

GENERAL NOTES AND SPECIFICATIONS:

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

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 2, 3 & 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 HTL LAB 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 THE ABOVE MENTIONED BUILDING CODE 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 3.5 Ksi MINIMUM YIELD STRENGTH.

5. ALL WELDING TO CONFORM W/AMERICAN WELDING SOCIETY A.W.S. D.1.3 AND D-19.0 REGULATIONS WITH E60XX ELECTRODES, FOR GALVANNEAL MATERIAL, AND W/AMERICAN WELDING SOCIETY A.W.S. D.1.6 REGULATIONS W/ E-308 ELECTRODES (FU=80k.s.i.) FOR STAINLESS STEEL MATERIAL

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. THESE DOOR ASSEMBLIES ARE APPROVED FOR WATER AND AIR INFILTRATION AS PER TESTING INDICATED ON NOTE 1, AND SHALL BE LIMITED TO DESIGN PRESSURE RATINGS INDICATED ON SHEETS 2, 3 & 3A.

10. 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.

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

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

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 REGISTERED PROFESSIONAL ENGINEER OR ARCHITECT WHO 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.

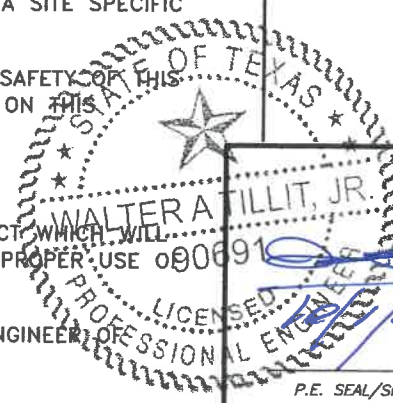
(e) ORIGINAL P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.

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:

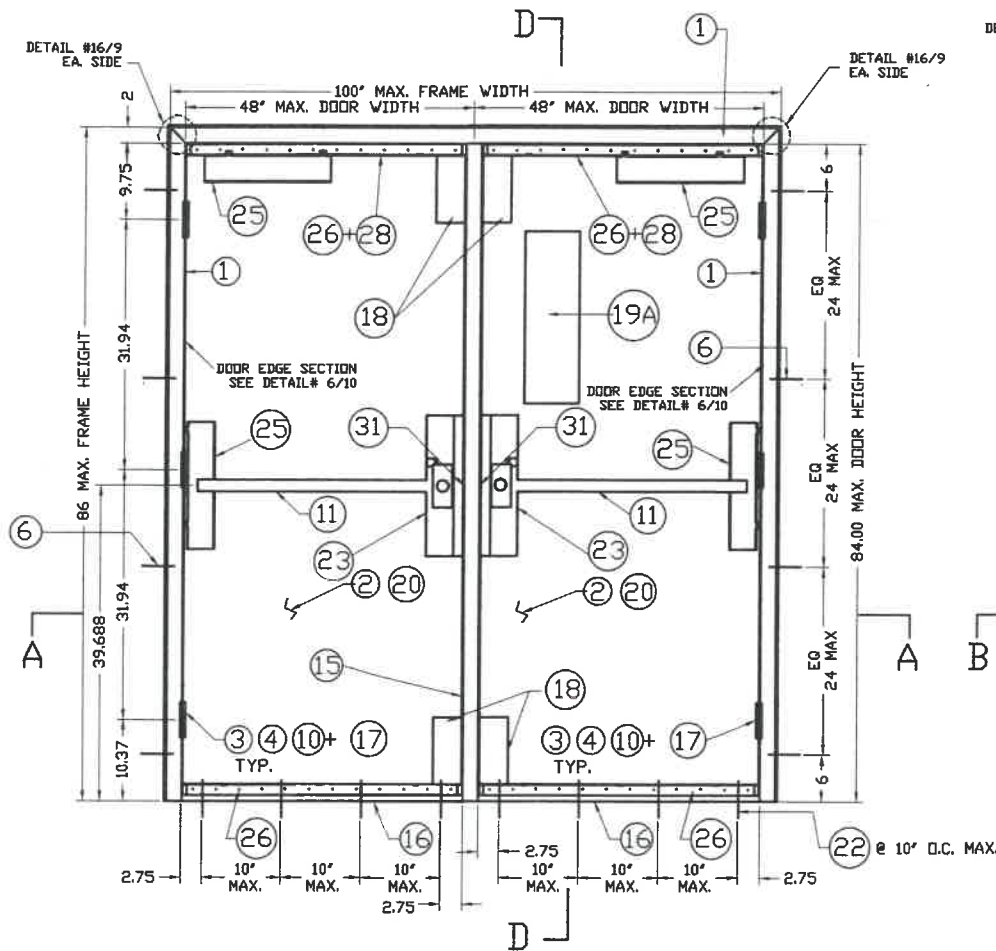
- SHEET #1 INDEX, COVER SHEET & GENERAL NOTES
- SHEET #2 ASSEMBLY ELEVATIONS No 1, 2, 3.
- SHEET #3 ASSEMBLY ELEVATIONS No 7, 7-EMB.
- SHEET #3A MAX. DESIGN PRESSURE RATING (psf.) SCHEDULE.
- SHEET #4 OPTIONAL EMBOSSSED DOOR SHEET CONFIGURATIONS.
- SHEET #5 HORIZONTAL SECTIONS A-A & B-B.
- SHEET #6 HORIZONTAL SECTIONS C-C & C'-C'.
- SHEET #7 VERTICAL SECTIONS D-D, E, F, G, H, I AND HORIZONTAL SECTION J-J
- SHEET #8 DAYBAR & AIR LOUVERS VISION LITE DETAILS.
- SHEET #9 FRAME SECTIONS, & REINFORCINGS 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 PIECE COMBINATION STUD ANCHOR DETAIL.
EMA BUTTERFLY ANCHOR DETAIL.
- SHEET #19 BILL OF MATERIALS.

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



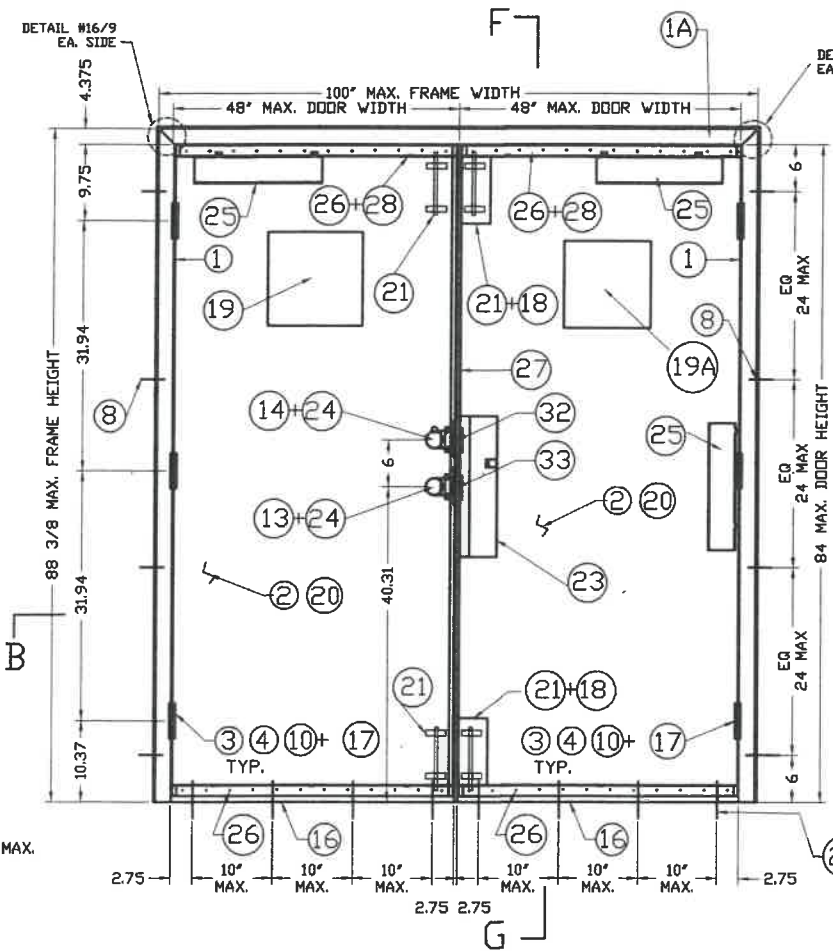
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FIRM REGISTRATION # F-13790

TEXAS DEPARTMENT OF INSURANCE - 2018					
DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL GALVANNEAL OR STAINLESS STEEL DOOR W/ SERIES "AS" 16 GAGE GALVANNEAL OR STAINLESS STEEL FRAME FLUSH, EMBOSSSED & GLAZED ASSEMBLIES - L.M.					DRAWN BY: M.P.
DAYBAR INDUSTRIES LTD					10/1/2021 DATE
50 WEST DRIVE, BRAMPTON, ON CANADA, L6T 2J4 TEL: 905 625-8000 FAX: 905 625-4204					21-129 DRAWING No
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 17-080	10/1/21	3	-	-
2	-	-	4	-	-



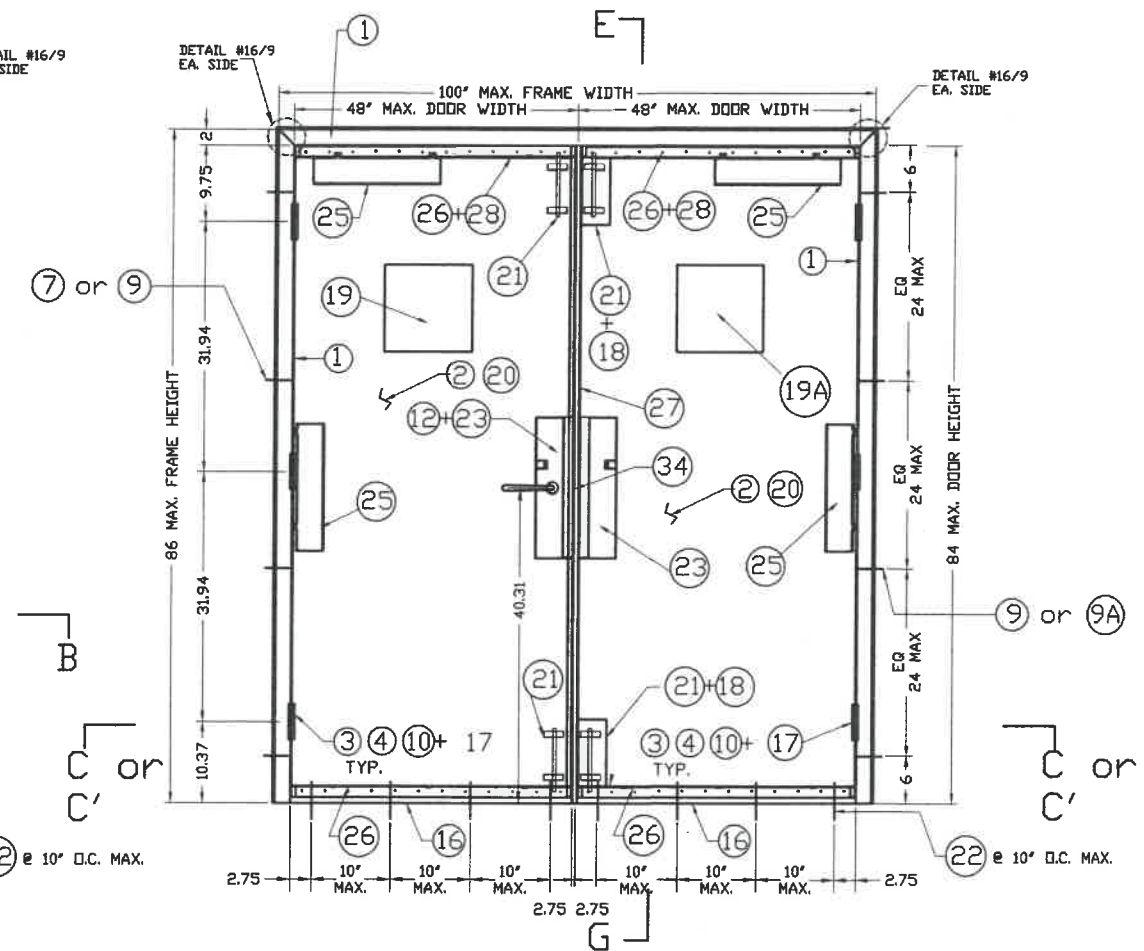
ASSEMBLY #1, * INTERIOR ELEVATION
 PAIR OF OUTSWING DOORS
 WALL CONDITION: MASONRY
 ANCHORS: WIRE (6) DETAIL #21
 VON DUPRIN 98/99L TRIM SERIES RIM EXIT (11)
 AT BOTH DOORS
 4 1/2" HAGER MODEL #BB1168 STEEL BUTT HINGE AND
 4 1/2" STANLEY MODEL #FB1168 STEEL BUTT HINGE (10)
 VON DUPRIN 9954 REMOVABLE MULLION (15)
 (FOR DOUBLE DOOR ONLY)
 DOOR CORE ITEM (20): EXPANDED POLYSTYRENE OR HONEYCOMB
 PAPER FULL FLUSH
 VISION LITE MODEL VLF-EZ-IG (19A) BY AIR LOUVERS, INC.,
 W/ 1/2" LEXAN GLAZING SET IN DOW CORNING #995
 STRUCTURAL SILICONE W/ 7" x 22" DOOR CUT-OUT
 NARROWLITE (5'x20" D.L.O.)

MAX. DESIGN PRESSURE RATINGS (OUTSWING SINGLE & DOUBLE DOORS W/ VON DUPRIN RIM PANIC DEVICES)	
POSITIVE	+70 PSF
NEGATIVE	-65 PSF



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
 VISION LITE MODEL VLF-EZ-IG (19A) BY AIR LOUVERS, INC.
 W/ 1/2" LEXAN GLAZING SET IN DOW CORNING #995
 STRUCTURAL SILICONE W/ 12" x 12" DOOR CUT-OUT
 NARROWLITE (10"x10" D.L.O.), AND DAYBAR VISION LITE (19)
 WITH 3/8" LEXAN GLAZING SET IN DOW CORNING #995
 STRUCTURAL SILICONE, W/ 11 1/8" x 11 1/8" DOOR
 CUT-OUT NARROWLITE (9 3/4"x9 3/4" D.L.O.)

MAX. DESIGN PRESSURE RATINGS (OUTSWING SINGLE DOOR W/ TWO SURFACE BOLTS & DOUBLE DOORS W/ FOUR SURFACE BOLTS)	
POSITIVE	+65 PSF
NEGATIVE	-65 PSF



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-L 9000 SERIES MORTISE LOCK (13) (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
 VISION LITE MODEL VLF-EZ-IG (19A) BY AIR LOUVERS, INC.
 W/ 1/2" LEXAN GLAZING SET IN DOW CORNING #995
 STRUCTURAL SILICONE W/ 12" x 12" DOOR CUT-OUT
 NARROWLITE (10"x10" D.L.O.), AND DAYBAR VISION LITE (19)
 WITH 3/8" LEXAN GLAZING SET IN DOW CORNING #995
 STRUCTURAL SILICONE, W/ 11 1/8" x 11 1/8" DOOR
 CUT-OUT NARROWLITE (9 3/4"x9 3/4" D.L.O.)

MAX. DESIGN PRESSURE RATINGS (OUTSWING SINGLE DOOR W/ TWO SURFACE BOLTS & DOUBLE DOORS W/ FOUR SURFACE BOLTS)	
POSITIVE	+65 PSF
NEGATIVE	-65 PSF

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

- SEE SHEET 3A FOR MAXIMUM DESIGN PRESSURE RATING
 SCHEDULE FOR ASSEMBLY COMBINATIONS.

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

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TEXAS DEPARTMENT OF INSURANCE - 2018

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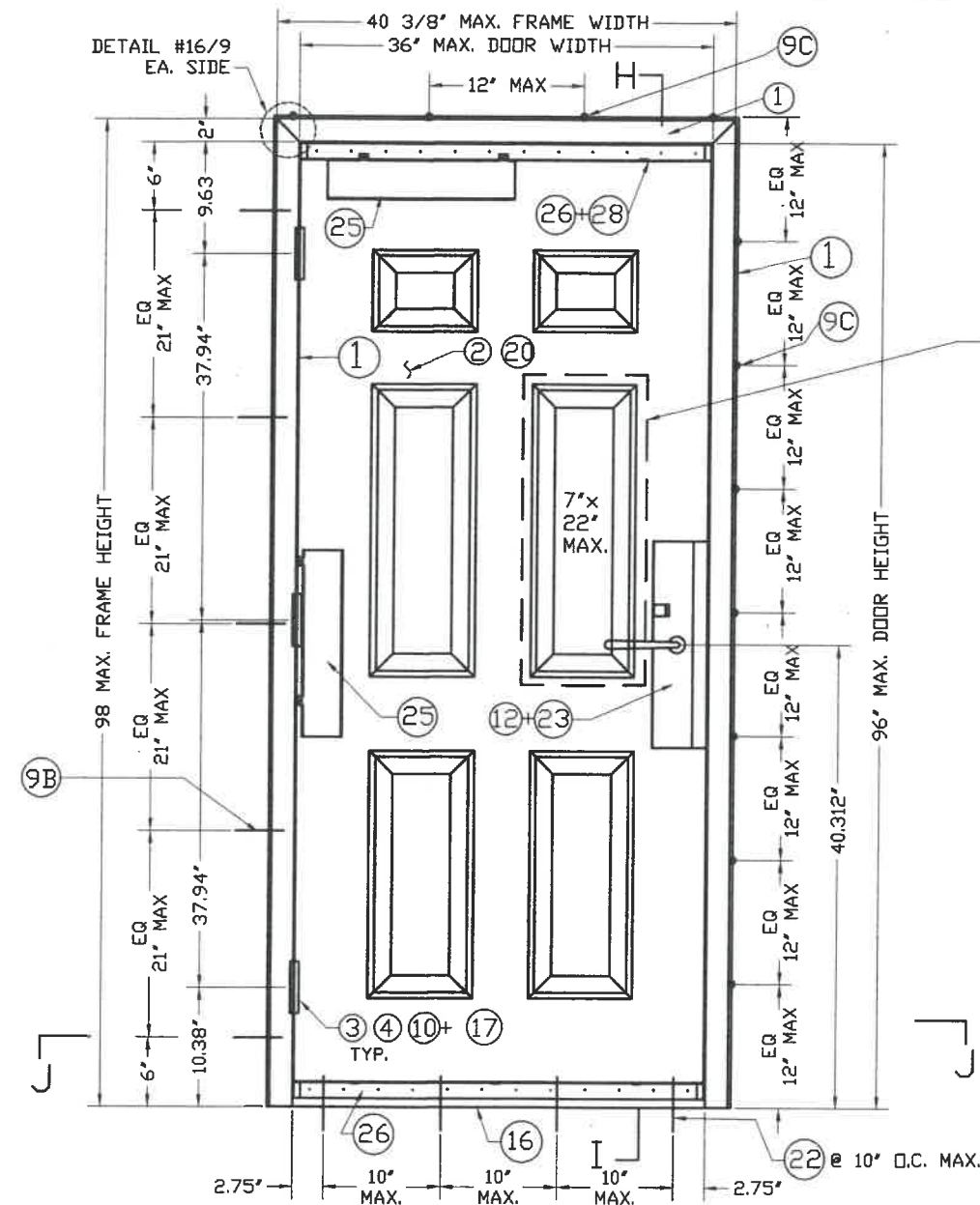
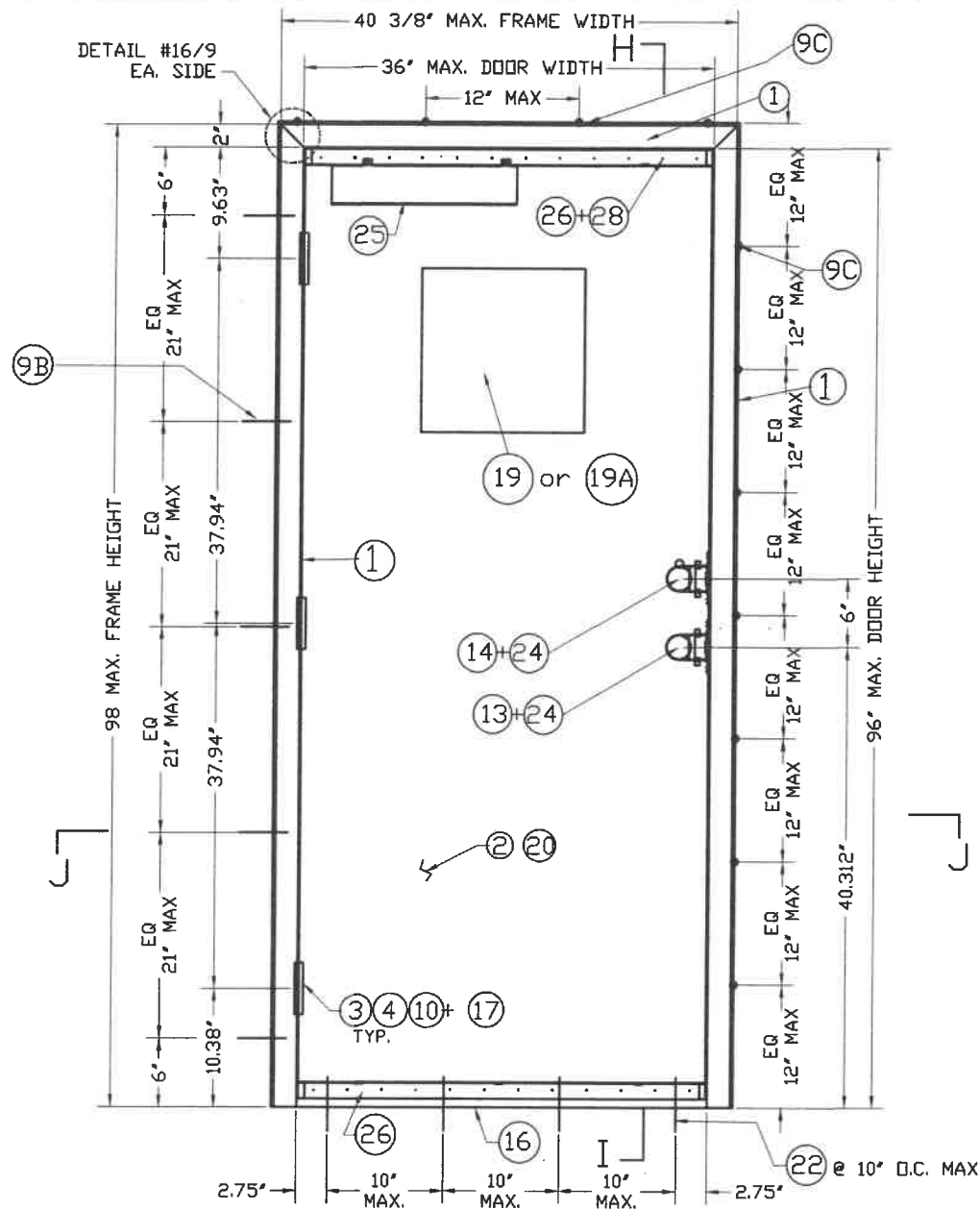
DAYBAR INDUSTRIES LTD

50 WEST DRIVE, BRAMPTON, ON CANADA, L6Y 2J4
 TEL: 905 625-8000 FAX: 905 625-4204

DRAWN BY: M.P.
 10/1/2021 DATE
21-129
 DRAWING No

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2	-	-	4	-	-

SHEET 2 OF 19



19 OR 19A LITES ARE PERMITTED ON EMBOSSED DOORS PROVIDED THAT LITE'S MOUNTING FLANGE MUST HAVE FULL FLUSH CONTACT WITH FLAT PORTION OF DOOR SKIN. SEE DETAILS ON SHEET 8/19

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 VISION LITE MODEL VLF-EZ-IG (19A) BY AIR LOUVERS, INC. W/ 1/2" LEXAN GLAZING SET IN DOW CORNING #995 STRUCTURAL SILICONE W/ 12" x 12" DOOR CUT-OUT NARROWLITE (10"x10" D.L.O.) AND DAYBAR VISION LITE (19) WITH 3/8" LEXAN GLAZING SET IN DOW CORNING #995 STRUCTURAL SILICONE, W/ 11 1/8" x 11 1/8" DOOR CUT-OUT NARROWLITE (9 3/4"x9 3/4" D.L.O.).

