

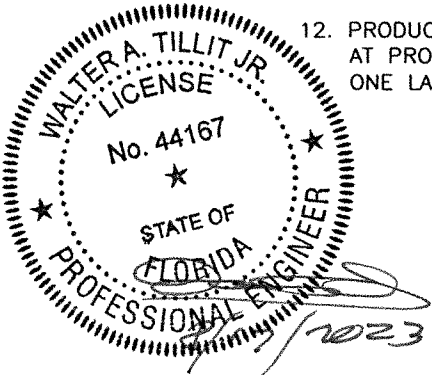
SHEETS CONTENT:

- 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 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 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.

GENERAL NOTES AND SPECIFICATIONS:

1. DOUBLE & SINGLE SERIES LS18 FLUSH/EMBOSSED OUTSWING COMMERCIAL STEEL DOOR W/SERIES "AS" FRAME, SHOWN ON THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) HAS BEEN VERIFIED FOR CODE COMPLIANCE IN ACCORDANCE WITH THE 2023 (8th EDITION) OF THE FLORIDA BUILDING CODE. DOOR MAY BE INSTALLED AT HIGH VELOCITY HURRICANE ZONES. DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTIONS 1620 OF THE ABOVE MENTIONED CODE, USING ASCE 7-22 AND SHALL NOT EXCEED THE MAXIMUM (A.S.D.) DESIGN PRESSURE RATINGS INDICATED ON SHEETS 2, 3 & 3A. IN ORDER TO VERIFY THE ABOVE CONDITION, ULTIMATE DESIGN WIND LOADS DETERMINED PER ASCE 7-22 SHALL BE FIRST REDUCED TO A.S.D. DESIGN WIND LOADS BY MULTIPLYING THEM BY 0.6 IN ORDER TO COMPARE THESE W/ MAX. (A.S.D.) DESIGN PRESSURE RATINGS INDICATED ON SHEETS 2, 3 & 3A.
- THIS DOOR'S ADEQUACY FOR WIND AND IMPACT LOAD HAS BEEN VERIFIED IN ACCORDANCE WITH SECTION 1626 OF THE ABOVE MENTIONED CODE AS PER 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 1616 OF THE FLORIDA 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 FBC TO BE DETERMINED BY BUILDING OFFICIALS ON A CASE-BY-CASE BASIS.
4. ALL SCREWS USED FOR ASSEMBLY CONNECTIONS (METAL TO METAL) TO BE STAINLESS STEEL 304 OR 316 AISI SERIES OR CORROSION RESISTANT COATED CARBON STEEL AS PER DIN 50018 WITH 50 ksi YIELD POINT AND 90 ksi TENSILE STRENGTH & SHALL COMPLY W/ FLORIDA BUILDING CODE SECTION 2411.3.3.4.
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.
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. PROVIDE SPECIFIED SEALANT AT ALL DOOR FRAME, THRESHOLD AND VISION LITE COMPONENTS INDICATED ON THIS DRAWING.
11. (a) THIS PRODUCT EVALUATION DOCUMENT (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 PRODUCT EVALUATION DOCUMENT (P.E.D.) WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.
- (d) ORIGINAL P.E.D SHALL BEAR THE DATE, SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.
12. PRODUCT MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION AT PRODUCT IN ACCORDANCE WITH SECTION 1709.5 OF THE FLORIDA BUILDING CODE. ONE LABEL SHALL BE PLACED FOR EVERY OPENING.

THIS DRAWING SHALL ONLY BE USED TO
OBTAIN PERMITS IN THE STATE OF FLORIDA



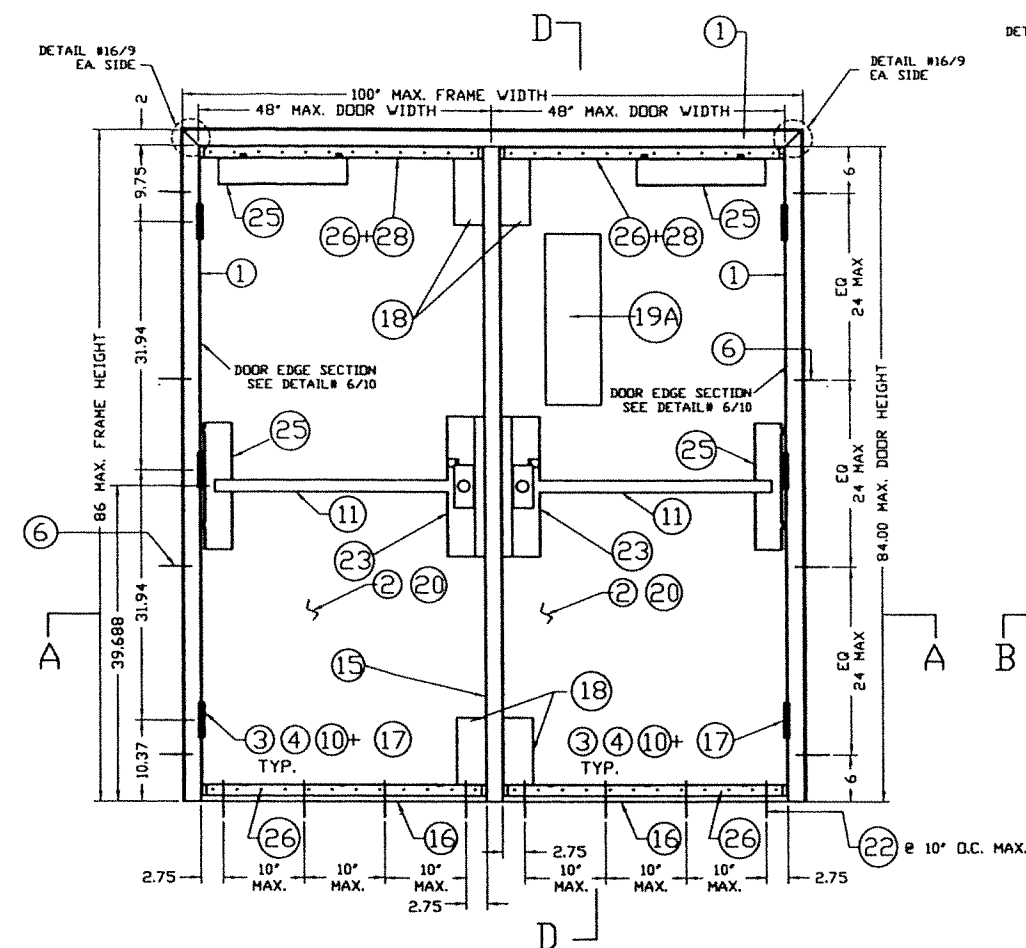
©2023 TILTECO, INC.

TILTECO inc.

TILLIT TESTING & ENGINEERING COMPANY
6355N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL GALVANNEAL OR STAINLESS STEEL DOOR W/ SERIES "AS" 18 GAGE GALVANNEAL OR STAINLESS STEEL FRAME FLUSH, EMBOSSED & GLAZED ASSEMBLIES - L.M.						DRAWN BY: Y.M.
DAYBAR INDUSTRIES LTD 50 WEST DRIVE, BRAMPTON, ON CANADA, L6T 2J4 TEL: 905 625-8000 FAX: 905 625-4204						08/17/2023 DATE
						23-174 DRAWING No
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE	SHEET 1 OF 19
1	OLD 20-150	08/17/2023	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 #FB168 STEEL BUTT HINGE (1)

VON DUPRIN 9954 REMOVABLE MULLION (1)

(FOR DOUBLE DOOR ONLY)

DOOR CORE ITEM (20): EXPANDED POLYSTYRENE OR HONEYCOMB

PAPER OR 1.5 PCF POLYURETHANE OR 12.5 PCF MINERAL BOARD

FULL FLUSH

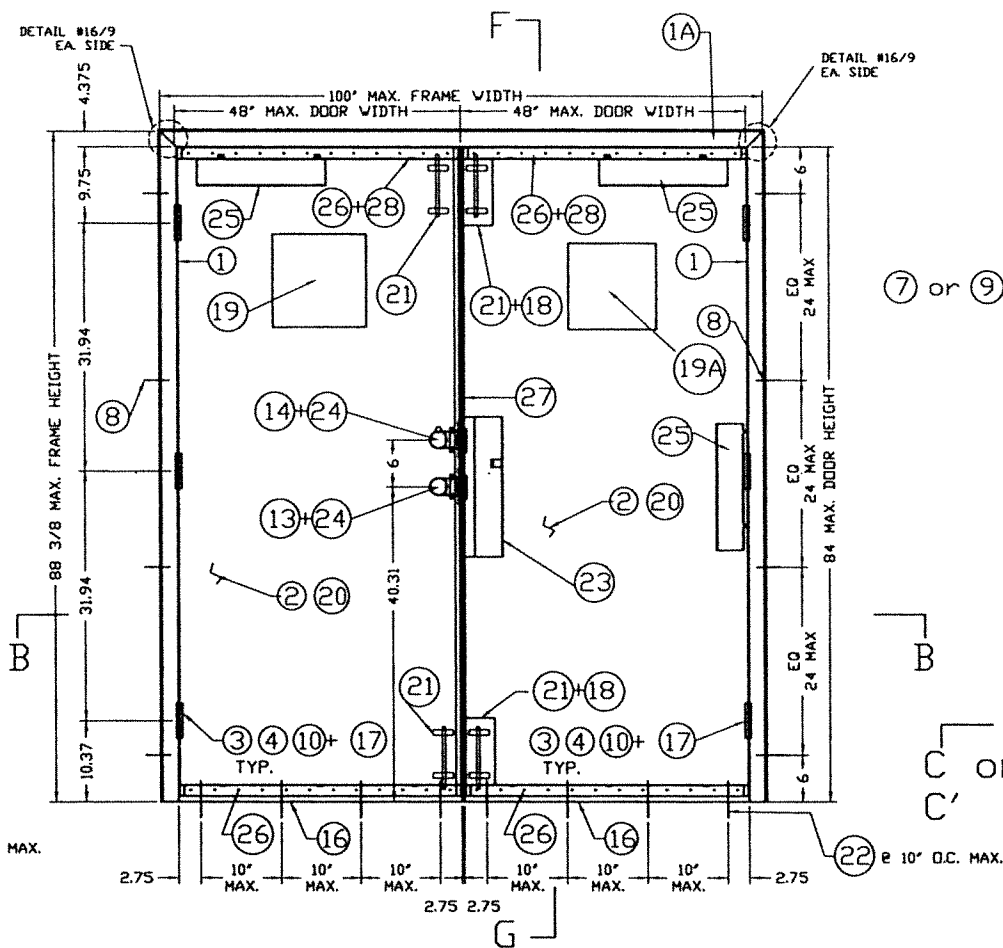
VISION LITE MODEL VLF-EZ-IG (19A) BY AIR LOUVERS, INC.,

W/ 1/2" LEXAN GLAZING SET IN DOW CORNING #995

STRUCTURAL SILICONE W/ 7" x 22" DOOR CUT-OUT

NARROWLITE (5"x20" D.L.Q.)

MAX. A.S.D. 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 (1)

"Z" ASTRAGAL (2) W/ ASA STRIKE

FOR CYLINDRICAL LOCK AND DEAD BOLT STRIKE

DOOR CORE (20): EXPANDED POLYSTYRENE OR HONEYCOMB PAPER OR

1.5 PCF POLYURETHANE OR 12.5 PCF MINERAL BOARD 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

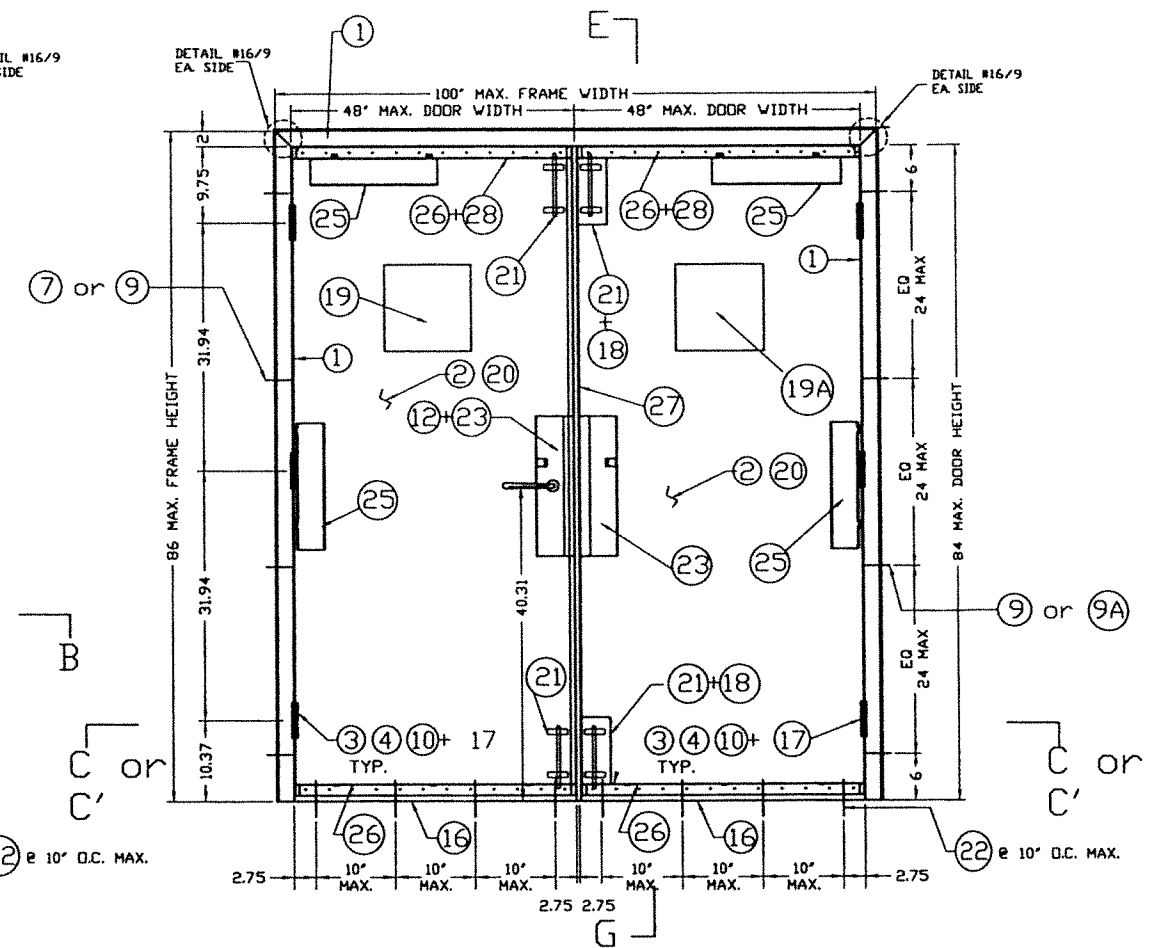
NARROWLITE (10"x10" D.L.Q.) AND DAYBAR VISION LITE (19)

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.Q.)

MAX. A.S.D. 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 (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 (1)

"Z" ASTRAGAL (2) W/ ASA STRIKE FOR MORTISE LOCK

DOOR CORE (20) EXPANDED POLYSTYRENE OR HONEYCOMB PAPER OR

1.5 PCF POLYURETHANE OR 12.5 PCF MINERAL BOARD 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.Q.) 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

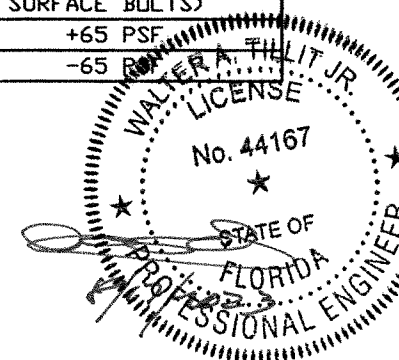
CUT-OUT NARROWLITE (9 3/4"x9 3/4" D.L.Q.)

MAX. A.S.D. 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 A.S.D. DESIGN PRESSURE RATING
SCHEDULE FOR ASSEMBLY COMBINATIONS.



©2023 TILTECO, INC.

TILTECO INC.

TILLIT TESTING & ENGINEERING COMPANY

6355N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166

Phone: (305)871-1530, Fax: (305)871-1531

e-mail: tilteco@aol.com

CA-0006719

WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

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

DRAWN BY:
Y.M.

