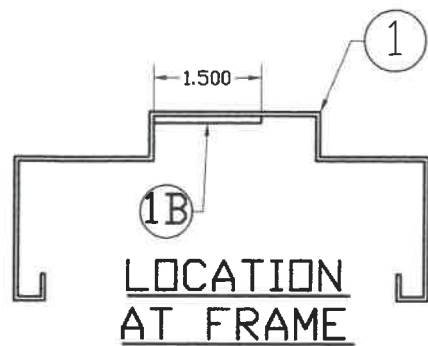
NOTE: SEE MAX. A.S.D. DESIGN PRESSURE RATING ON SHEET 1



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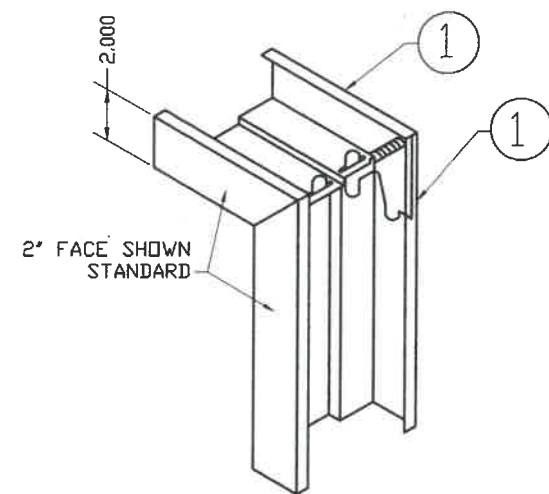
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TEL: 905 625-8000 FAX: 905 625-4204				SHEET 8 OF 19	
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
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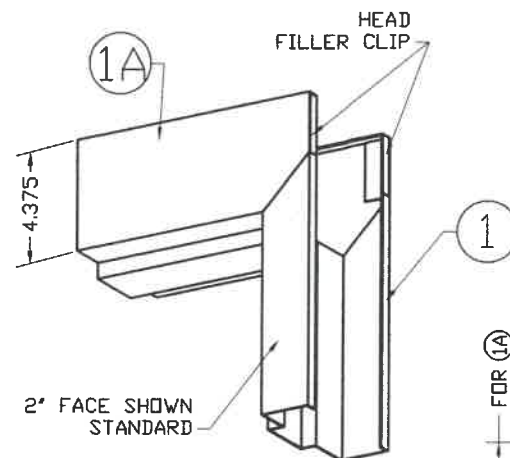
MATERIAL:
GAUGE 12 MINIMUM (0.097 THICK) GALVANNEAL,
ATTACHED W/(2) LONG MIC WELDS ONE/END.

1B SURFACE STRIKE REINFORCING



1. DIE MITERED CORNER CONT. WELDED INSIDE FACES & AT RETURNS
2. CAULK COMPLETE INSIDE CORNER WITH (29) GE SILICONE II

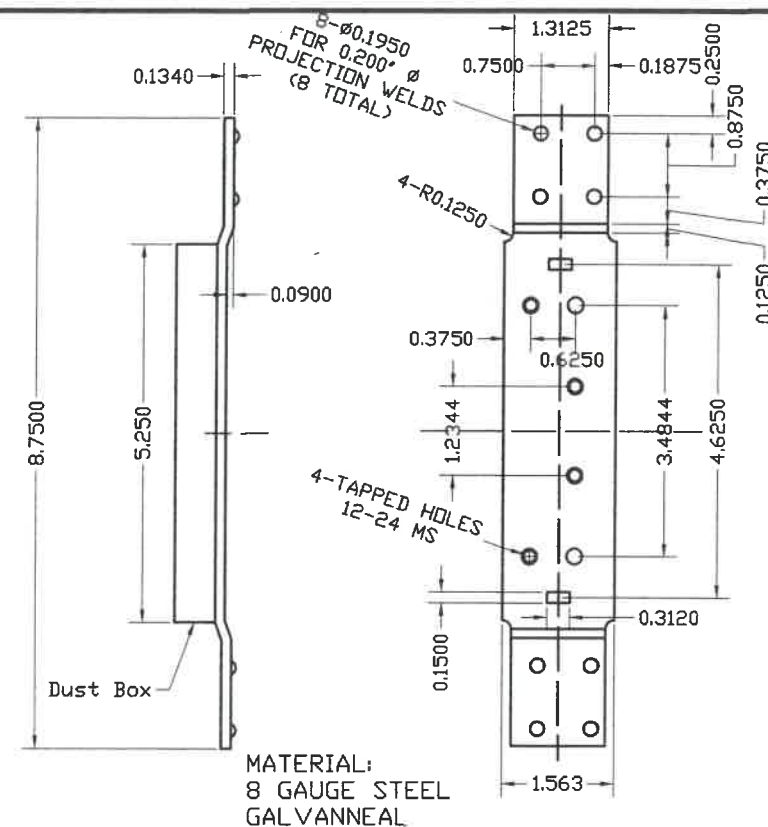
**DETAIL 16
TYPICAL WELDED CORNER**



2" FACE SHOWN STANDARD

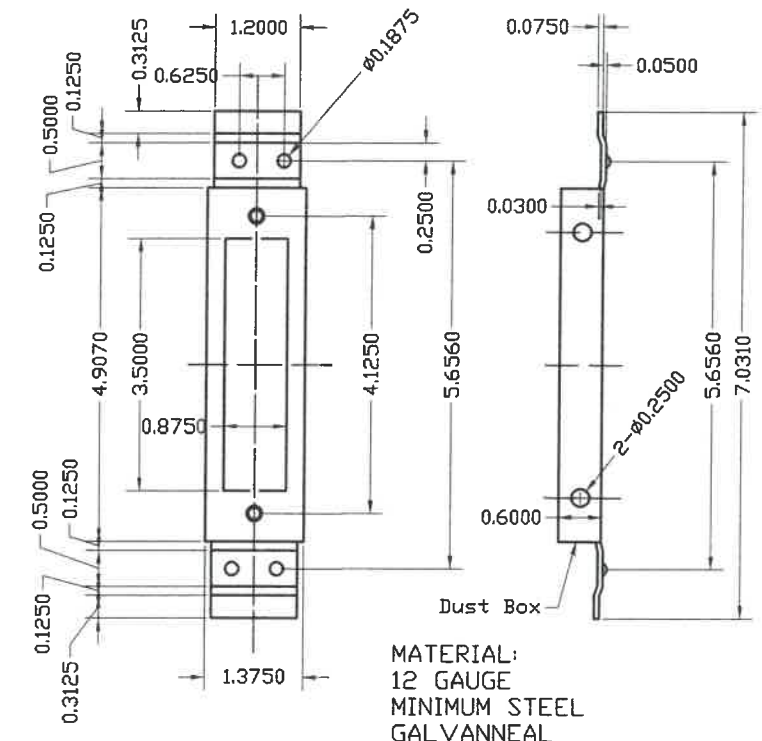
1A) OPTIONAL HEAD SECTION

FRAME SECTIONS AND REINFORCING DETAILS



MATERIAL:
8 GAUGE STEEL GALVANNEAL

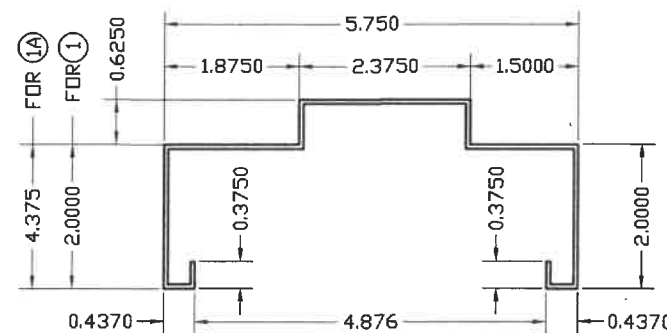
3, 4 4 1/2" FRAME DOOR HINGE REINFORCING DETAIL



MATERIAL:
12 GAUGE MINIMUM STEEL GALVANNEAL

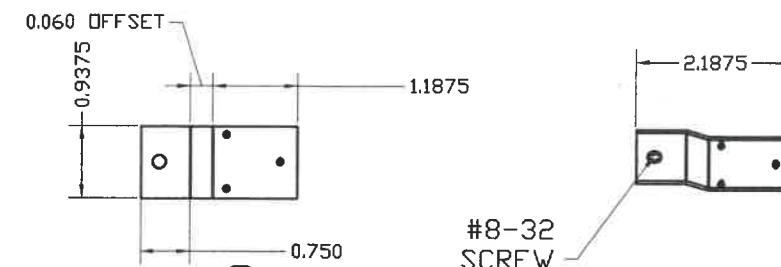
5 4 7/8" STRIKE REINFORCEMENT FOR FRAME DETAIL

ATTACHED W/(4) 3/16" Ø PROJECTION WELDS.



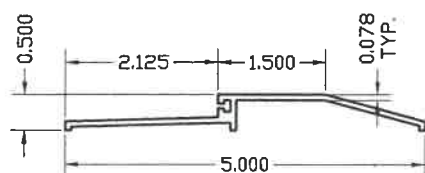
MATERIAL:
GAUGE 16 MINIMUM (0.057) GALVANNEAL

1 TYPICAL JAMB & HEAD SECTION

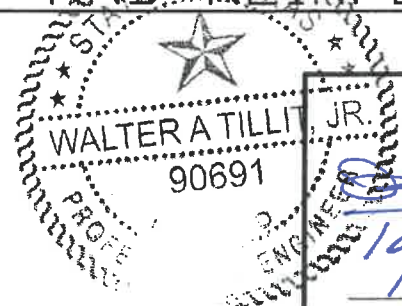


**5A) DEAD LOCK STRIKE TAB
14 GA (0.072) MIN GALVANNEAL OR STAINLESS STEEL**

ATTACHED TO STRIKE JAMB W/ (3) 1/8" Ø PROJECTION WELDS.



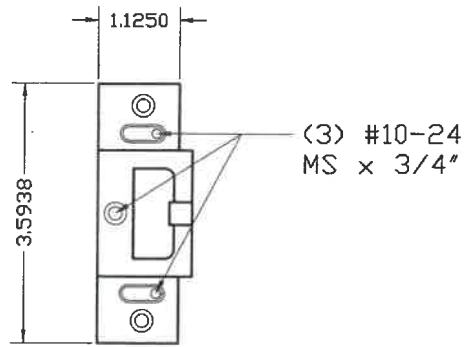
16 EXTRUDED ALUMINUM THRESHOLD NGP #950NA



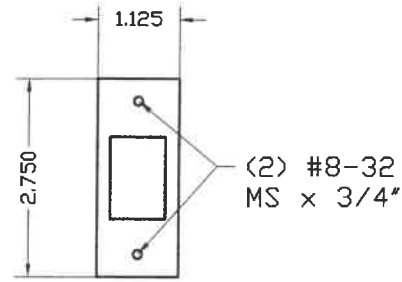
WALTER A. TILLIT JR.
90691
P.E. SEAL/SIGNATURE/DATE

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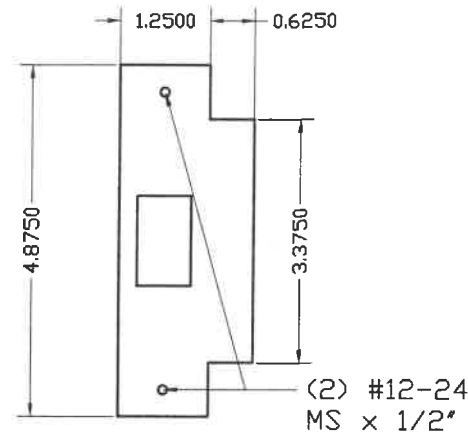
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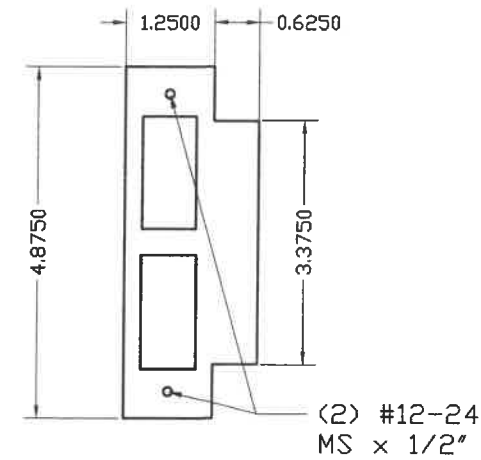
31 STRIKE FOR RIM EXIT DEVICE (11)
 MATERIAL: (0.125") Steel, Painted Finish



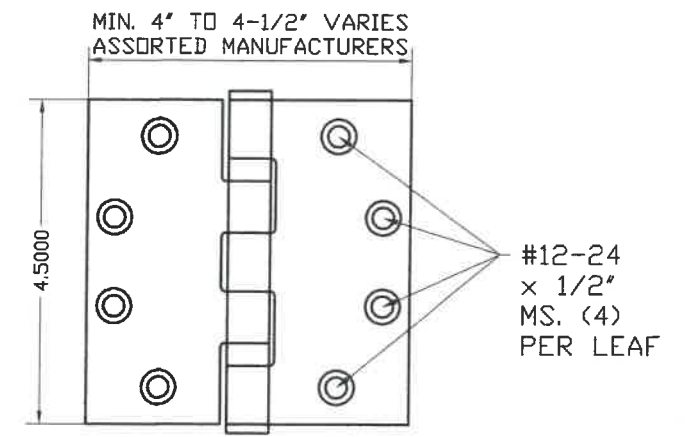
32 STRIKE FOR DEAD BOLT (14)
 MATERIAL: (0.095) Steel, Nickel Finish



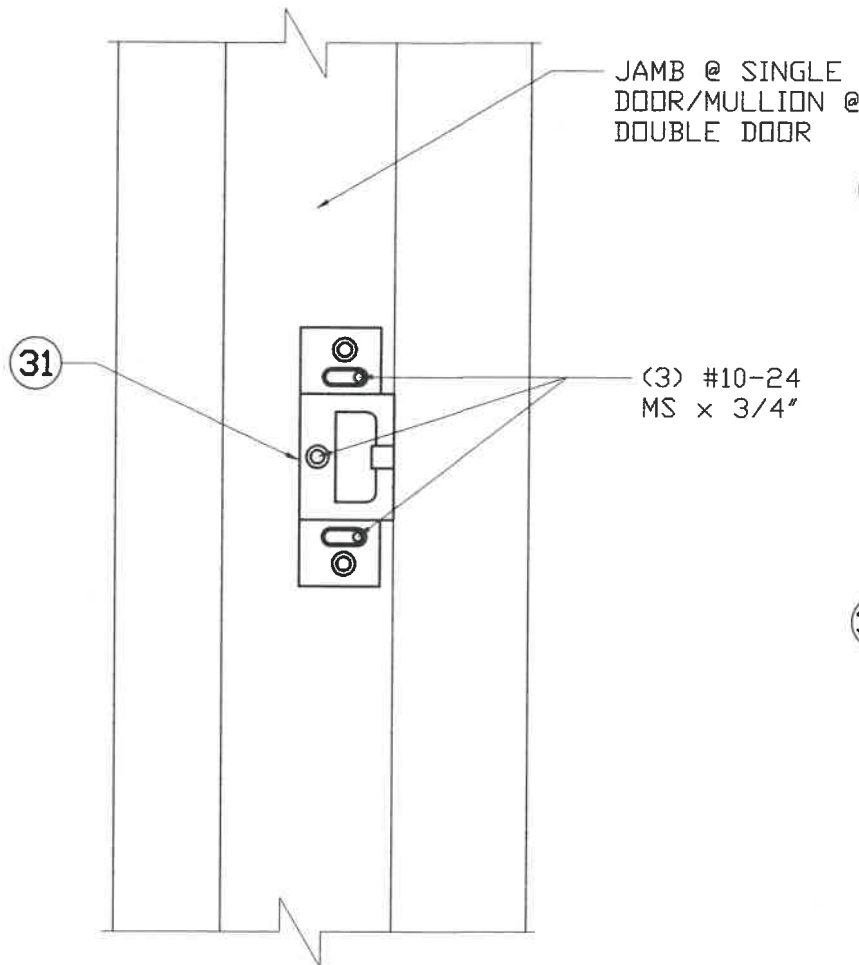
33 STRIKE FOR CILINDRICAL LOCK (13)
 MATERIAL: (0.095) Steel, Nickel Finish