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

MAX. DESIGN PRESSURE RATINGS (OUTSWING SINGLE DOORS WITHOUT SURFACE BOLTS)	
POSITIVE	+65 PSF
NEGATIVE	-53.3 PSF

MAX. DESIGN PRESSURE RATINGS (OUTSWING SINGLE DOORS WITHOUT SURFACE BOLTS)	
POSITIVE	+65 PSF
NEGATIVE	-53.3 PSF

ASSEMBLY ELEVATIONS #7, 7-EMB
SEE SECTIONS ON SHEET 7

- SEE SHEET 3A FOR MAXIMUM DESIGN PRESSURE RATING SCHEDULE FOR ASSEMBLY COMBINATIONS.



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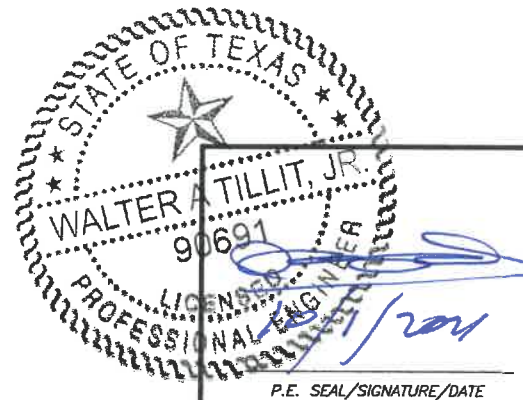
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MAX. DESIGN PRESSURE RATING (psf.) SCHEDULE FOR INSTALLATIONS COMBINING ASSEMBLIES #1 THRU #7-EMB BETWEEN EACH OTHER FOR A GIVEN ANCHOR JAMB TYPE *

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)	+70, -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

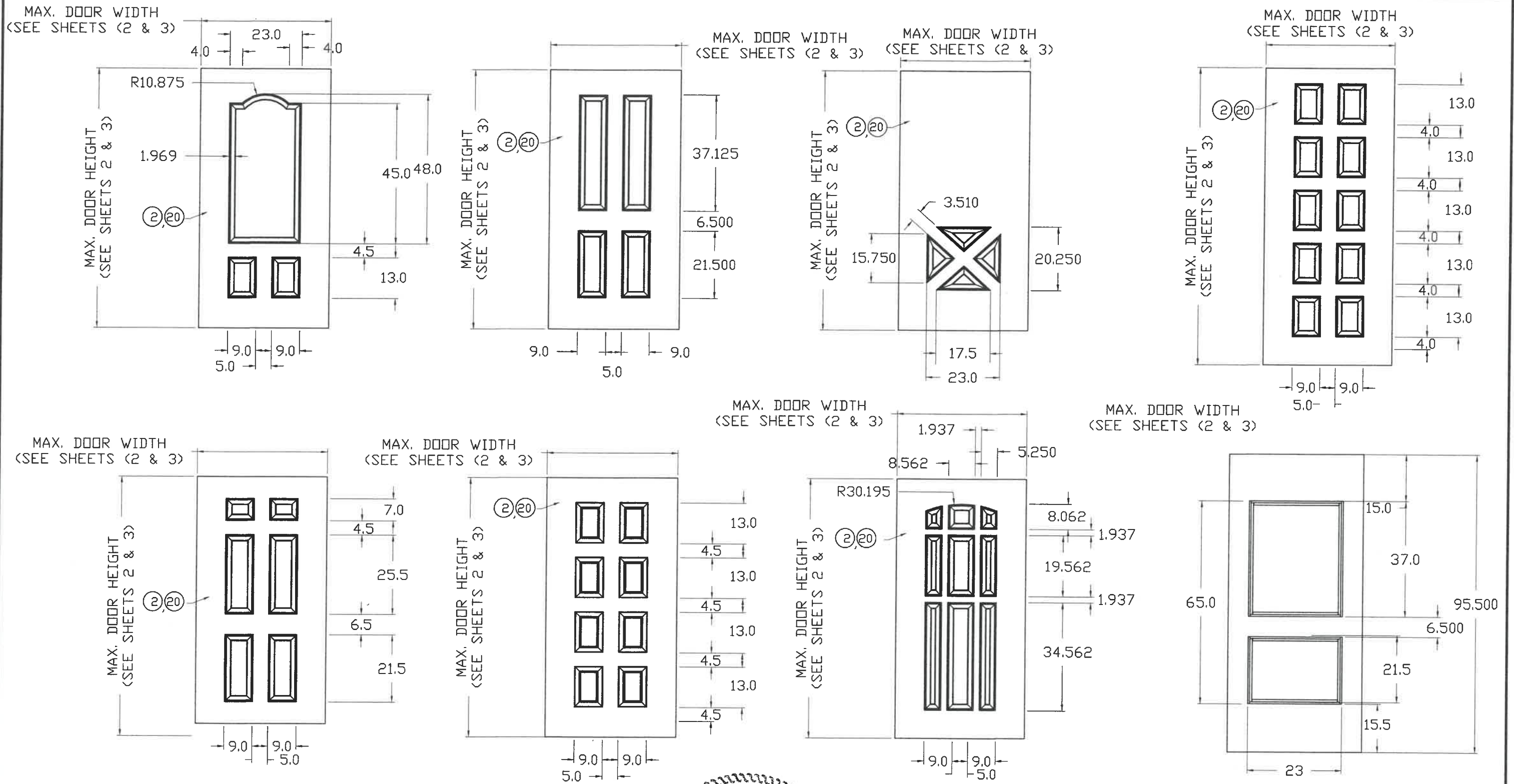
* NOTES ON FRAME HEAD REQUIREMENTS

1. 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.
2. 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.
3. 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.



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OPTIONAL EMBOSSED DOOR SKAB SHEET CONFIGURATIONS

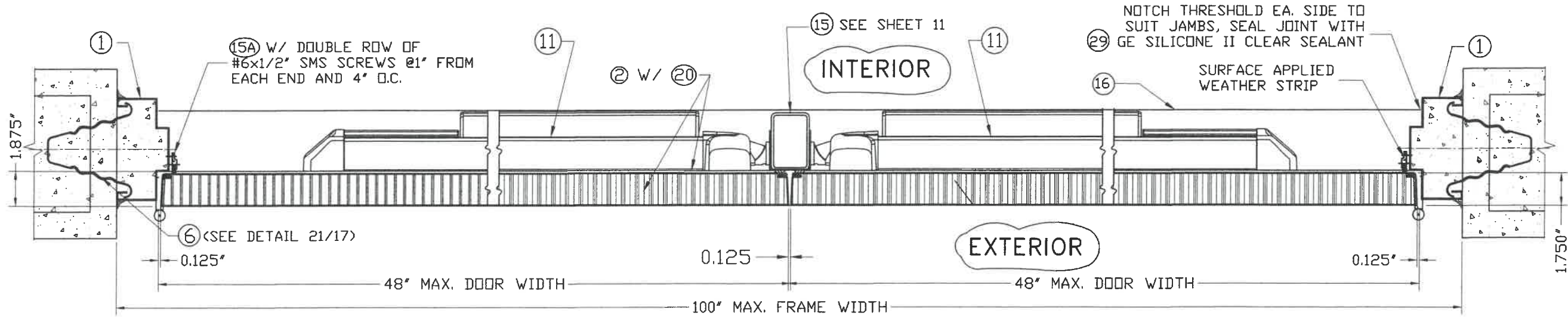
NOTE:
 EMBOSSED DOORS PERMITTED IN
 SINGLES & PAIRS LIMITED TO DESIGN
 PRESSURES NOTED FOR EACH ASSEMBLY

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

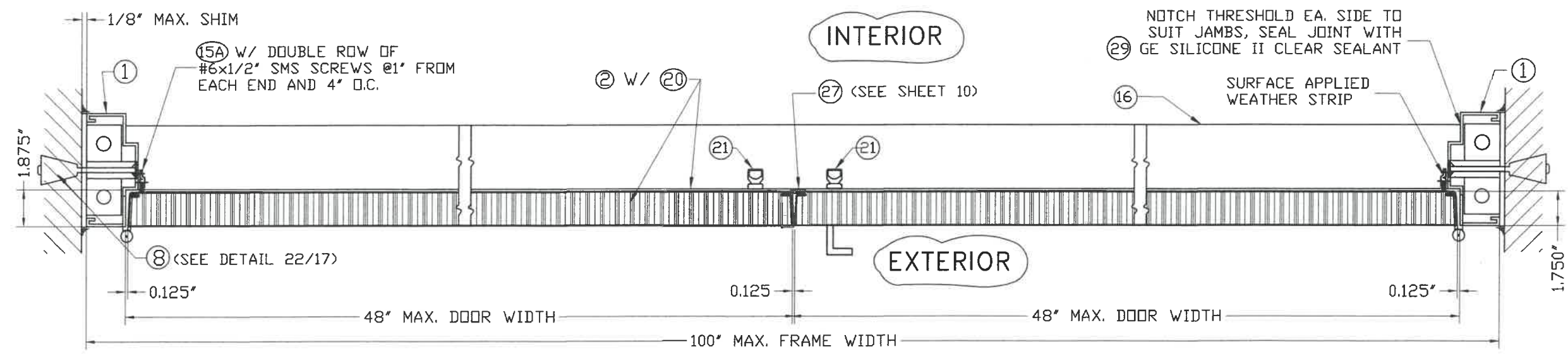
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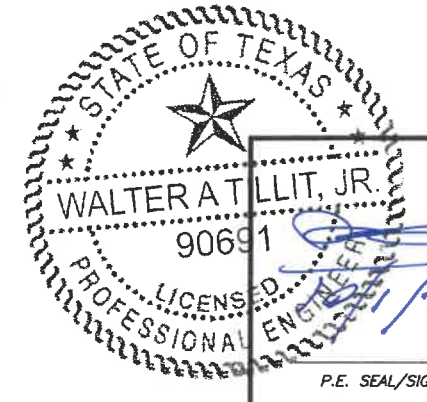
SHEET 4 OF 19



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



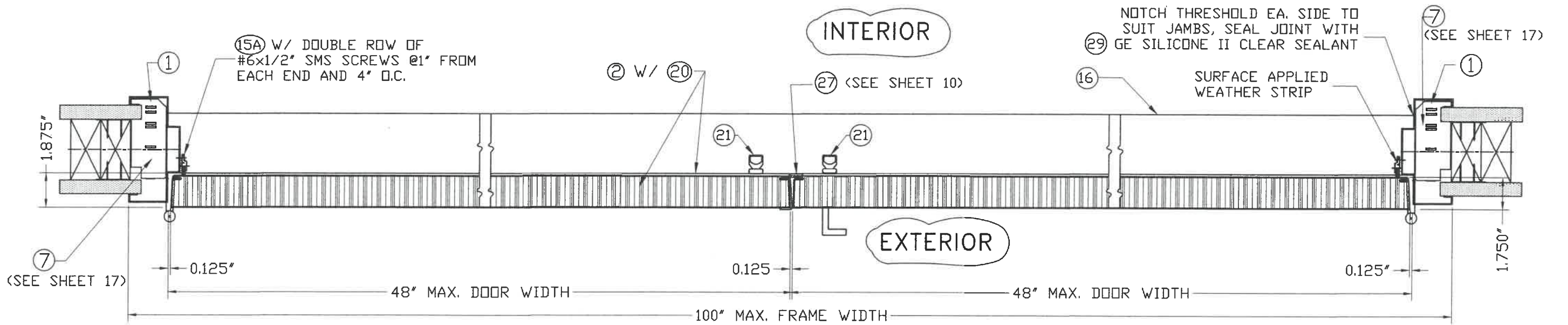
SECTION B-B
SCALE: 3/16"=1"



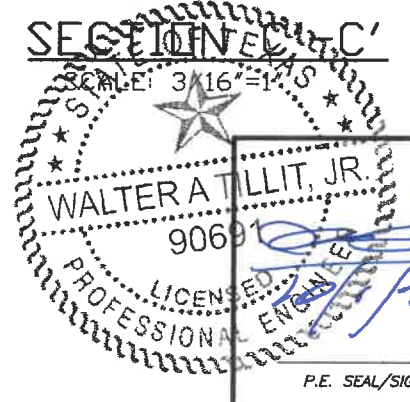
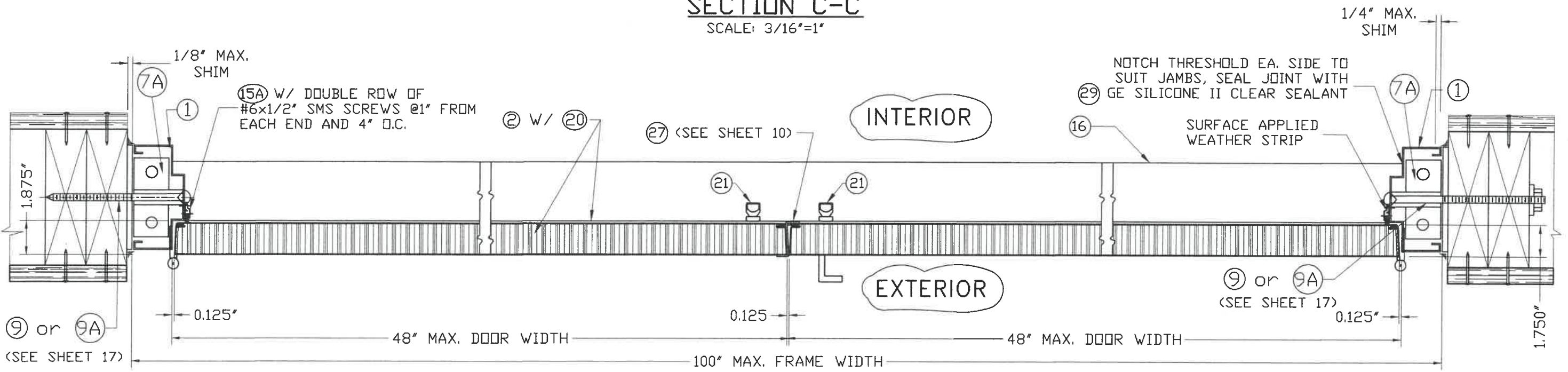
WALTER A. TILLIT Jr P.E.
PROFESSIONAL ENGINEER
6355 N.W. 36 STREET, STE. 305
VIRGINIA GARDENS, FL 33166
PHONE(305) 871-1530 FAX (305) 871-1531
TEXAS LIC. # 90691
FIRM REGISTRATION # F-13790

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TEXAS DEPARTMENT OF INSURANCE - 2018					
DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL GALVANNEAL OR STAINLESS STEEL DOOR W/ SERIES "AS" 16 GAGE GALVANNEAL OR STAINLESS STEEL FRAME FLUSH, EMBOSSED & GLAZED ASSEMBLIES - L.M.				DRAWN BY: M.P.	
DAYBAR INDUSTRIES LTD				10/1/2021 DATE	
50 WEST DRIVE, BRAMPTON, ON CANADA L6T 2J4 TEL: 905 625-8000 FAX: 905 625-4204				21-129 DRAWING No	
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 17-060	10/1/21	3	-	-
2	-	-	4	-	-



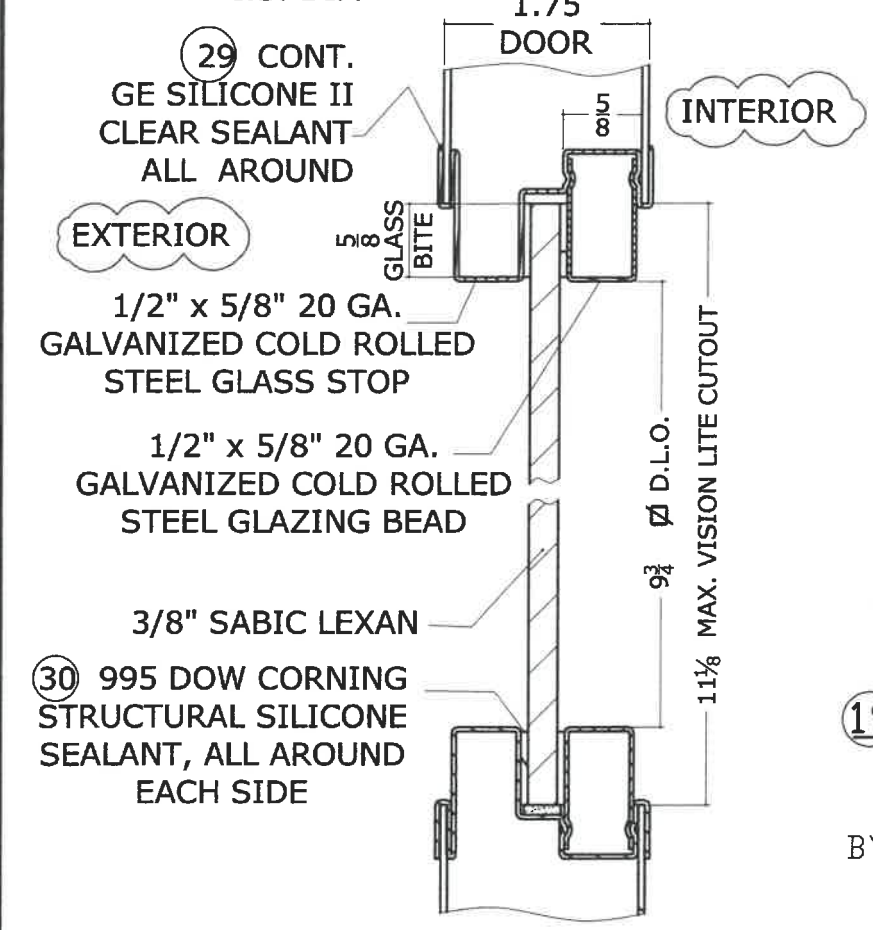
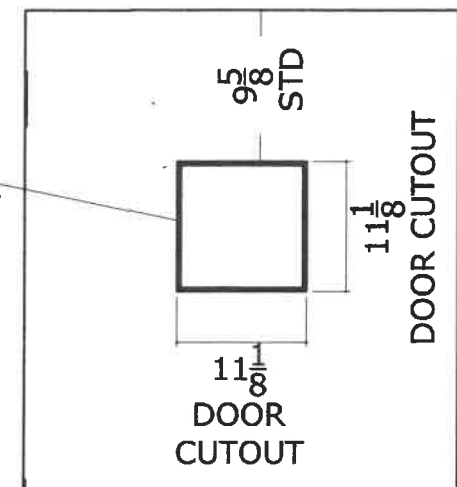
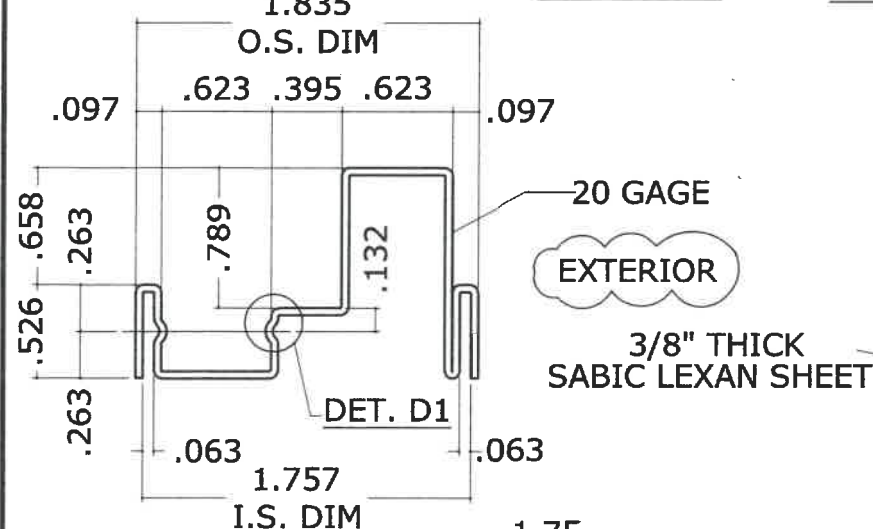
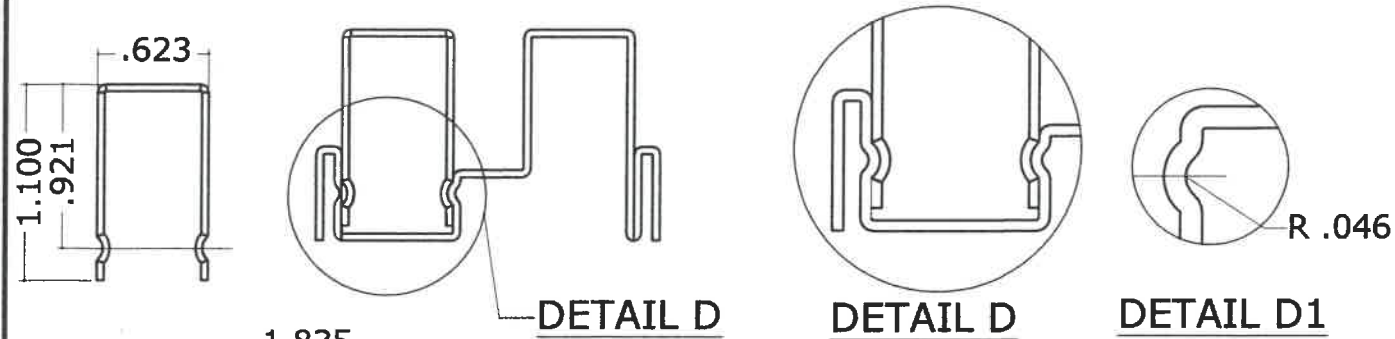
SECTION C-C
SCALE: 3/16"=1"