08/17/2023
DATE

23-174
DRAWING No

SHEET 2 OF 19

DAYBAR INDUSTRIES LTD

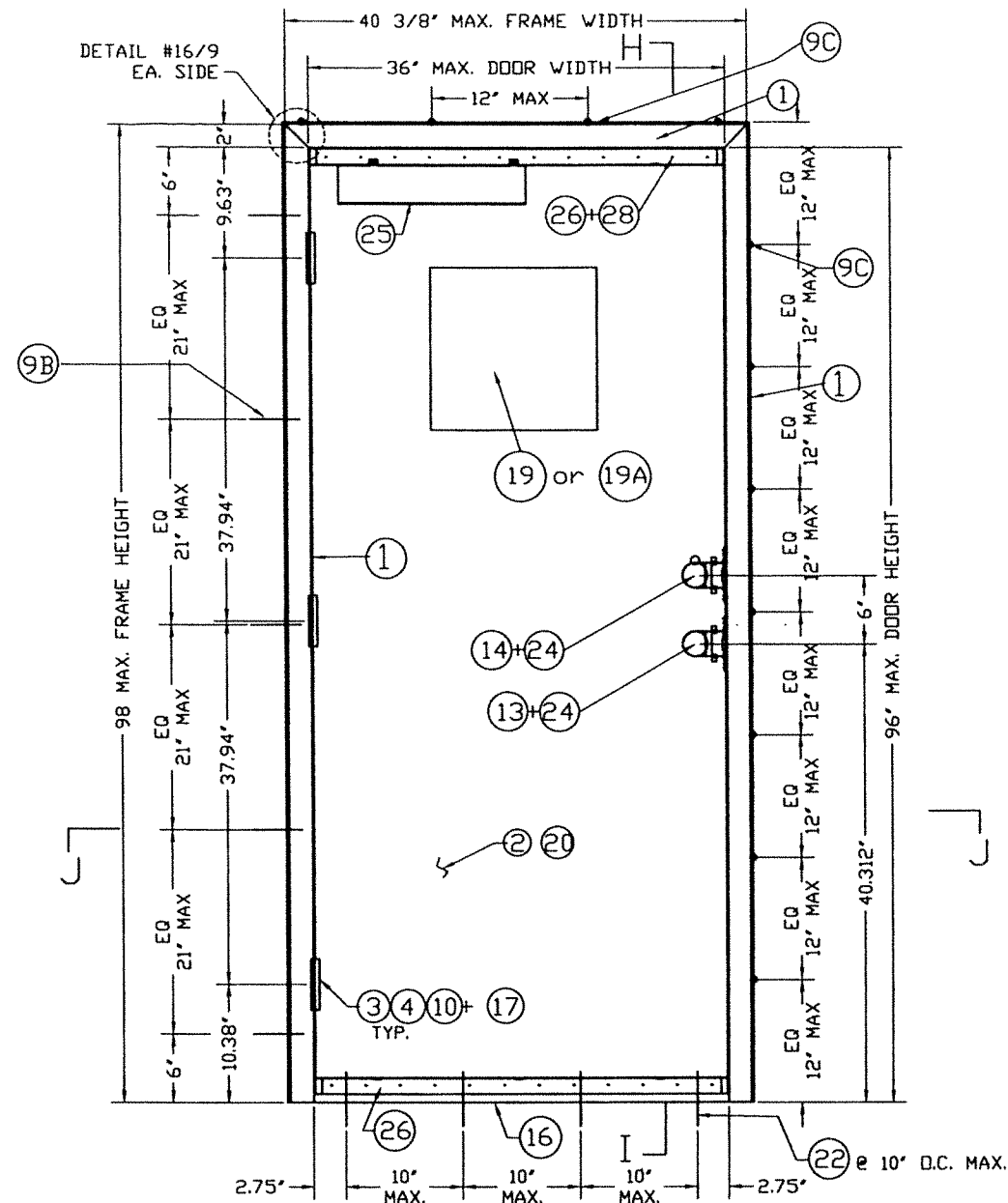
50 WEST DRIVE, BRAMPTON,

ON CANADA, L6T 2J4

TEL: 905 625-8000

FAX: 905 625-4204

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-150	08/17/2023	3		
2			4		



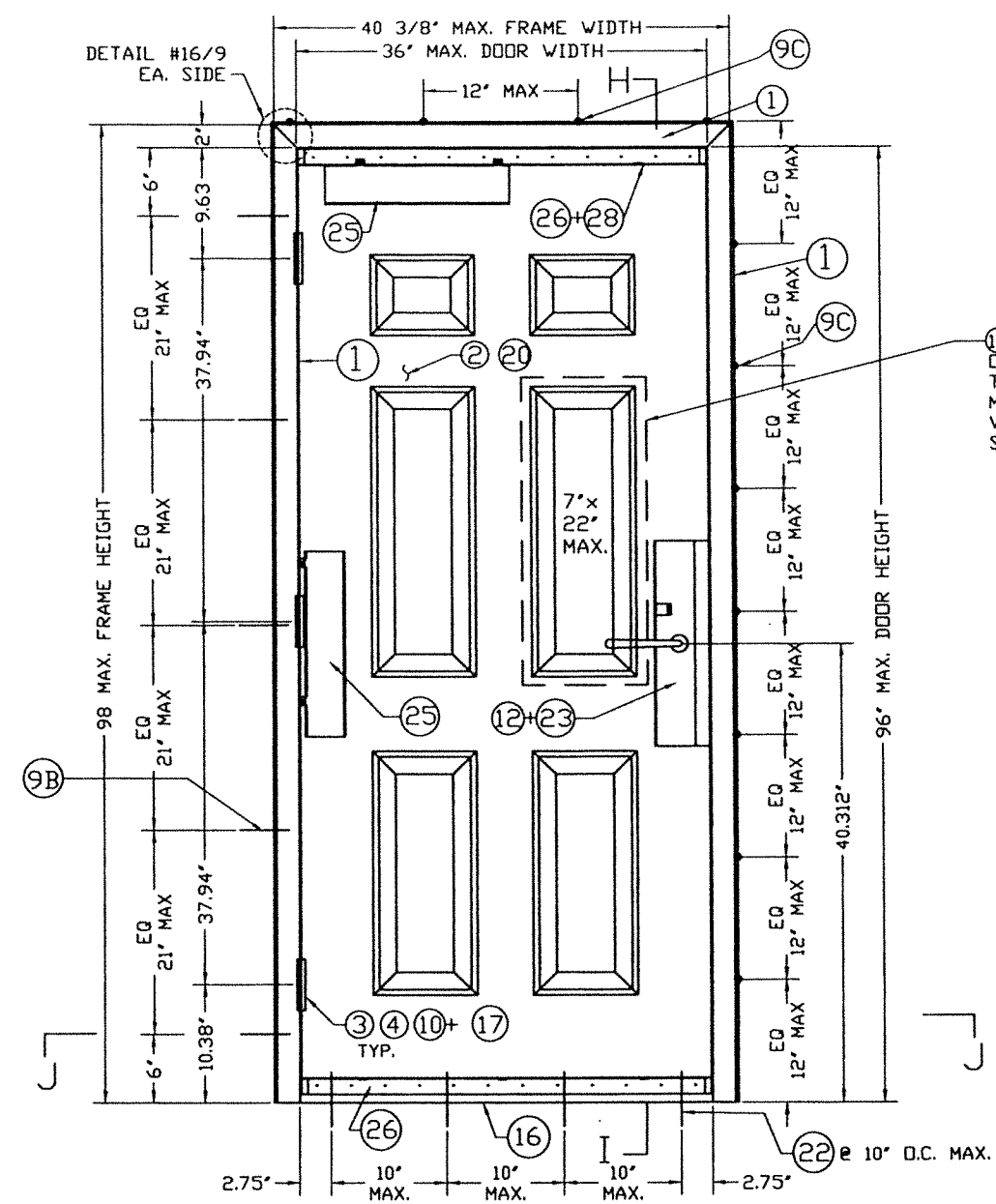
ASSEMBLY #7 * EXTERIOR ELEVATION SINGLE DOOR OUTSWING WALL CONDITION - WELDED HOT ROLLED 3/8" MIN. THICK STRUCTURAL STEEL CHANNEL FRAME JAMB AND HEAD. ANCHORS: 3/8"x3 1/2" FLAT HEAD MACHINE SCREW, LOCK WASHER & NUT W/ EMA (DET #23A), OR FRAME (1) WELDED @ 12" O.C. AT JAMB AND HEAD INCLUDING TOP & BOTTOM 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 OR 1.5 PCF POLYURETHANE OR 12.5 PCF MINERAL BOARD. 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. A.S.D. DESIGN PRESSURE RATINGS (OUTSWING SINGLE DOORS WITHOUT SURFACE BOLTS)	
POSITIVE	+65 PSF
NEGATIVE	-53.3 PSF

ASSEMBLY ELEVATIONS #7, 7-EMB

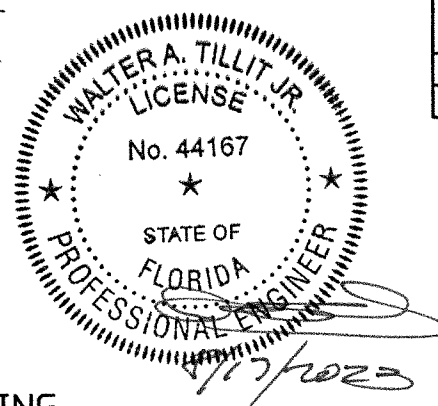
SEE SECTIONS ON SHEET 7

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



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 OR 1.5 PCF POLYURETHANE OR 12.5 PCF MINERAL BOARD. FULL EMBOSSED

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



FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC.

TILTECO INC.

TILLIT TESTING & ENGINEERING COMPANY
6355N.W. 36th. St. Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL GALVANNEAL OR STAINLESS STEEL W/ SERIES "AS" 18 GAGE GALVANNEAL OR STAINLESS STEEL FRAME FLUSH, EMBOSSED & GLAZED ASSEMBLIES - L.M.

DAYBAR INDUSTRIES LTD

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

DRAWN BY: Y.M.
08/17/2023 DATE
23-174
DRAWING No
SHEET 3 OF 19

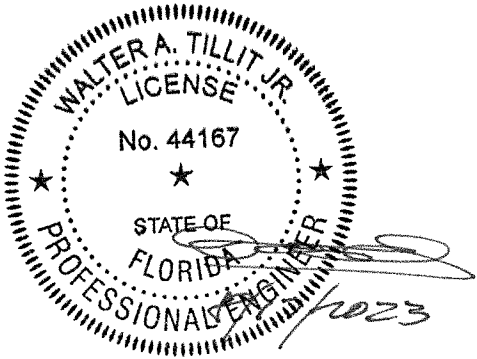
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-150	08/17/2023	3		
2			4		

MAX. A.S.D. 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.



©2023 TILTECO, INC.

TILTECO INC.

TILLIT TESTING & ENGINEERING COMPANY
6355N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr., P.E.
FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL GALVANNEAL OR STAINLESS STEEL DOOR W/ SERIES "AS" 18 GAGE GALVANNEAL OR STAINLESS STEEL FRAME FLUSH, EMBOSSED & GLAZED ASSEMBLIES - L.M.