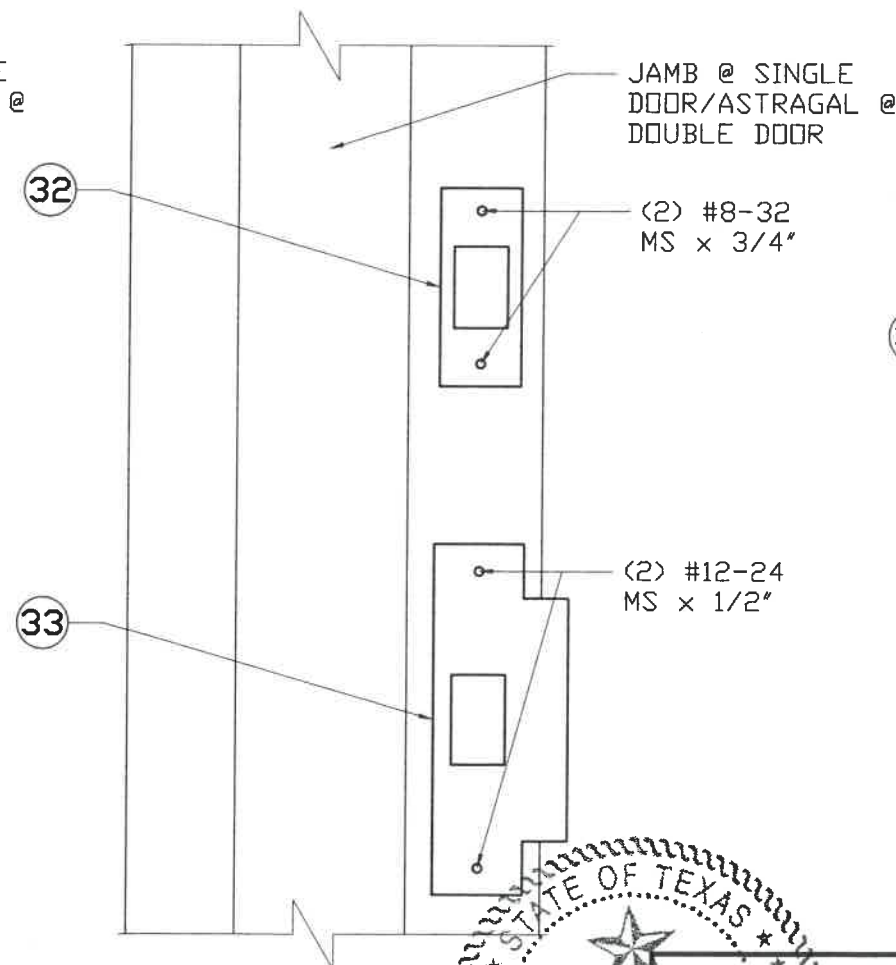
34 STRIKE FOR MORTISE LOCK (12)
 MATERIAL: (0.095) Steel, Nickel Finish



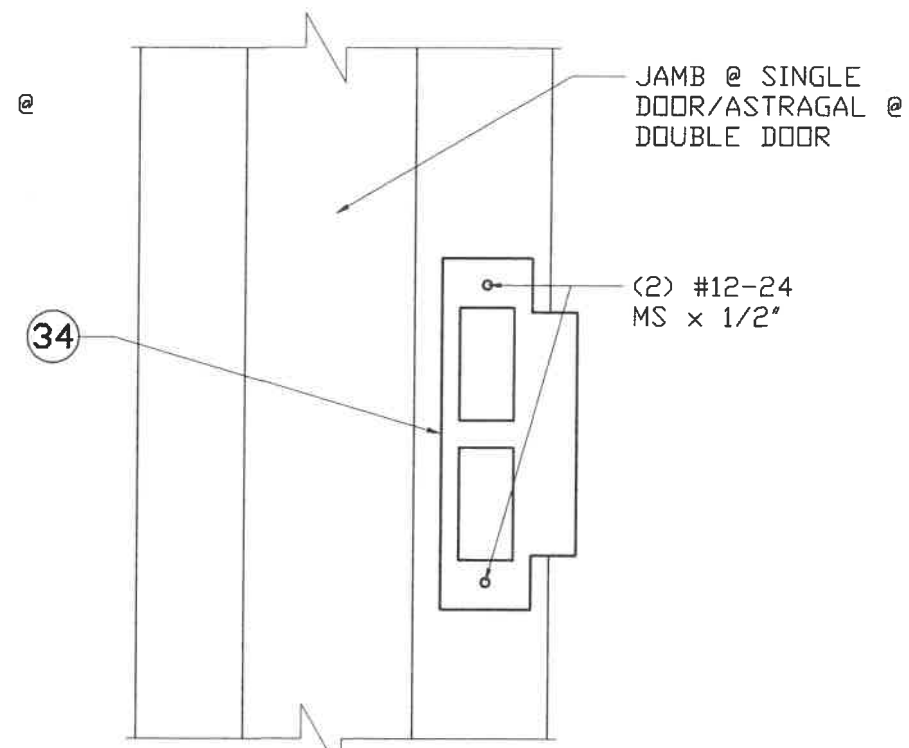
10 HINGE-HAGER
 MATERIAL: 0.134" STEEL, NICKEL FINISH



STRIKE DETAIL ELEVATION
 Rim Exit Device



STRIKE DETAIL ELEVATION
 Latch & Deadbolt

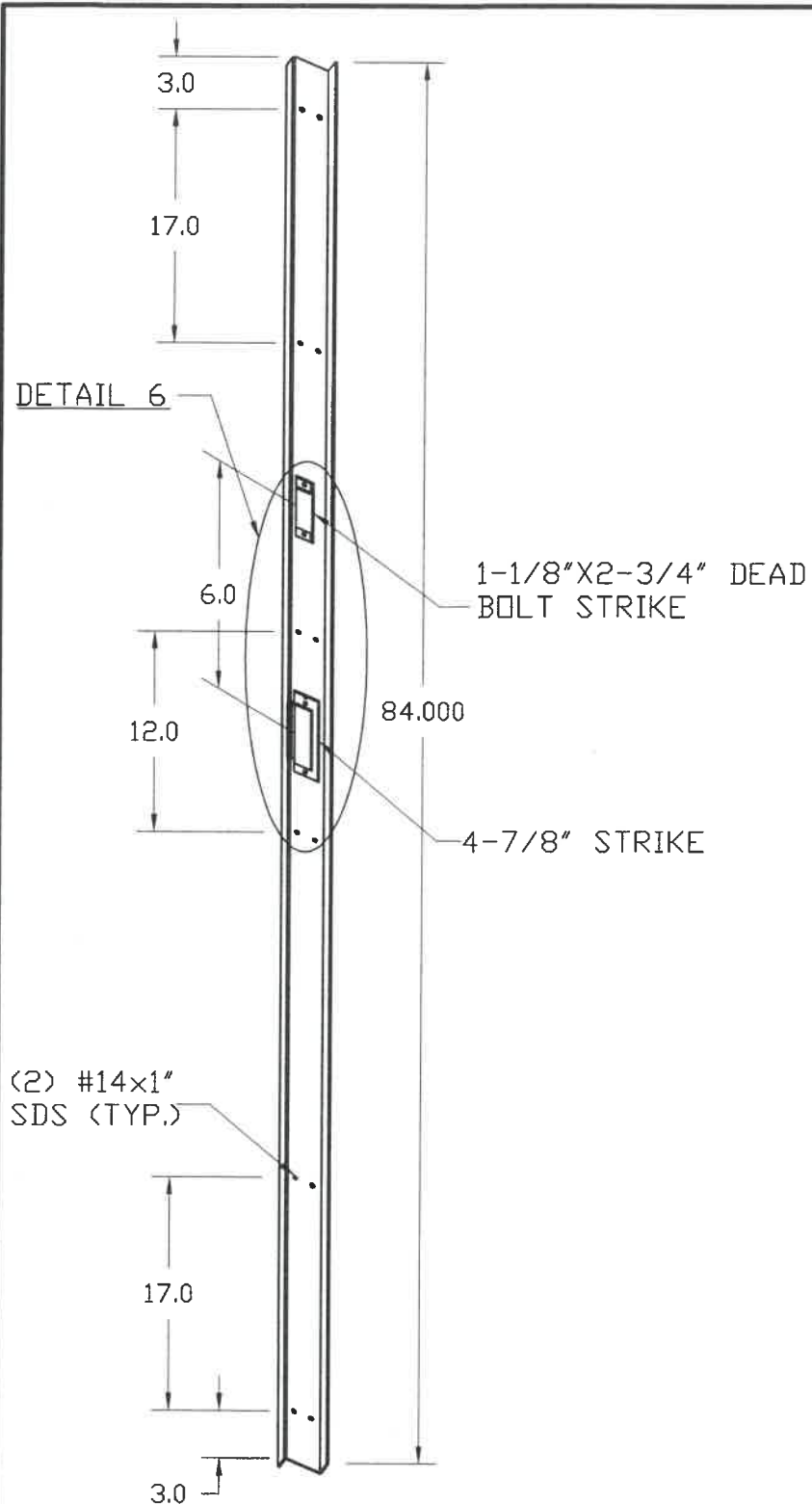


STRIKE DETAIL ELEVATION
 Mortised Device Latch

STATE OF TEXAS
 WALTER A. TILLIT, JR.
 90691
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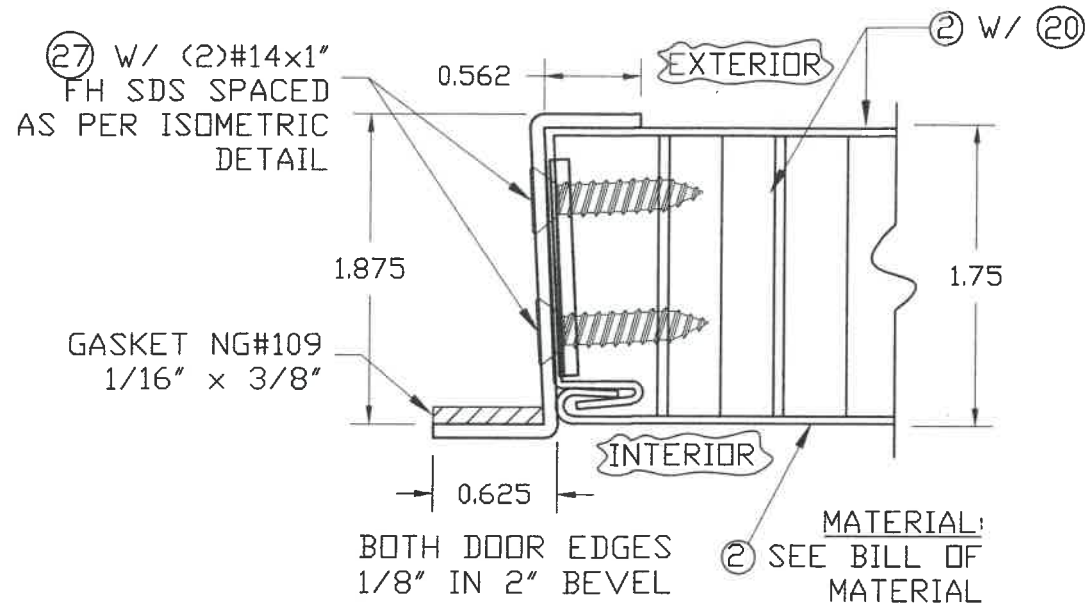
WALTER A. TILLIT Jr P.E.
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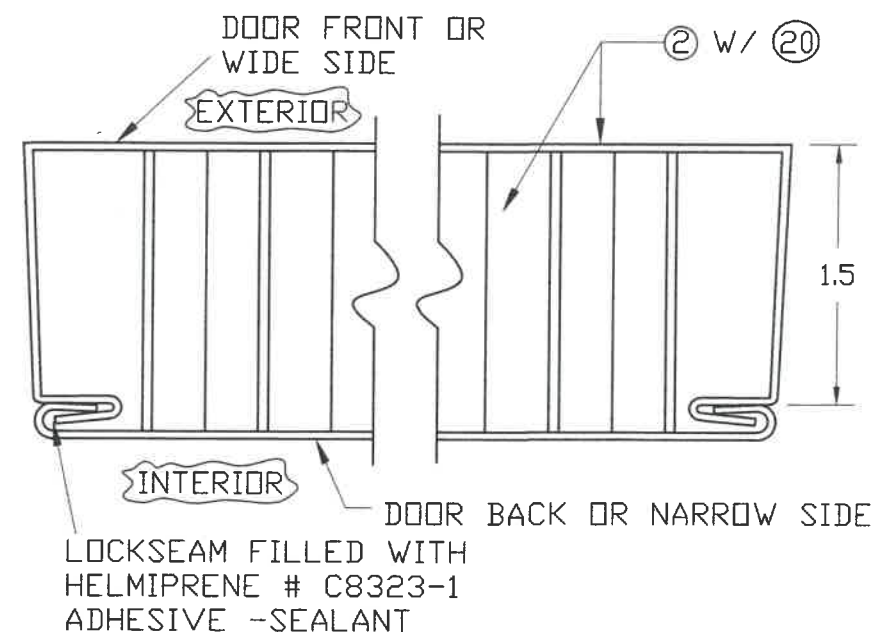