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

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TEXAS LIC. # 90691
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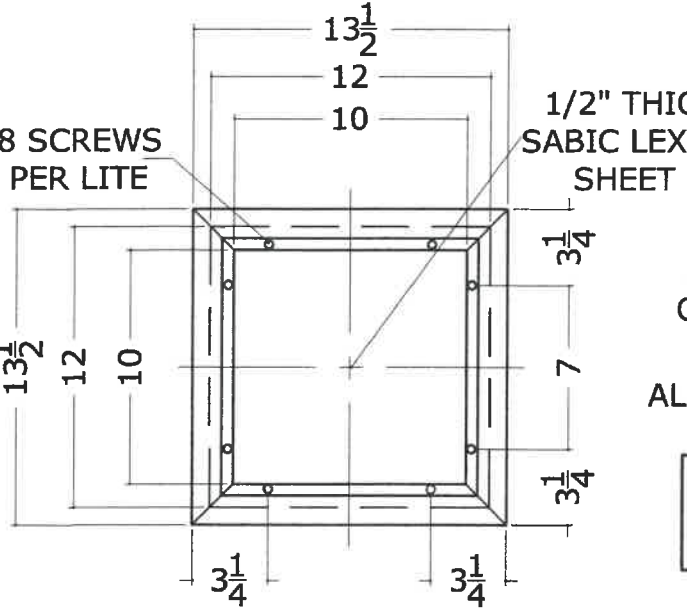
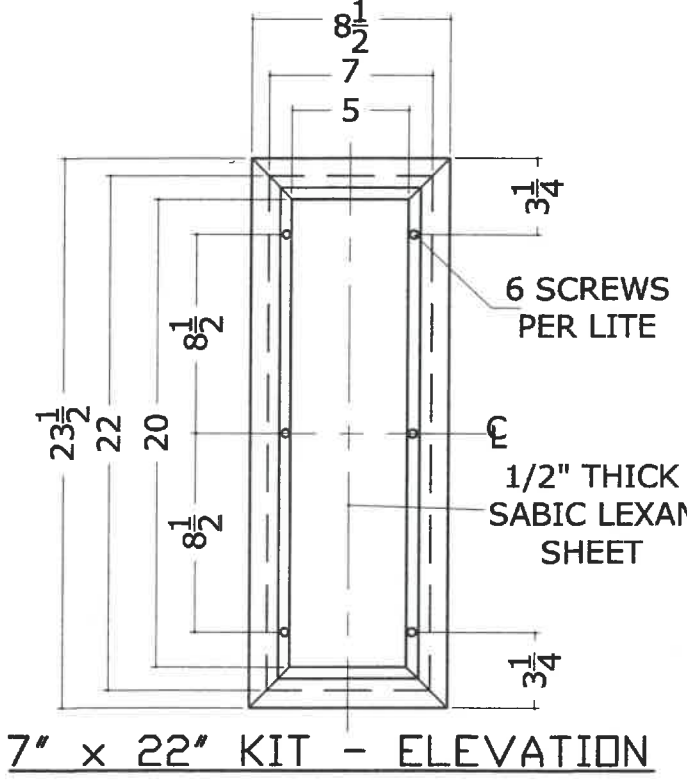
TEXAS DEPARTMENT OF INSURANCE - 2018					
DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL GALVANNEAL OR STAINLESS STEEL DOOR W/ SERIES "AS" 16 GAGE GALVANNEAL OR STAINLESS STEEL FRAME FLUSH, EMBOSSED & GLAZED ASSEMBLIES - L.M.				DRAWN BY: M.P.	
DAYBAR INDUSTRIES LTD				10/1/2021 DATE	
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REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
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2	-	-	4	-	-



SEE ELEVATION FOR MAX. A.S.D. DESIGN PRESSURE RATING ON SHEET 2 & 3

19 3/8" LEXAN GLAZED VISION LITE

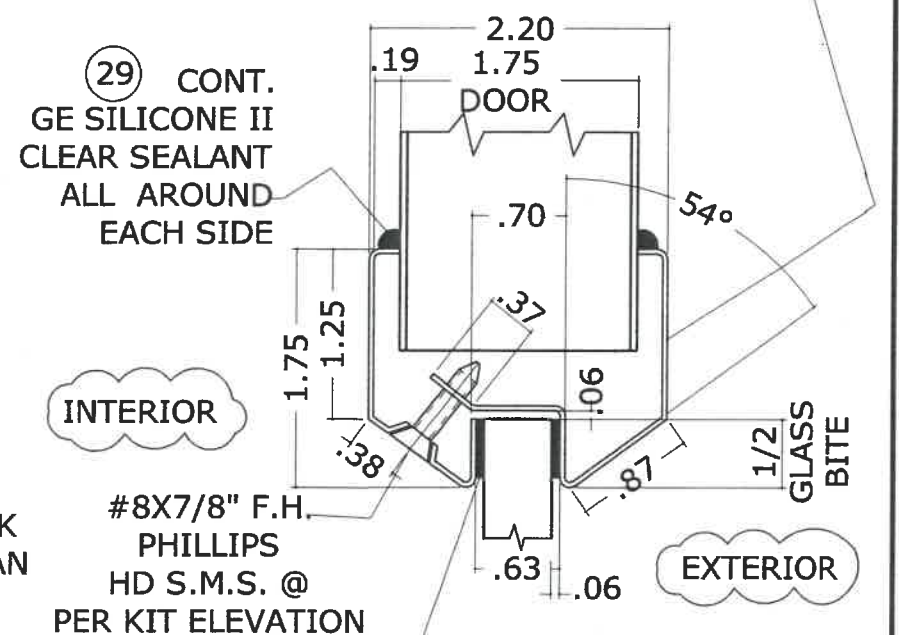
MANUFACTURED BY DAYBAR INDUSTRIES, L



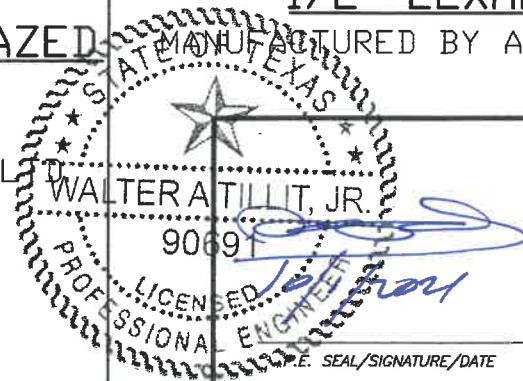
19A VLF-EZ-IG VISION LITES 1/2" LEXAN GLAZED

MANUFACTURED BY AIR LOUVERS, INC.

MATERIAL SPECIFICATIONS:
 20 GAGE CRS FRAME W/ A MINERAL BRONZE BAKED ON POWDER COAT.



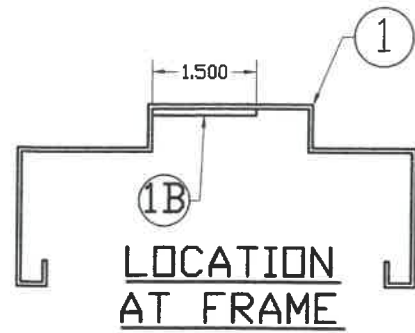
SEE ELEVATION FOR MAX. DESIGN PRESSURE RATING ON SHEET 2 & 3



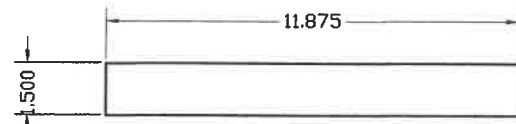
WALTER A. TILLIT Jr P.E.
 PROFESSIONAL ENGINEER
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 VIRGINIA GARDENS, FL 33166
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 TEXAS LIC. # 90691
 FIRM REGISTRATION # F-13790

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1	OLD 17-060	10/1/21	3	-	-
2	-	-	4	-	-

3/8" GE LEXAN GLAZING DETAIL

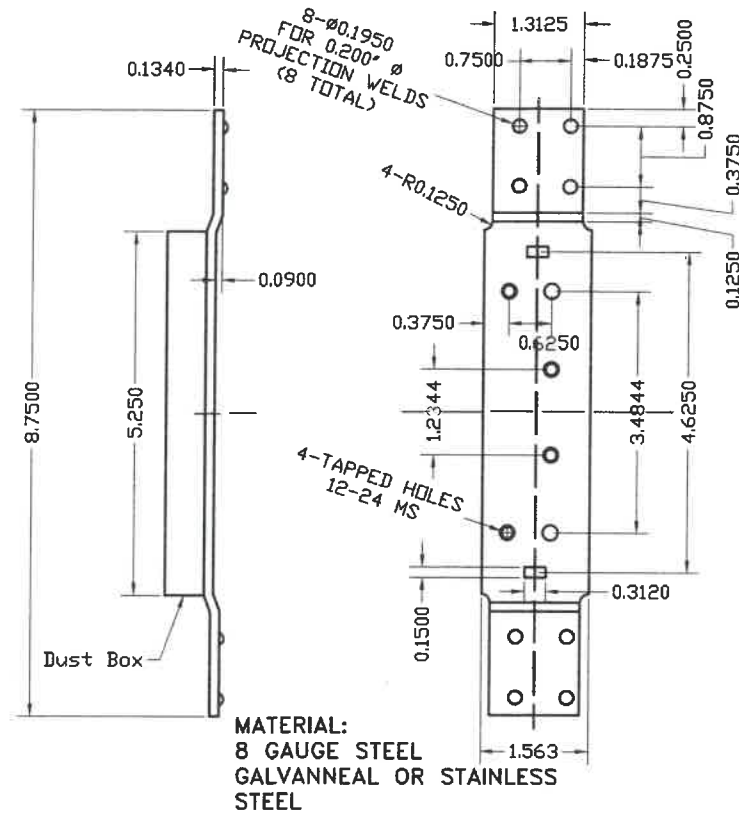


1B LOCATION AT FRAME



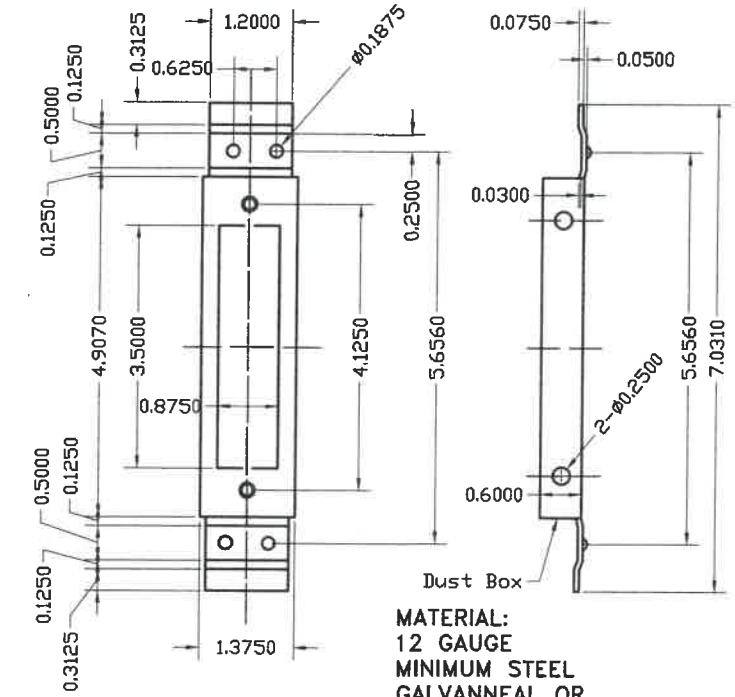
1B SURFACE STRIKE REINFORCING

MATERIAL:
GAUGE 12 MINIMUM (0.097 THICK) GALVANNEAL OR STAINLESS STEEL ATTACHED W/(2) LONG MIC WELDS ONE/END.



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

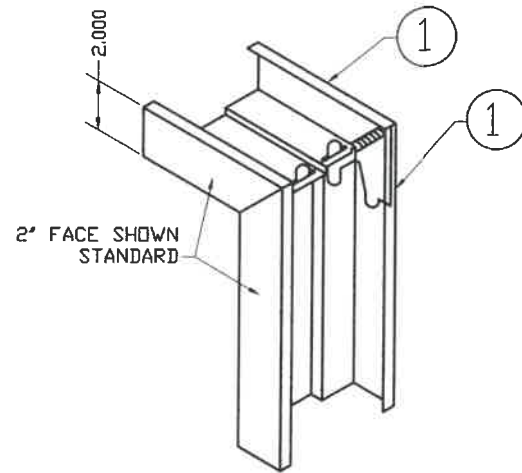
MATERIAL:
8 GAUGE STEEL GALVANNEAL OR STAINLESS STEEL



5 4 7/8" STRIKE REINFORCEMENT FOR FRAME DETAIL

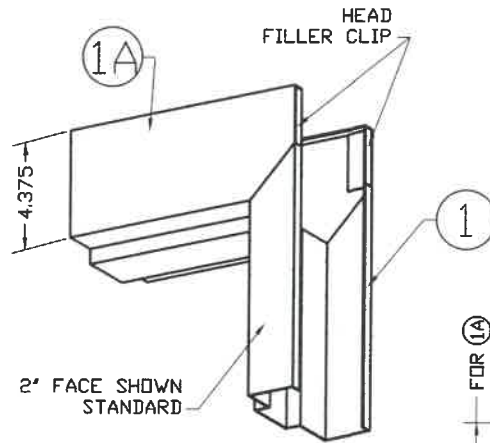
MATERIAL:
12 GAUGE MINIMUM STEEL GALVANNEAL OR STAINLESS STEEL

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



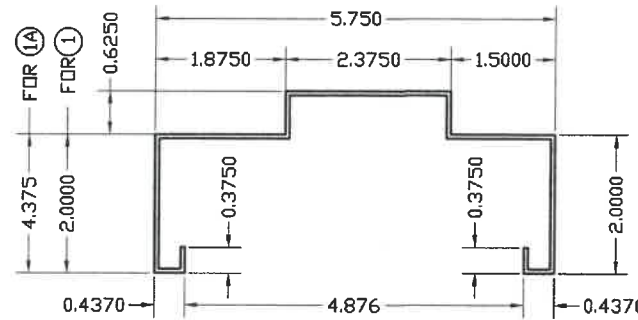
1. DIE MITERED CORNER CONT. WELDED INSIDE FACES & AT RETURNS
2. CAULK COMPLETE INSIDE CORNER WITH (29) GE SILICONE II

DETAIL 16
TYPICAL WELDED CORNER

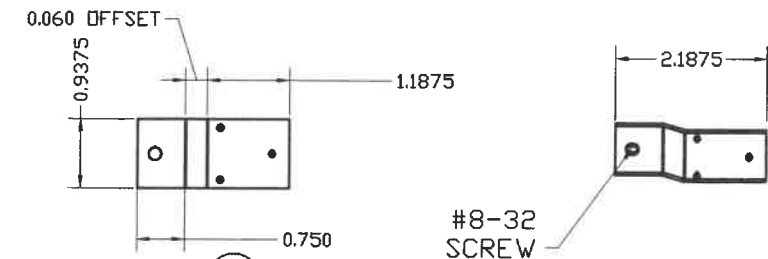


1 TYPICAL JAMB & HEAD SECTION

1A OPTIONAL HEAD SECTION

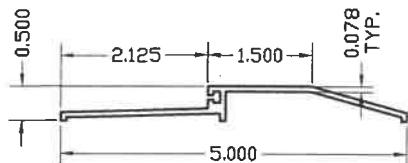


MATERIAL:
GAUGE 16 MINIMUM (.058) GALVANNEAL OR STAINLESS STEEL



5A DEAD LOCK STRIKE TAB
14 GA (.072) MIN GALVANNEAL OR STAINLESS STEEL

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



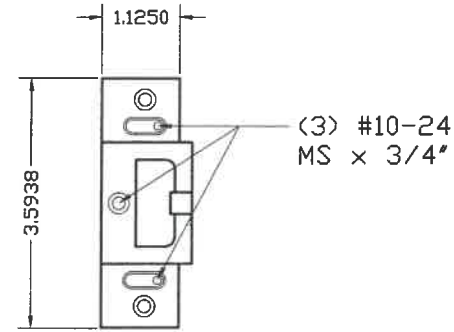
16 EXTRUDED ALUMINUM THRESHOLD NGP #950NA

FRAME SECTIONS AND REINFORCING DETAILS

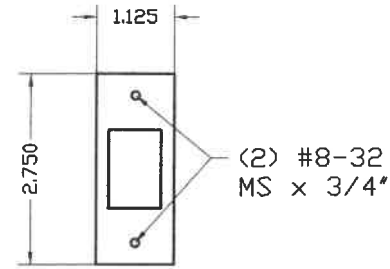
STATE OF TEXAS
WALTER A. TILLIT, JR.
90691
LICENSED PROFESSIONAL ENGINEER
SEAL/SIGNATURE/DATE

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

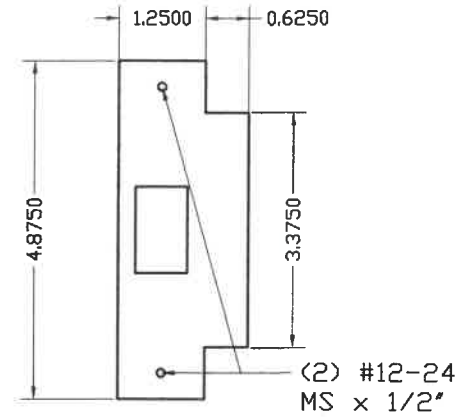
TEXAS DEPARTMENT OF INSURANCE - 2018					
DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL GALVANNEAL OR STAINLESS STEEL DOOR W/ SERIES "AS" 16 GAGE GALVANNEAL OR STAINLESS STEEL FRAME FLUSH, EMBOSSED & GLAZED ASSEMBLIES - L.M.					DRAWN BY: M.P.
DAYBAR INDUSTRIES LTD					10/1/2021 DATE
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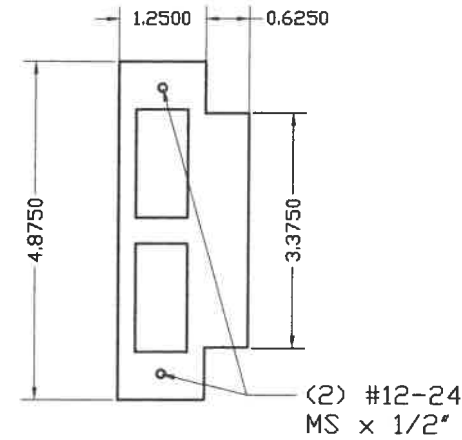
31 STRIKE FOR RIM EXIT DEVICE (11)
 MATERIAL: (0.125") Steel, Painted Finish



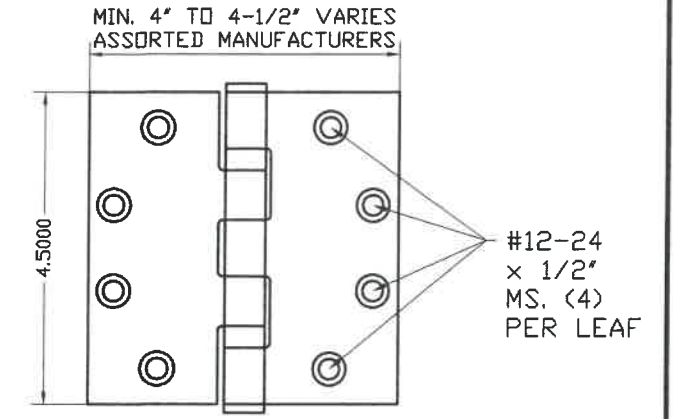
32 STRIKE FOR DEAD BOLT (14)
 MATERIAL: (0.095) Steel, Nickel Finish