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

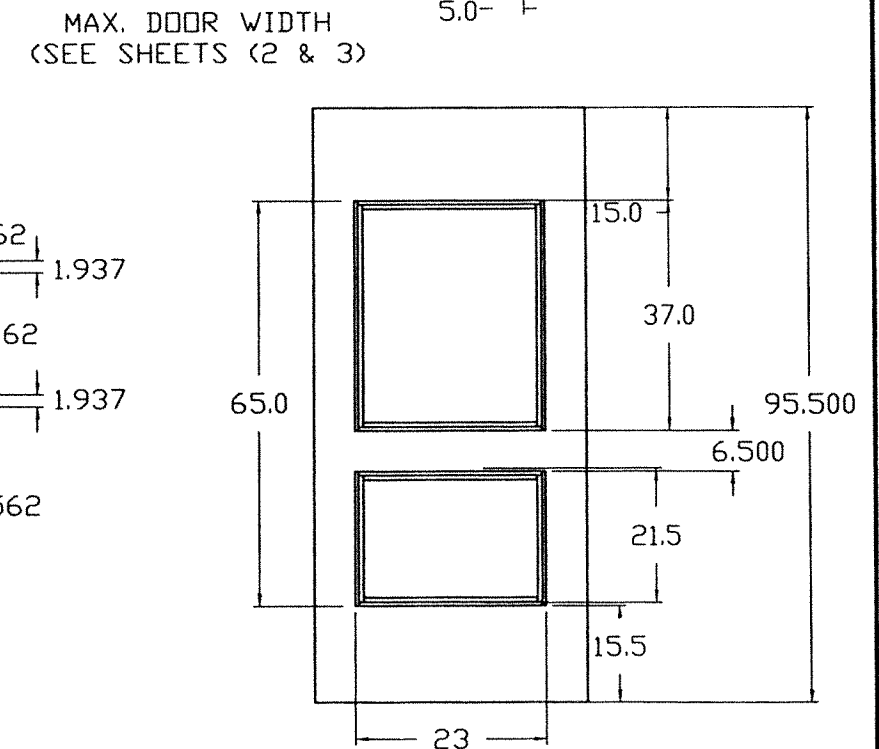
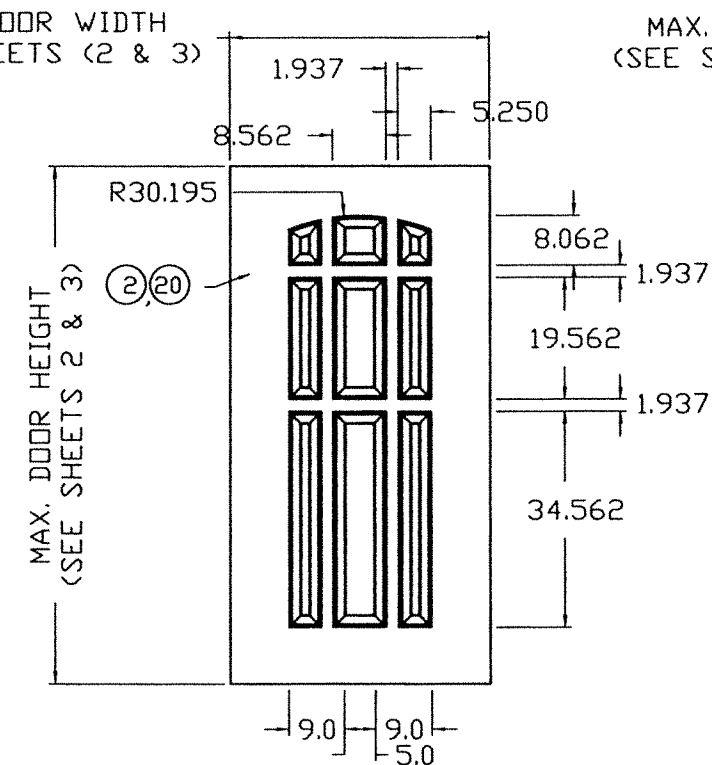
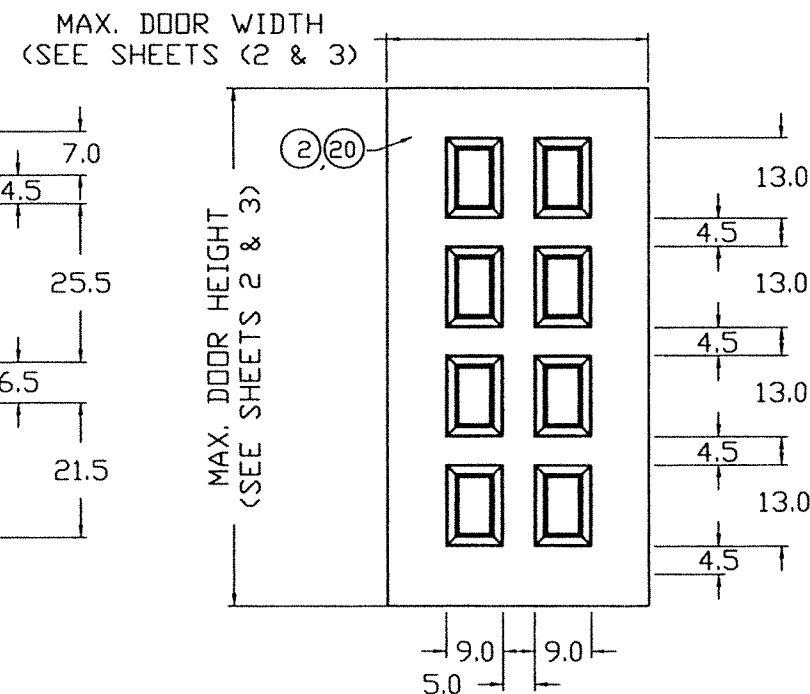
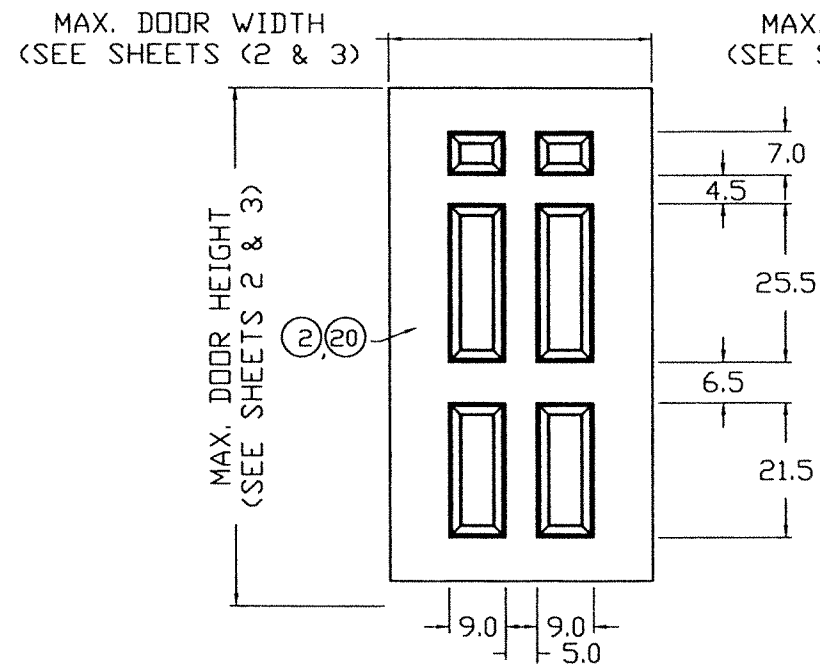
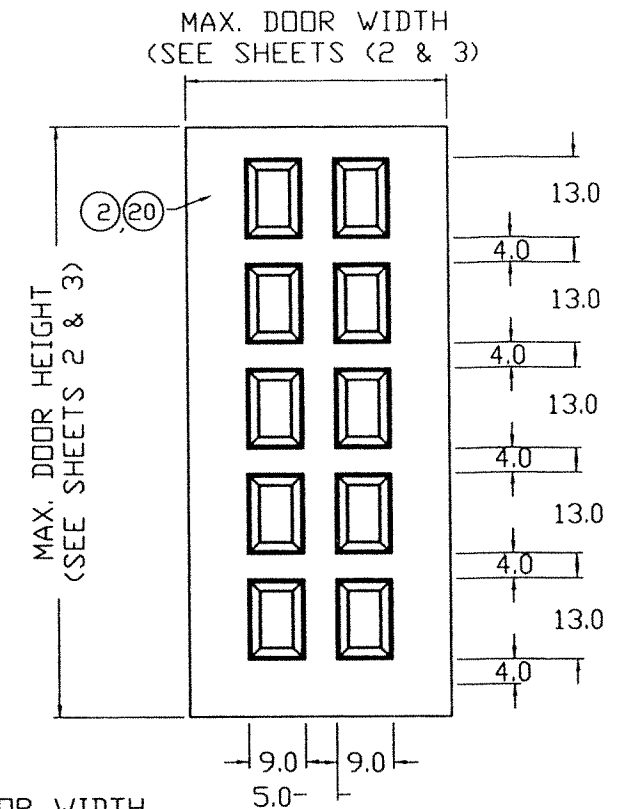
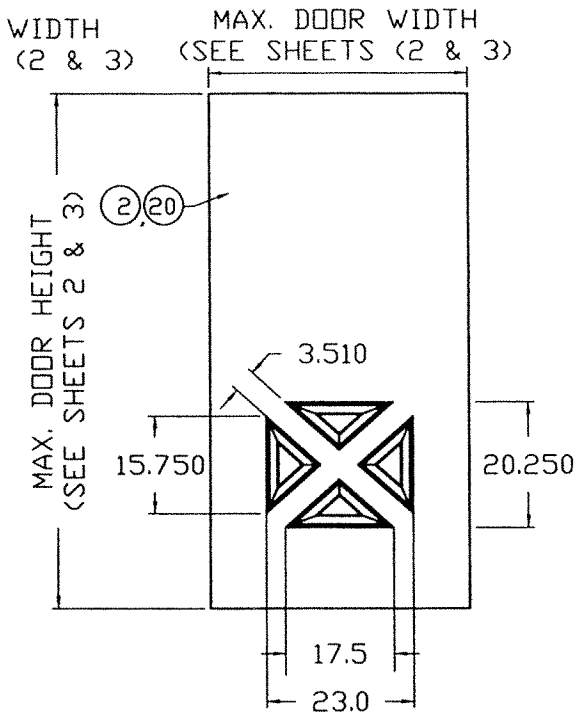
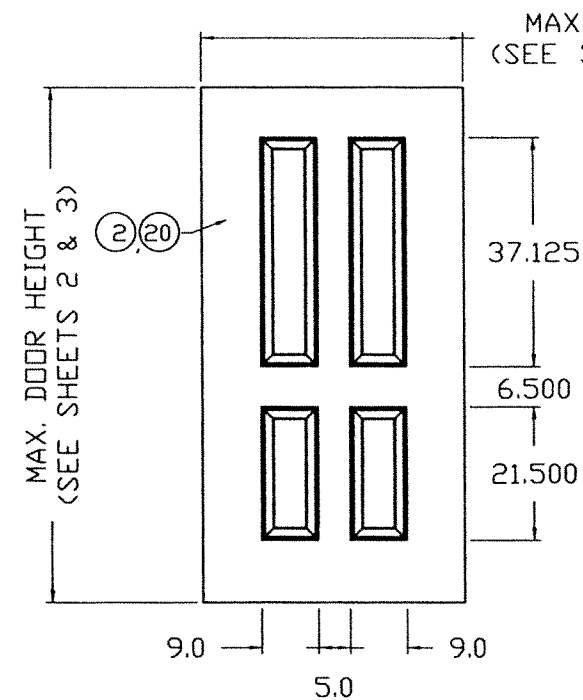
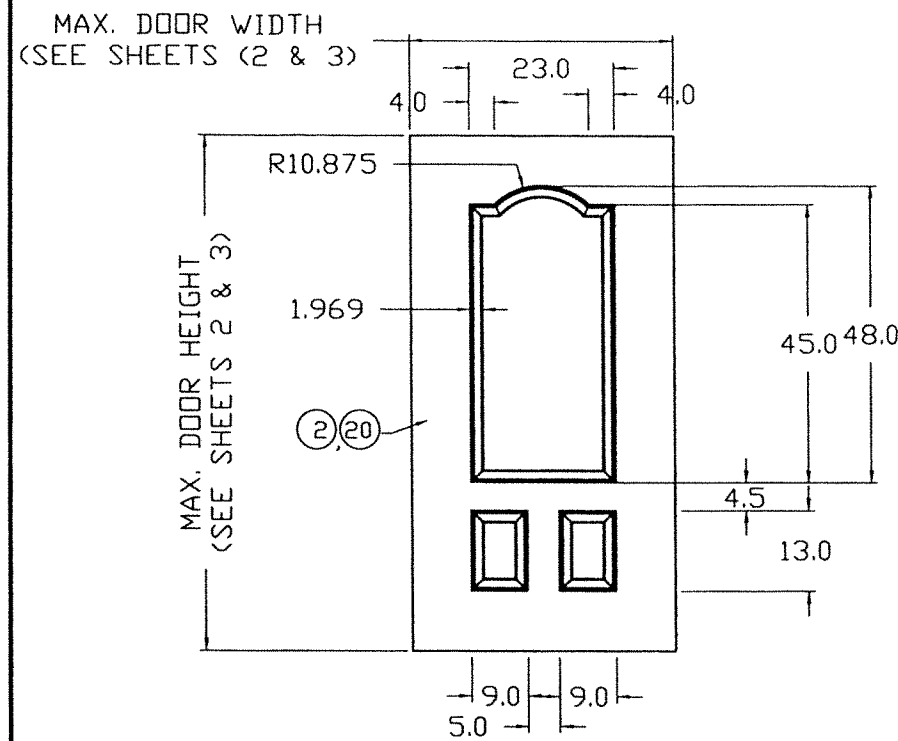
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-150	08/17/2023	3		
2			4		

DRAWN BY:
Y.M.

08/17/2023
DATE

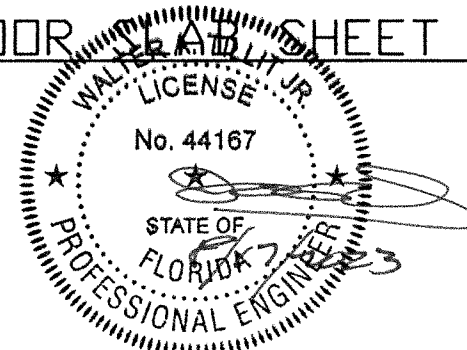
23-174
DRAWING No

SHEET 3A OF 19



OPTIONAL EMBOSSED DOOR GLASS SHEET CONFIGURATIONS

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



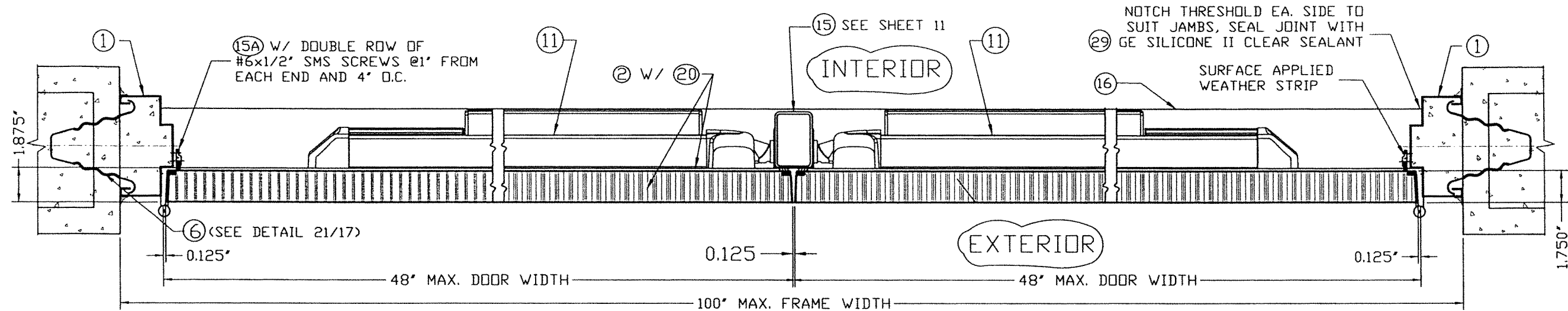
©2023 TILTECO, INC.

TILTECO inc.

TILLIT TESTING & ENGINEERING COMPANY
6355N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

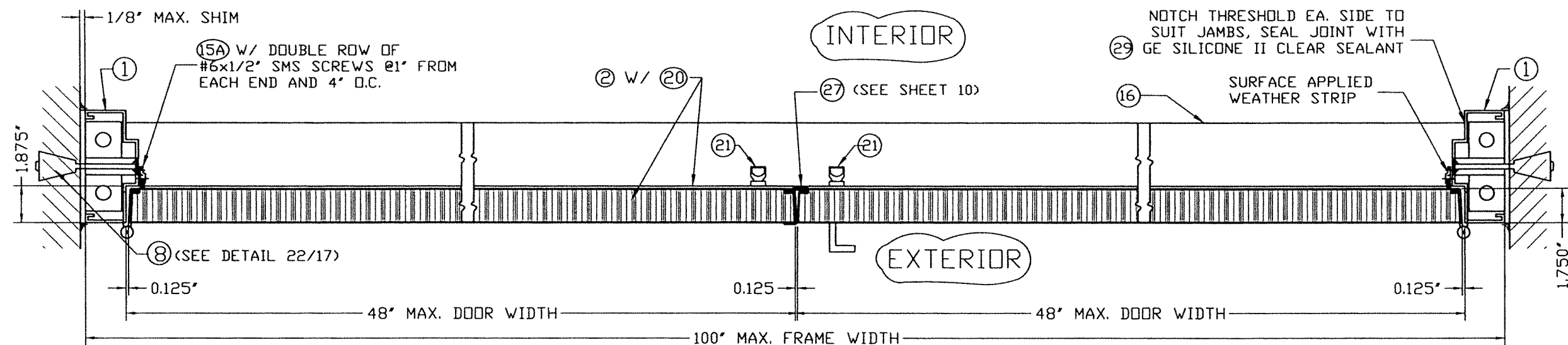
FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL GALVANNEAL OR STAINLESS STEEL DOOR W/ SERIES "AS" 18 GAGE GALVANNEAL OR STAINLESS STEEL FRAME FLUSH, EMBOSSED & GLAZED ASSEMBLIES - L.M.						DRAWN BY: Y.M.
DAYBAR INDUSTRIES LTD						08/17/2023 DATE
50 WEST DRIVE, BRAMPTON, ON CANADA, L6T 2J4 TEL: 905 625-8000 FAX: 905 625-4204						23-174 DRAWING No
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE	SHEET 4 OF 19
1	OLD 20-150	08/17/2023	3			
2			4			



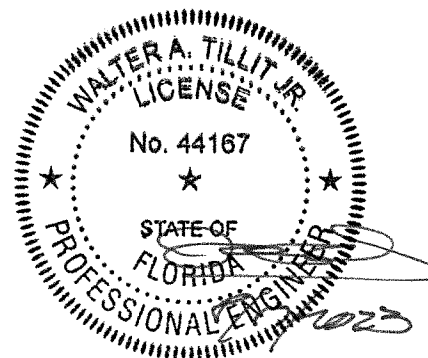
SECTION A-A

SCALE: 3/16"=1"



SECTION B-B

SCALE: 3/16"=1"



©2023 TILTECO, INC.

TILTECO INC.

TILLIT TESTING & ENGINEERING COMPANY
6355N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone: (305)871-1530 • Fax: (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

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.

DAYBAR INDUSTRIES LTD

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

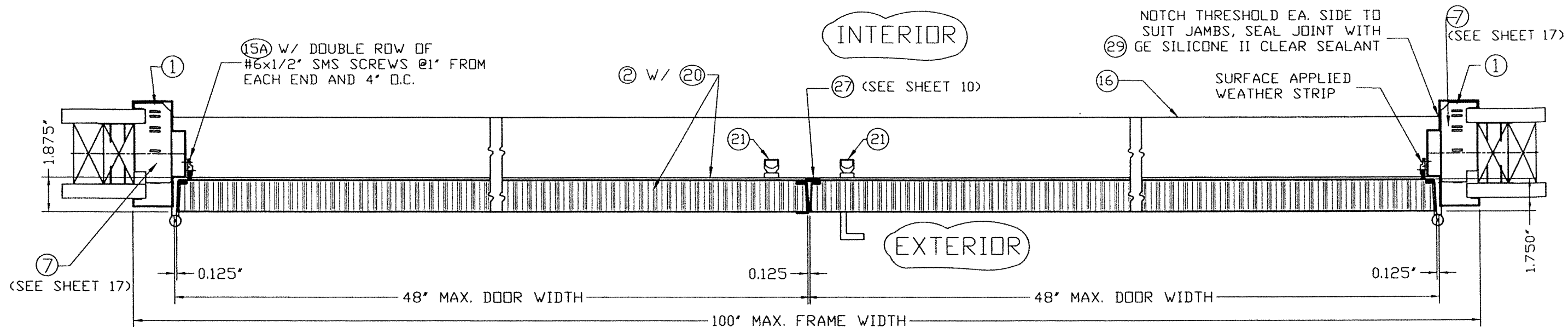
DRAWN BY:
Y.M.