(27) "Z" ASTRAGAL ISOMETRIC DETAIL

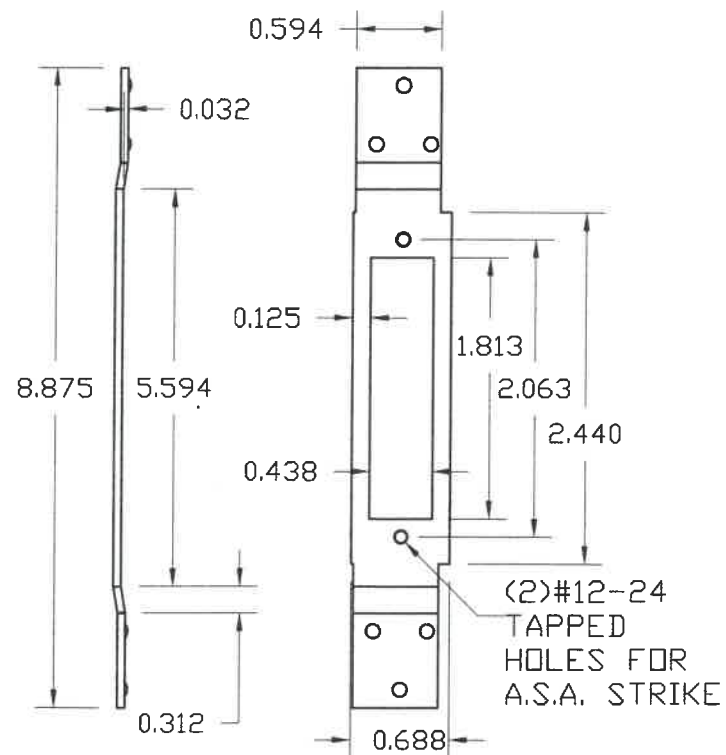
MATERIAL:
0.075" THICK STEEL



SECTION THRU ASTRAGAL AT DOUBLE DOOR

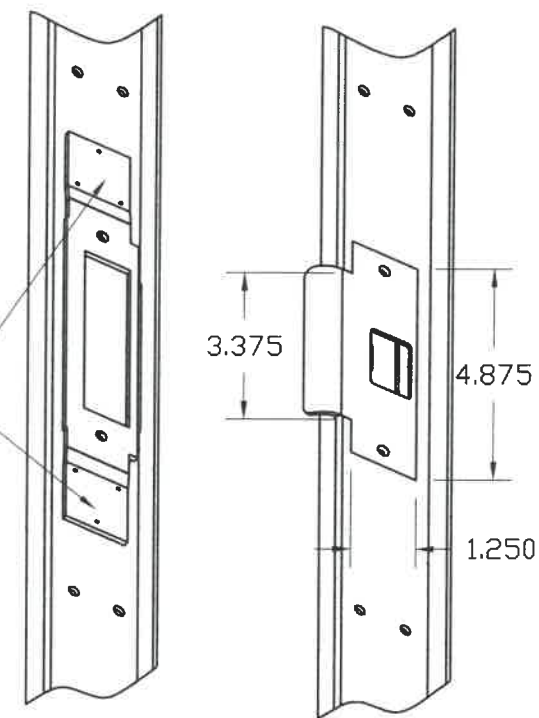


TYPICAL CROSS SECTION THRU DOOR



12 GAGE STEEL ASA 1299 STRIKE REINFORCEMENT FOR ASTRAGAL

12GA. STEEL ASA STRIKE REINFORCEMENT
3x1/8" PROJECTION
WELD EACH SIDE

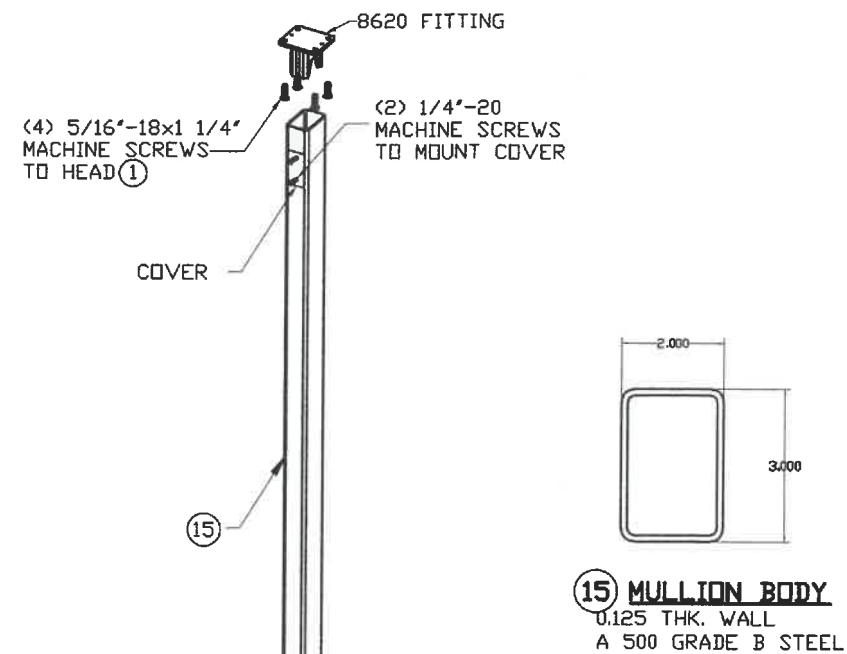


DETAIL 6

WALTER A. TILLIT, JR.
90691
PROFESSIONAL ENGINEER
P.E. SEAL/SIGNATURE/DATE

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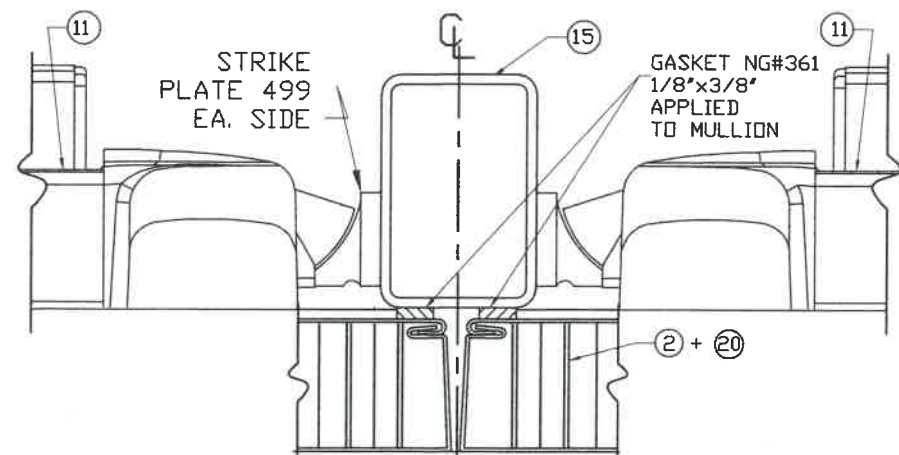
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DAYBAR INDUSTRIES LTD 50 WEST DRIVE, BRAMPTON, ON CANADA, L6T 2J4 TEL: 905 625-8000 FAX: 905 625-4204				9/30/2021 DATE	
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15 MULLION BODY
0.125 THK. WALL
A 500 GRADE B STEEL

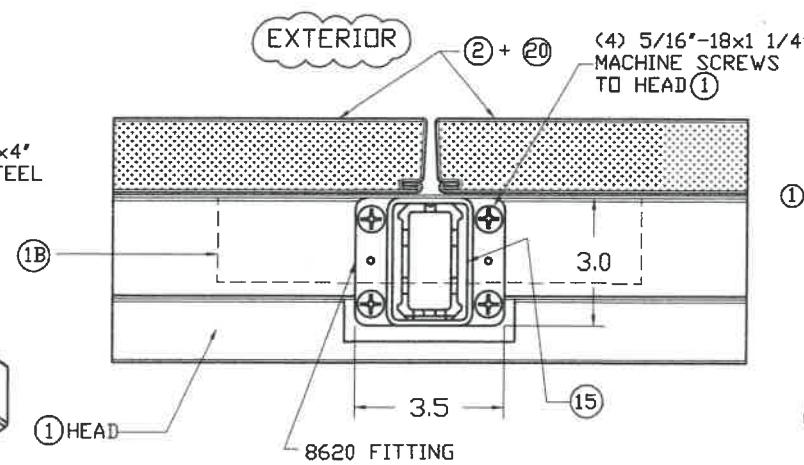
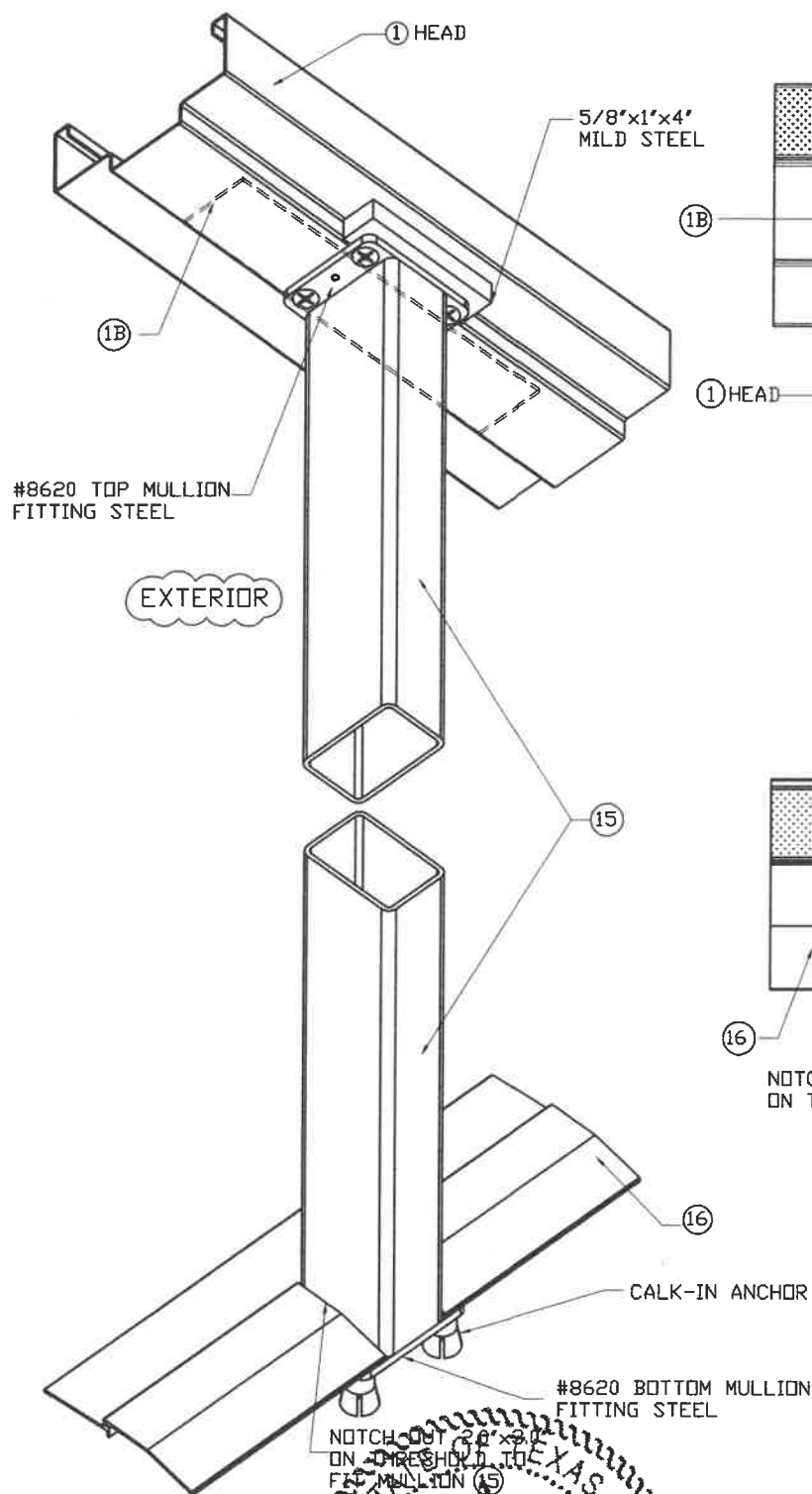
(4) 5/16"Ø-18 POWERS FASTENERS CALK-IN ANCHORS W/ 1" MIN. EMBEDMENT TO POURED CONCRETE.

ISOMETRIC

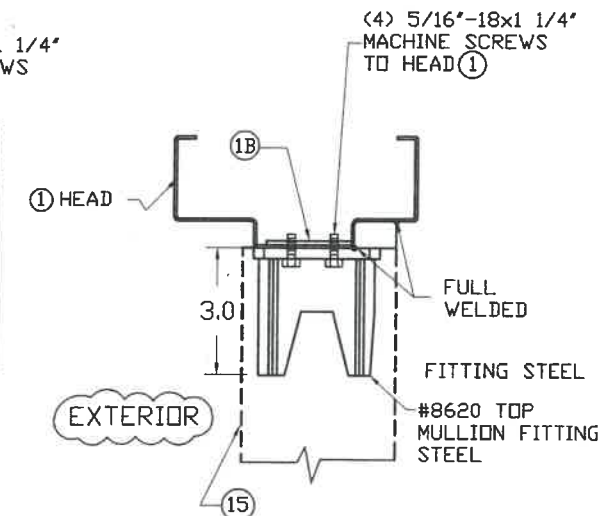


MULLION/DOOR SEAL

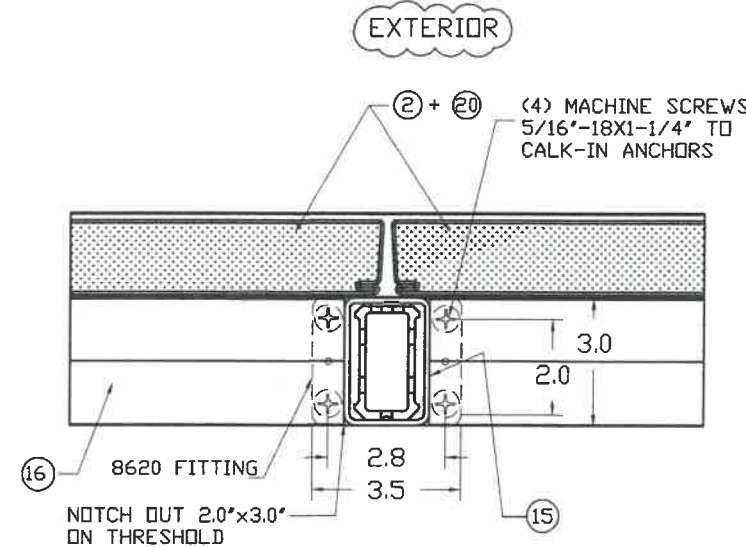
15 VON DUPRIN SERIES 9954 (W/ 499 STRIKE PLATE) MULLION INSTALLATION



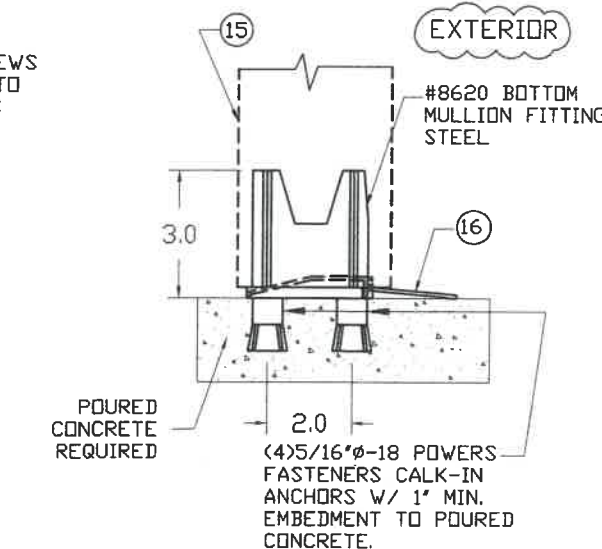
CONNECTION AT TOP (PLAN)



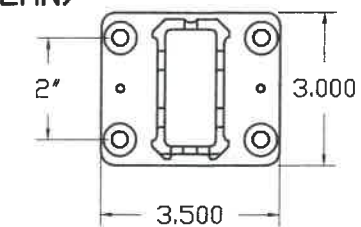
SECTION



CONNECTION AT BOTTOM (PLAN)



SECTION



MULLION FITTING 8620 STEEL

NOTCH OUT 2.0\"/>

WALTER A. TILLIT, JR.
9069
PROFESSIONAL ENGINEER
STATE OF TEXAS
P.E. SEAL/SIGNATURE/DATE

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TEXAS LIC. # 90691
FIRM REGISTRATION # F-13790

TEXAS DEPARTMENT OF INSURANCE - 2018

DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL STEEL DOOR W/SERIES "AS" 16 GAGE STEEL FRAME LOUVERED ASSEMBLIES.

DRAWN BY:
M.P.