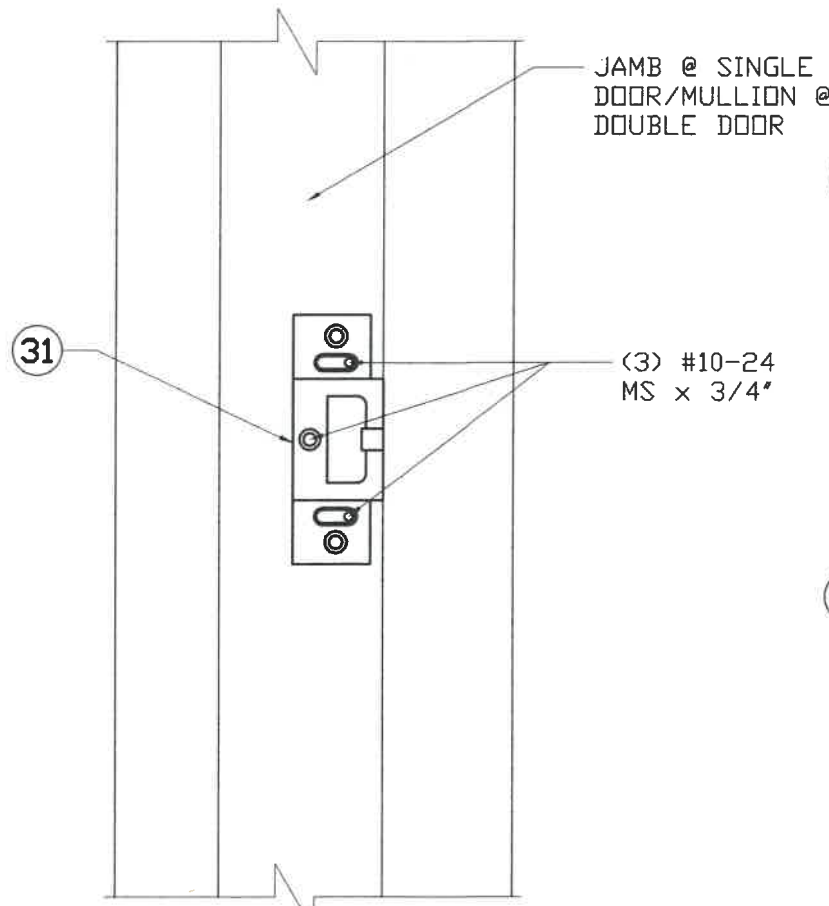
33 STRIKE FOR CILINDRICAL LOCK (13)
 MATERIAL: (0.095) Steel, Nickel Finish



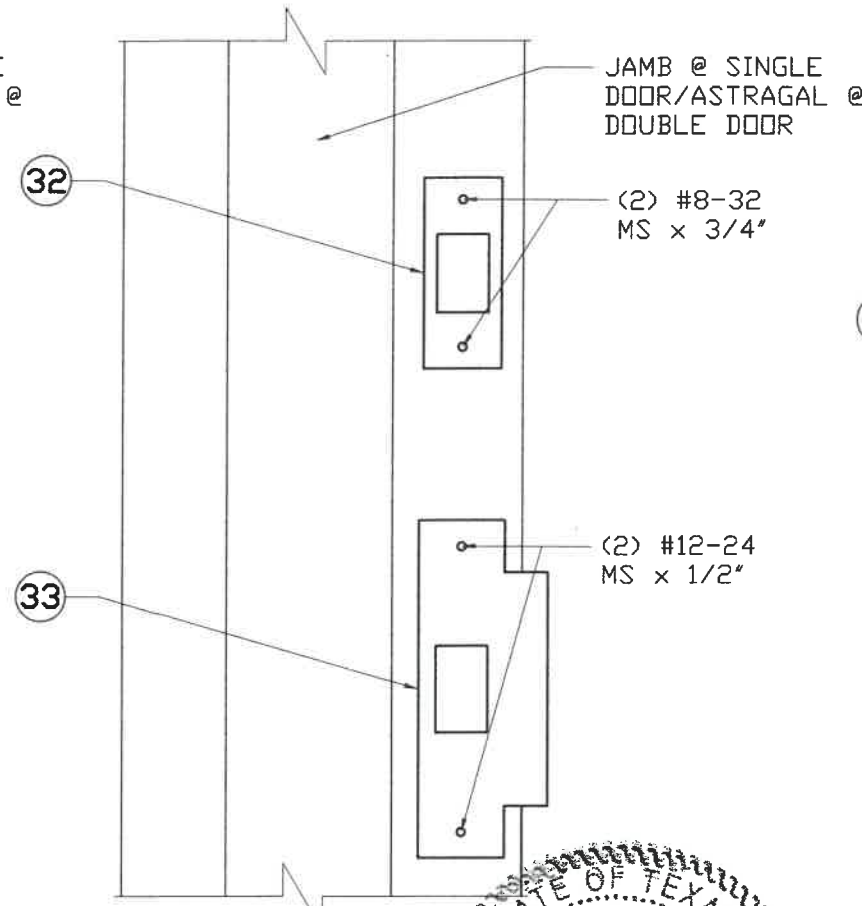
34 STRIKE FOR MORTISE LOCK (12)
 MATERIAL: (0.095) Steel, Nickel Finish



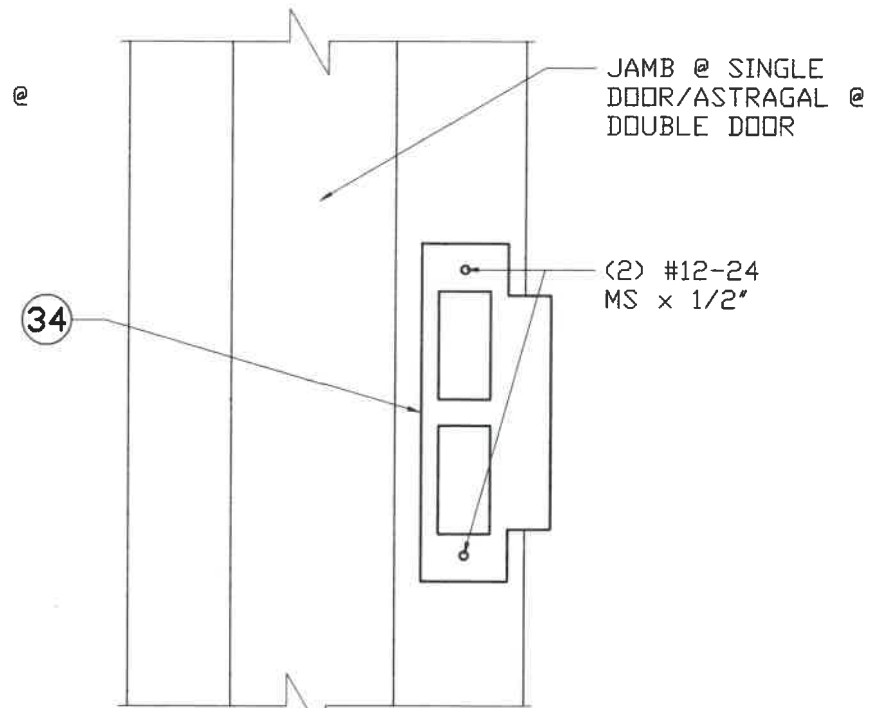
10 HINGE-HAGER
 MATERIAL: 0.134\"/>



STRIKE DETAIL ELEVATION
 Rim Exit Device



STRIKE DETAIL ELEVATION
 Latch & Deadbolt

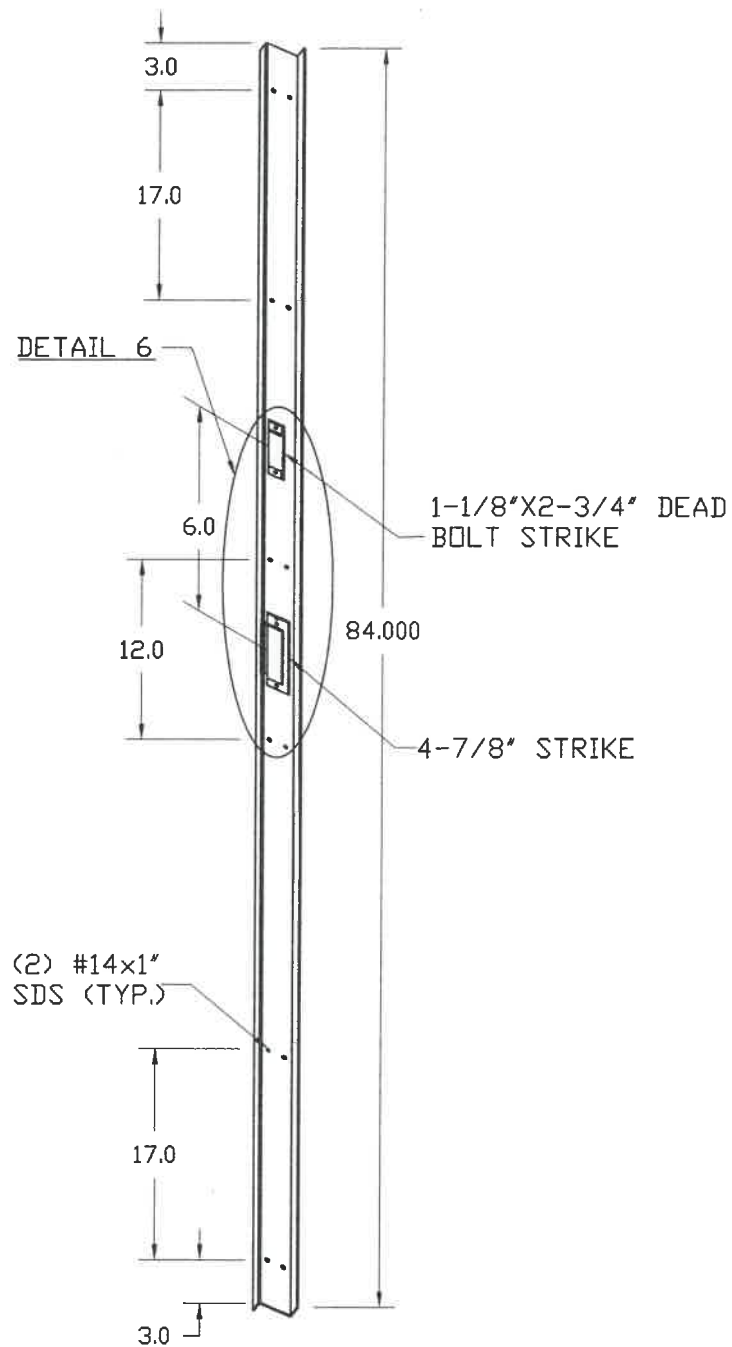


STRIKE DETAIL ELEVATION
 Mortised Device Latch

STATE OF TEXAS
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 9069
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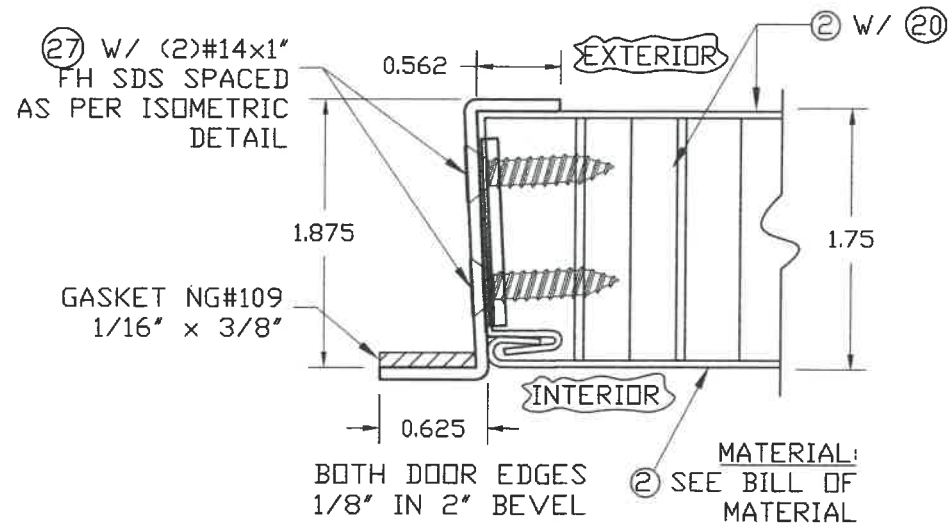
WALTER A. TILLIT Jr P.E.
 PROFESSIONAL ENGINEER
 6355 N.W 36 STREET, STE. 305
 VIRGINIA GARDENS, FL 33166
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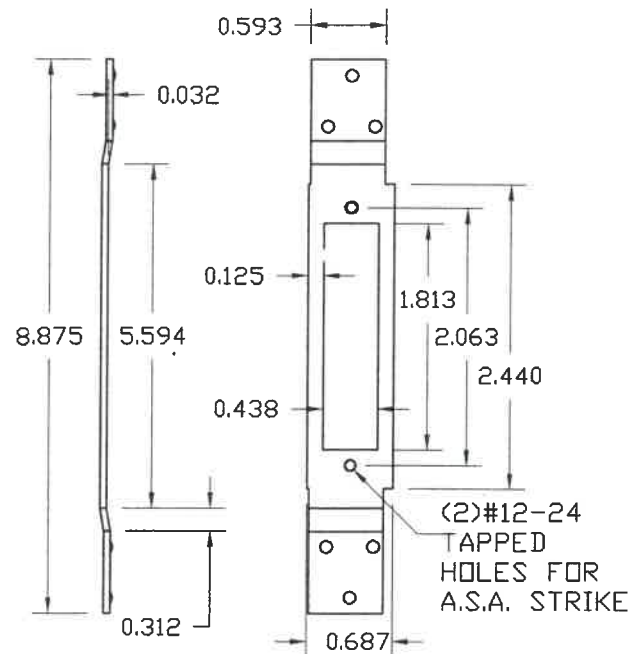


**(27) "Z" ASTRAGAL ISOMETRIC
DETAIL**

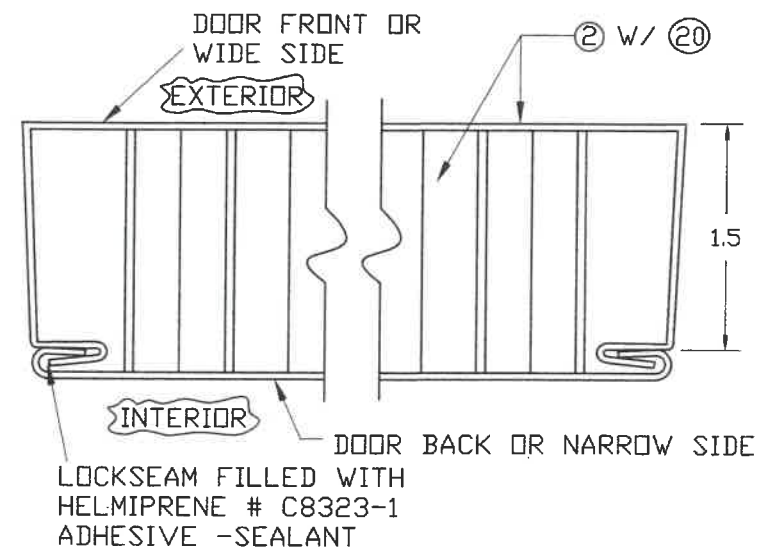
MATERIAL:
0.075" THICK
GALVANNEAL STEEL
OR STAINLESS
STEEL



**SECTION THRU ASTRAGAL
AT DOUBLE DOOR**

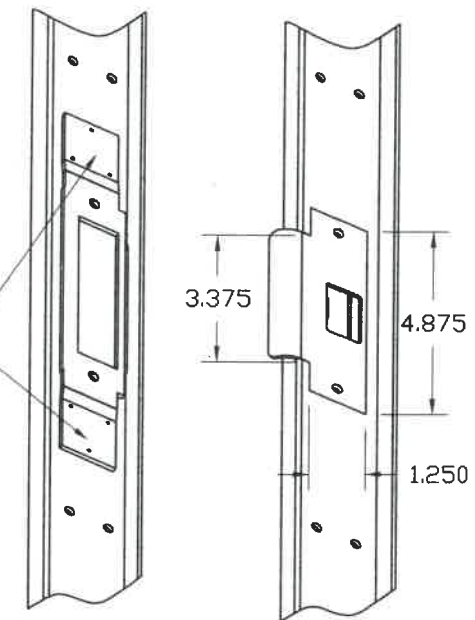


**12 GAGE GALVANNEAL STEEL OR STAINLESS STEEL
ASA 1299 STRIKE
REINFORCEMENT FOR ASTRAGAL**

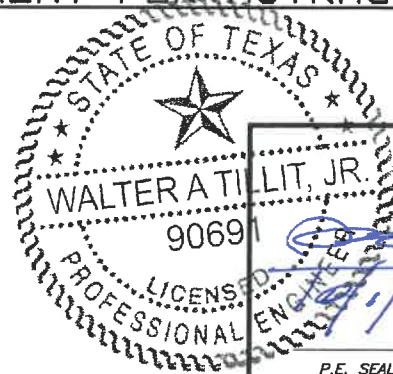


**TYPICAL CROSS SECTION
THRU DOOR**

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



DETAIL 6



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
GALVANNEAL OR STAINLESS STEEL DOOR W/ SERIES "AS"
16 GAGE GALVANNEAL OR STAINLESS STEEL FRAME
FLUSH, EMBOSSED & GLAZED ASSEMBLIES - L.M.

DRAWN BY:
M.P.