08/17/2023
DATE

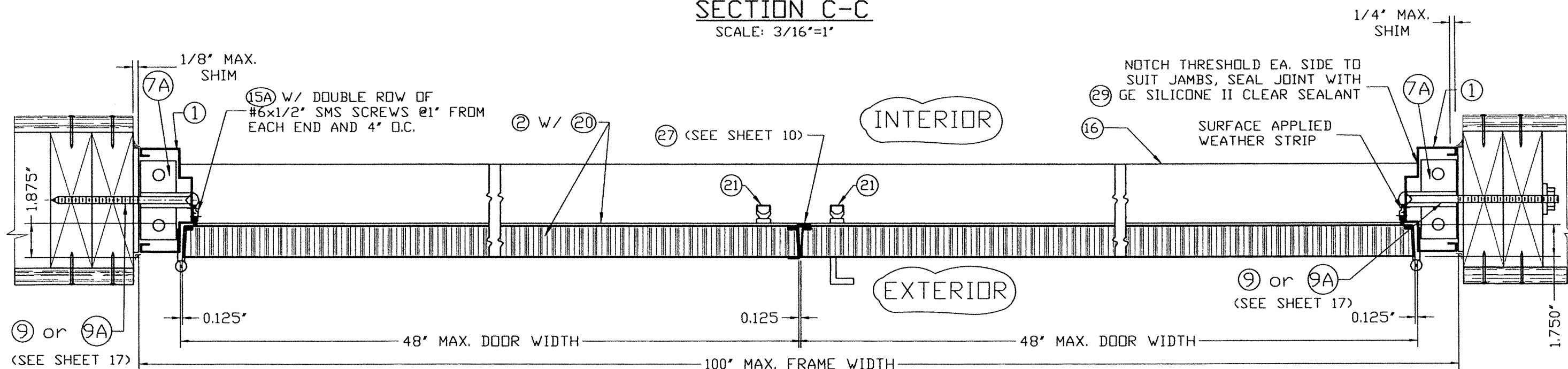
23-174
DRAWING No

SHEET 5 OF 19

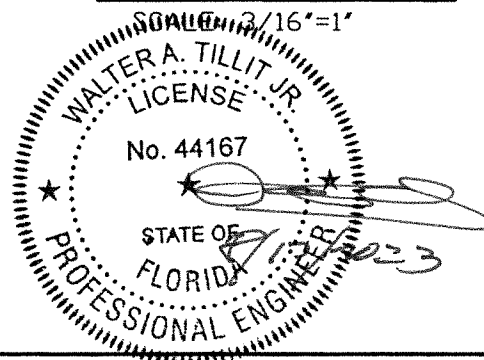
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-150	08/17/2023	3		
2			4		



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



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



©2023 TILTECO, INC.

TILTECO inc.

TILLIT TESTING & ENGINEERING COMPANY
6355N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL GALVANNEAL OR STAINLESS STEEL DOOR W/ SERIES "AS" 18 GAGE GALVANNEAL OR STAINLESS STEEL FRAME FLUSH, EMBOSSED & GLAZED ASSEMBLIES - L.M.

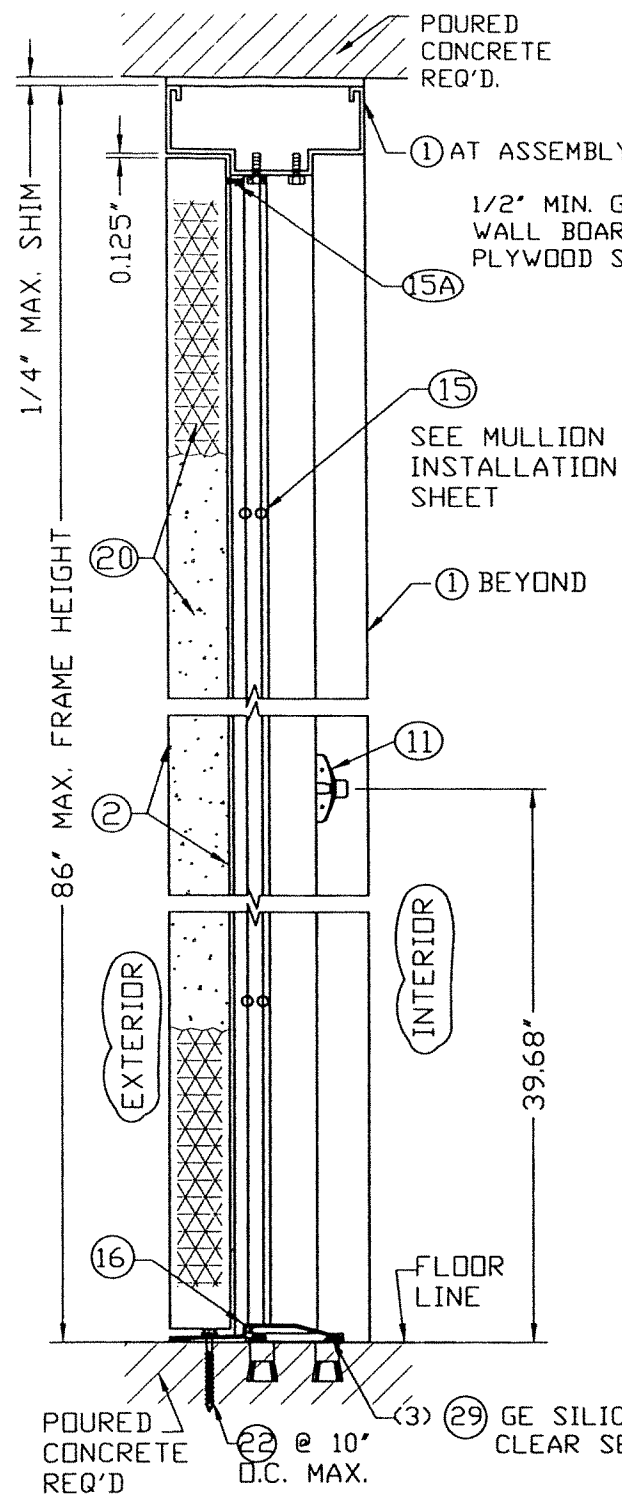
DAYBAR INDUSTRIES LTD
50 WEST DRIVE, BRAMPTON,
ON CANADA, L6T 2J4
TEL: 905 625-8000
FAX: 905 625-4204

DRAWN BY:
Y.M.

08/17/2023
DATE

23-174
DRAWING No

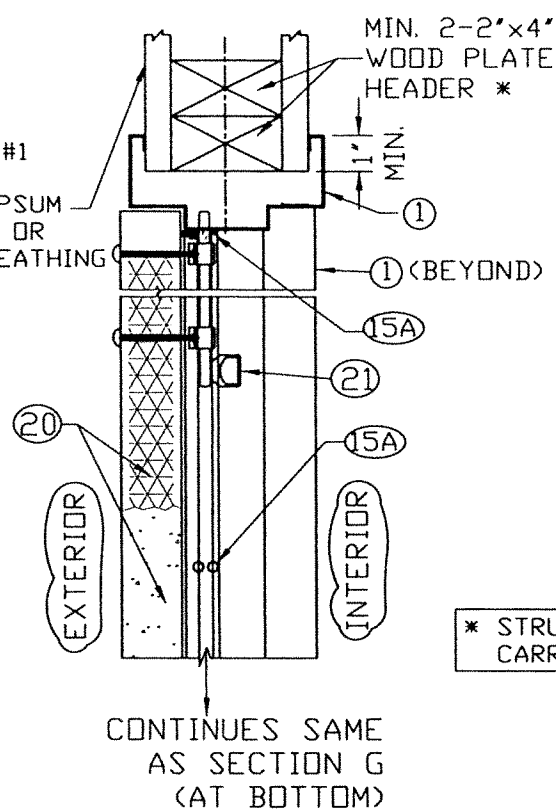
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-150	08/17/2023	3		
2			4		



SECTION D-D

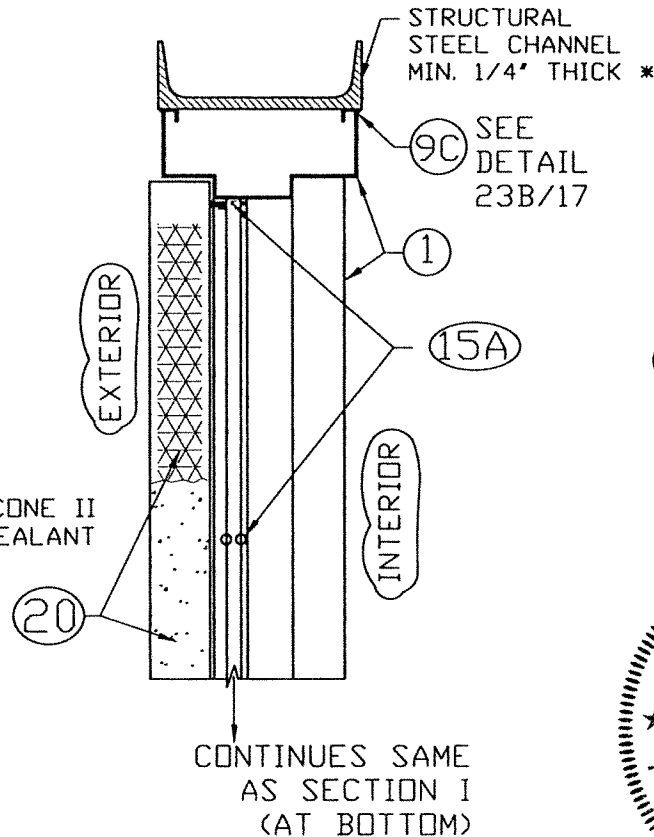
SINGLE DOOR DOES NOT NEED MULLION.
LATCH ONTO REINFORCED JAMB

SCALE: 3/16"=1'



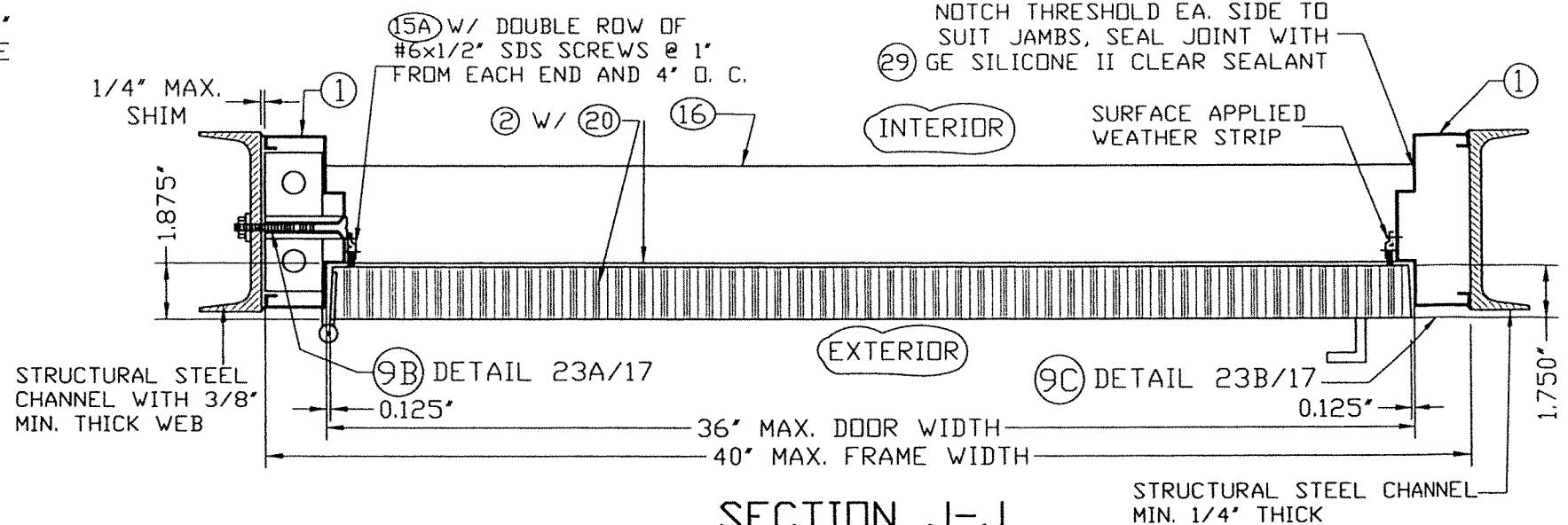
SECTION E

SCALE: 3/16"=1'



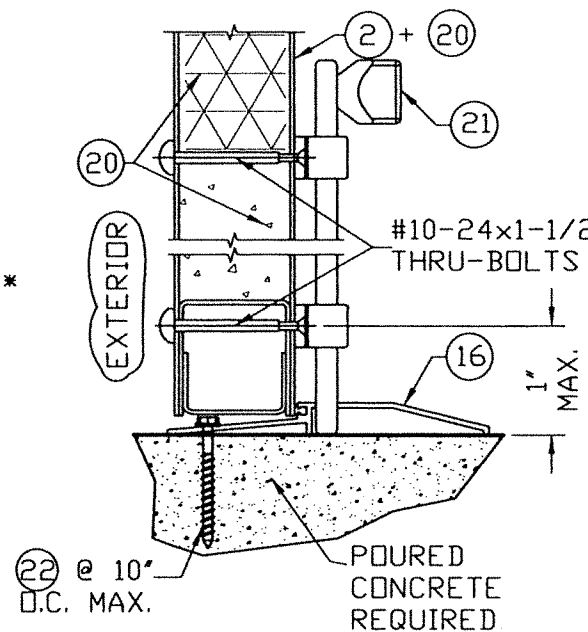
SECTION H

SCALE: 3/16"=1'

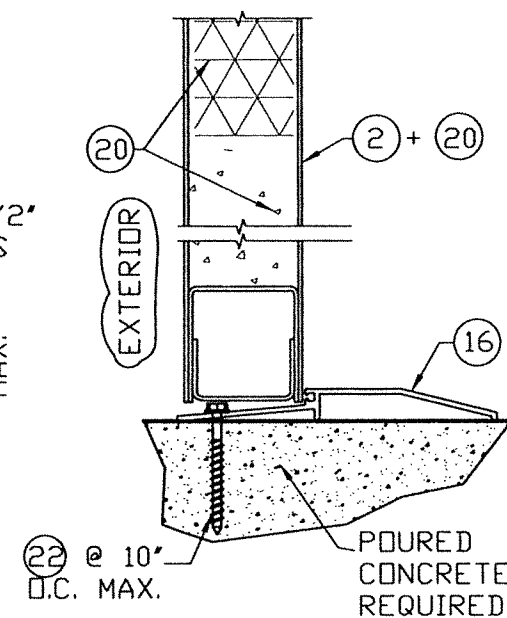


SECTION J-J

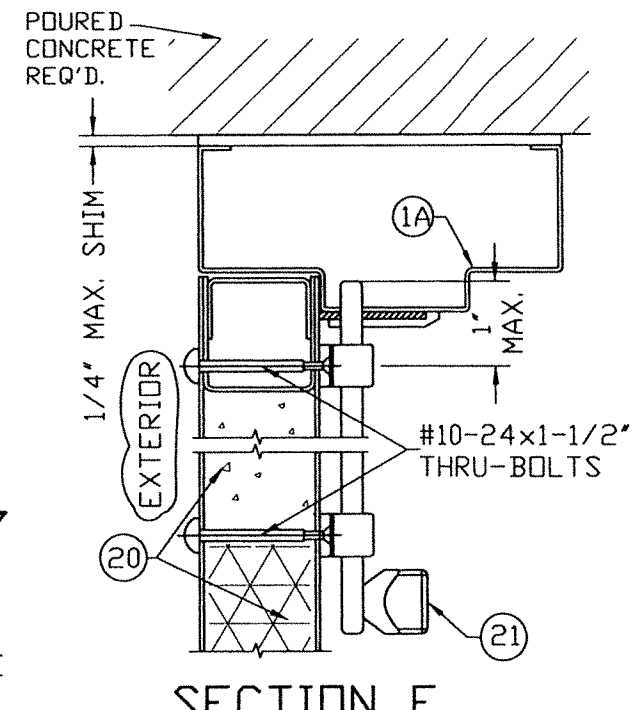
SCALE: 3/16"=1'



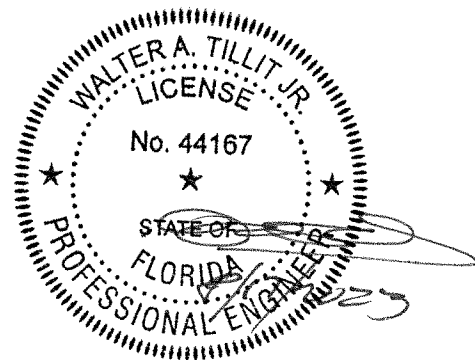
SECTION G



SECTION I



SECTION F



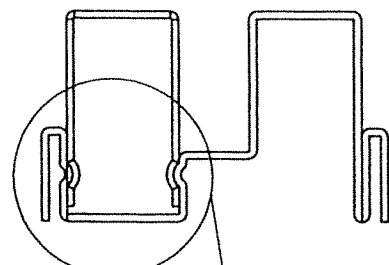
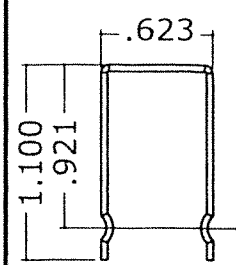
©2023 TILTECO, INC.