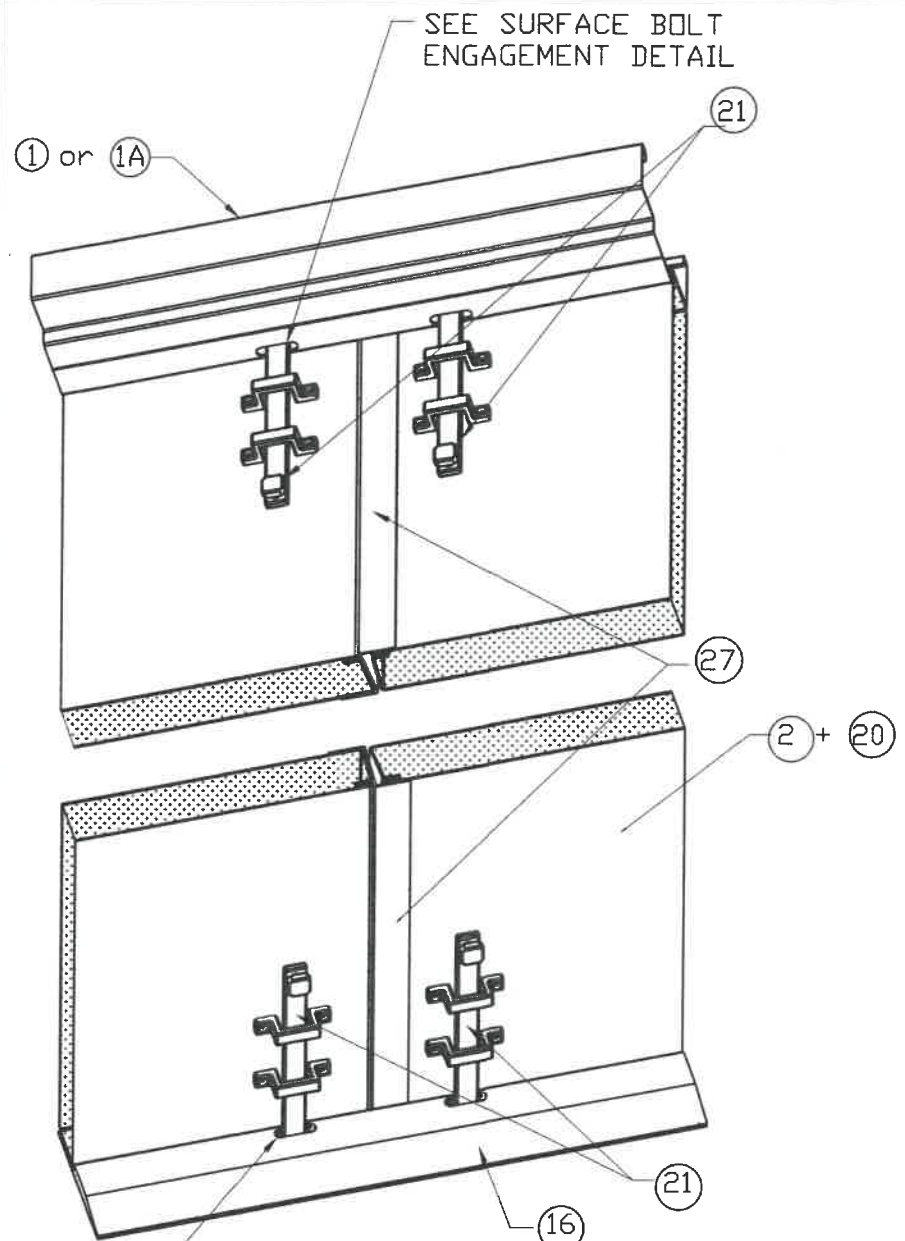
DAYBAR INDUSTRIES LTD

9/30/2021
DATE

50 WEST DRIVE, BRAMPTON,
ON CANADA, L7J 2J4
TEL: 905 625-8000 FAX: 905 625-4204

21-126
DRAWING No

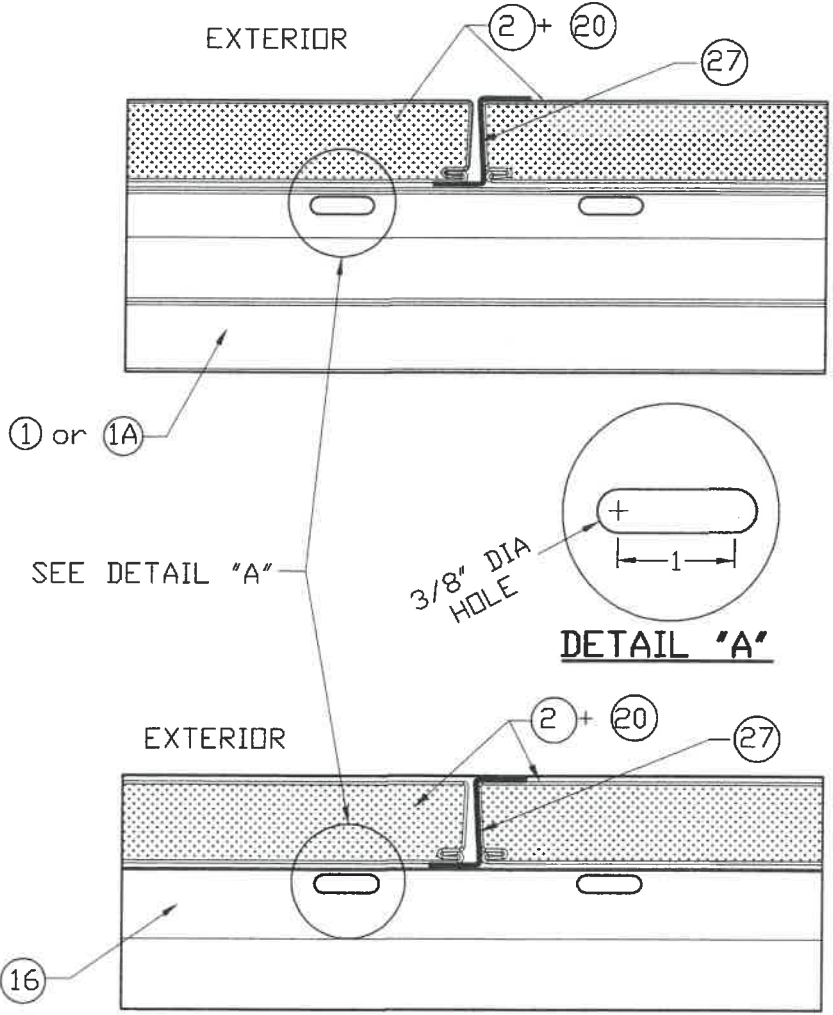
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2	-	-	4	-	-



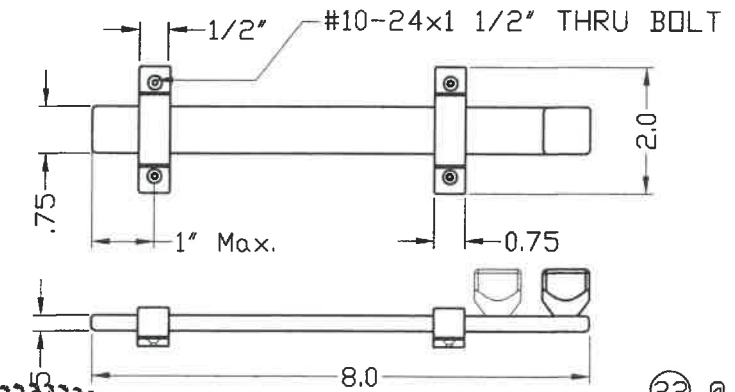
SURFACE BOLT INSTALLATION AT DOOR W/ ASTRAGAL (INTERIOR VIEW)

NOTE:
 SURFACE BOLT
 MANUFACTURER-HAGER
 MODEL #275D
 MATERIAL-STEEL
 FINISH US26D

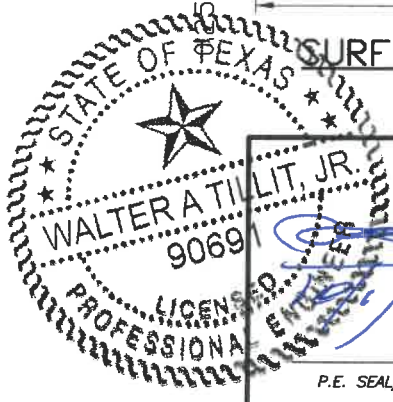
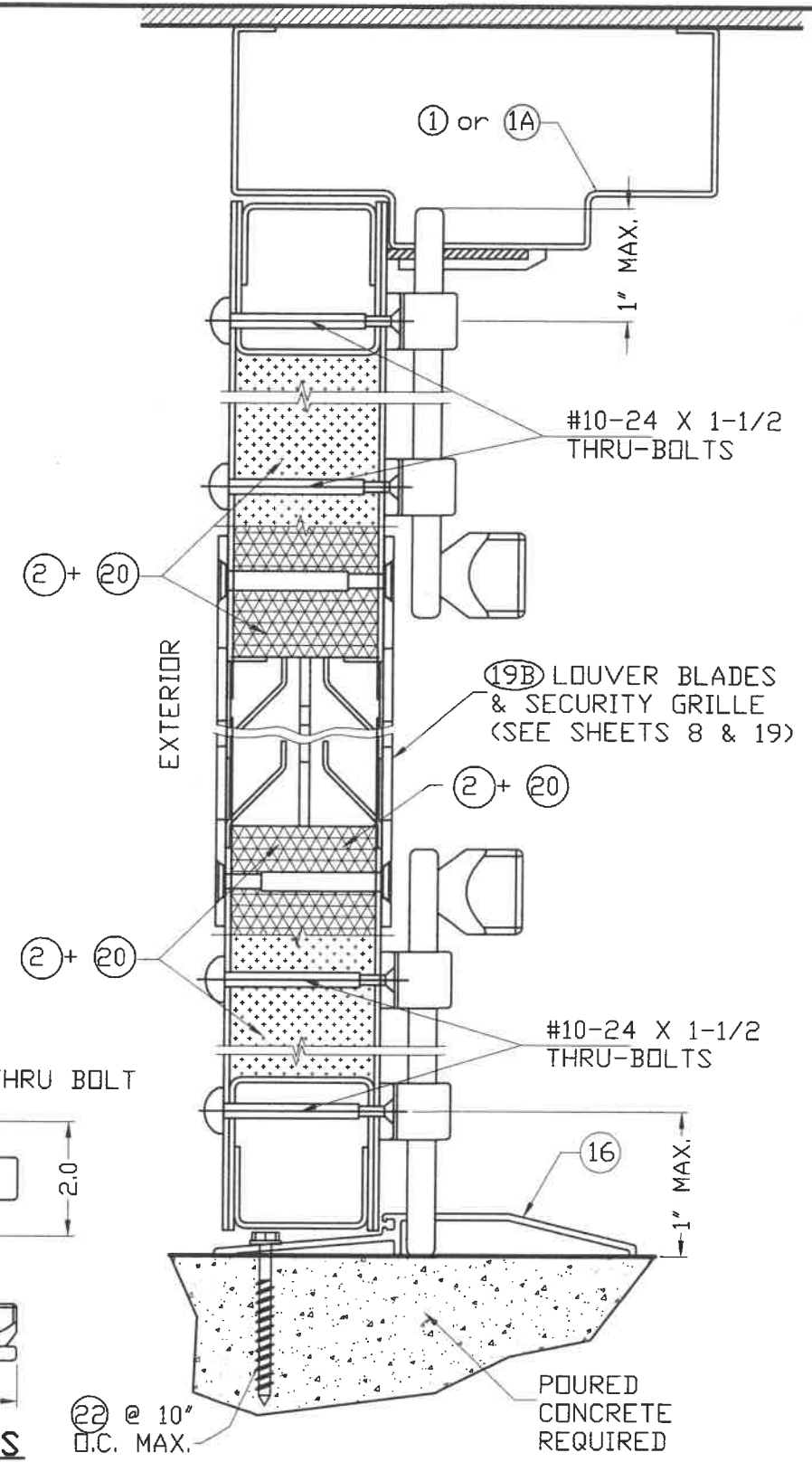
21 8" #275D HAGER SURFACE BOLT



TYPICAL SURFACE BOLT ENGAGEMENT DETAIL AT HEAD & SILL

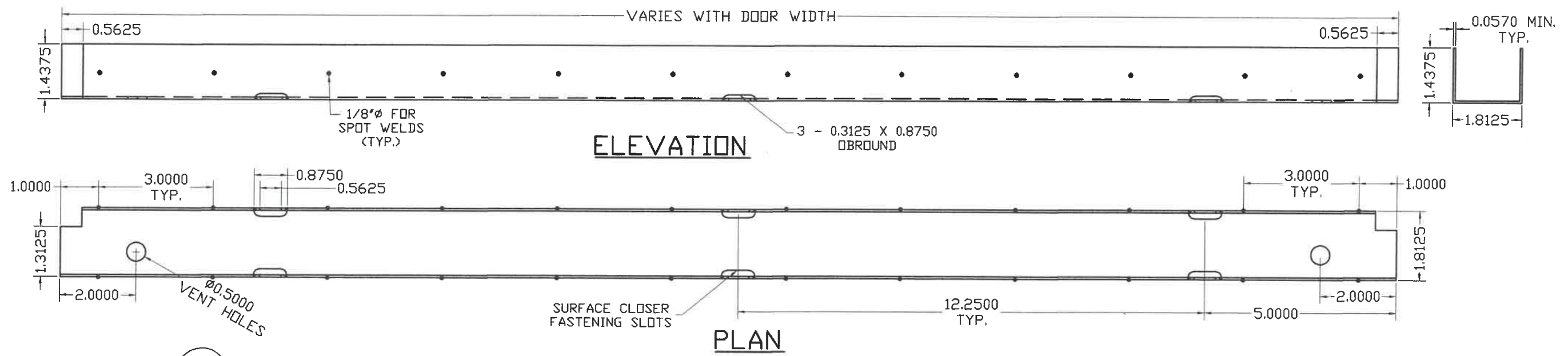


SURFACE BOLT DETAILS



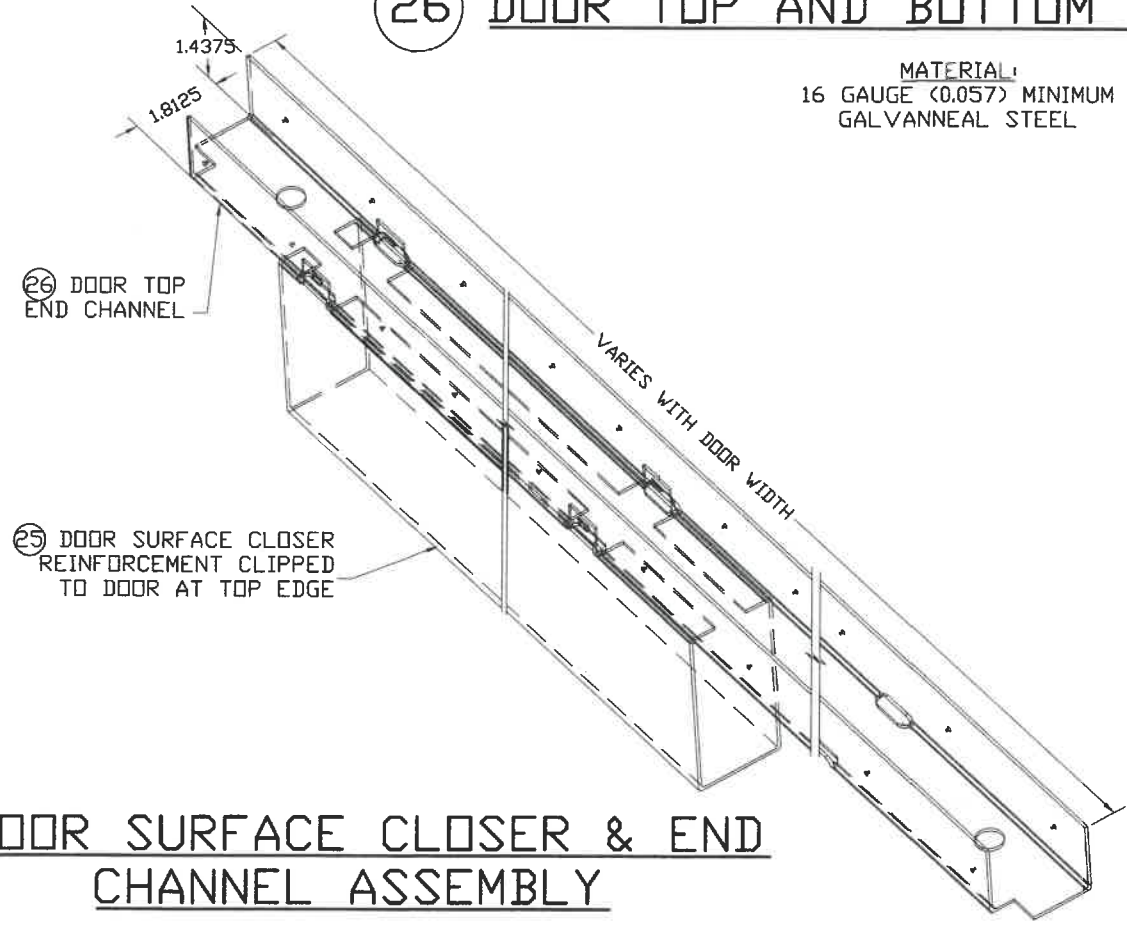
WALTER A. TILLIT Jr P.E.
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TEXAS DEPARTMENT OF INSURANCE - 2018					
DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL STEEL DOOR W/SERIES "AS" 16 GAGE STEEL FRAME LOUVERED ASSEMBLIES.				DRAWN BY: M.P.	
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REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
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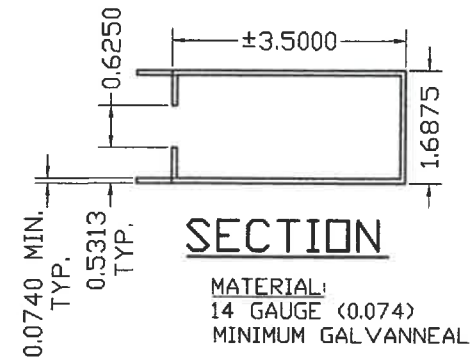
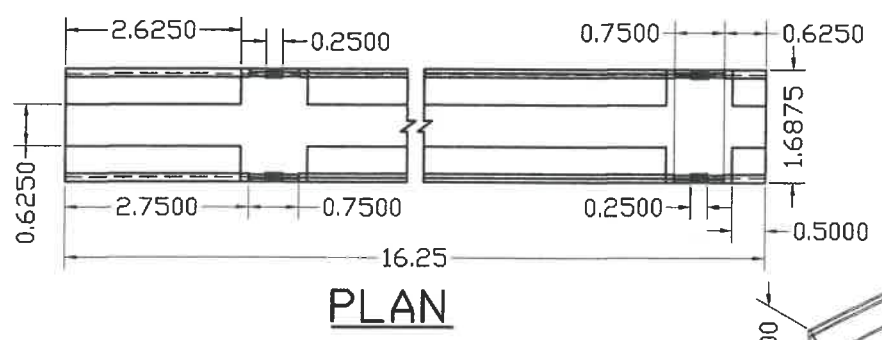