DAYBAR INDUSTRIES LTD

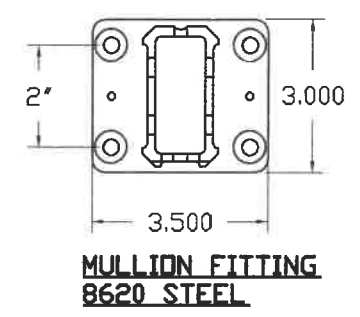
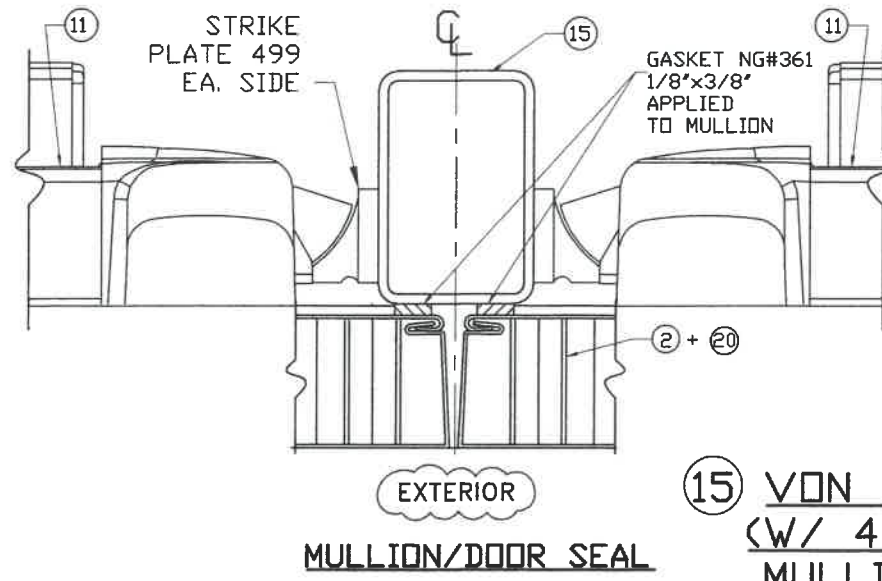
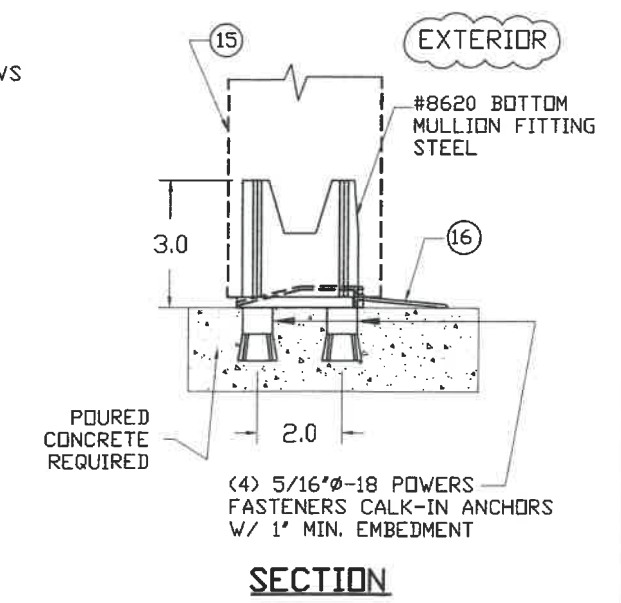
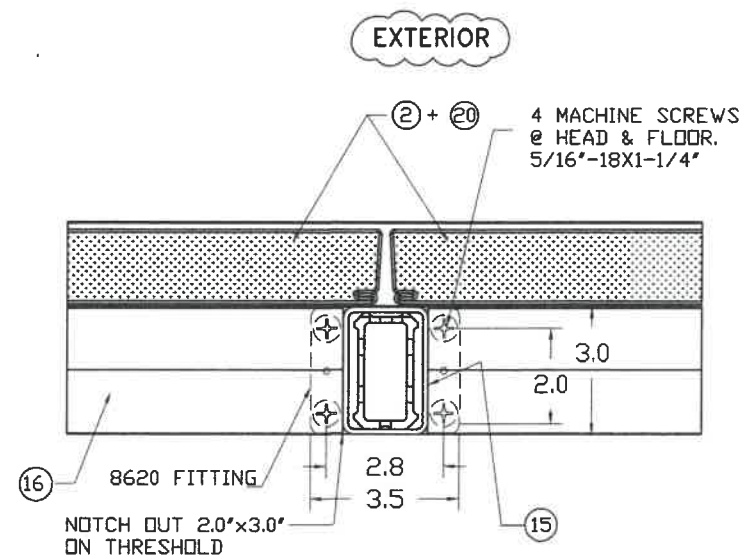
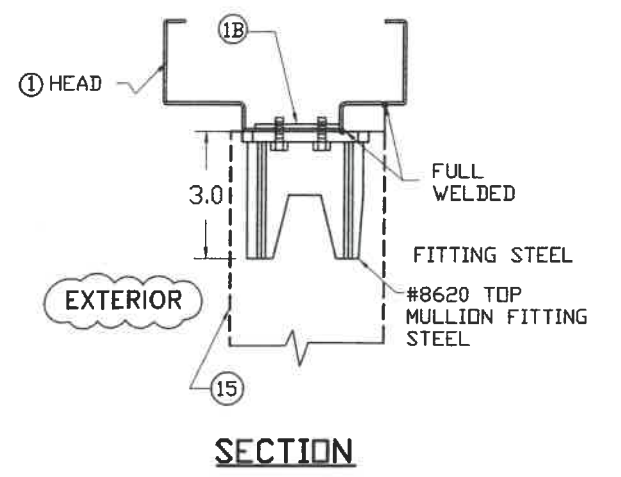
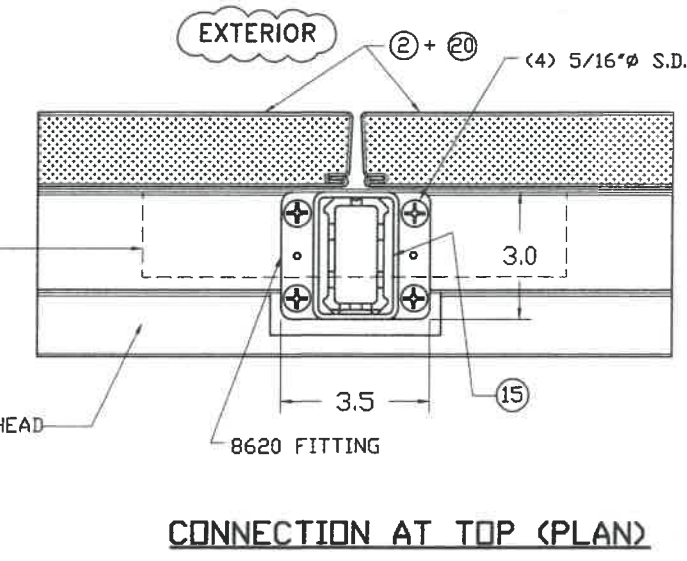
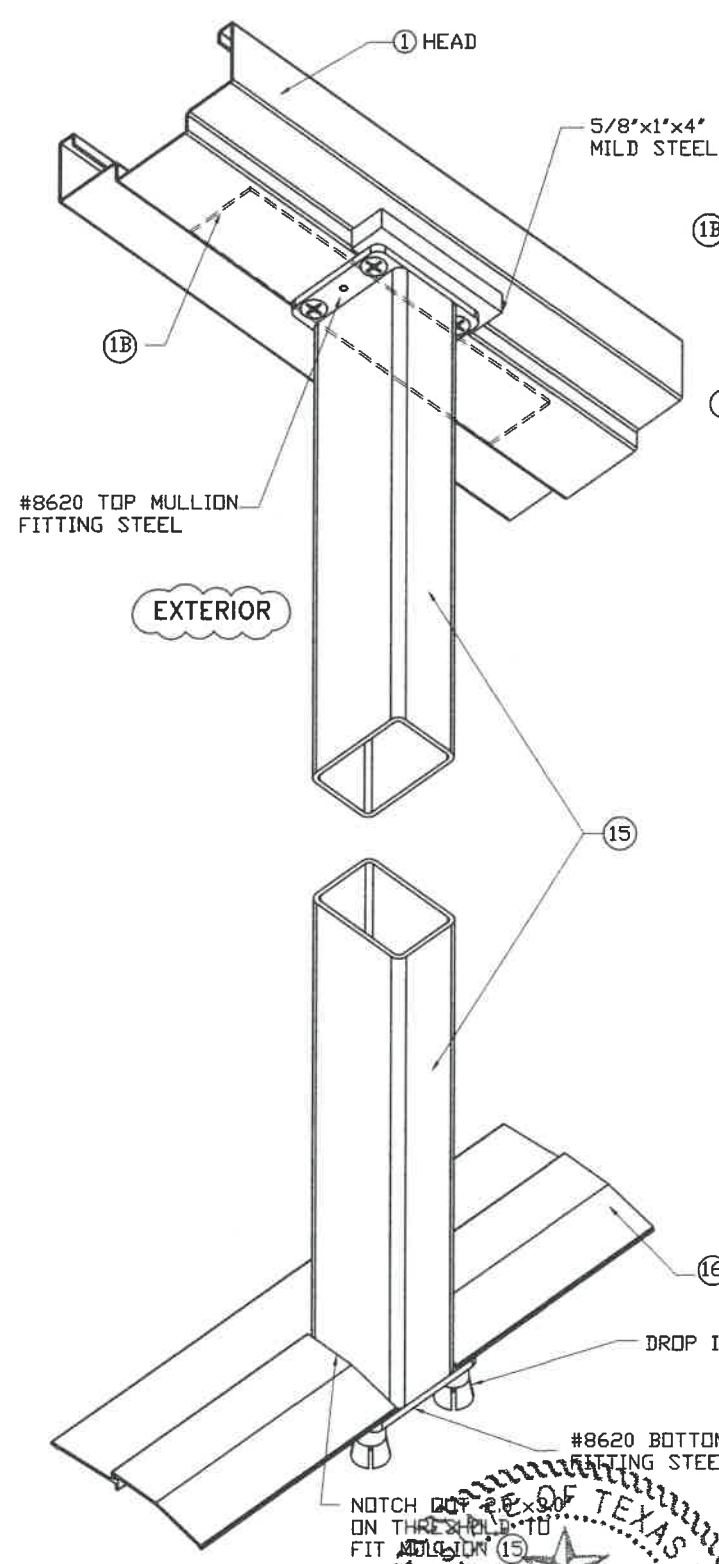
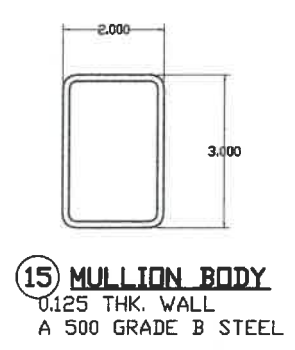
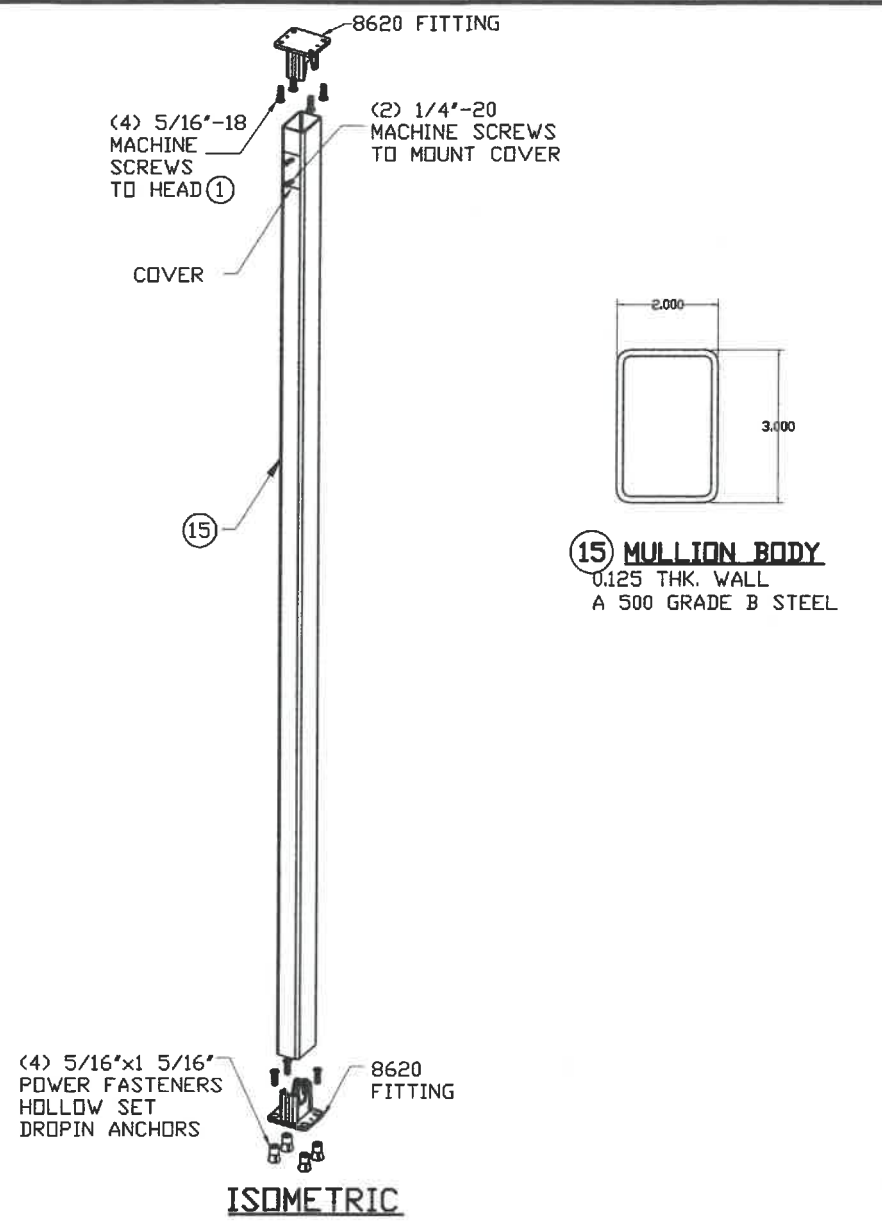
10/1/2021
DATE

50 WEST DRIVE, BRAMPTON,
ON CANADA, L6T 2J4
TEL: 905 625-8000 FAX: 905 625-4204

21-129
DRAWING No

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

SHEET 10 OF 19

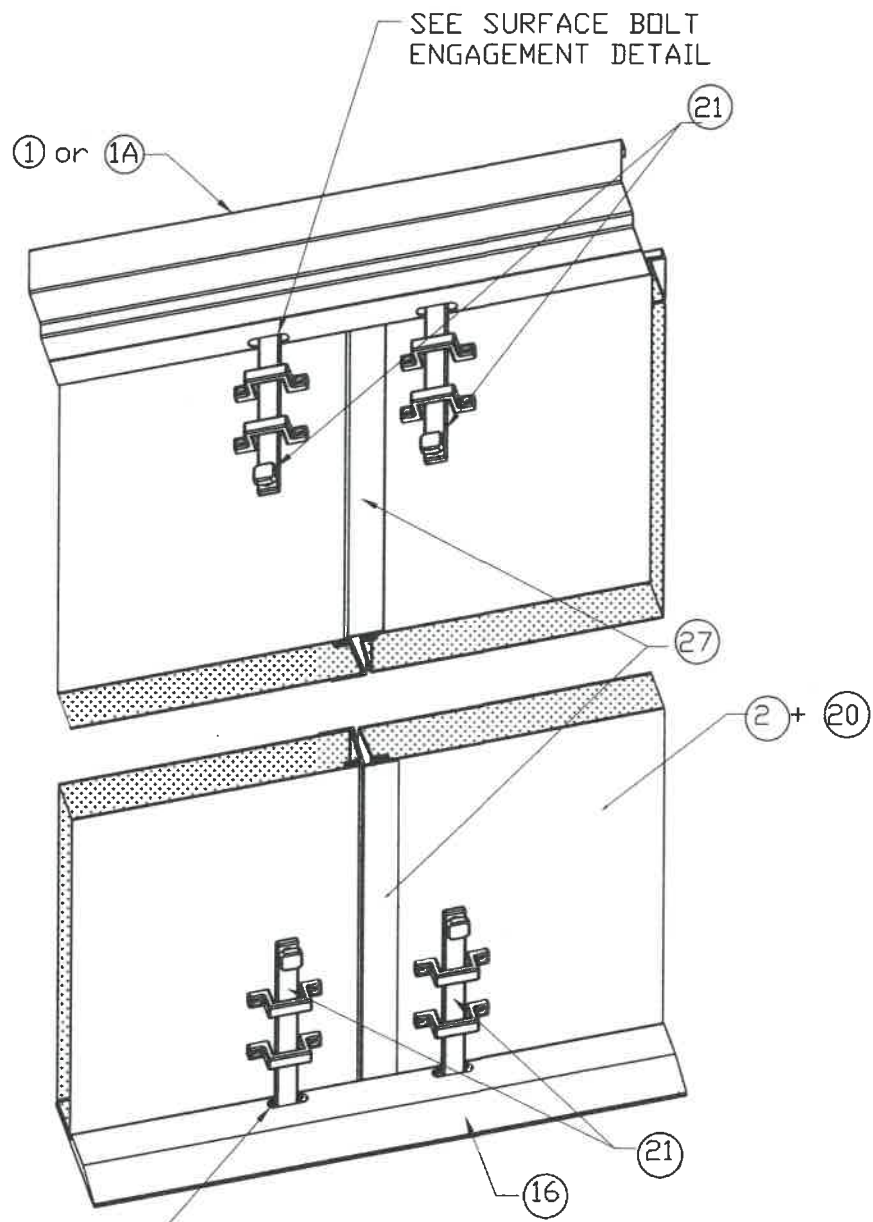


(15) VON DUPRIN SERIES 9954 (W/ 499 STRIKE PLATE) MULLION INSTALLATION

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

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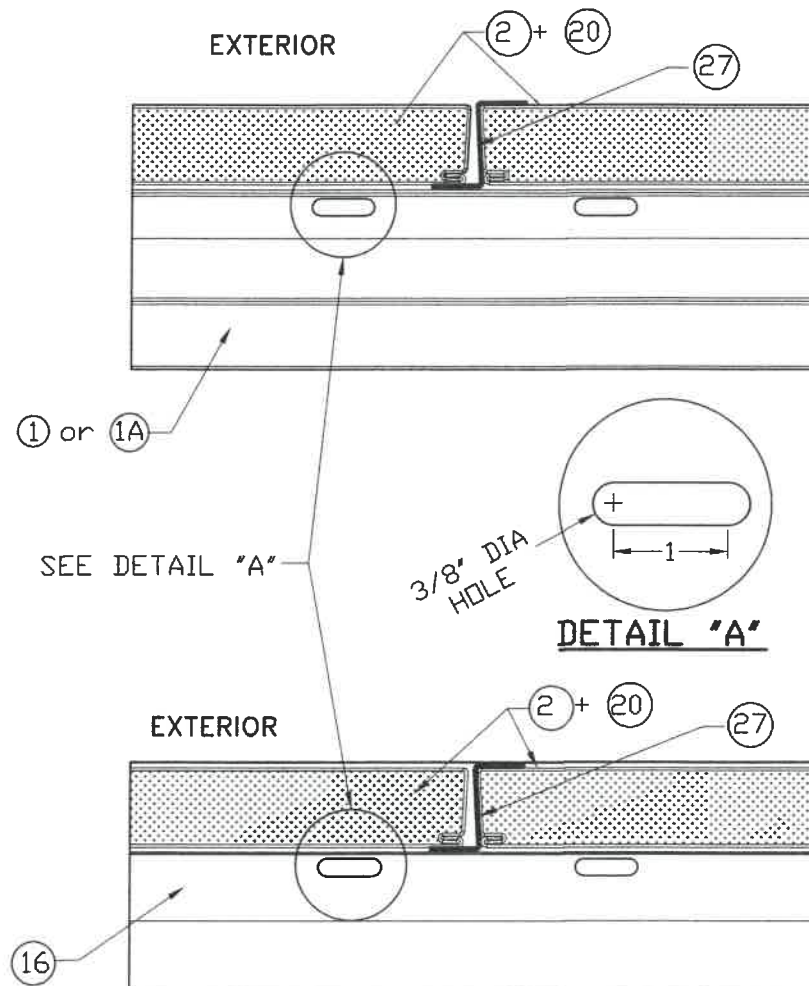
TEXAS DEPARTMENT OF INSURANCE - 2018					
DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL GALVANNEAL OR STAINLESS STEEL DOOR W/ SERIES "AS" 16 GAGE GALVANNEAL OR STAINLESS STEEL FRAME FLUSH, EMBOSSED & GLAZED ASSEMBLIES - L.M.				DRAWN BY: M.P.	
DAYBAR INDUSTRIES LTD				10/1/2021 DATE	
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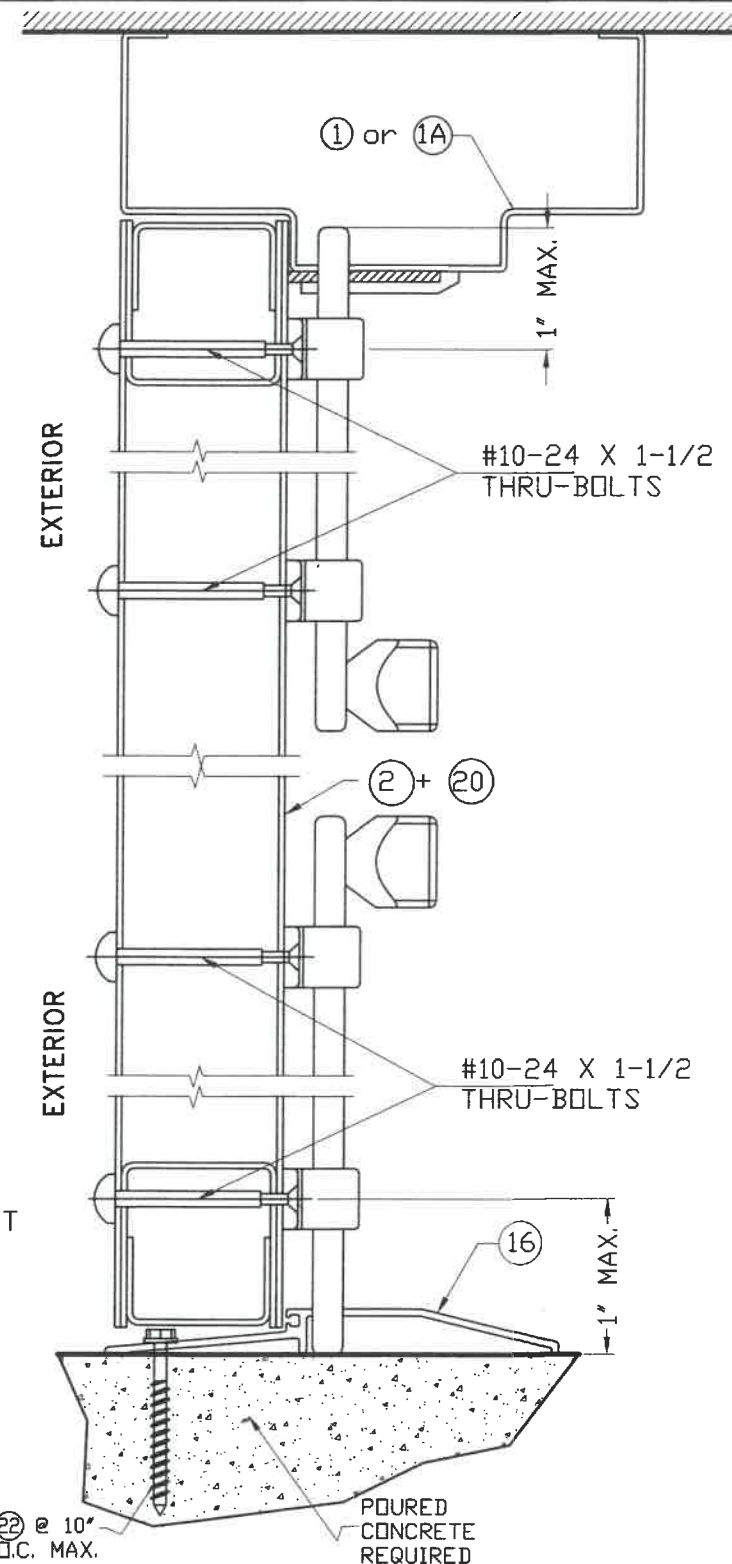
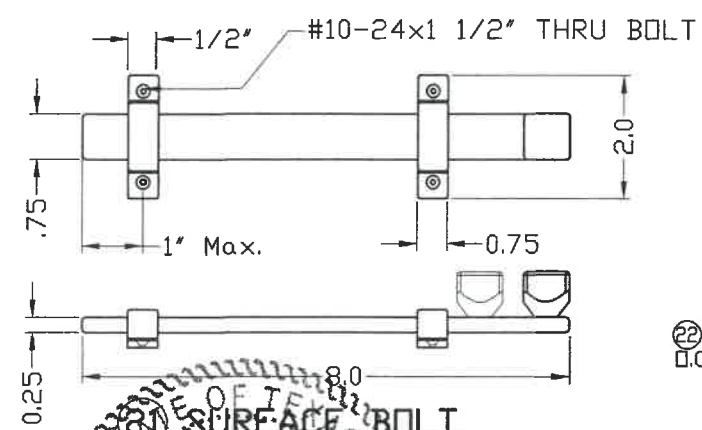
SURFACE BOLT INSTALLATION AT DOOR W/ ASTRAGAL (INTERIOR VIEW)

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



TYPICAL SECTION

STATE OF TEXAS
 WALTER A. TILLIT, JR.
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DRAWN BY:
M.P.