TILTECO INC.

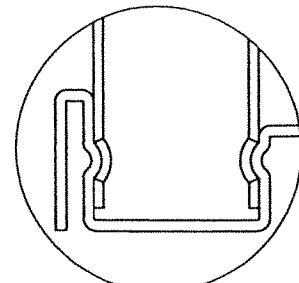
TILLIT TESTING & ENGINEERING COMPANY
6355N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33186
Phone: (305)871-1530 Fax: (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

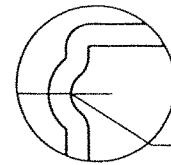
DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL GALVANNEAL OR STAINLESS STEEL DOOR W/ SERIES "AS" 18 GAGE GALVANNEAL OR STAINLESS STEEL FRAME FLUSH, EMBOSSED & GLAZED ASSEMBLIES - L.M.						DRAWN BY:
DAYBAR INDUSTRIES LTD						Y.M.
50 WEST DRIVE, BRAWPTON, ON CANADA, L6T 2J4 TEL: 905 625-8000 FAX: 905 625-4204						08/17/2023 DATE
REV. No DESCRIPTION DATE REV. No DESCRIPTION DATE						23-174 DRAWING No
1	OLD 20-150	08/17/2023	3			SHEET 7 OF 19
2			4			



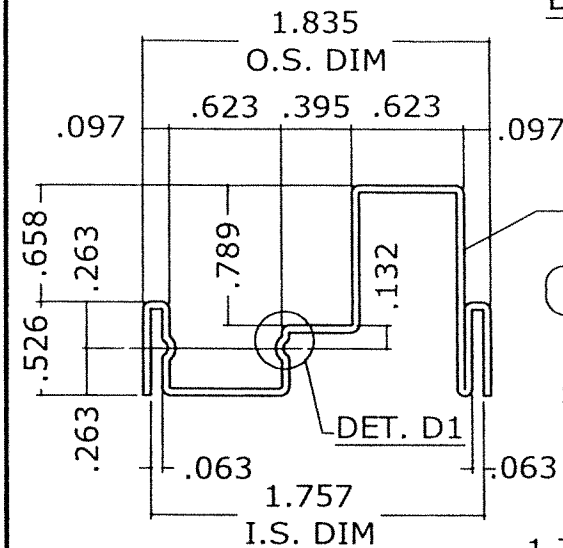
DETAIL D



DETAIL D



DETAIL D1



20 GAGE

EXTERIOR

3/8" THICK
SABIC LEXAN SHEET

DET. D1

I.S. DIM

29 CONT.
GE SILICONE II
CLEAR SEALANT
ALL AROUND

EXTERIOR

1/2" x 5/8" 20 GA.
GALVANIZED COLD ROLLED
STEEL GLASS STOP

1/2" x 5/8" 20 GA.
GALVANIZED COLD ROLLED
STEEL GLAZING BEAD

3/8" SABIC LEXAN

30 995 DOW CORNING
STRUCTURAL SILICONE
SEALANT, ALL AROUND
EACH SIDE

1.75
DOOR

INTERIOR

GLASS
BITE

9 3/4" Ø D.L.O.

11 1/8" MAX. VISION LITE CUTOUT

5 5/8" STD

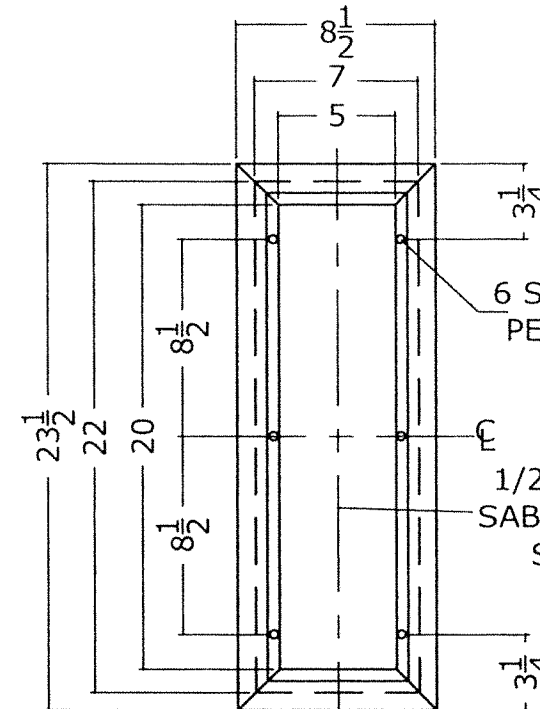
11 1/8" DOOR
CUTOUT

DOOR CUTOUT

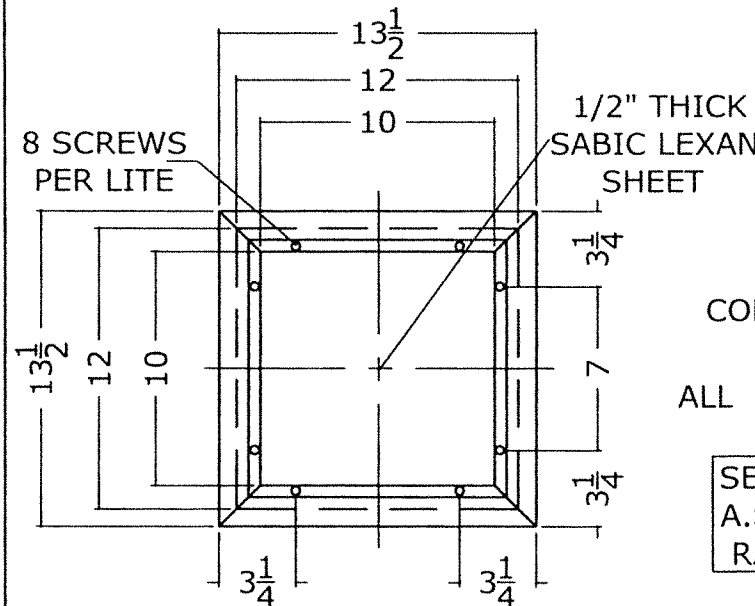
SEE ELEVATION FOR MAX.
A.S.D. DESIGN PRESSURE
RATING ON SHEET 2 & 3

19 3/8" LEXAN GLAZED
VISION LITE
MANUFACTURED
BY DAYBAR INDUSTRIES, LTD.

3/8" GE LEXAN GLAZING DETAIL



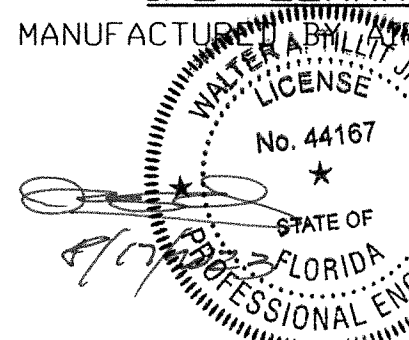
7' x 22' KIT - ELEVATION



12' x 12' KIT - ELEVATION

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

MANUFACTURED BY DAYBAR LOUVERS, INC.



2023 TILTECO, INC.
TILTECO INC.
TESTING & ENGINEERING COMPANY
8355 W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone: (305) 871-1530 Fax: (305) 871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT JR., P.E.
FLORIDA Lic. # 44167

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

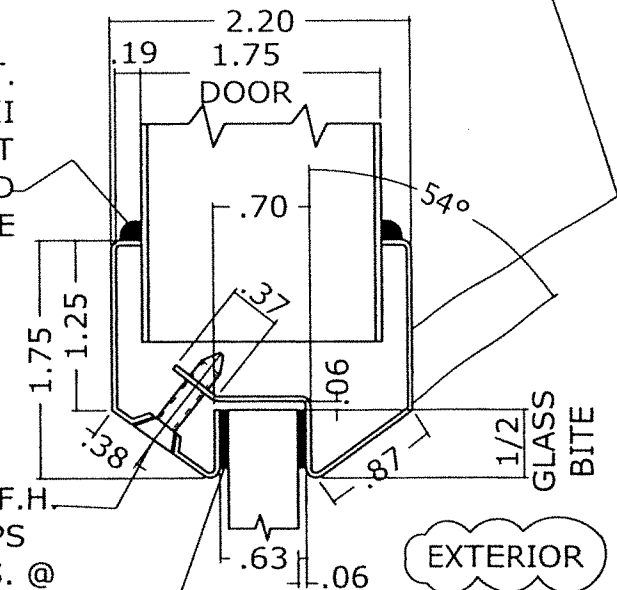
29 CONT.
GE SILICONE II
CLEAR SEALANT
ALL AROUND
EACH SIDE

INTERIOR

#8X7/8" F.H.
PHILLIPS
HD S.M.S. @
PER KIT ELEVATION

30 995 DOW
CORNING STRUCTURAL
SILICONE SEALANT,
ALL AROUND EACH SIDE

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



1/2" SABIC LEXAN
GLAZING DETAIL

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

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.

DAYBAR INDUSTRIES LTD

50 WEST DRIVE, BRAMPTON,
ON CANADA, L6T 2J4
TEL: 905 825-8000
FAX: 905 625-4204

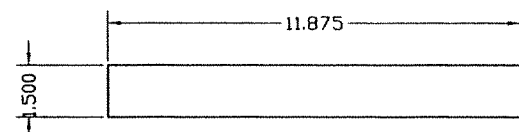
DRAWN BY:
Y.M.

08/17/2023
DATE

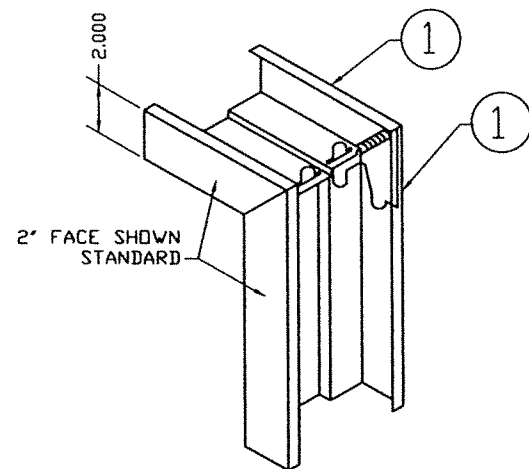
23-174
DRAWING No

SHEET 8 OF 19

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-150	08/17/2023	3		
2			4		

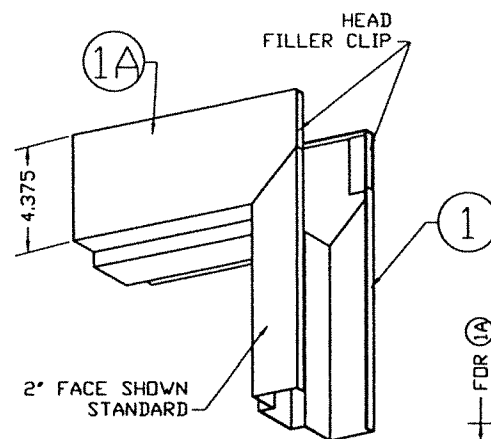


(1B) SURFACE STRIKE REINFORCING



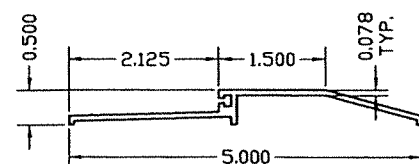
1. DIE MITERED CORNER CONT.
WELDED INSIDE FACES &
AT RETURNS
2. CAULK COMPLETE INSIDE
CORNER WITH (29) GE SILICONE II

DETAIL 16
TYPICAL WELDED CORNER

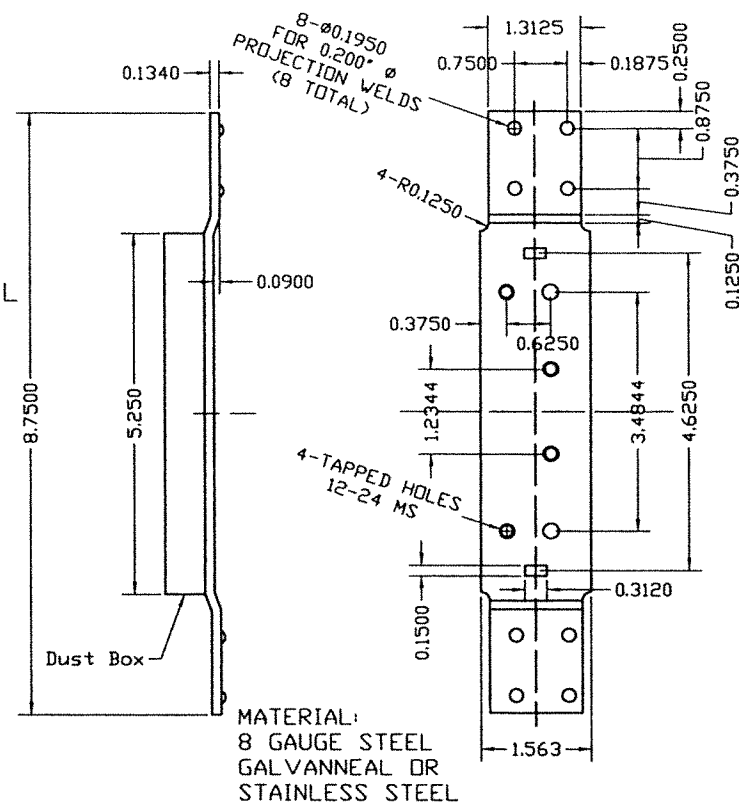


① TYPICAL JAMB & HEAD SECTION

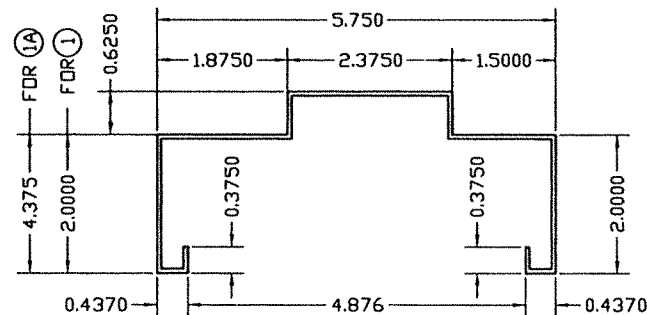
①A OPTIONAL HEAD SECTION



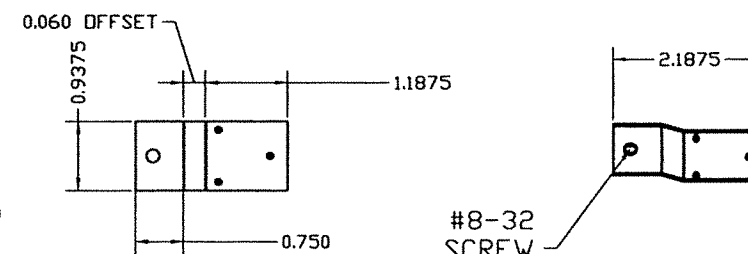
①6 EXTRUDED ALUMINUM
THRESHOLD NGP #950NA