26 DOOR TOP AND BOTTOM TYPICAL END CHANNEL DETAIL

MATERIAL:
16 GAUGE (0.057) MINIMUM
GALVANNEAL STEEL

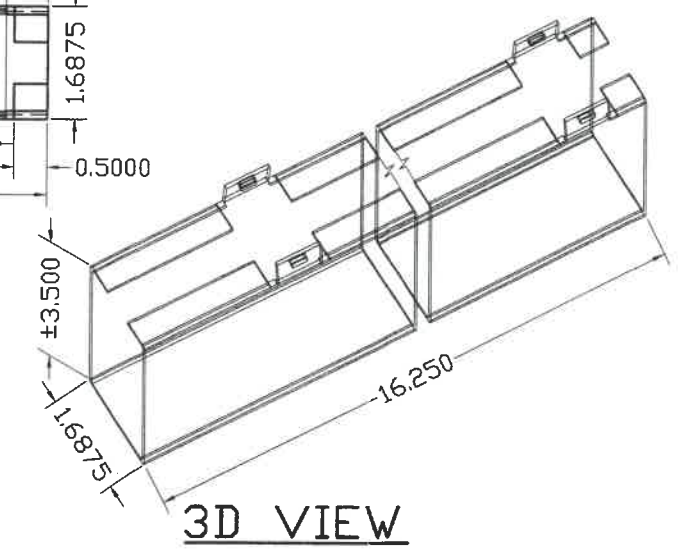


DOOR SURFACE CLOSER & END CHANNEL ASSEMBLY



25 DOOR SURFACE CLOSER REINFORCEMENT DETAIL

MATERIAL:
14 GAUGE (0.074)
MINIMUM GALVANNEAL



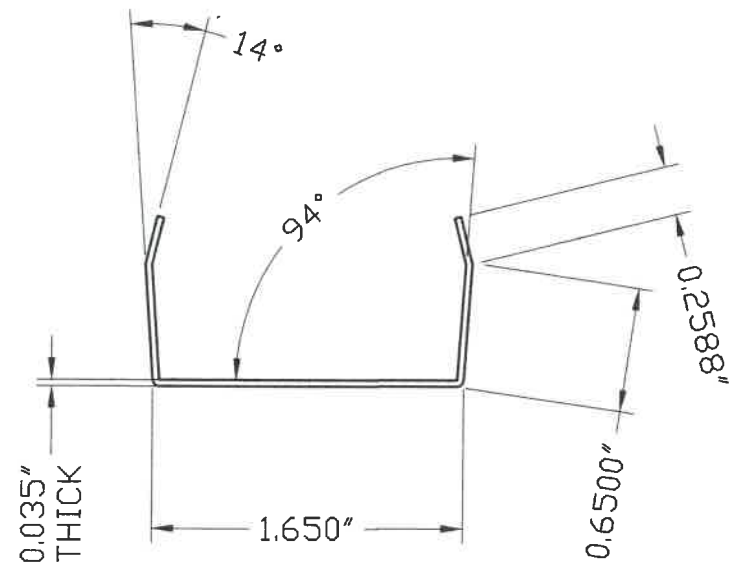
LAMINATED TO EACH FACE OF DOOR
W/ CONTACT ADHESIVE (HELHIBOND 8326-1)
AT HINGE EDGE AND TOP END CHANNEL.



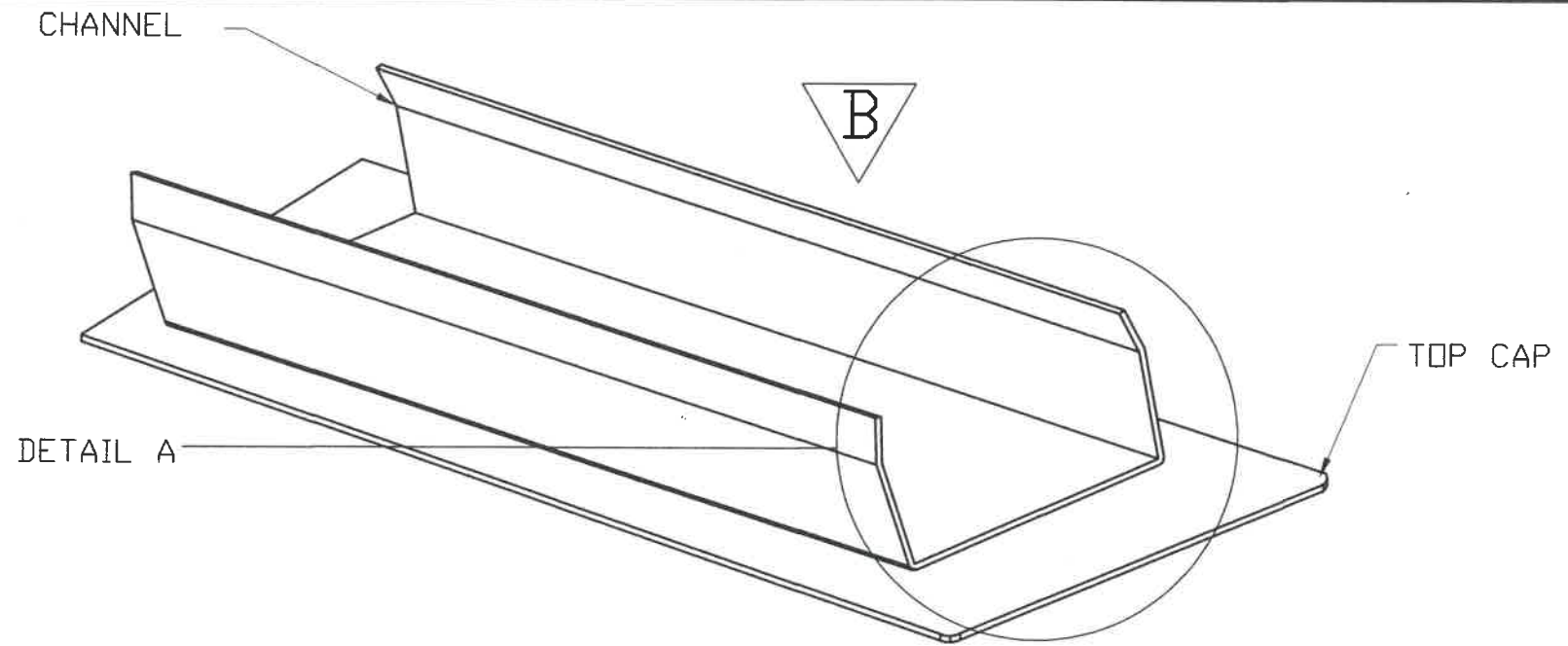
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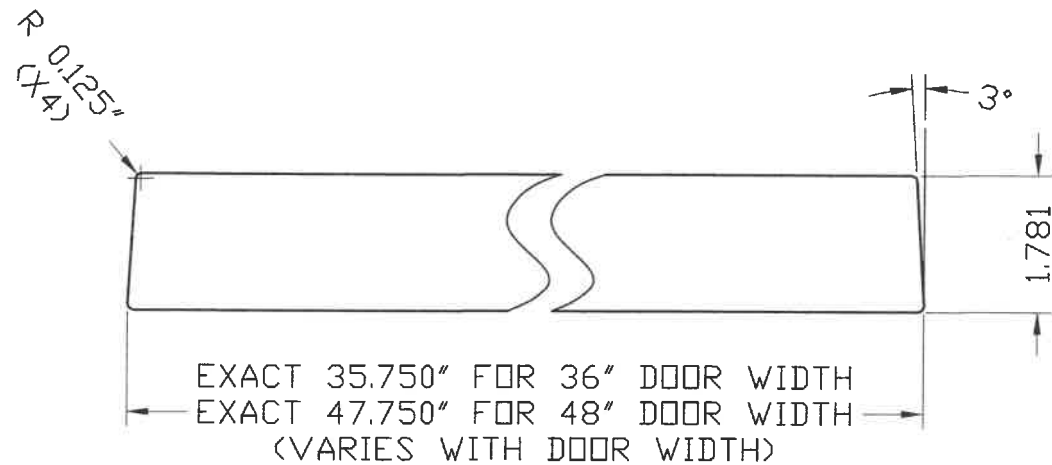
TEXAS DEPARTMENT OF INSURANCE - 2018					
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				21-126 DRAWING No	
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
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2	-	-	4	-	-



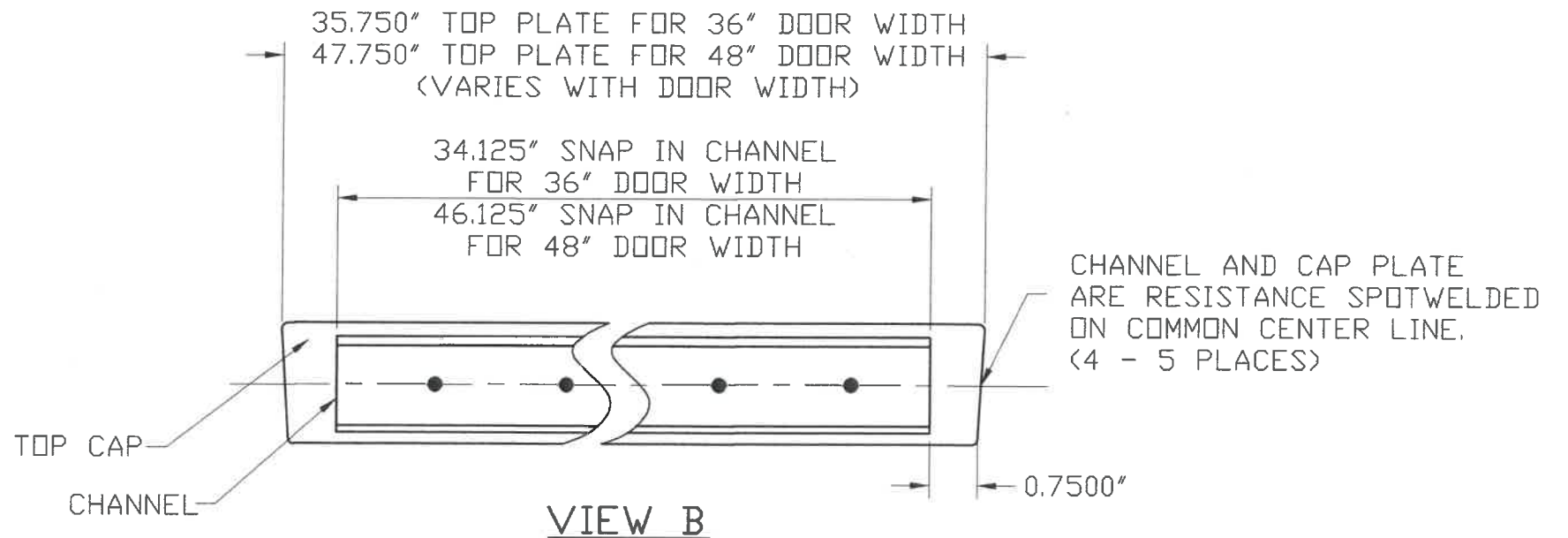
DETAIL A
SNAP IN CHANNEL



ASSEMBLY (ISOMETRIC)
(SNAP IN CHANNEL WITH TOP CAP)



STANDARD TOP CAP



VIEW B

28 DOOR SNAP IN TOP CAP DETAIL

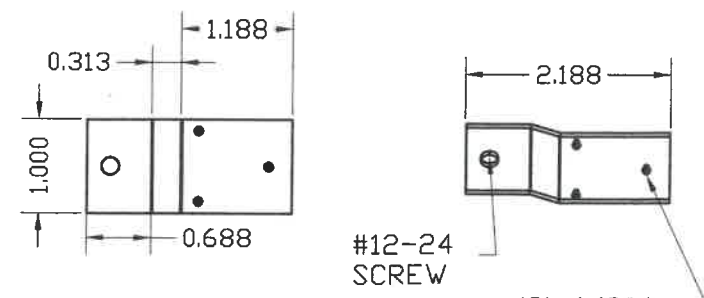
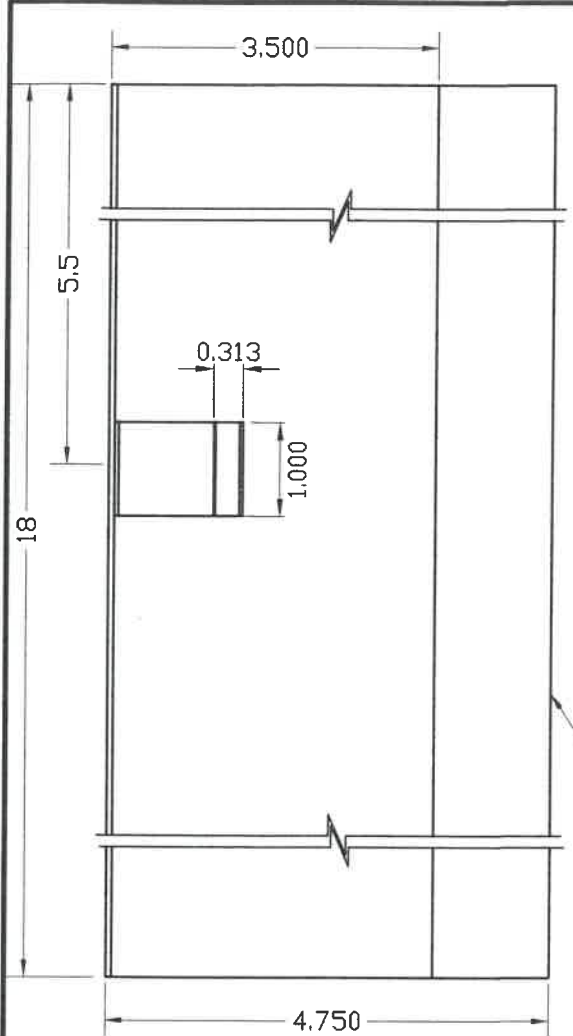
MATERIAL: 20 GA GALVANNEAL STEEL FOR BOTH PCS. ASTM A-653, A-60

INSTALLATION OPTIONS:
(A) CAULK AND PRESSFIT
(B) CAULK, PRESSFIT AND TACK WELD

STATE OF TEXAS
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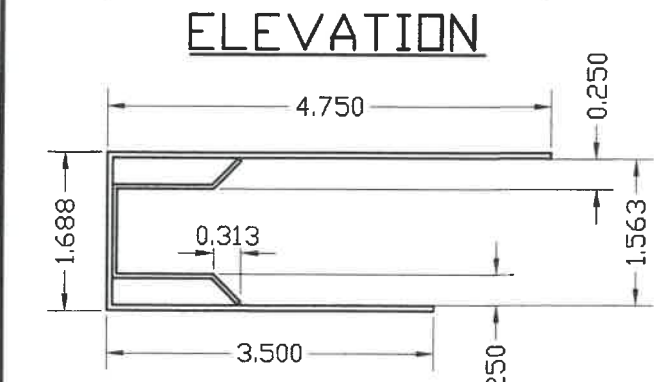
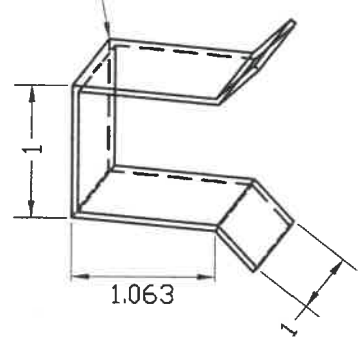
TEXAS DEPARTMENT OF INSURANCE - 2018					
DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL STEEL DOOR W/SERIES "AS" 16 GAGE STEEL FRAME LOUVERED ASSEMBLIES.					DRAWN BY: M.P.
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					21-126 DRAWING No
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
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2	-	-	4	-	-