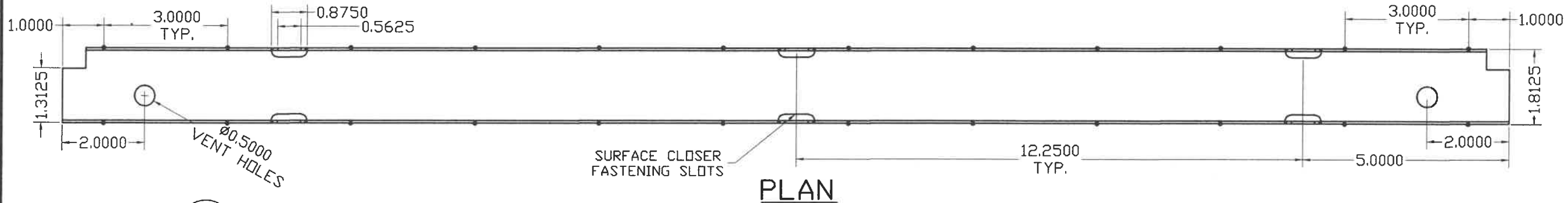
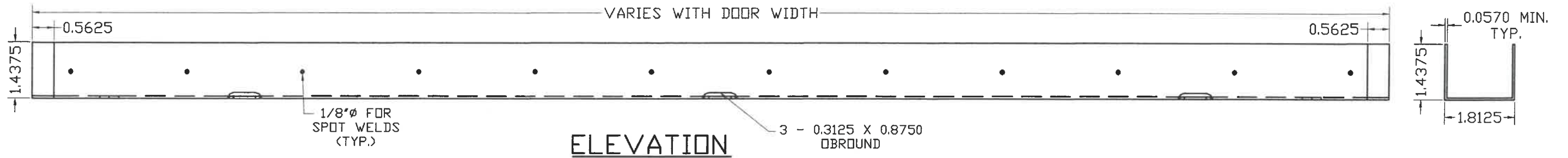
DAYBAR INDUSTRIES LTD

50 WEST DRIVE, BRAMPTON,
 ON CANADA, L6T 2J4
 TEL: 905 625-8000 FAX: 905 625-4204

10/1/2021
DATE

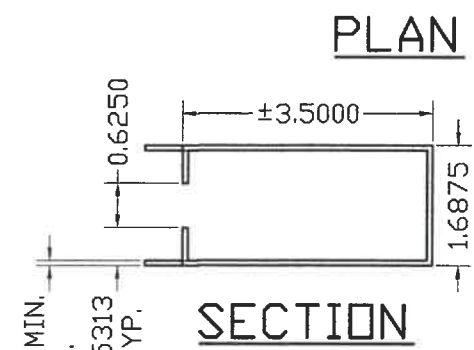
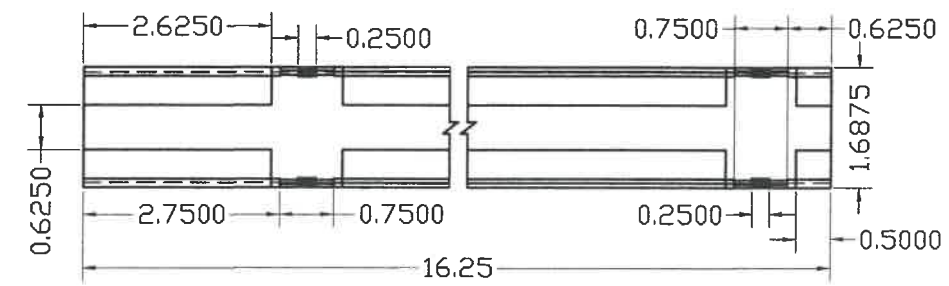
21-129
DRAWING No

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 17-060	10/1/21	3	-	-
2	-	-	4	-	-



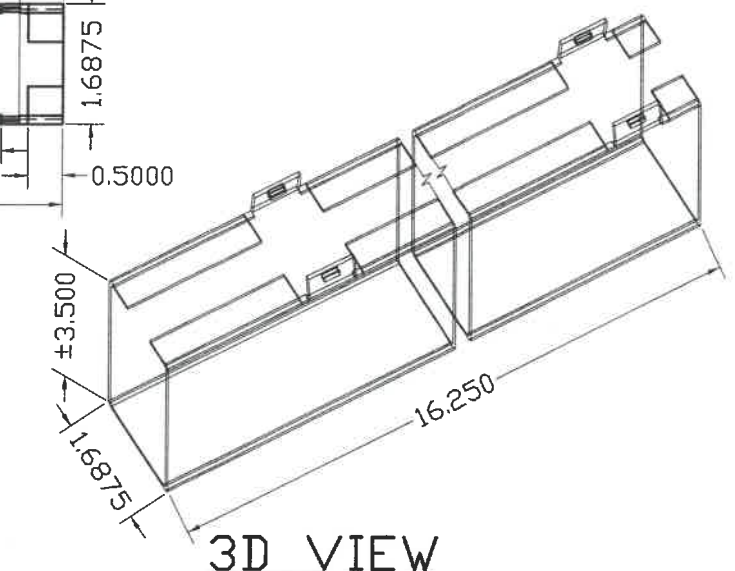
26 DOOR TOP AND BOTTOM TYPICAL END CHANNEL DETAIL

MATERIAL:
16 GAUGE (0.057) MINIMUM
GALVANNEAL STEEL OR STAINLESS STEEL

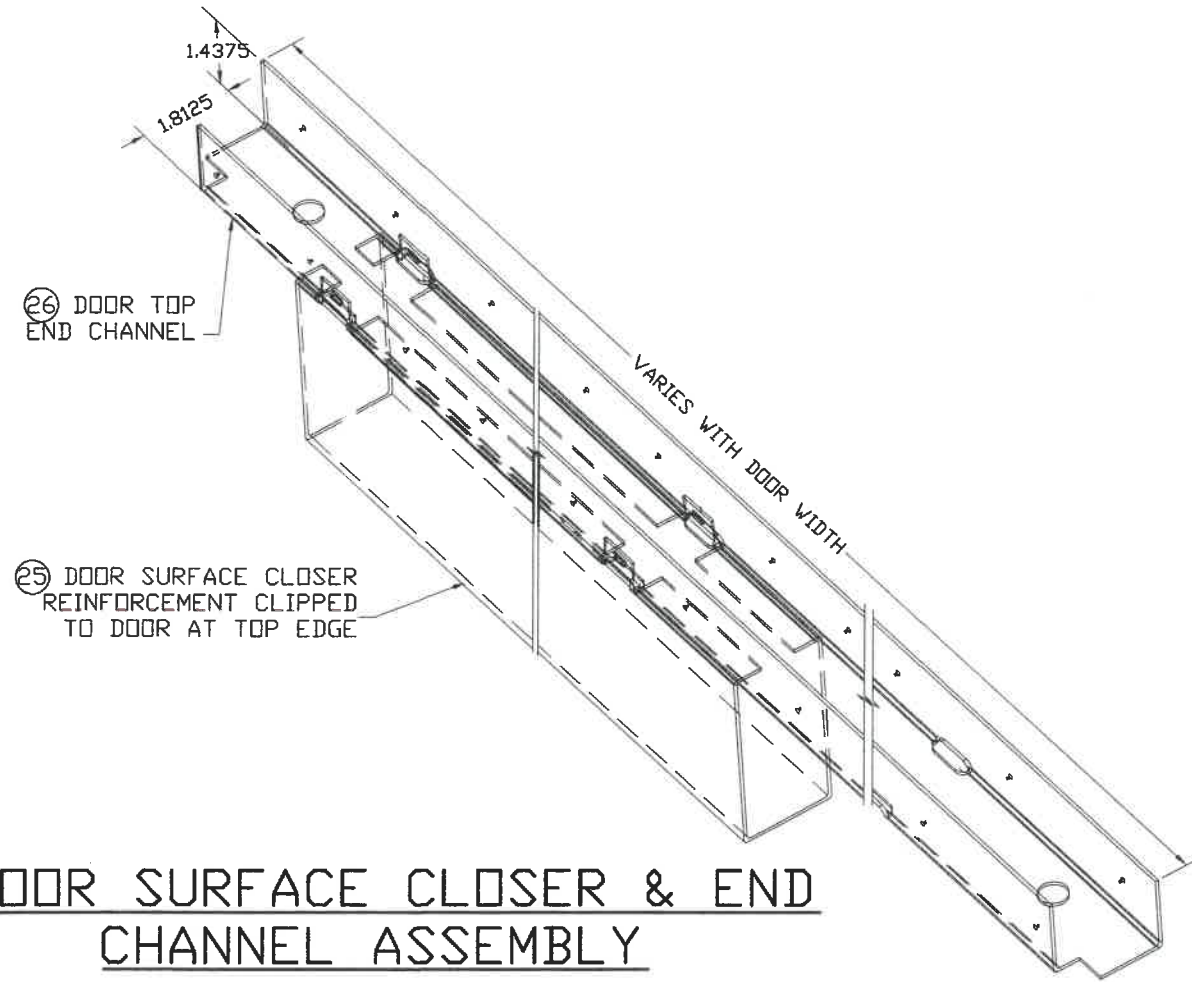


MATERIAL:
14 GAUGE (0.074)
MINIMUM GALVANNEAL OR STAINLESS STEEL

25 DOOR SURFACE CLOSER REINFORCEMENT DETAIL



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

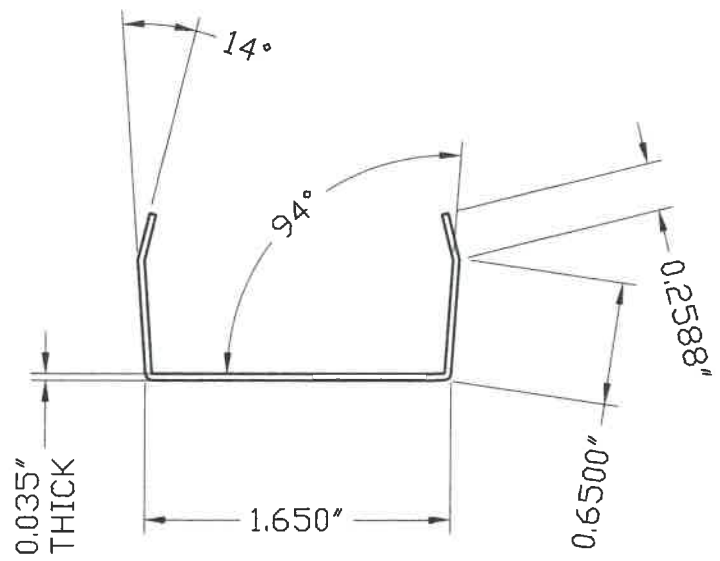


DOOR SURFACE CLOSER & END CHANNEL ASSEMBLY

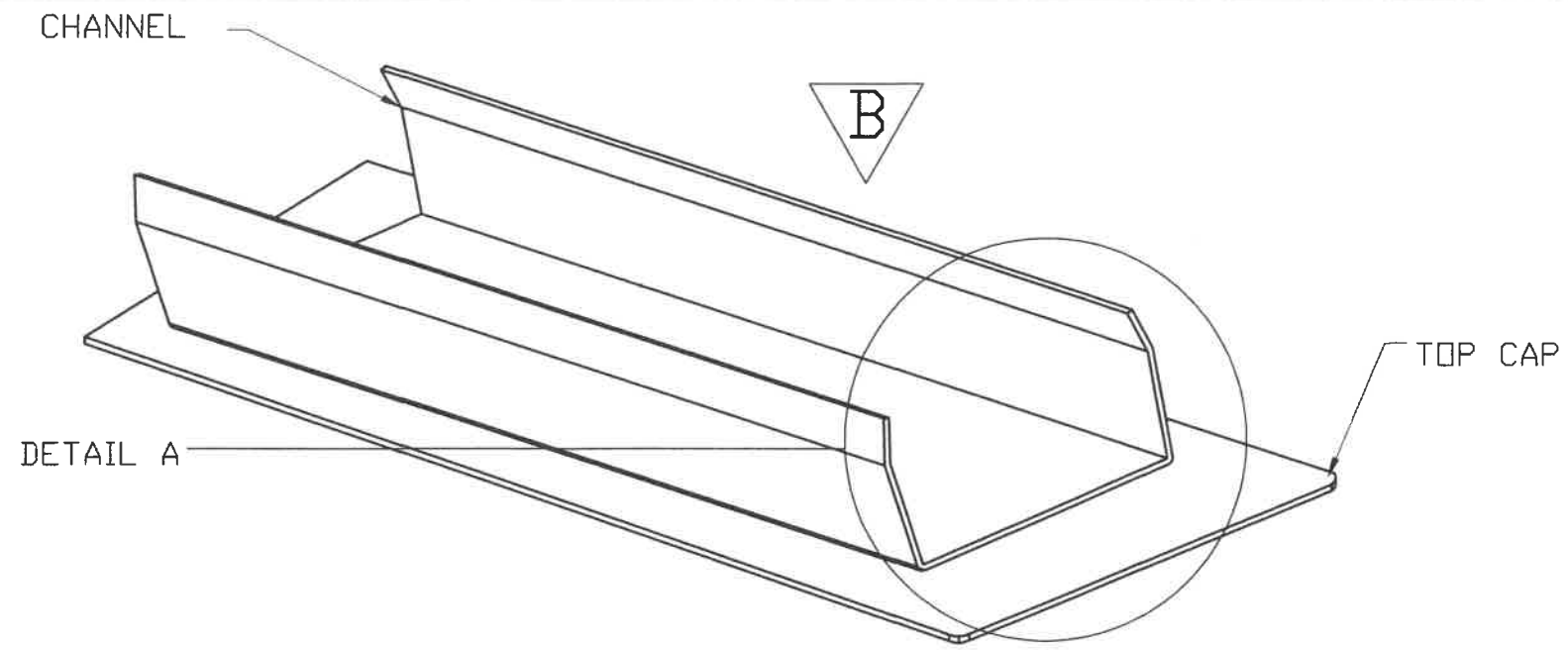
WALTER A. TILLIT, JR.
90691
PROFESSIONAL ENGINEER
SEAL/SIGNATURE/DATE

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

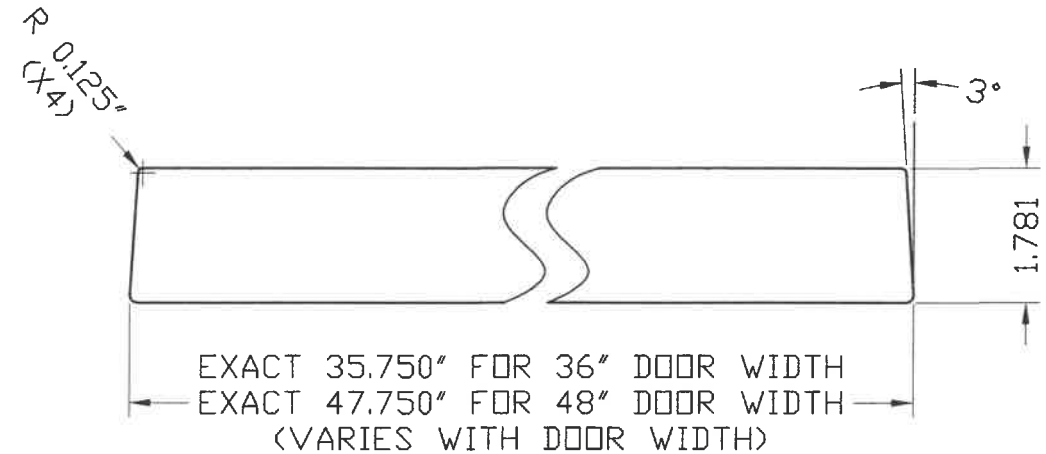
TEXAS DEPARTMENT OF INSURANCE - 2018					
DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL GALVANNEAL OR STAINLESS STEEL DOOR W/ SERIES "AS" 16 GAGE GALVANNEAL OR STAINLESS STEEL FRAME FLUSH, EMBOSSED & GLAZED ASSEMBLIES - L.M.				DRAWN BY: M.P.	
DAYBAR INDUSTRIES LTD				10/1/2021 DATE	
50 WEST DRIVE, BRAMPTON, ON CANADA, L6T 2J4 TEL: 905 625-8000 FAX: 905 625-4204				21-129 DRAWING No	
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 17-060	10/1/21	3	-	-
2	-	-	4	-	-



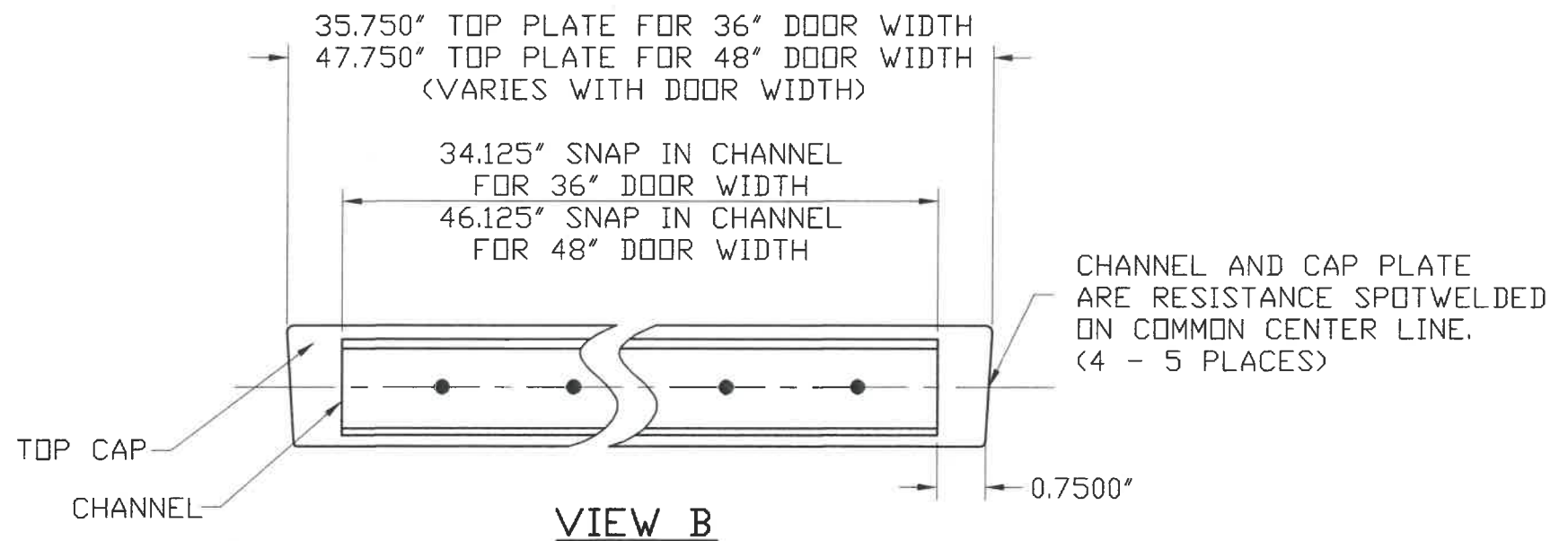
DETAIL A
SNAP IN CHANNEL



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



STANDARD TOP CAP



VIEW B

28 DOOR SNAP IN TOP CAP DETAIL

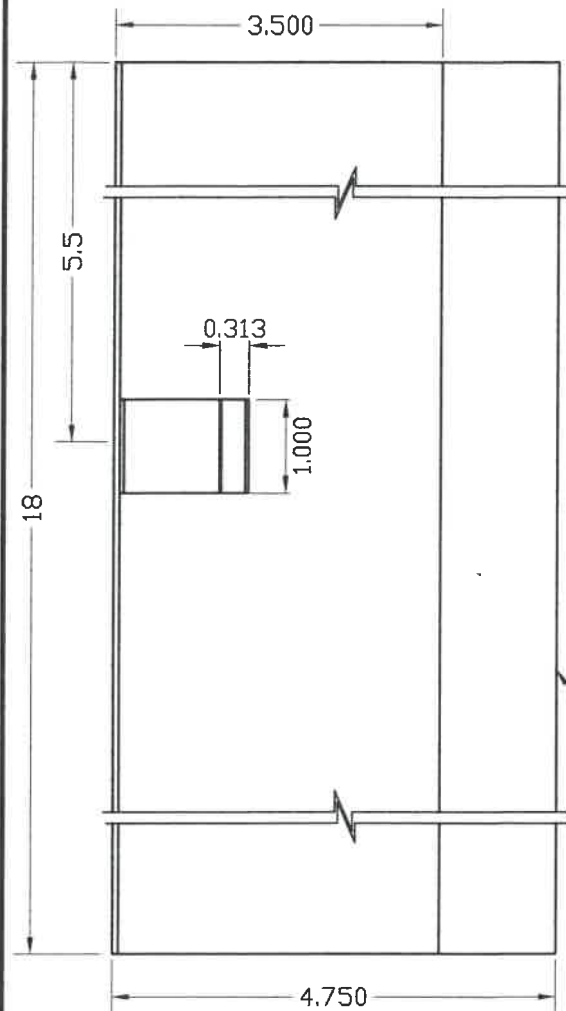
MATERIAL: 20 GA GALVANNEAL STEEL ASTM A-653, A-60 OR STAINLESS STEEL FOR BOTH PIECES.