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

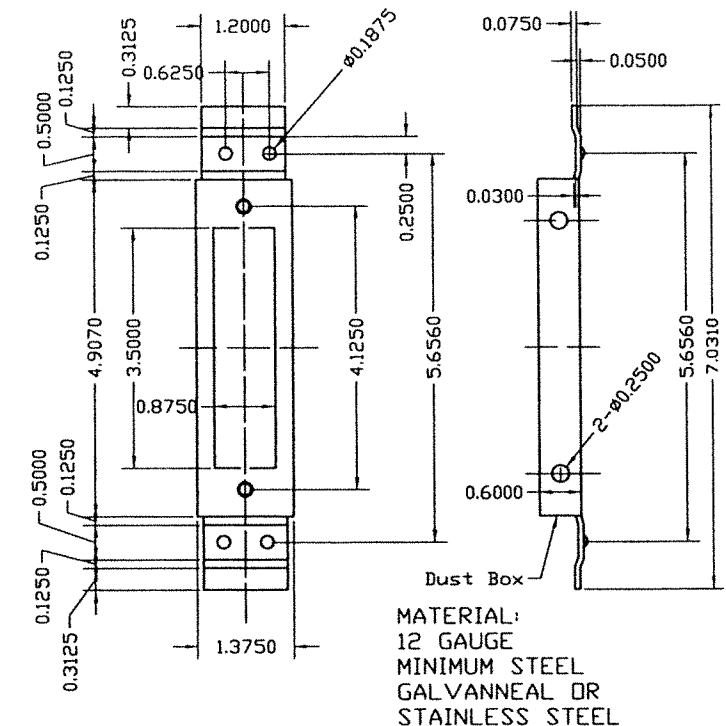


MATERIAL:
GAUGE 16 MINIMUM (.058)
GALVANNEAL OR
STAINLESS STEEL



DEAD LOCK STRIKE TAB
14 GA (0.074) MIN GALVANNEAL OR STAINLESS STEEL

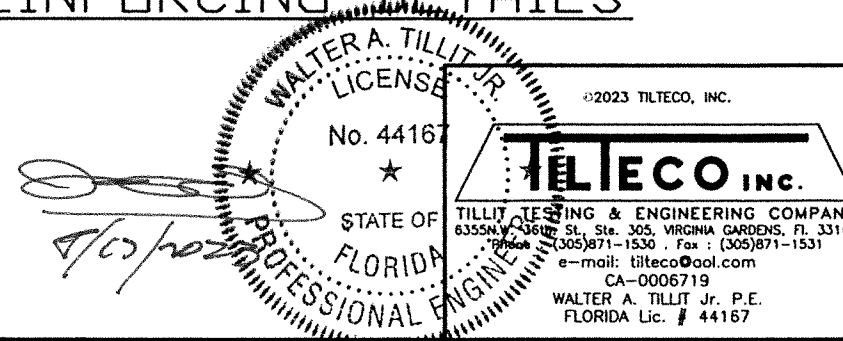
ATTACHED TO STRIKE JAMB W/ (3) 1/8" Ø
PROJECTION WELDS.



⑤ 4 7/8" STRIKE
REINFORCEMENT FOR FRAME
DETAIL

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

FRAME SECTIONS AND REINFORCING DETAILS

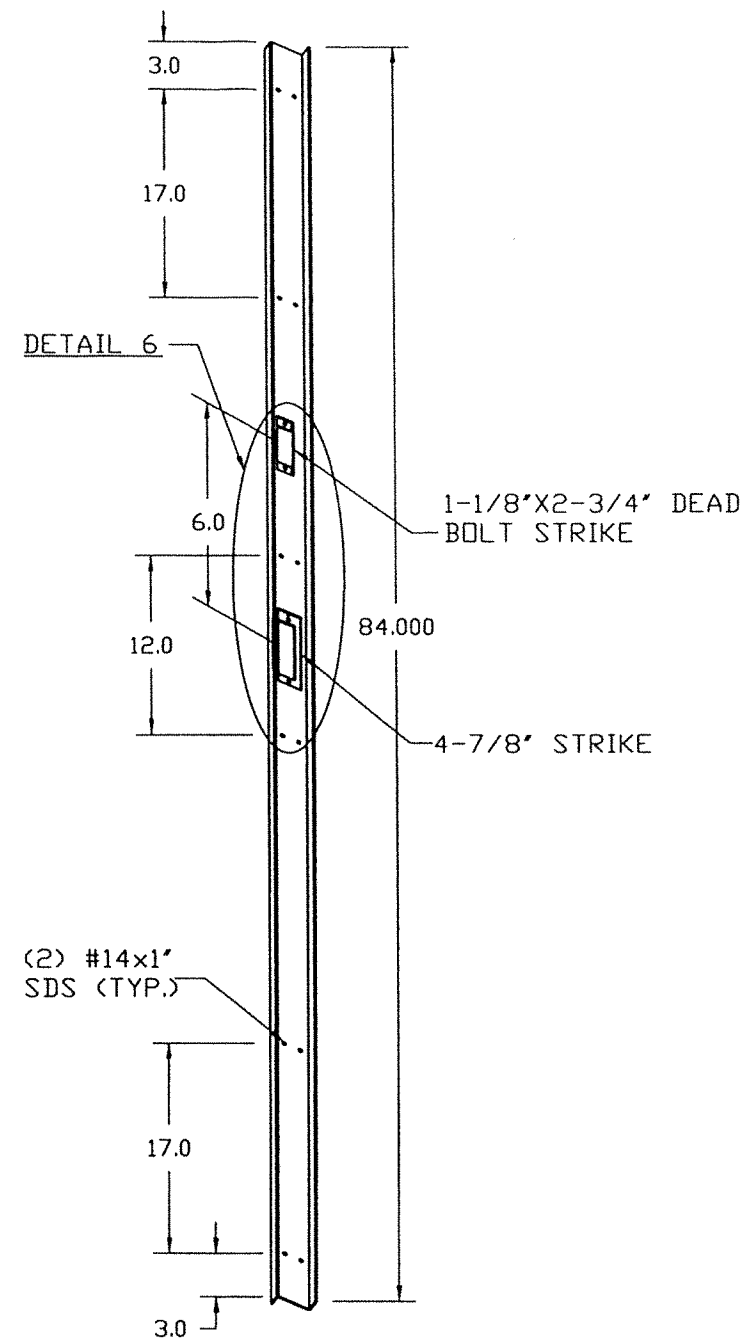


FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

DOUBLE & SINGLE SERIES L518 OUTSWING COMMERCIAL GALVANNEAL OR STAINLESS STEEL DOOR W/ SERIES "AS" 18 GAGE GALVANNEAL OR STAINLESS STEEL FRAME FLUSH, EMBOSSED & GLAZED ASSEMBLIES - L.M.	DRAWN BY: Y.M.
DAYBAR INDUSTRIES LTD 50 WEST DRIVE, BRAMPTON, ON CANADA, L6T 2J4 TEL: 905 625-8000 FAX: 905 625-4204	08/17/2023 DATE
	23-174 DRAWING No

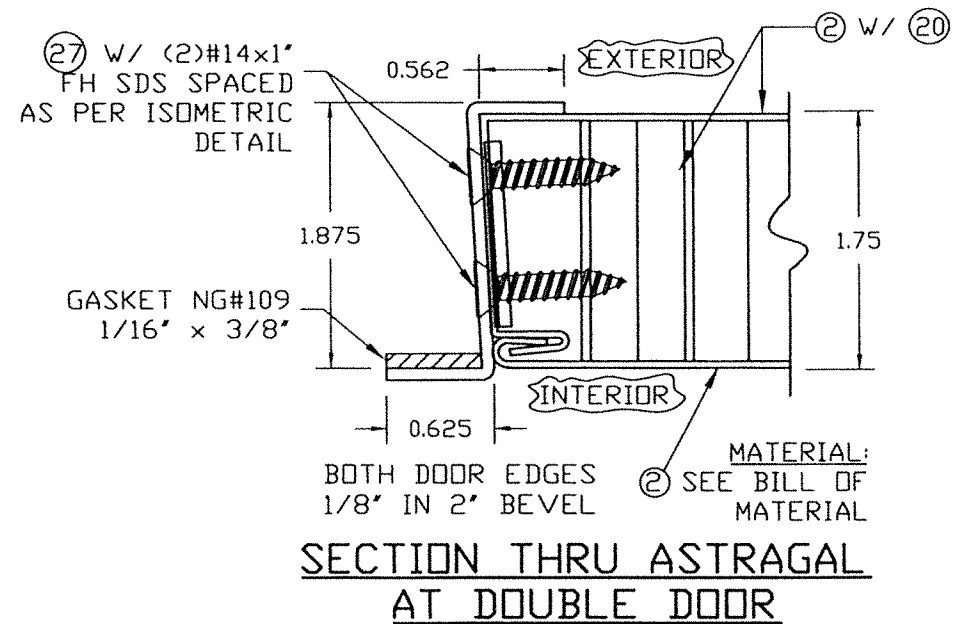
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-150	08/17/2023	3		
2			4		

SHEET 9 OF 19

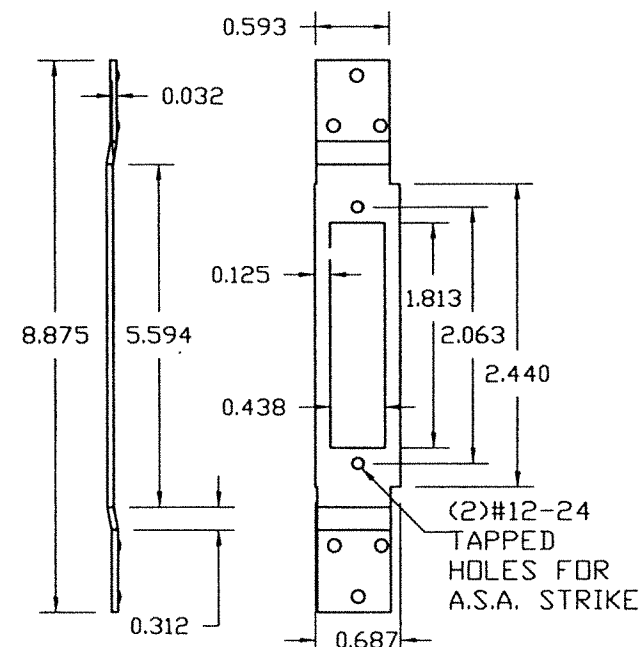


**(27) "Z" ASTRAGAL ISOMETRIC
DETAIL**

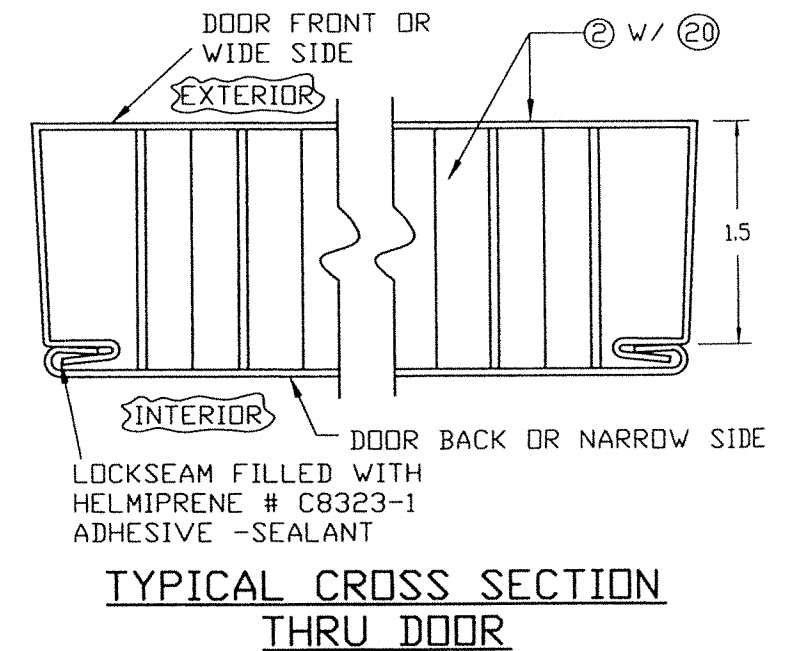
MATERIAL:
0.075" THICK
GALVANNEAL STEEL
OR STAINLESS
STEEL



**SECTION THRU ASTRAGAL
AT DOUBLE DOOR**

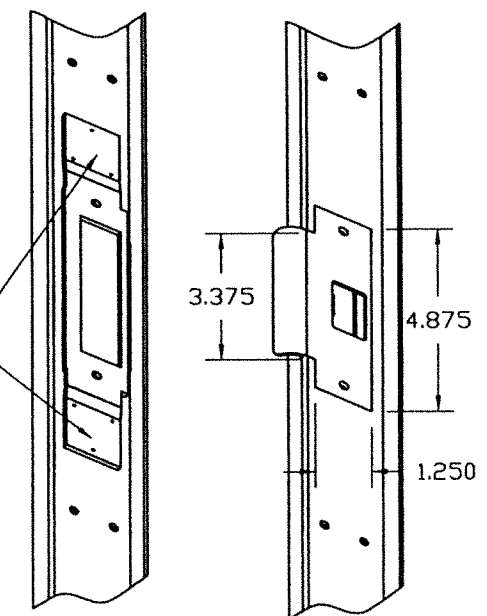


**12 GAGE GALVANNEAL STEEL OR STAINLESS STEEL
ASA 1299 STRIKE
REINFORCEMENT FOR ASTRAGAL**

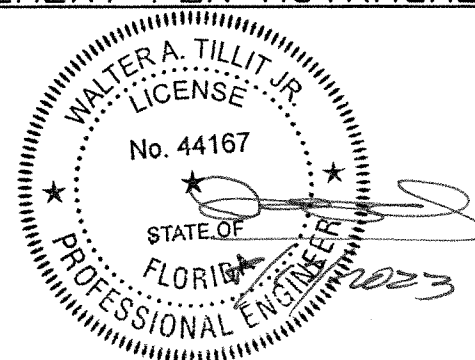


**TYPICAL CROSS SECTION
THRU DOOR**

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



DETAIL 6



©2023 TILTECO, INC.

TILTECO INC.

TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone: (305) 871-1530 Fax: (305) 871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

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.

DAYBAR INDUSTRIES LTD

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

DRAWN BY:
Y.M.