DOOR EDGE MOUNTING TAB
 14 GA (0.074) MIN STEEL

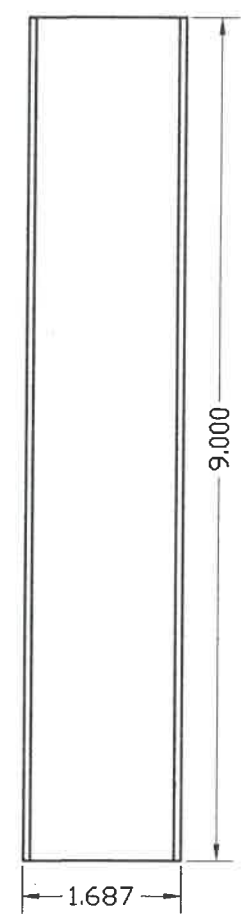
GAGE 14 (0.074) MINIMUM RP REINFORCING SAME AS #86. LESS LOCK CLIP & MOUNTING TABS, GLUE W /CONTACT ADHESIVE TO DOOR FACE

LOCK CLIP-18GA (0.045) MIN. ONLY VALID FOR ASSEMBLY WHERE APPLICABLE

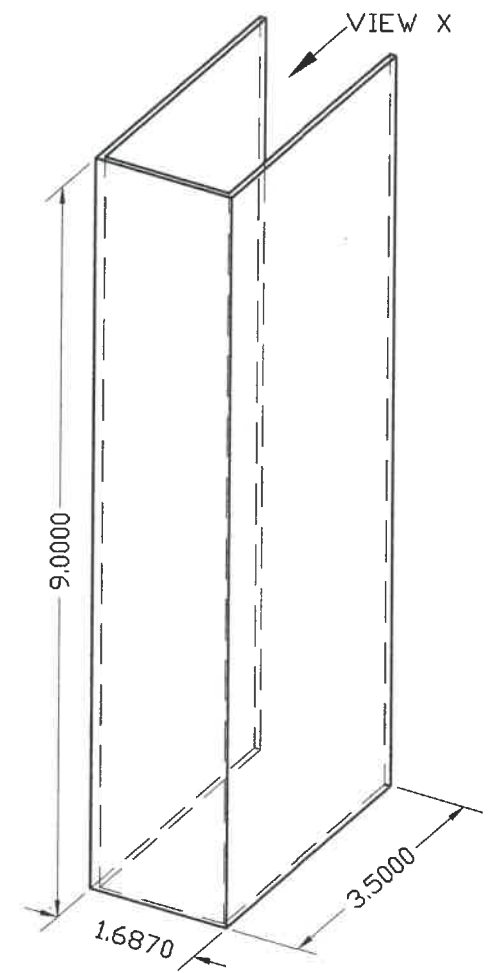


PLAN
 MATERIAL:
 ALL GALVANNEAL STEEL

(23) ANSI #A115.1 #86 MORTISE LOCK (12) /RIM PANIC (11) REINFORCING



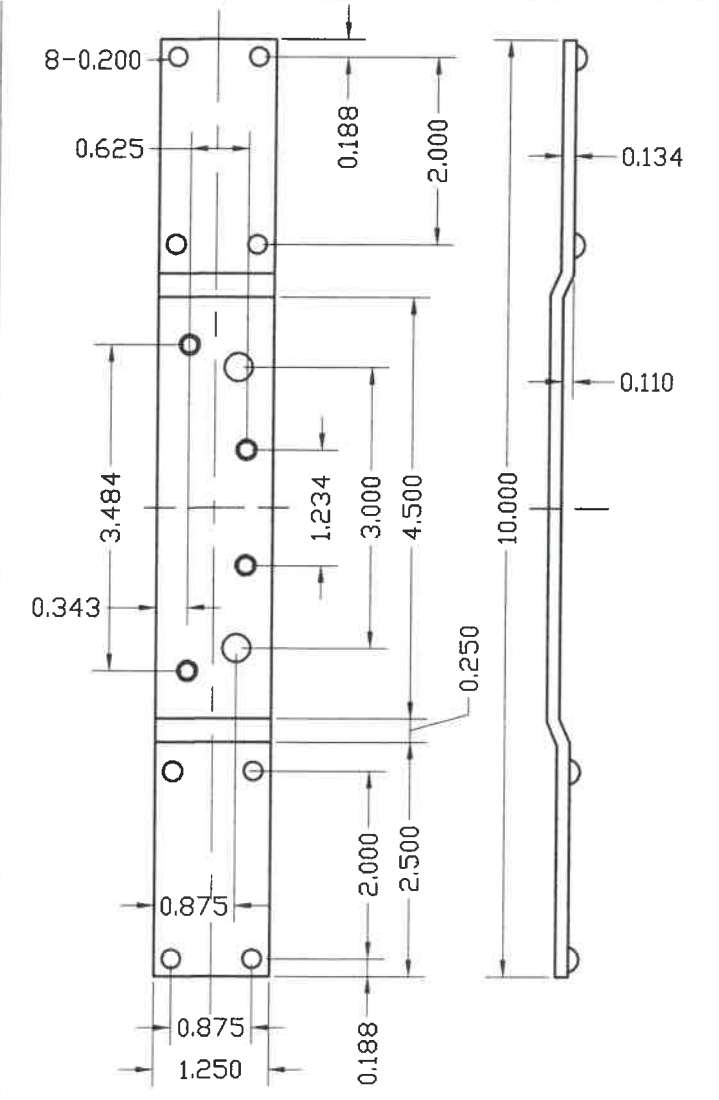
VIEW X



3D VIEW

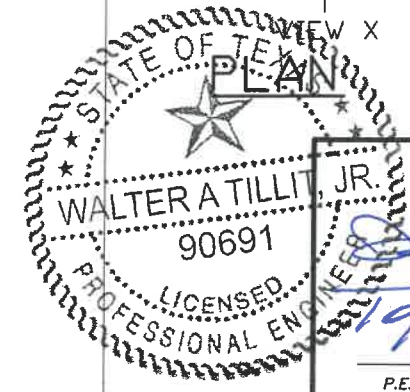
MATERIAL:
 14 GAUGE (0.074) MINIMUM GALVANNEAL STEEL, GLUED TO DOOR AT HEAD & SILL USING HEMILBOND 8320-1 CONTACT ADHESIVE.

(18) DOOR SURFACE BOLT REINFORCING DETAIL



(17) 4 1/2" HINGE BAR REINFORCING FOR DOOR

MATERIAL:
 8 GAUGE GALVANNEAL STEEL



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TEXAS DEPARTMENT OF INSURANCE - 2018

DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL STEEL DOOR W/SERIES "AS" 16 GAGE STEEL FRAME LOUVERED ASSEMBLIES.

DRAWN BY:
 M.P.

DAYBAR INDUSTRIES LTD

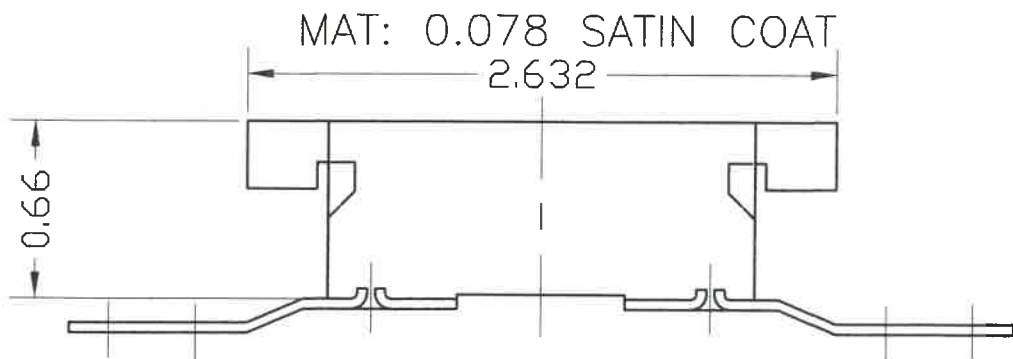
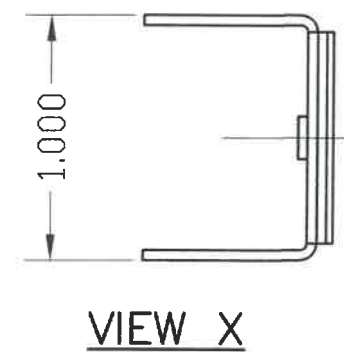
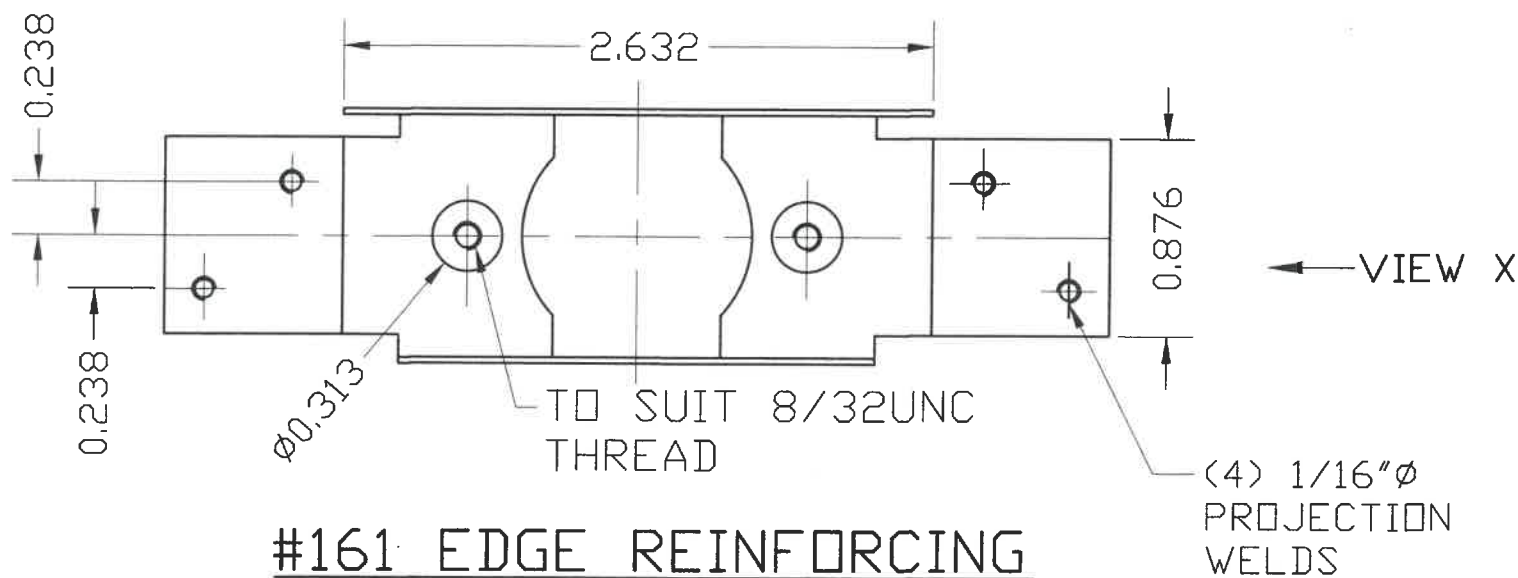
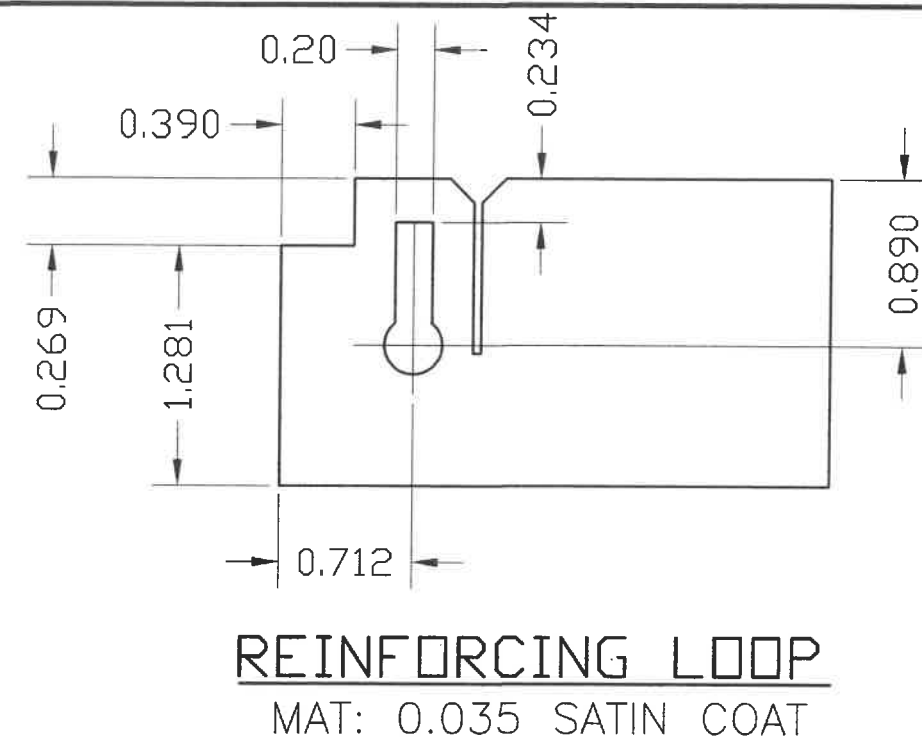
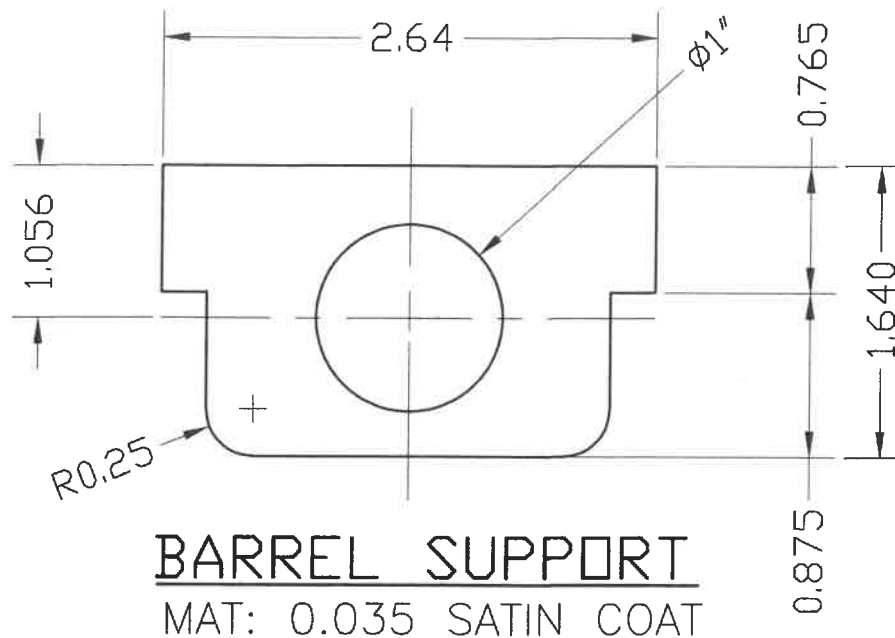
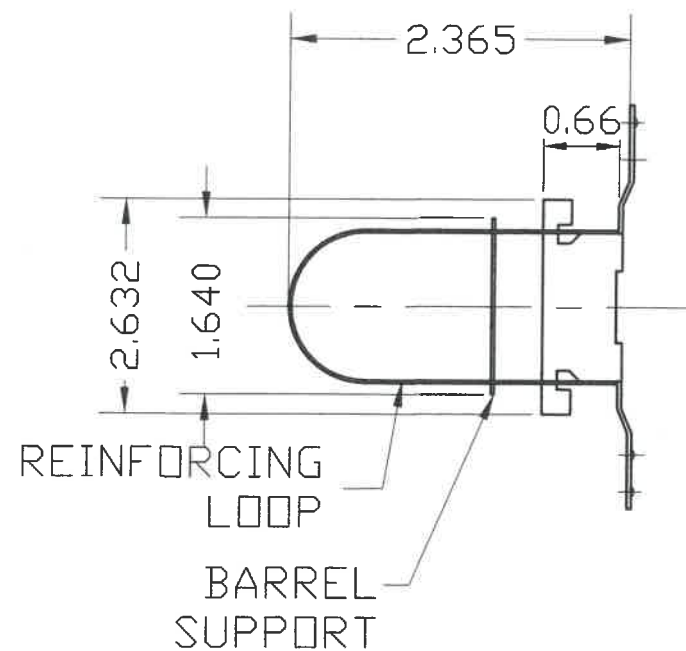
9/30/2021
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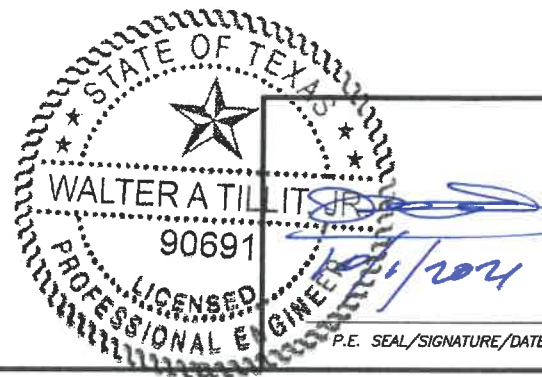
21-126
 DRAWING No