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

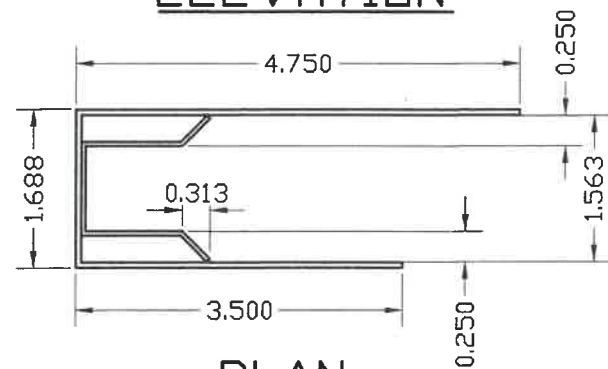
STATE OF TEXAS
WALTER A. TILLIT, JR.
90691
LICENSED PROFESSIONAL ENGINEER
P.E. SEAL/SIGNATURE/DATE

WALTER A. TILLIT Jr P.E.
PROFESSIONAL ENGINEER
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VIRGINIA GARDENS, FL 33166
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TEXAS DEPARTMENT OF INSURANCE - 2018					
DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL GALVANNEAL OR STAINLESS STEEL DOOR W/ SERIES "AS" 16 GAGE GALVANNEAL OR STAINLESS STEEL FRAME FLUSH, EMBOSSED & GLAZED ASSEMBLIES - L.M.					DRAWN BY: M.P.
DAYBAR INDUSTRIES LTD					10/1/2021 DATE
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REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 17-060	10/1/21	3	-	-
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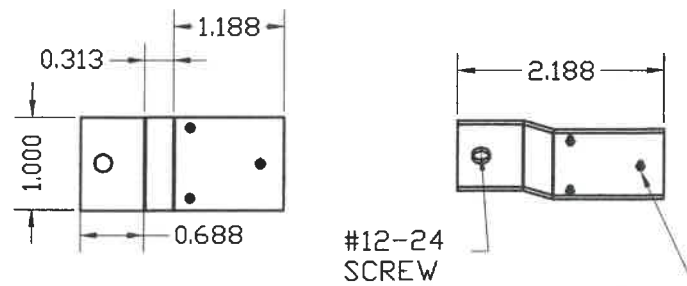
ELEVATION



PLAN

MATERIAL:
ALL GALVANNEAL STEEL OR
STAINLESS STEEL

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

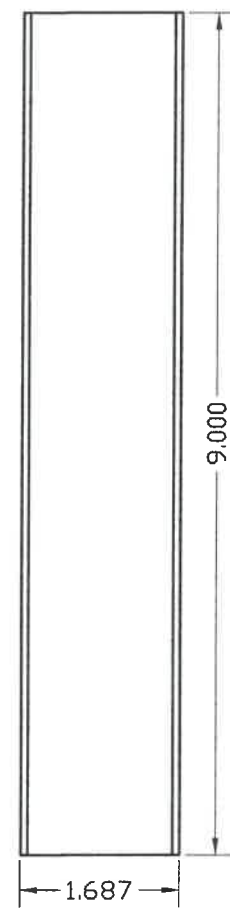
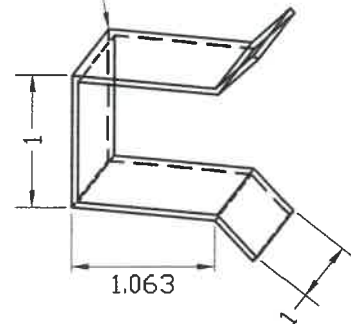


**DOOR EDGE
MOUNTING TAB**

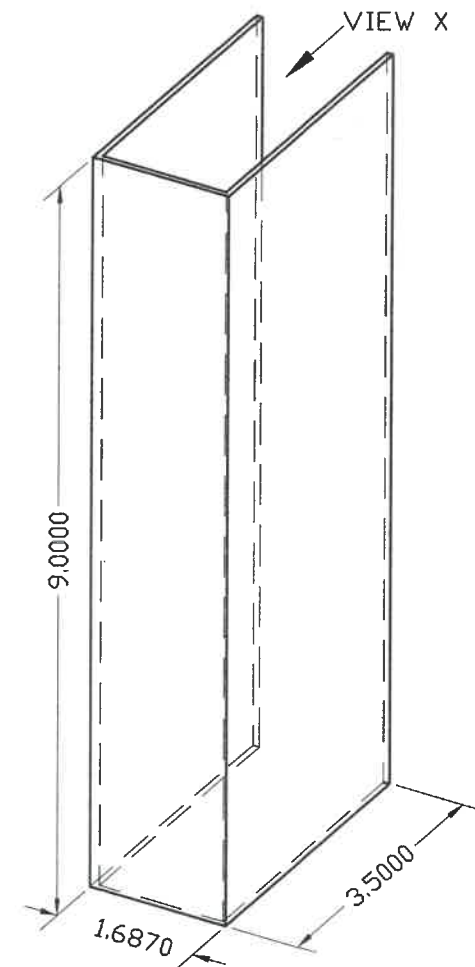
14 GA (0.074) MIN GALVANNEAL
STEEL OR STAINLESS STEEL

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



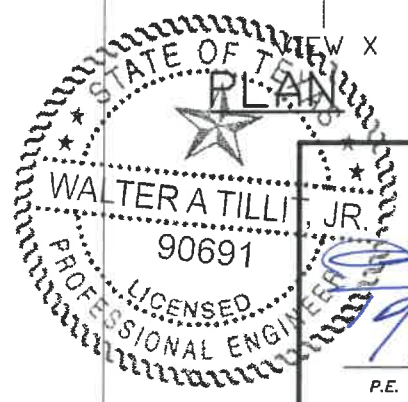
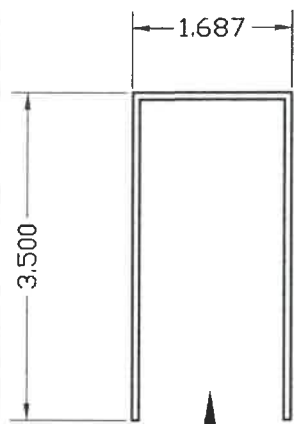
VIEW X



3D VIEW

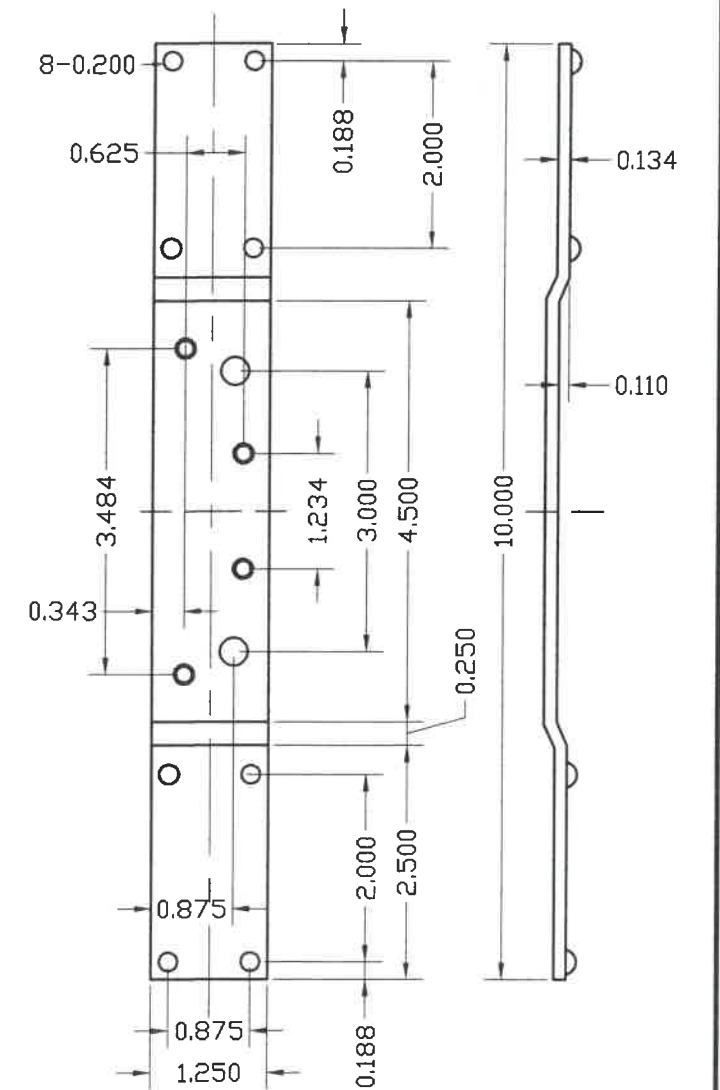
MATERIAL:
14 GAUGE (0.074) MINIMUM
GALVANNEAL STEEL OR STAINLESS
STEEL, GLUED TO DOOR AT HEAD
& SILL USING HEMILBOND 8320-1
CONTACT ADHESIVE.

18 DOOR SURFACE
BOLT REINFORCING
DETAIL



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

WALTER A. TILLIT Jr P.E.
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TEXAS LIC. # 90691
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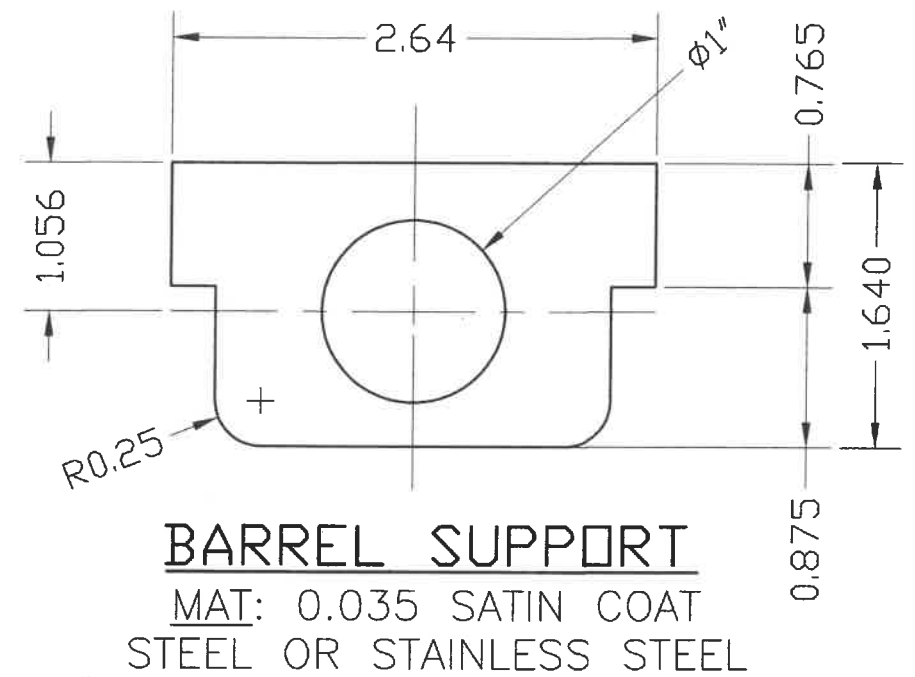
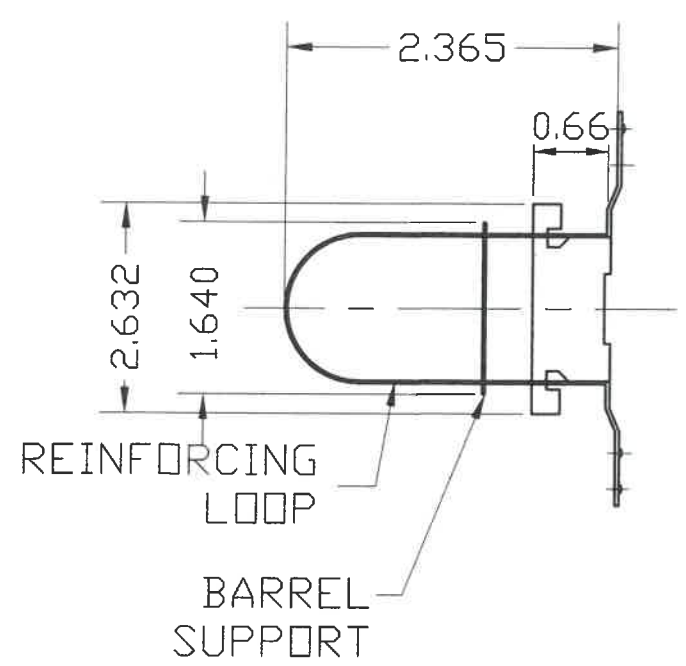


17 4 1/2" HINGE BAR
REINFORCING FOR DOOR

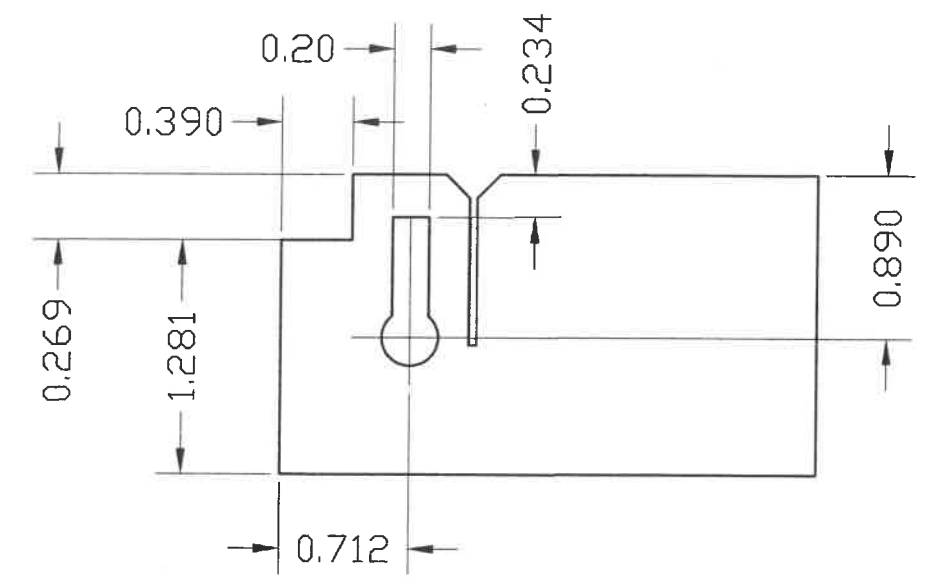
MATERIAL:
8 GAUGE
GALVANNEAL STEEL OR STAINLESS
STEEL

TEXAS DEPARTMENT OF INSURANCE - 2018

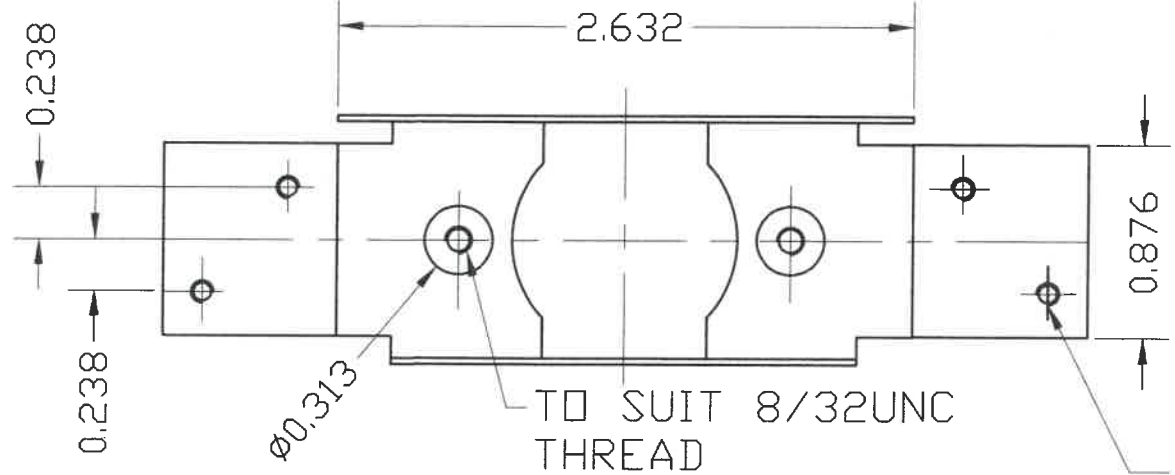
DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL GALVANNEAL OR STAINLESS STEEL DOOR W/ SERIES "AS" 16 GAGE GALVANNEAL OR STAINLESS STEEL FRAME FLUSH, EMBOSSED & GLAZED ASSEMBLIES - L.M.						DRAWN BY: M.P.
DAYBAR INDUSTRIES LTD						10/1/2021 DATE
50 WEST DRIVE, BRAMPTON, ON CANADA, L6T 2J4 TEL: 905 625-8000 FAX: 905 625-4204						21-129 DRAWING No
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE	SHEET 15 OF 19
1	OLD 17-060	10/1/21	3	-	-	
2	-	-	4	-	-	



BARREL SUPPORT
 MAT: 0.035 SATIN COAT
 STEEL OR STAINLESS STEEL



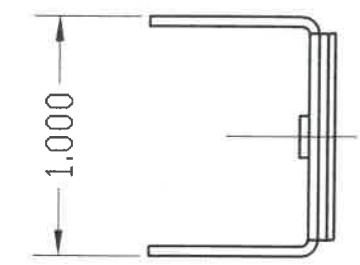
REINFORCING LOOP
 MAT: 0.035 SATIN COAT
 STEEL OR STAINLESS STEEL



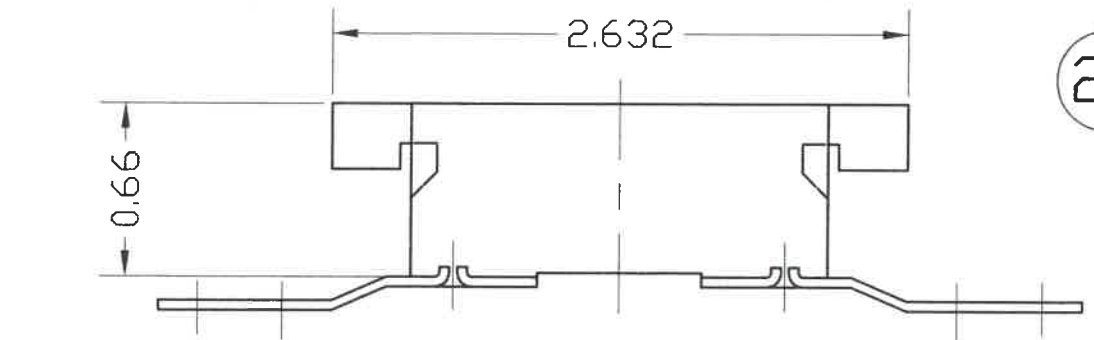
#161 EDGE REINFORCING
 MAT: 0.078 SATINCOAT STEEL OR
 STAINLESS STEEL

(4) 1/16"Ø
 PROJECTION
 WELDS

← VIEW X

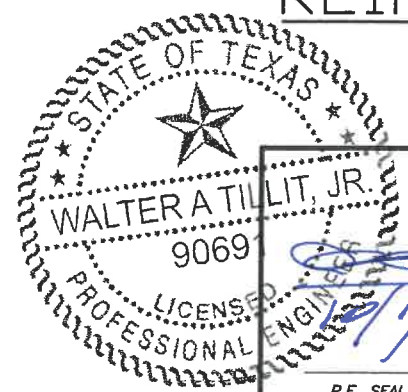


VIEW X



**SECTION THROUGH
 EDGE REINFORCING**

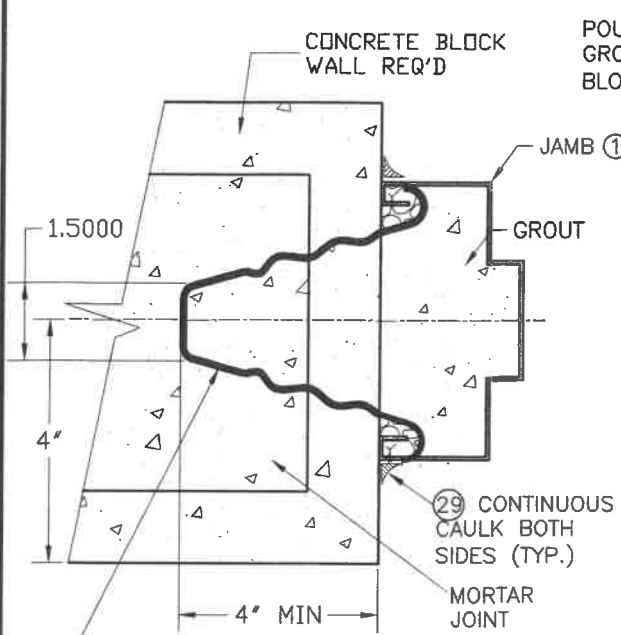
**24 #161 CYLINDRICAL LOCK AND DEAD BOLT
 REINFORCEMENT DETAIL**



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

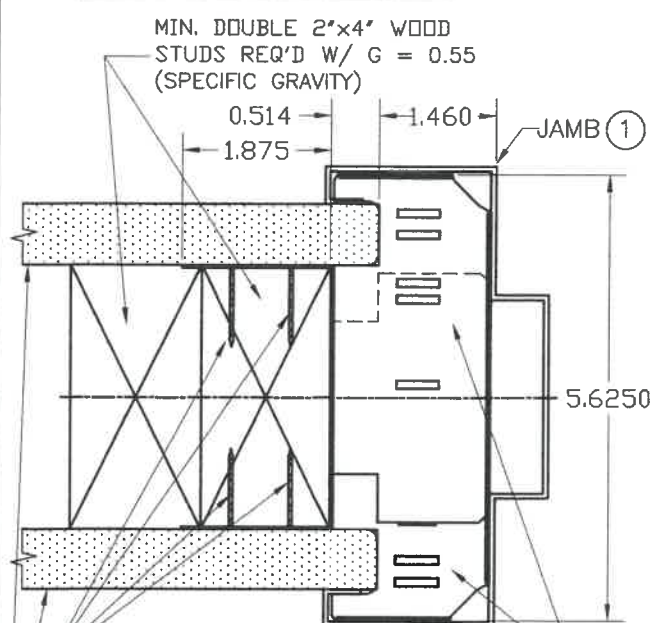
WALTER A. TILLIT Jr P.E.
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 VIRGINIA GARDENS, FL 33166
 PHONE(305) 871-1530 FAX (305) 871-1531
 TEXAS LIC. # 90691
 FIRM REGISTRATION # F-13790

TEXAS DEPARTMENT OF INSURANCE - 2018					
DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL GALVANNEAL OR STAINLESS STEEL DOOR W/ SERIES "AS" 16 GAGE GALVANNEAL OR STAINLESS STEEL FRAME FLUSH, EMBOSSED & GLAZED ASSEMBLIES - L.M.					DRAWN BY: M.P.
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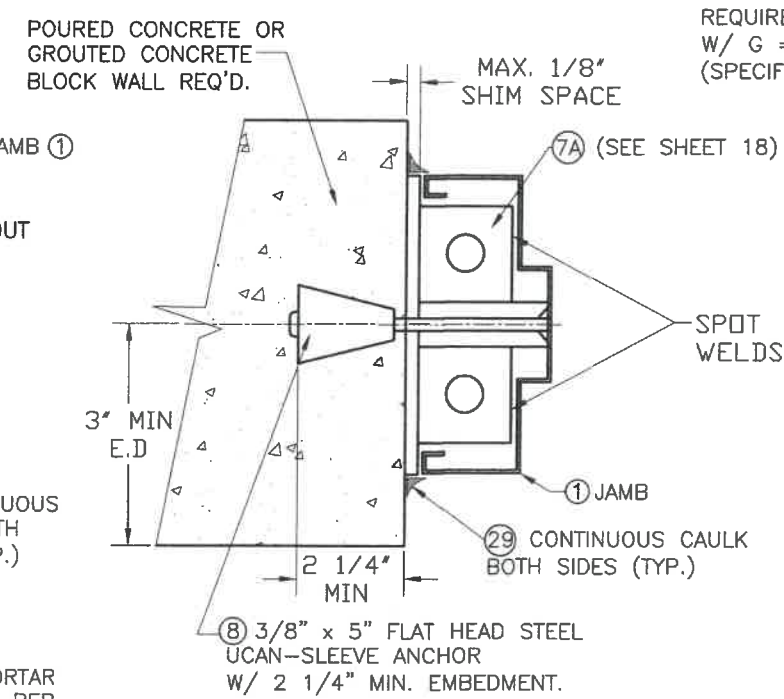
⑥ MASONRY WIRE ANCHORS IN HORIZ. MORTAR JOINTS; FILL JAMBS ① SOLID WITH GROUT PER ASTM C476 W/ MIN. COMPRESSION STRENGTH OF 2.5 Ksi (SEE SHEET 18)

DETAIL #21
WIRE ANCHOR ⑥
INSTALLATION TO
MASONRY WALLS

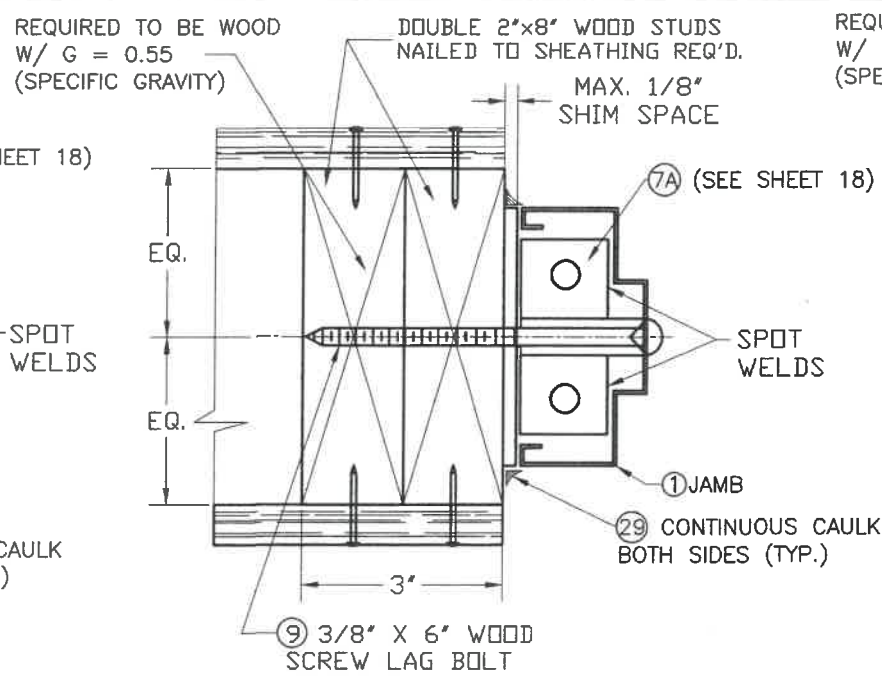


(4) #8 W/ 1-1/4" MIN. THREADED PENETRATION F.H. WOOD SCREWS PER ANCHOR
1/2" MIN. GYPSUM WALL BOARD OR PLYWOOD SHEATHING (TYP.)