08/17/2023
DATE

23-174
DRAWING No

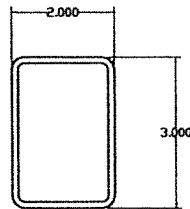
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-150	08/17/2023	3		
2			4		

SHEET 10 OF 19

8620 FITTING
(4) 5/16"-18
MACHINE
SCREWS
TO HEAD ①
(2) 1/4"-20
MACHINE SCREWS
TO MOUNT COVER

COVER

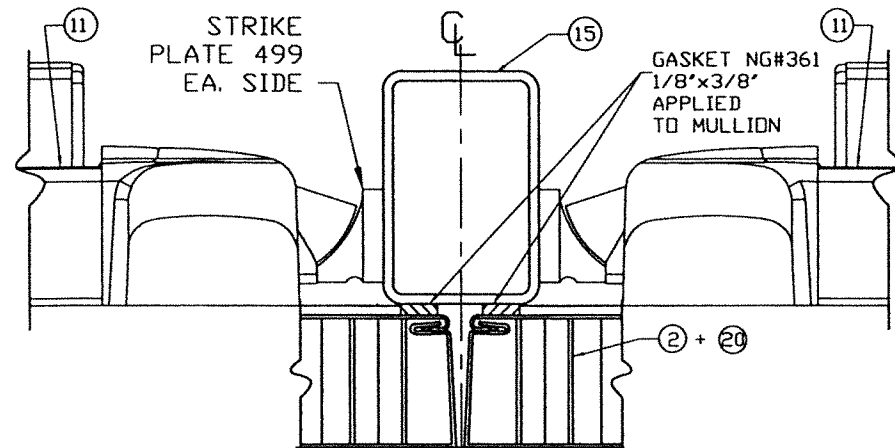
⑮



⑮ **MULLION BODY**
0.125 THK. WALL
A 500 GRADE B STEEL

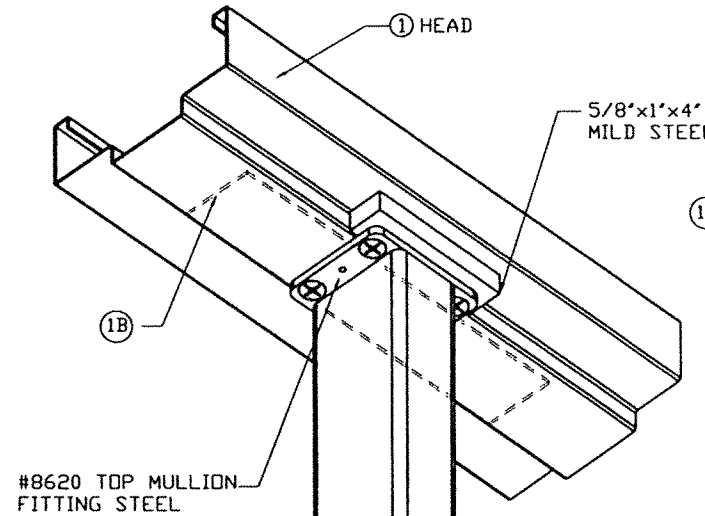
(4) 5/16"x1 5/16"
POWER FASTENERS
HOLLOW SET
DROPIN ANCHORS
8620
FITTING

ISOMETRIC

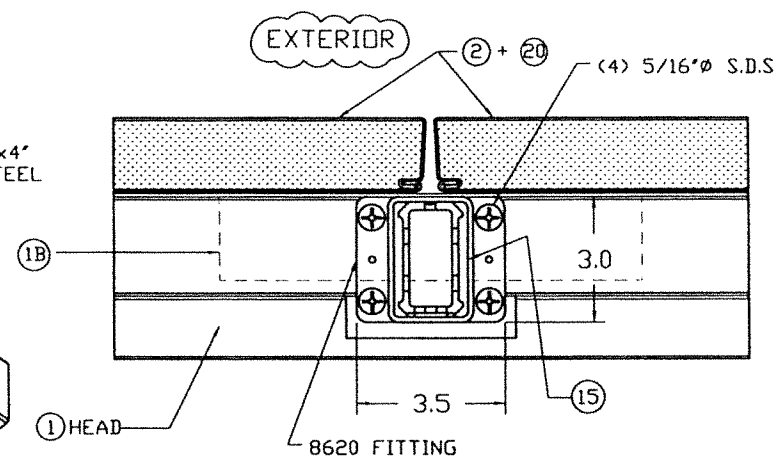


⑪ STRIKE
PLATE 499
EA. SIDE
⑮
GASKET NG#361
1/8"x3/8"
APPLIED
TO MULLION
② + 20
MULLION/DOOR SEAL

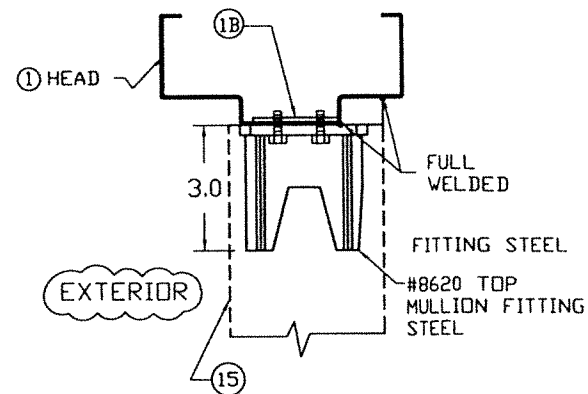
⑮ **VON DUPRIN SERIES 9954**
(W/ 499 STRIKE PLATE)
MULLION INSTALLATION



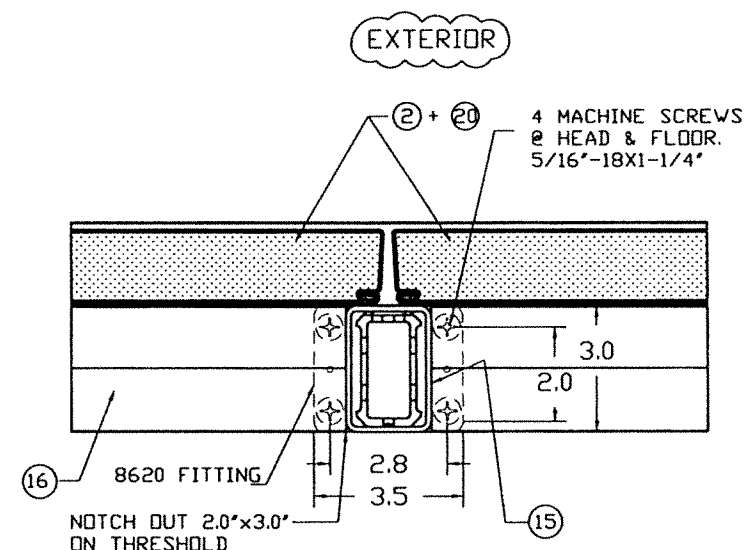
EXTERIOR



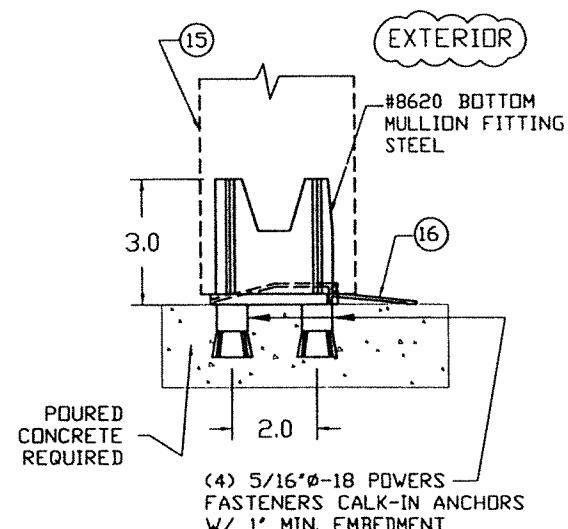
CONNECTION AT TOP (PLAN)



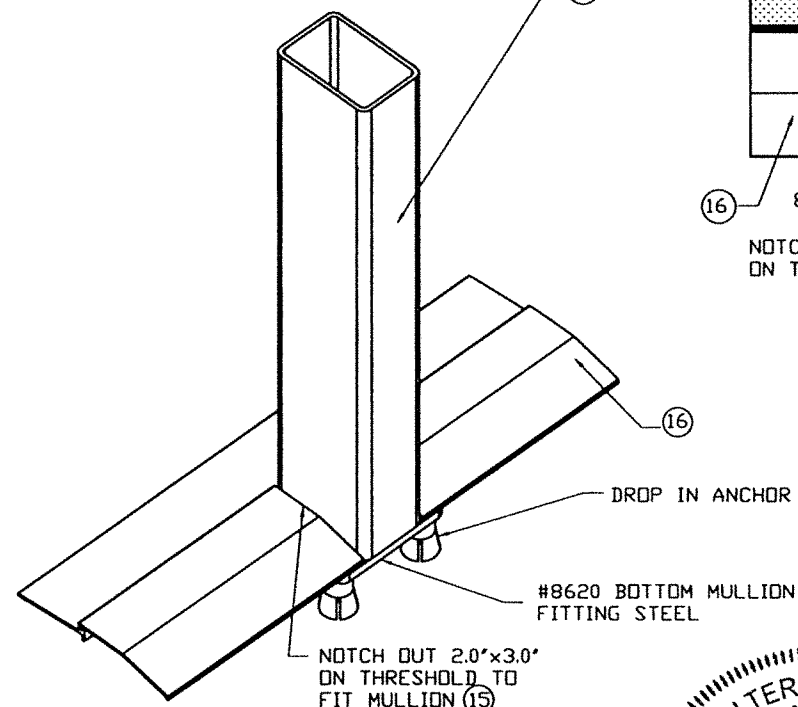
SECTION



CONNECTION AT BOTTOM (PLAN)



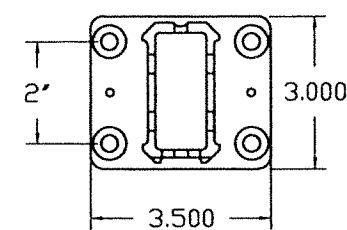
SECTION



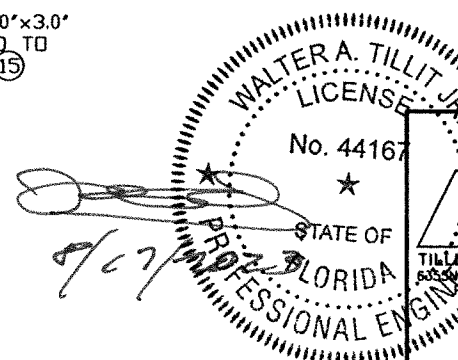
DROP IN ANCHOR

#8620 BOTTOM MULLION
FITTING STEEL

NOTCH OUT 2.0"x3.0"
ON THRESHOLD TO
FIT MULLION ⑮



**MULLION FITTING
8620 STEEL**



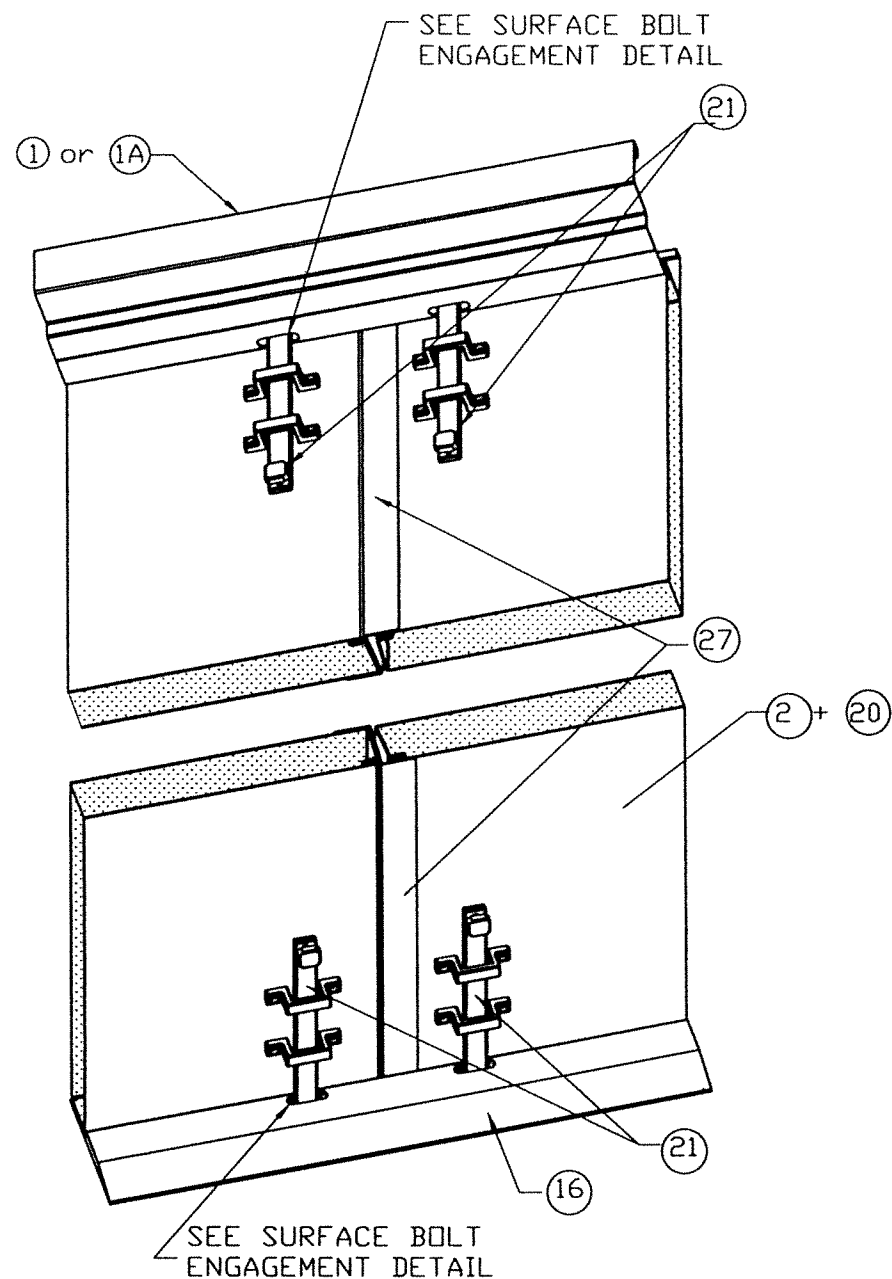
©2023 TILTECO, INC.
TILTECO Inc.
TILTECO TESTING & ENGINEERING COMPANY
8055 W. 38th St., Ste. 305, VIRGINIA GARDENS, FL 33166
TEL: (305) 871-1530 Fax: (305) 871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

**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.**
DAYBAR INDUSTRIES LTD
50 WEST DRIVE, BRAMPTON,
ON CANADA, L6T 2J4
TEL: 905 625-8000
FAX: 905 625-4204

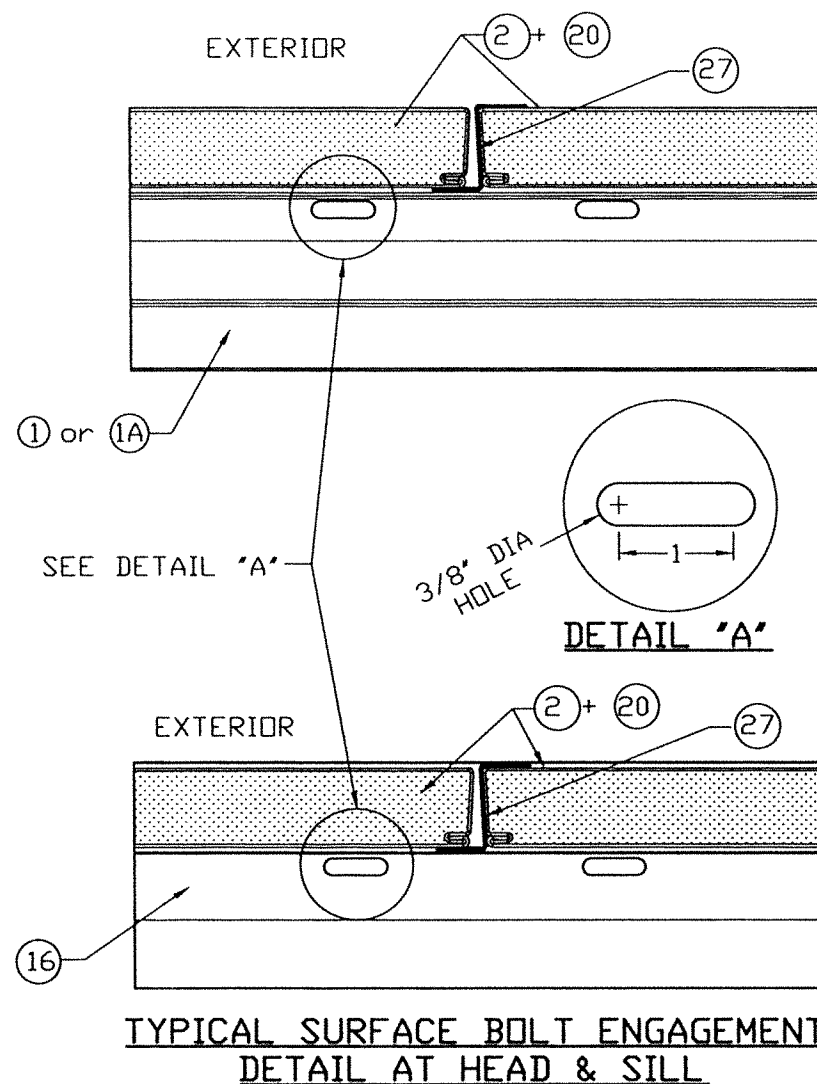
DRAWN BY:
Y.M.
08/17/2023
DATE
23-174
DRAWING No
SHEET 11 OF 19