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
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2	-	-	4	-	-

SHEET 15 OF 19

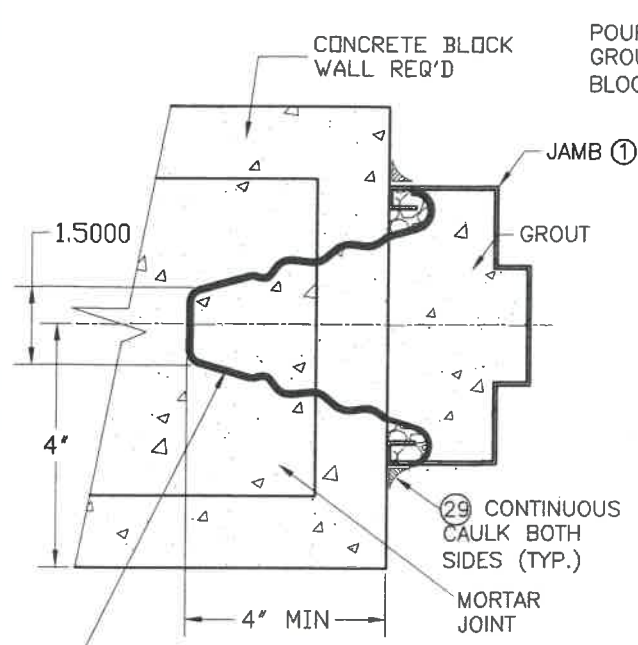


24 #161 CYLINDRICAL LOCK AND DEAD BOLT REINFORCEMENT DETAIL



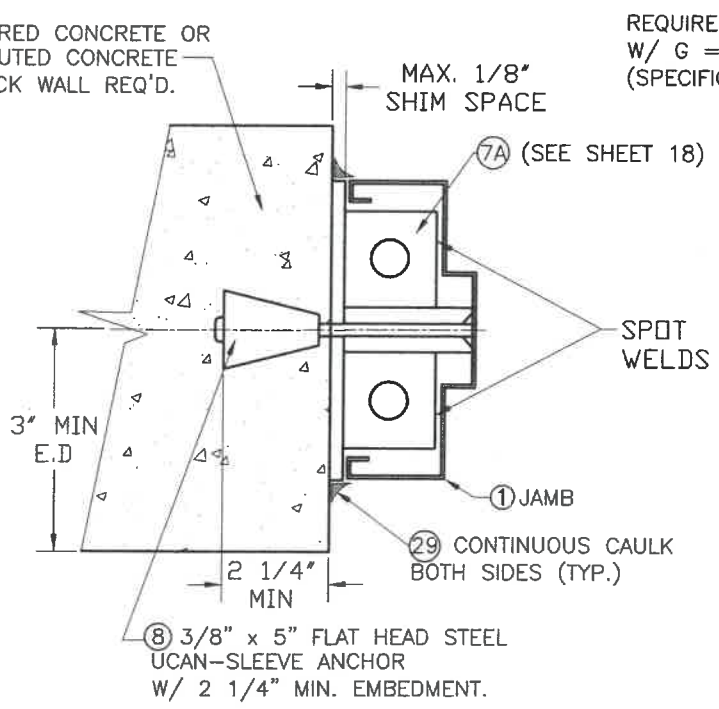
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DAYBAR INDUSTRIES LTD				9/30/2021 DATE	
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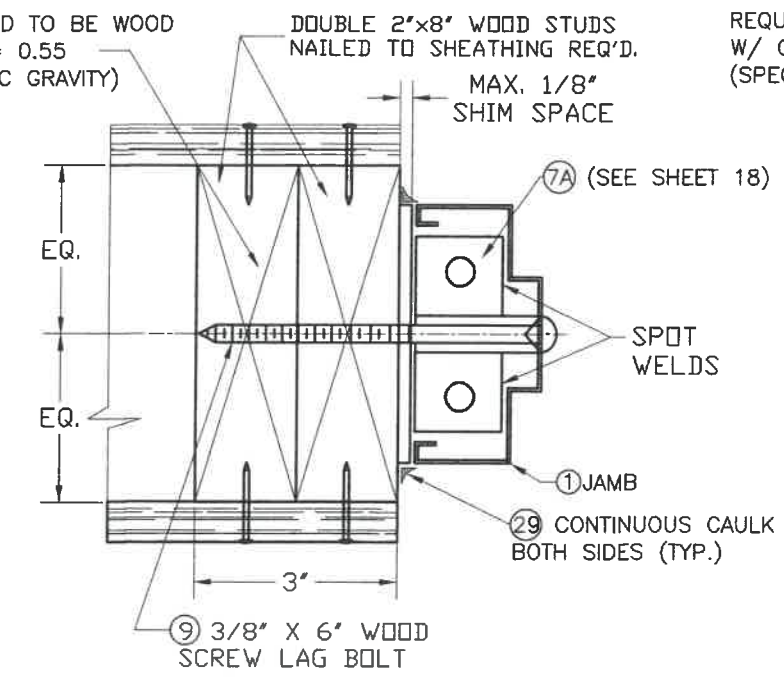


⑥ MASONRY WIRE ANCHORS IN HORIZ. MORTAR JOINTS; FILL JAMBS ① SOLID WITH GROUT PER ASTM C476 W/ MIN. COMPRESSION STRENGTH OF 2.5 KSI (SEE SHEET 18)

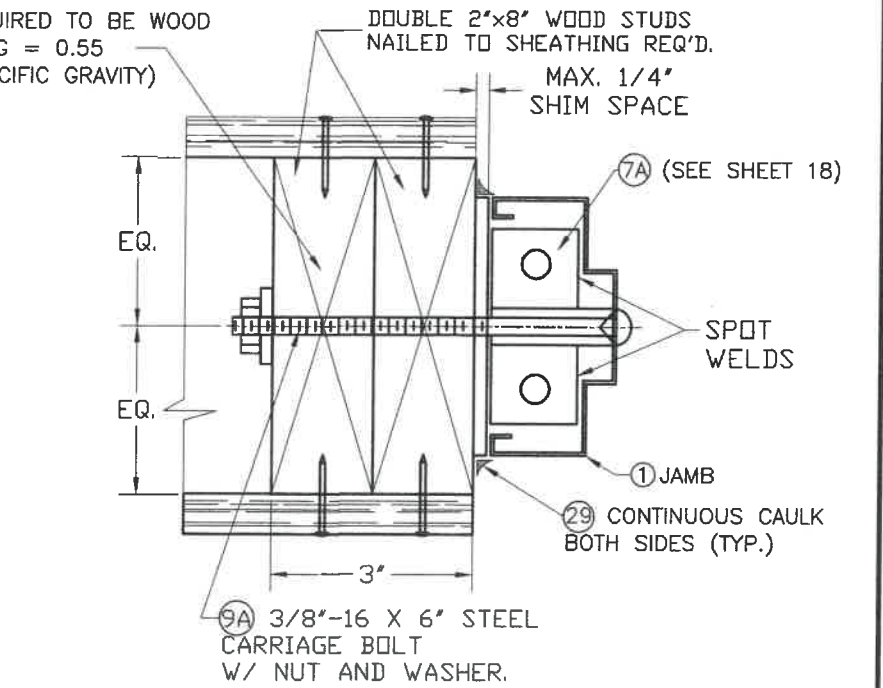
DETAIL #21
WIRE ANCHOR ⑥
INSTALLATION TO
MASONRY WALLS



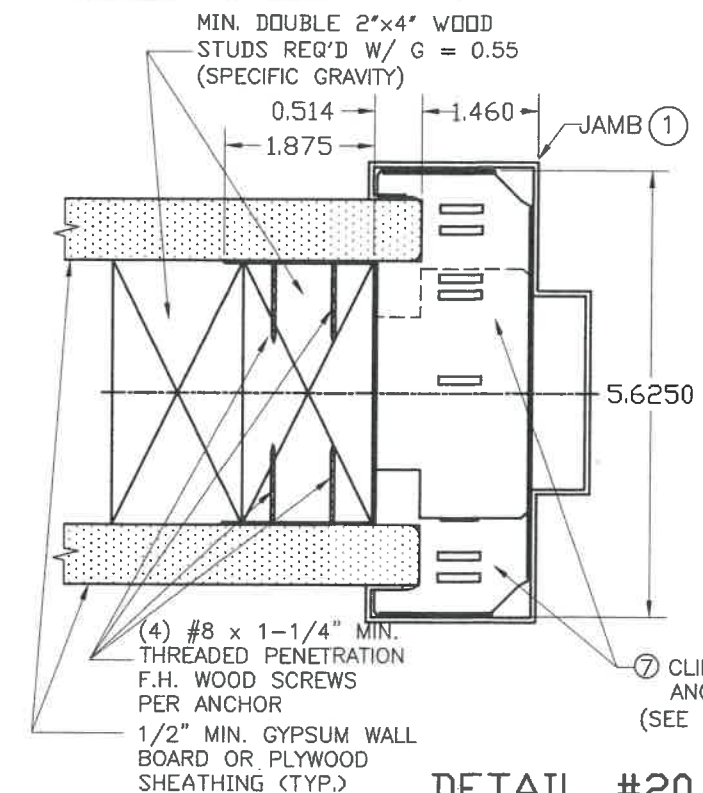
DETAIL #22
INSTALLATION OF UCAN
SLEEVE ANCHORS ⑧ TO
MASONRY WALLS



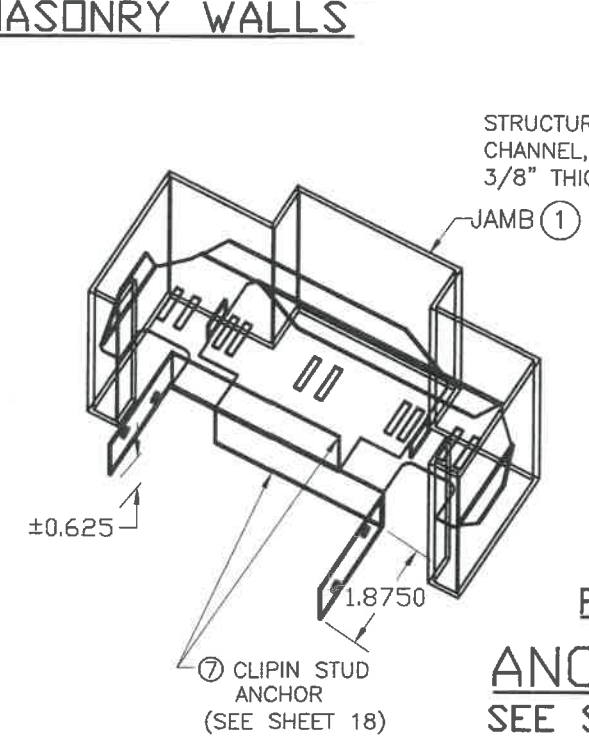
DETAIL #22A
INSTALLATION OF 3/8"Ø LAG
SCREW ⑨ TO WOOD FRAME WALLS