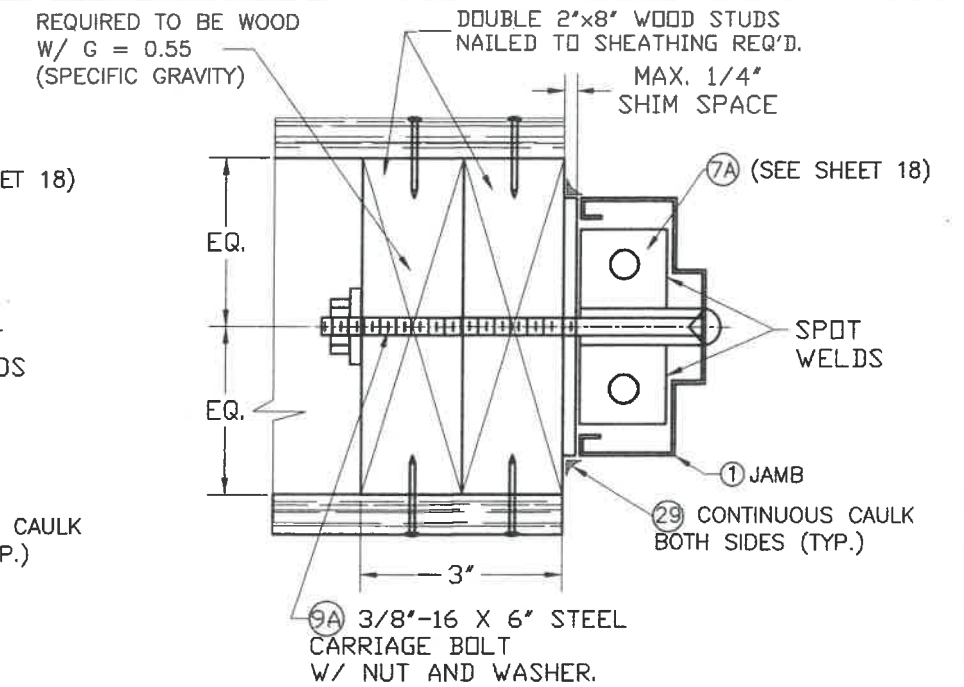
DETAIL #20
INSTALLATION OF 2 PIECE COMBINATION
STUD ANCHOR ⑦ INTO WOOD FRAME WALLS



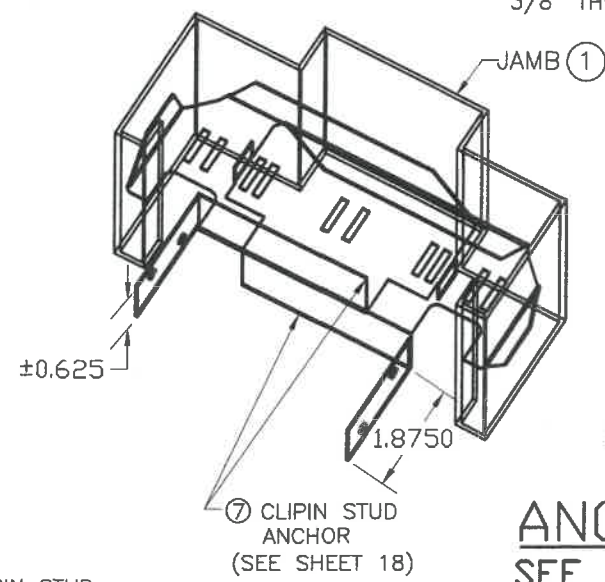
DETAIL #22
INSTALLATION OF UCAN
SLEEVE ANCHORS ⑧ TO
MASONRY WALLS



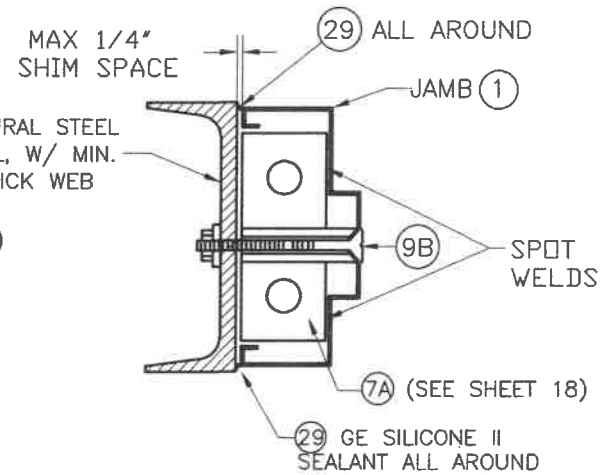
DETAIL #22A
INSTALLATION OF 3/8"Ø LAG
SCREW ⑨ TO WOOD FRAME WALLS



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



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



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

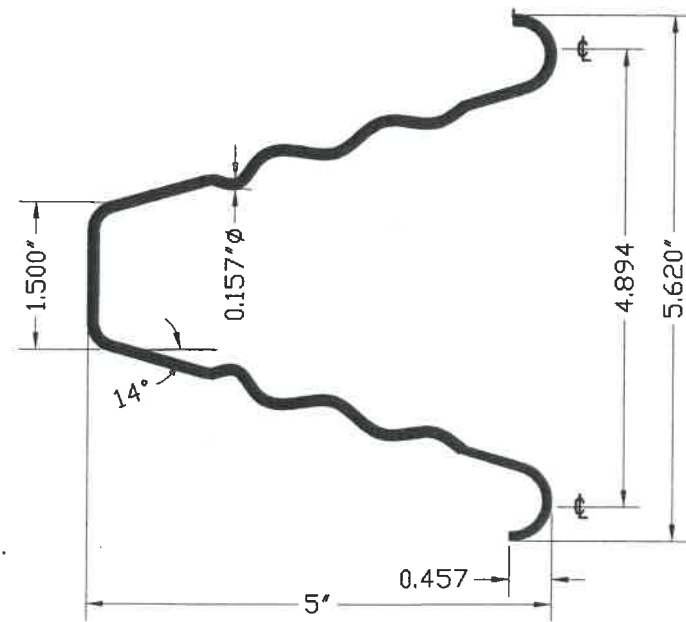
* WELD ON INSTALLATION AS FOLLOWS:
9C TOP & BOTTOM OF JAMBS AND @ 12" O. C. THEREAFTER ADDITIONALLY, AT 12" O. C. AT HEAD

ANCHOR DETAILS:
SEE SCHEDULE ON SHEET 18

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

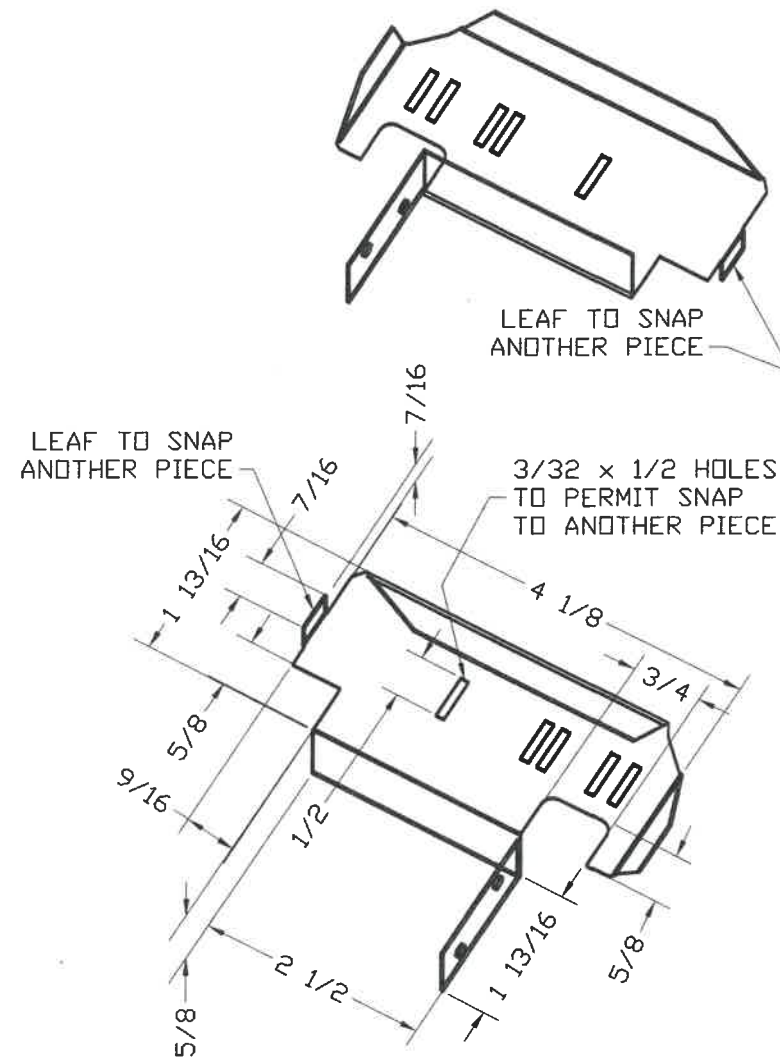
WALTER A. TILLIT Jr P.E.
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VIRGINIA GARDENS, FL 33166
PHONE(305) 871-1530 FAX (305) 871-1531
TEXAS LIC. # 90691
FIRM REGISTRATION # F-13790

TEXAS DEPARTMENT OF INSURANCE - 2018					
DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL GALVANNEAL OR STAINLESS STEEL DOOR W/ SERIES "AS" 16 GAGE GALVANNEAL OR STAINLESS STEEL FRAME FLUSH, EMBOSSED & GLAZED ASSEMBLIES - L.M.					DRAWN BY: M.P.
DAYBAR INDUSTRIES LTD					10/1/2021 DATE
50 WEST DRIVE, BRAMPTON, ON CANADA, L6T 2J4 TEL: 905 625-8000 FAX: 905 625-4204					21-129 DRAWING No
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1	OLD 17-060	10/1/21	5	-	-
2	-	-	4	-	-



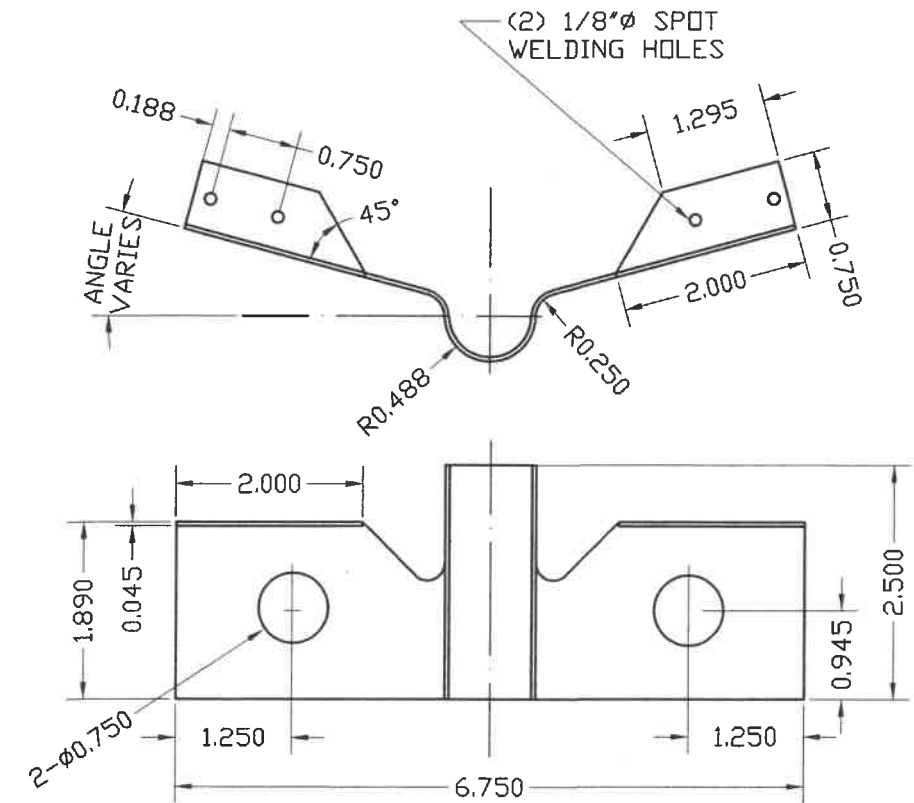
**⑥ WIRE ANCHOR
FOR DETAIL #21/17**

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



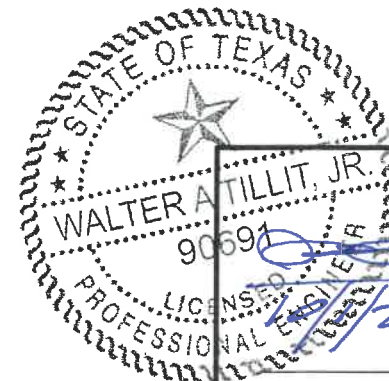
**⑦ 2 PIECE COMBINATION STUD
ANCHOR FOR DETAIL #20/17**

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



P.E. SEAL/SIGNATURE/DATE

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FIRM REGISTRATION # F-13790

TEXAS DEPARTMENT OF INSURANCE - 2018

DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL
GALVANNEAL OR STAINLESS STEEL DOOR W/ SERIES "AS"
16 GAGE GALVANNEAL OR STAINLESS STEEL FRAME
FLUSH, EMBOSSED & GLAZED ASSEMBLIES - L.M.

DRAWN BY:
M.P.

DAYBAR INDUSTRIES LTD

10/1/2021
DATE

50 WEST DRIVE, BRAMPTON,
ON CANADA, L6T 2J4
TEL: 905 625-8000 FAX: 905 625-4204

21-129
DRAWING No

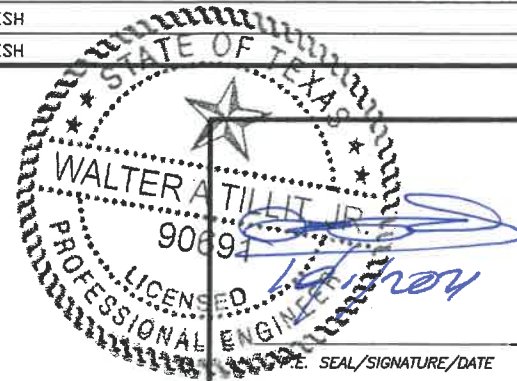
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 17-060	10/1/21	3	-	-
2	-	-	4	-	-

SHEET 18 OF 19

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% OR STAINLESS STEEL*	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 OR STAINLESS STEEL*	12 GAGE (0.097" MIN.) X 1.500" X 11.875" LONG, SEE DETAIL ON SHEET 9.
②	1	18 GAUGE FLUSH/EMBOSSED DOOR COMMERCIAL W/ CORE ②①	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 MIN. 45 KSI, ELONGATION 40% OR STAINLESS STEEL*	1 3/4" THICK X (.045 MIN), SEE SHEET 4, 5, 6 & 7.
③	3	8 GAUGE DOOR HINGE REINFORCING	GALVANNEAL STEEL OR STAINLESS STEEL*	1 1/4" X 10" X 8 GAUGE
④	3	8 GAUGE FRAME HINGE REINFORCING	GALVANNEAL STEEL OR STAINLESS STEEL*	1 1/2" X 8 3/4" X 8 GAUGE
⑤	1	STRIKE REINFORCING (FRAME)	GALVANNEAL STEEL OR STAINLESS STEEL*	1 3/8" X 7 5/16" X 14 GAUGE (.072 MIN)
⑤A	1	DEAD LOCK STRIKE TAB	GALVANNEAL STEEL OR STAINLESS 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	E60XX ELECTRODE FOR GALVANNEAL STEEL, E-308 ELECTRODES FOR STAINLESS STEEL*	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 W/ 499 STRIKE PLATE	AS PER MANUFACTURER'S CATALOG	RIM EXIT ATTACHED TO DOOR W/(4) 1/4-20x1" MS. (2) STRIKE PLATES EA. MULLION
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"-18x1" (MIN.) MACHINE SCREWS.
⑮A	1	WEATHER STRIP (NATIONAL GUARD PRODUCTS #120NA)	NEDPRENE	SECURED WITH DOUBLE ROW OF #6x1/2" SMS SCREWS @ 1' FROM EACH END AND 4" O.C. (AS PREDRILLED BY MANUFACTURER)
⑯	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 OR STAINLESS STEEL*	1.25" x 10" x 0.134" MIN. THICK
⑱	1	DOOR SURFACE BOLT REINFORCING	GALVANNEAL STEEL OR STAINLESS STEEL*	14 GAGE (0.074") x 1.687" x 3.500" x 9.000" LONG.
⑲	AS REQ'D	3/8" LEXAN VISION LITE	AS PER MANUFACTURER (DAYBAR INDUSTRIES, LTD)	SEE SHEET 8 FOR DETAILS & COMPONENTS
⑲A	AS REQ'D	1/2" LEXAN VLF-EZ-IG VISION LITE	AS PER MANUFACTURER (AIR LOUVERS, INC.)	SEE SHEET 8 FOR DETAILS & COMPONENTS
⑳	1	0.75" THICK EXPANDED POLYSTYRENE DOOR CORE OR 3/4" CELL PAPER HONEYCOMB.	0.75" THICK DOOR 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 DOOR AT TOP AND BOTTOM TO HEADER & THRESHOLD RESPECTIVELY & FASTENED TO DOOR 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 OR STAINLESS STEEL*	SEE SHEET 15 FOR SUBCONJUNTS
㉔	1	#161 CYLINDRICAL LOCK AND DEAD BOLT REINFORCEMENT	SATIN COAT STEEL OR STAINLESS STEEL*	SEE SHEET 16 FOR DETAILS
㉕	1	DOOR SURFACE CLOSER REINFORCEMENT	0.074" MIN. THICK GALVANNEAL STEEL OR STAINLESS 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 OR STAINLESS STEEL*	16 GAGE (0.057" MIN.) x 1.8125" x 1.4375.
㉗	1	'Z' ASTRAGAL	0.075" MIN. THICK A 500 GRADE B GALVANNEAL STEEL OR STAINLESS 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 OR STAINLESS STEEL*	SEE SHEET 14 FOR SIZES
㉙	AS REQ'D	CAULKING: GE SILICONE II	N/A	
㉚	AS REQ'D	995 DDW 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

* AISI 304 SERIES STAINLESS STEEL WITH Fy =45.75 Ksi AND Fu= 101.38 Ksi



WALTER A. TILLIT Jr P.E.
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 TEXAS LIC. # 90691
 FIRM REGISTRATION # F-13790

TEXAS DEPARTMENT OF INSURANCE - 2018

DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL GALVANNEAL OR STAINLESS STEEL DOOR W/ SERIES "AS" 16 GAGE GALVANNEAL OR STAINLESS STEEL FRAME FLUSH, EMBOSSED & GLAZED ASSEMBLIES - L.M.

DRAWN BY:
M.P.

DAYBAR INDUSTRIES LTD

10/1/2021
DATE

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

21-129
DRAWING No

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 17-060	10/1/21	3	-	-
2	-	-	4	-	-