DETAIL #22B
INSTALLATION OF 3/8"Ø CARRIAGE
BOLT ⑨A TO WOOD FRAME WALLS

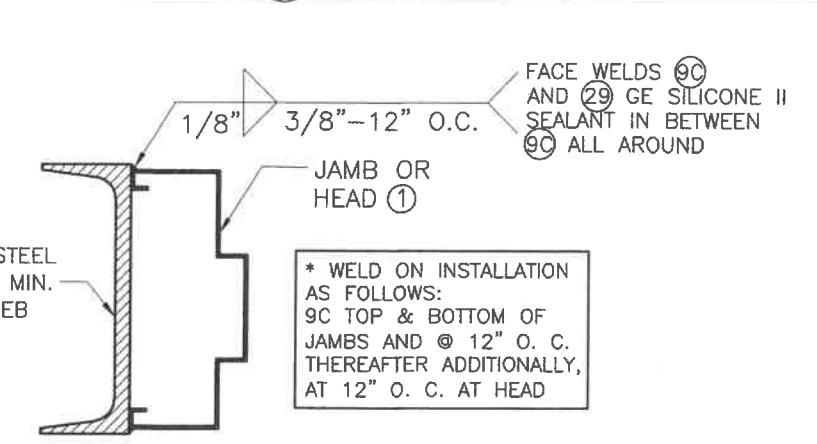


DETAIL #20
INSTALLATION OF 2 PIECE COMBINATION
STUD ANCHOR ⑦ INTO WOOD FRAME WALLS



DETAIL #23A
INSTALLATION OF 3/8"Ø
F.H. M.S. ⑨B TO STEEL CHANNEL

ANCHOR DETAILS:
SEE SCHEDULE ON SHEET 18



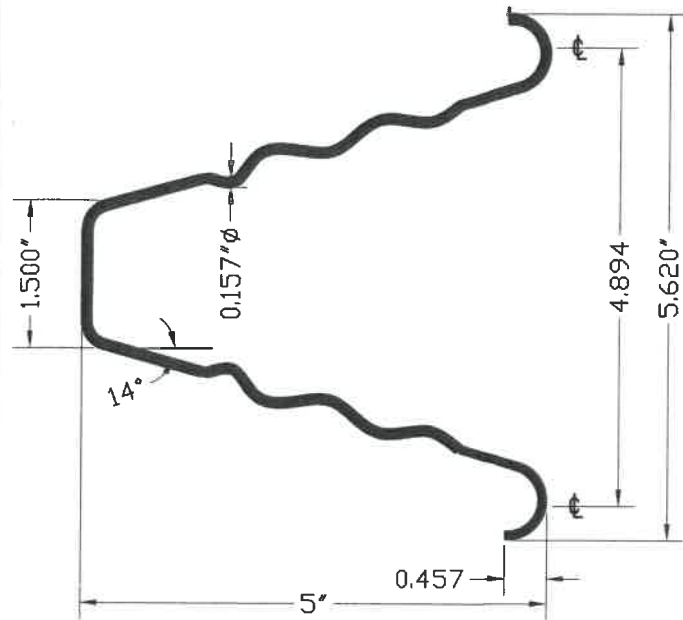
DETAIL #23B
INSTALLATION OF JAMB ① TO
STEEL CHANNEL THRU WELDING ⑨C

* WELD ON INSTALLATION AS FOLLOWS:
9C TOP & BOTTOM OF JAMBS AND @ 12" O.C. THEREAFTER ADDITIONALLY, AT 12" O.C. AT HEAD

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90691
LICENSED PROFESSIONAL ENGINEER
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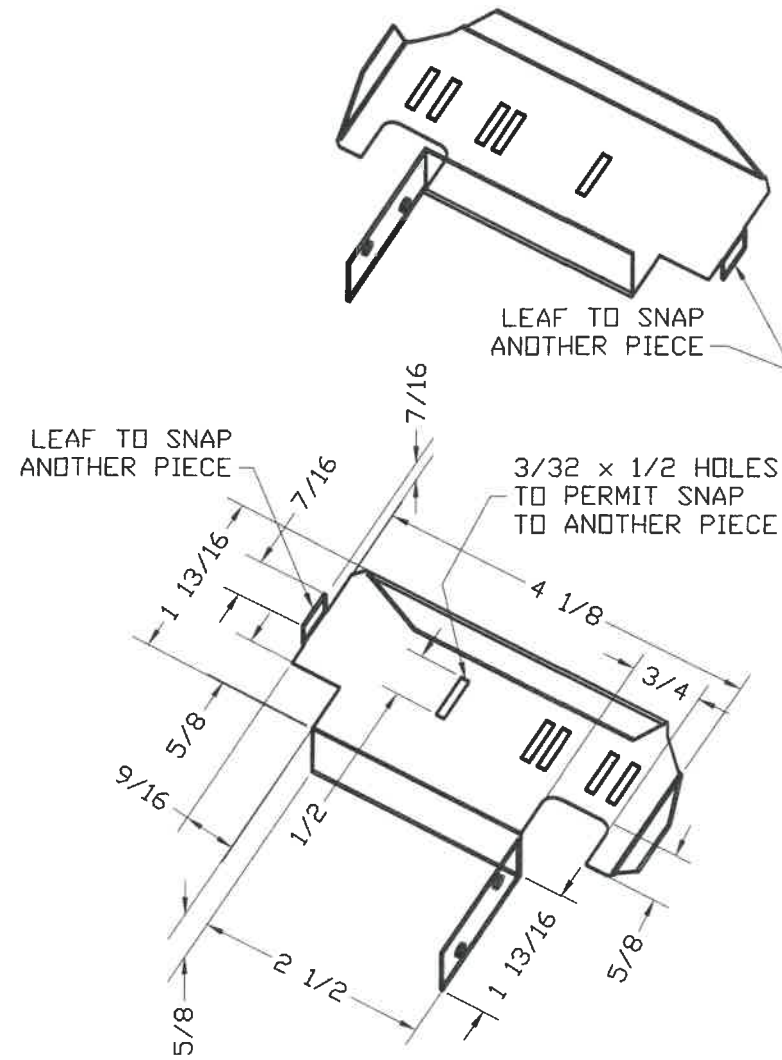
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TEXAS DEPARTMENT OF INSURANCE - 2018					
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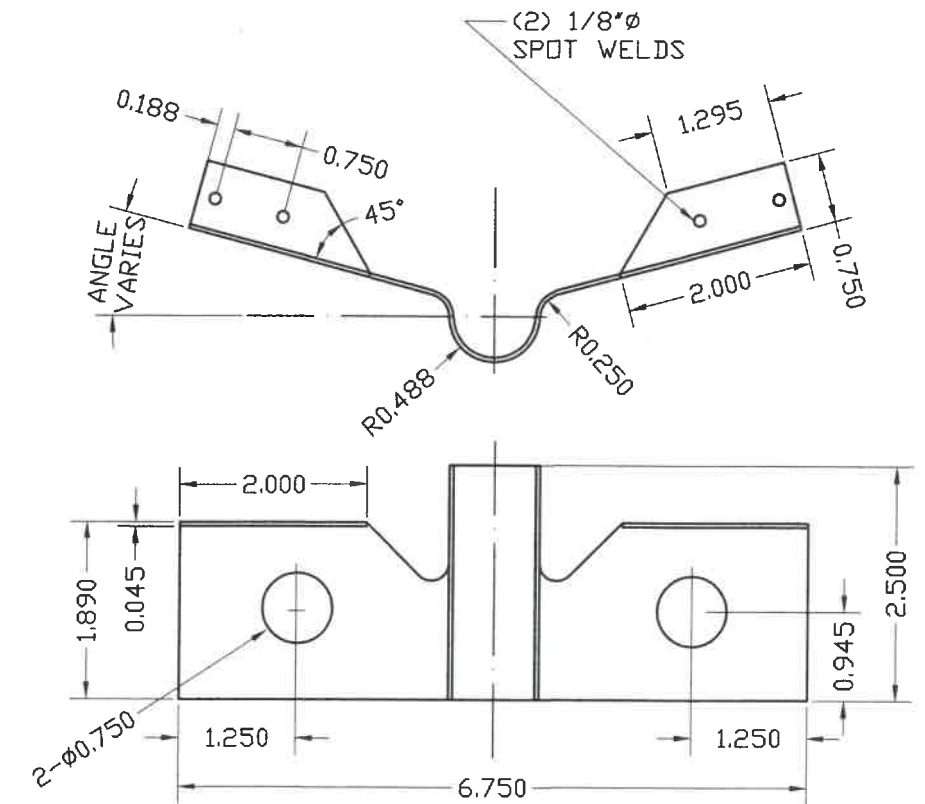
**⑥ WIRE ANCHOR
FOR DETAIL #21/17**

STEEL WIRE ANCHORS
(0.157" DIA, 9 1/2" LONG) IN HORIZ.
Fu Min.=95.9 Ksi, Fy Min.=40.2 Ksi



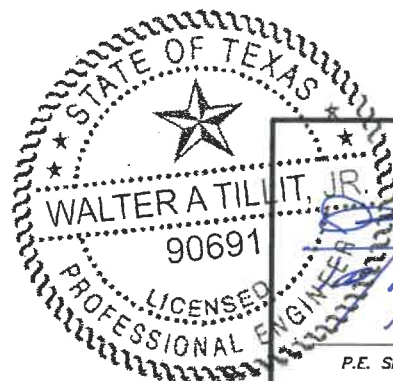
**⑦ 2 PIECES COMBINATION STUD
ANCHOR FOR DETAIL #20/17**

CLIPIN STUD ANCHOR MATERIAL:
GAUGE 20 (0.035) ASTM A-653,
A-60 GALVANNEALED STEEL.



**⑦A EMA BUTTERFLY ANCHOR (PART #PT1-008)
FOR DETAILS 22/17, 22A/17, 22B/17 & 23A/17**

MATERIAL: 18 GA SATIN COAT



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P.E. SEAL/SIGNATURE/DATE

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				21-126 DRAWING No	
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
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2	-	-	4	-	-

BILL OF MATERIALS:

ITEM	QTY	DESCRIPTION	MATERIAL	SIZE AND SPEC'S
①	1	16 GAUGE JAMB/ HEAD FRAME SERIES 'AS'	16 GAUGE .058 MINIMUM. ALL COMPONENTS OF THIS ITEM, I.E., HEAD, JAMBS, REINFORCEMENTS AND ANCHORS ARE COMMERCIAL GALVANIZED STEEL (TYPE B), ASTM A653/A653M, COATING DESIGNATION A40, KNOWN COMMERCIALLY AS PAINTABLE GALVANNEAL W/ MIN. TENSILE STRENGTH 52 KSI, MIN. YIELD STRENGTH 45 KSI, ELONGATION 40%.	5 3/4' DEPTH X 2' FACE X .058' MIN THICK (SEE SHEET 9)
①A	1	16 GAUGE OPTIONAL HEAD FRAME SERIES 'AS'	SAME AS ITEM 1	5 3/4' DEPTH X 4 3/8' FACE X .058' MIN THICK (SEE SHEET 9)
①B	1	SURFACE STRIKE REINFORCING	12 GAGE GALVANNEAL STEEL	12 GAGE (0.097' MIN.) X 1.500' X 11.875' LONG, SEE DETAIL ON SHEET 9.
②	1	18 GAUGE FLUSH/EMBOSSD DDOOR COMMERCIAL W/ CORE ②0	18 GAUGE .045 MINIMUM. ALL COMPONENTS OF THIS ITEM, I.E., FACE SHEETS, INTERNAL COMPONENTS AND REINFORCEMENTS ARE GALVANIZED STEEL CONFORMING TO ASTM A924, TO ASTM A653/A653M, COMMERCIAL STEEL (TYPE B), COATING DESIGNATION A40, KNOWN COMMERCIALLY AS PAINTABLE GALVANNEAL W/TENSILE STRENGTH 60 KSI, AND YIELD STRENGTH 45 KSI, ELONGATION 40%.	1 3/4' THICK X (.045 MIN), SEE SHEET 6.
③	3	8 GAUGE DOOR HINGE REINFORCING	STEEL	1 1/4' X 10' X 8 GAUGE
④	3	8 GAUGE FRAME HINGE REINFORCING	STEEL	1 1/2' X 8 3/4' X 8 GAUGE
⑤	1	STRIKE REINFORCING (FRAME)	STEEL	1 3/8' X 7 5/16' X 14 GAUGE (.072 MIN)
⑤A	1	DEAD LOCK STRIKE TAB	STEEL	2 3/16' X 15/16' X 14 GAUGE (.072 MIN)
⑥	AS REQ'D	WIRE MASONRY FRAME ANCHORS	STEEL W/ MIN. YIELD STRENGTH = 40.2KSI AND MIN. TENSILE STRENGTH = 95.9 KSI	9 1/2' LONG X 0.157' MIN. DIAMETER.
⑦	AS REQ'D	CLIPIN STUD ANCHORS (2 PIECE COMBINATION)	STEEL, ASTM A-653, A-60 GALVANNEAL	1 7/8' X 5 5/8' X 20 GAUGE (.035 MIN) W/ (4)#8 X 1 5/8' WOOD SCREWS
⑦A	AS REQ'D	EMA BUTTERFLY ANCHOR (PART #PT1-008)	STEEL	18 GAUGE STEEL SATIN COAT.
⑧	AS REQ'D	EMA ANCHOR BOLTS	STEEL, W/ Fy = 45,000 psi.	3/8" X 5" STEEL UCAN-SLEEVE ANCHOR
⑨	AS REQ'D	WOOD SCREW LAG BOLT	STEEL, W/ Fy = 45,000 psi.	3/8" X 6"
⑨A	AS REQ'D	CARRIAGE ANCHOR BOLT	STEEL, W/ Fy = 45,000 psi.	3/8"-16 X 6" STEEL CARRIAGE BOLT C/W NUT AND WASHER, PER ASTM A-307
⑨B	AS REQ'D	F.H. M.S. TO STEEL CHANNEL THROUGH BOLTING	STEEL, W/ Fy = 45,000 psi.	3/8" X 3 1/2" STEEL F.H. M.S., PER ASTM A-307
⑨C	AS REQ'D	STEEL CHANNEL WELDING	STEEL, E60XX ELECTRODE	WELD ON INSTALLATION, MIN. 1/8"x3/8" STITCH WELD
⑩	3	HINGES-HAGER BB1279, BB1168HD OR STANLEY FBB179, FBB168	STEEL	MIN. 4" TO 4.5" X 4.5" STANDARD WEIGHT (.134 THK.), ATTACHED TO FRAME W/(4) 12-24x1/2" FHMS.
⑪	1	RIM EXIT: VON DUPRIN 98/99L X CYC X TRIM	AS PER MANUFACTURER'S CATALOG	RIM EXIT ATTACHED TO DDOOR W/(4) 1/4"-20x1" MS.
⑫	1	MORTISE LOCK: SCHLAGE-L9000 SERIES W/ DEAD BOLT	AS PER MANUFACTURER'S CATALOG	MORTISE LOCK ATTACHED W/(2) #12-24x1/2" SREWS.
⑬	1	CYLINDRICAL LOCK: - SCHLAGE D SERIES	AS PER MANUFACTURER'S CATALOG	ATTACHED TO STRIKE PLATE W/(2) 12-24x1/2" SCREWS.
⑭	1	DEAD BOLT: - SCHLAGE B SERIES	AS PER MANUFACTURER'S CATALOG	ATTACHED TO STRIKE PLATE W/(2) 8-32x1/2" SCREWS
⑮	1	VON DUPRIN #9954 REMOVABLE MULLION	0.125" THICK A 500 GRADE B STEEL	SECURED TO 499 STRIKE PLATE WITH (8) 5/16"-18x3/4"(MIN.) MACHINE SCREWS.
⑮A	1	WEATHER STRIP (NATIONAL GUARD PRODUCTS #120NA)	NEOPRENE	SECURED WITH DOUBLE ROW OF #6x1/2" SMS SCREWS @ 1' FROM EACH END AND 4" O.C. (AS PREDRILLED BY MANUFACTURER)
⑮B	1	THRESHOLD (NATIONAL GUARD PRODUCTS #950NA)	EXTRUDED ALUMINUM (6063-T5 ALLOY)	5" X 0.500" X 0.080" THICK, ATTACHED TO SLAB W/ 3/16" X 1 3/4" F. H. TAPCON ANCHORS W/ 1 1/4" MIN. EMBEDMENT LOCATED @ 2 3/4" FROM EACH END AND 10" O. C.
⑰	1	4 1/2" HINGE BAR REINFORCING FOR DOOR	GALVANNEAL STEEL	1.25" X 10" X 0.134" MIN. THICK
⑱	1	DOOR SURFACE BOLT REINFORCING	GALVANNEAL STEEL	14 GAGE (0.074") X 1.687" X 3.500" X 9.000" LONG.
⑱A	AS REQ'D	MODEL 1500-A LOUVER & SECURITY GRILLE	AS PER MANUFACTURER (AIR LOUVERS, INC.)	24" X 24" (MAX.), SEE SHEET 8 FOR DETAILS & COMPONENTS.
⑳	1	0.75" THICK EXPANDED POLYSTYRENE DOOR CORE OR 3/4" CELL PAPER HONEYCOMB.	0.75" THICK DDOOR CORE; EXPANDED POLYSTYRENE SOLID SLAB RIGID BOARD TYPE 1. PCF CONFORMING TO ASTM C578 BY DYPLAST PRODUCTS LLC, OR 3/4" CELL PAPER HONEYCOMB.	BONDED TO FACE SHEET WITH CONTACT ADHESIVE HELMIBOND # 8320-1 APPLICATION RATE OF 7 GRAMS PER SQUARE FOOT ON ALL CORES
㉑	4	8" LONG # 275 D HAGER SURFACE BOLT	STEEL W/ US26D FINISH	ENGAGED TO THE DDOOR AT TOP AND BOTTOM TO HEADER & THRESHOLD RESPECTIVELY & FASTENED TO DDOOR W/ (4) #10-24 X 1 1/2" THRU BOLT EACH CONNECTION.
㉒	AS REQ'D	TAPCON ANCHORS	STEEL	3/16" X 1 3/4"
㉓	1	MORTISE LOCK AND RIM PANIC DEVICE REINFORCEMENT	0.074" MIN. THICK GALVANNEAL STEEL	SEE SHEET 15 FOR SUBCONJUNTS
㉔	1	#161 CYLINDRICAL LOCK AND DEAD BOLT REINFORCEMENT	SATIN COAT STEEL	SEE SHEET 16 FOR DETAILS
㉕	1	DOOR SURFACE CLOSER REINFORCEMENT	0.074" MIN. THICK GALVANNEAL STEEL	14 GAGE (0.074" MIN.) X 3 1/2" X 1.6875 X 16.250" LONG.
㉖	1	DOOR TOP/ BOTTOM END CHANNEL	16 GAGE GALVANNEAL STEEL	16 GAGE (0.057" MIN.) X 1.8125" X 1.4375.
㉗	1	*Z* ASTRAGAL	0.075" MIN. THICK A 500 GRADE B STEEL	0.075" MIN. THICK X 2.00" X (2)0.625" X 84" LONG.
㉘	1	DOOR SNAP IN TOP CAP	20 GAGE GALVANNEAL STEEL ASTM A-653, A-60	SEE SHEET 14 FOR SIZES
㉙	AS REQ'D	CAULKING: GE SILICONE II	N/A	
㉚	AS REQ'D	995 DOW CORNING STRUCTURAL SILICONE	N/A	
㉛	1.	STRIKE FOR RIM EXIT DEVICE ⑪	0.125" THICK, STEEL, PAINTED FINISH	SEE SHEET 9A FOR SIZES
㉜	1	STRIKE FOR DEAD BOLT ⑭	0.095" THICK, STEEL, NICKEL FINISH	SEE SHEET 9A FOR SIZES
㉝	1	STRIKE FOR CILINDRICAL LOCK ⑬	0.095" THICK, STEEL, NICKEL FINISH	SEE SHEET 9A FOR SIZES
㉞	1	STRIKE FOR MORTISE LOCK ⑫	0.095" THICK, STEEL, NICKEL FINISH	SEE SHEET 9A FOR SIZES



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 FIRM REGISTRATION # F-13790

TEXAS DEPARTMENT OF INSURANCE - 2018					
DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL STEEL DOOR W/SERIES "AS" 16 GAGE STEEL FRAME LOUVERED ASSEMBLIES.				DRAWN BY: M.P.	
DAYBAR INDUSTRIES LTD				9/30/2021 DATE	
50 WEST DRIVE, BRAMPTON, ON CANADA, L6T 2J4 TEL: 905 625-8000 FAX: 905 625-4204				21-126 DRAWING No	
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 17-057	9/30/21	3	-	-
2	-	-	4	-	-