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-150	08/17/2023	3		
2			4		

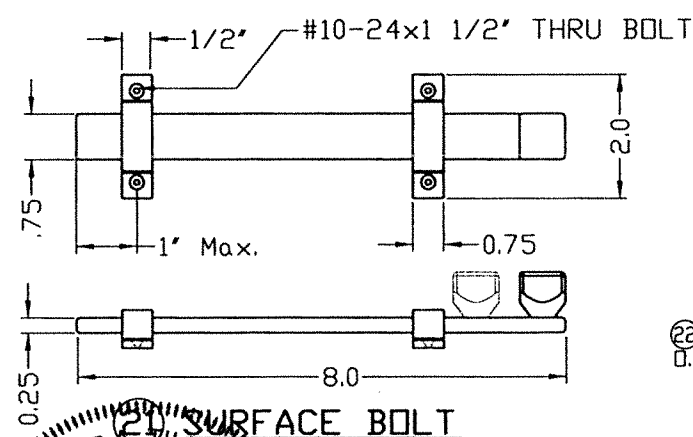


**SURFACE BOLT INSTALLATION
AT DOOR W/ ASTRAGAL (INTERIOR VIEW)**

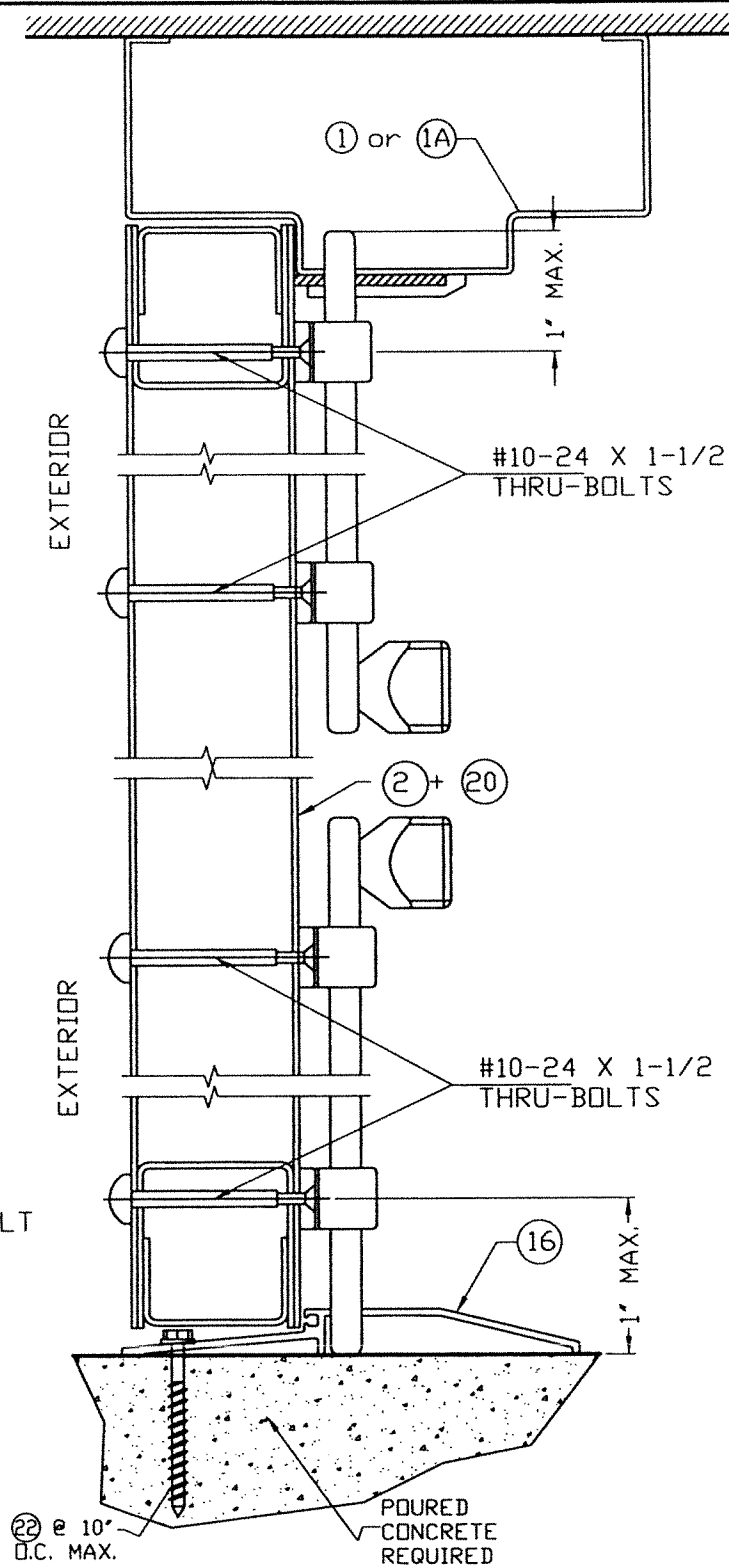
NOTE:
SURFACE BOLT
MANUFACTURER-HAGER
MODEL #275D
MATERIAL-STEEL
FINISH US26D



**TYPICAL SURFACE BOLT ENGAGEMENT
DETAIL AT HEAD & SILL**



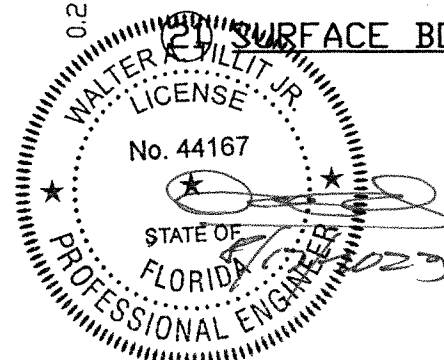
21 SURFACE BOLT



TYPICAL SECTION

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

21 8" #275D HAGER SURFACE BOLT



©2023 TILTECO, INC.

TILTECO INC.

TILLIT TESTING & ENGINEERING COMPANY
6355N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

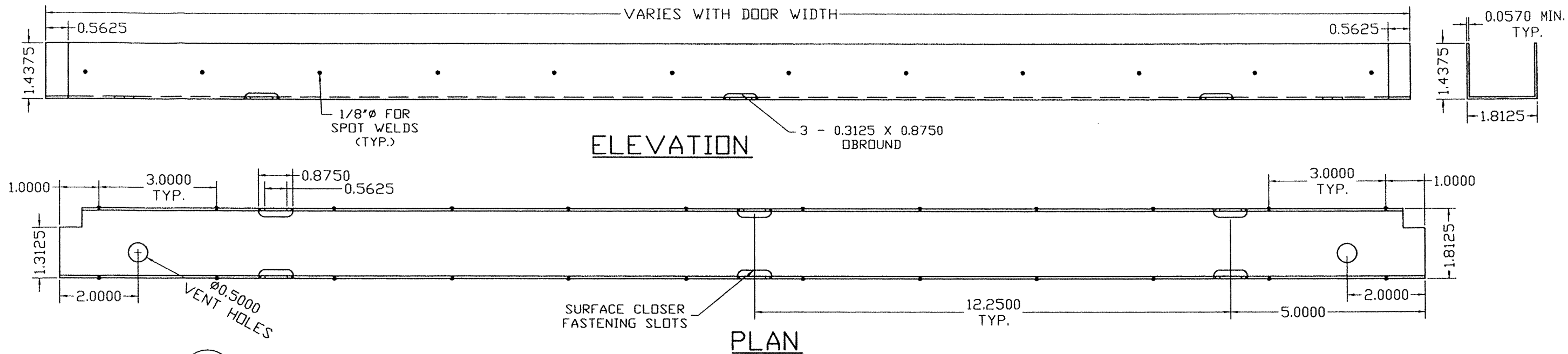
DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL GALVANNEAL OR STAINLESS STEEL DOOR W/ SERIES "AS" 18 GAGE GALVANNEAL OR STAINLESS STEEL FRAME FLUSH, EMBOSSED & GLAZED ASSEMBLIES - L.M.

DAYBAR INDUSTRIES LTD

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

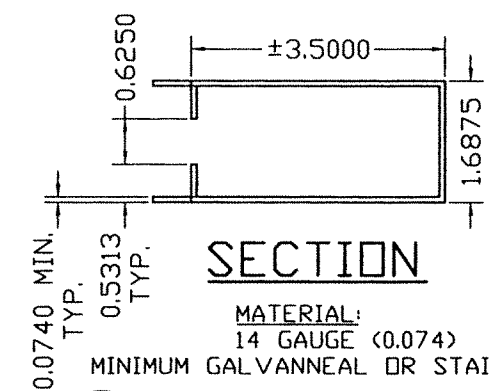
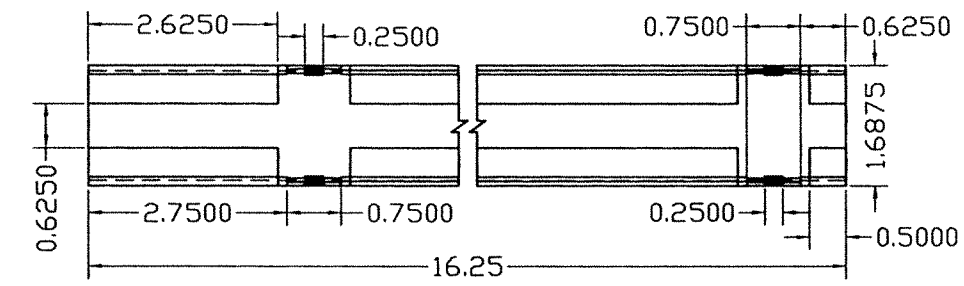
DRAWN BY:	Y.M.
DATE	08/17/2023
DRAWING No	23-174
SHEET	12 OF 19

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-150	08/17/2023	3		
2			4		

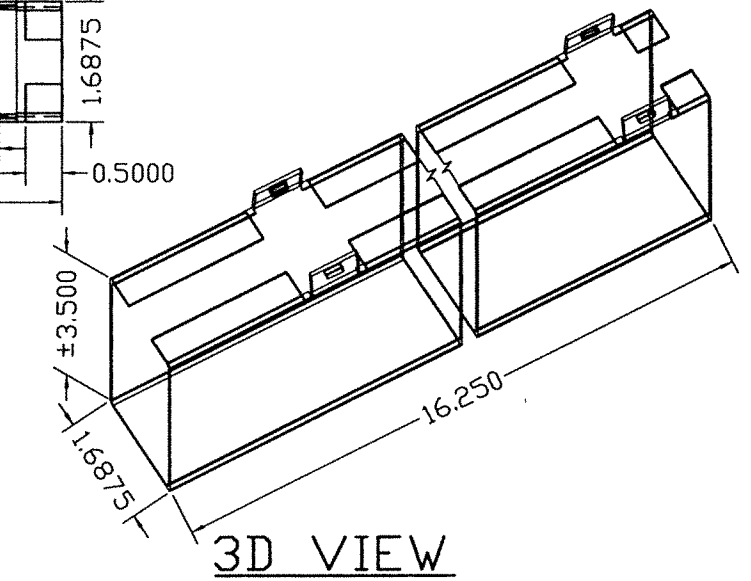


26 DOOR TOP AND BOTTOM TYPICAL END CHANNEL DETAIL

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

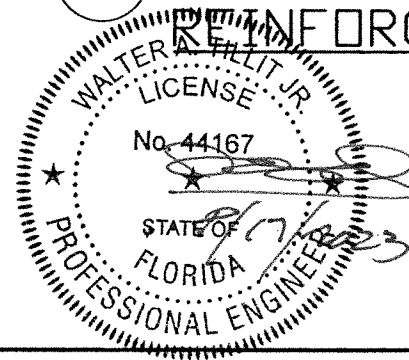
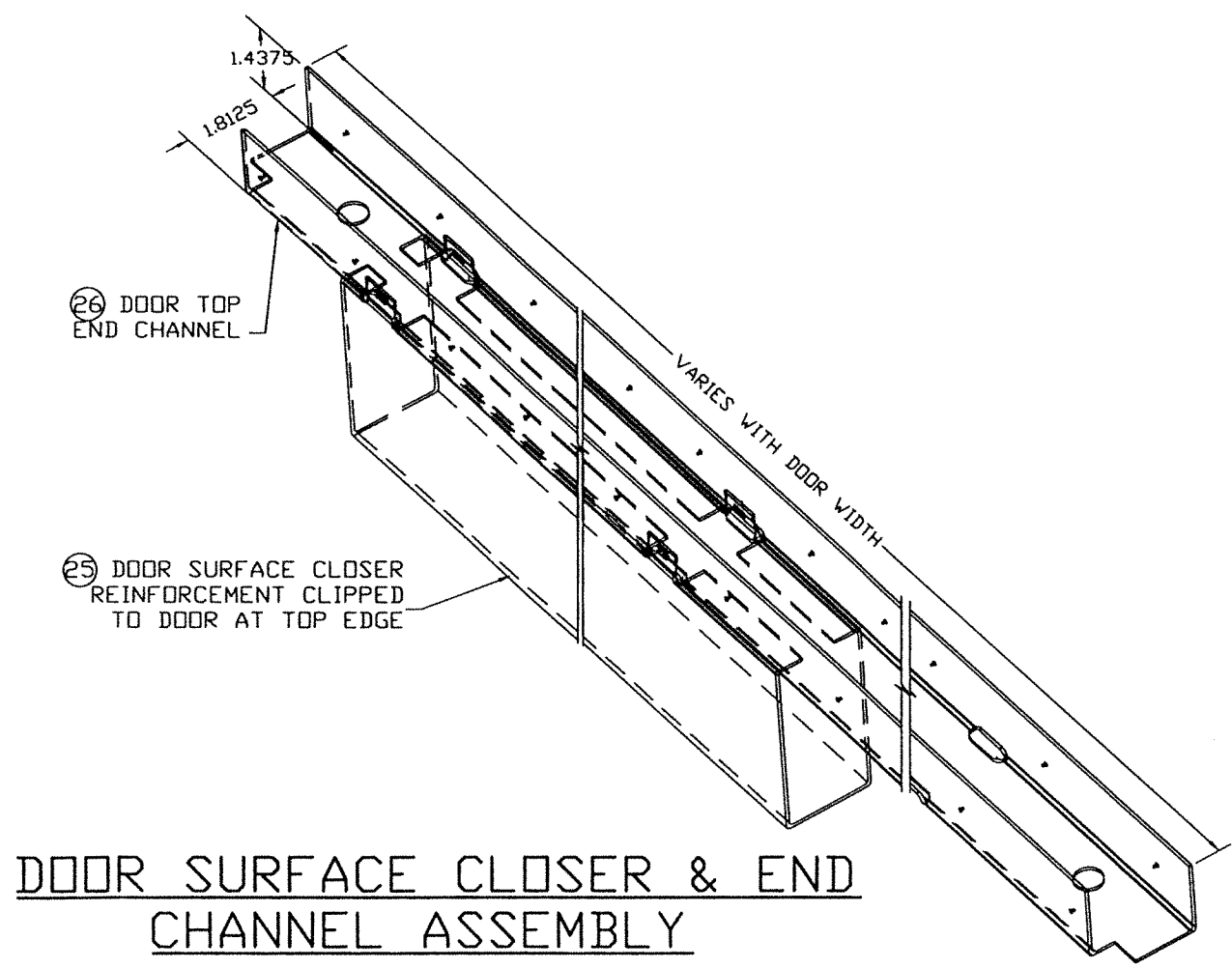


MATERIAL:
14 GAUGE (0.074)
MINIMUM GALVANNEAL OR STAINLESS STEEL



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

25 DOOR SURFACE CLOSER REINFORCEMENT DETAIL

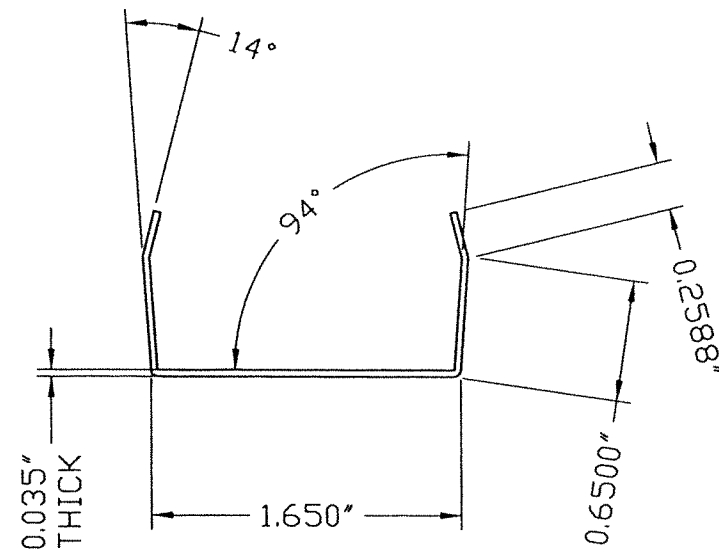


©2023 TILTECO, INC.

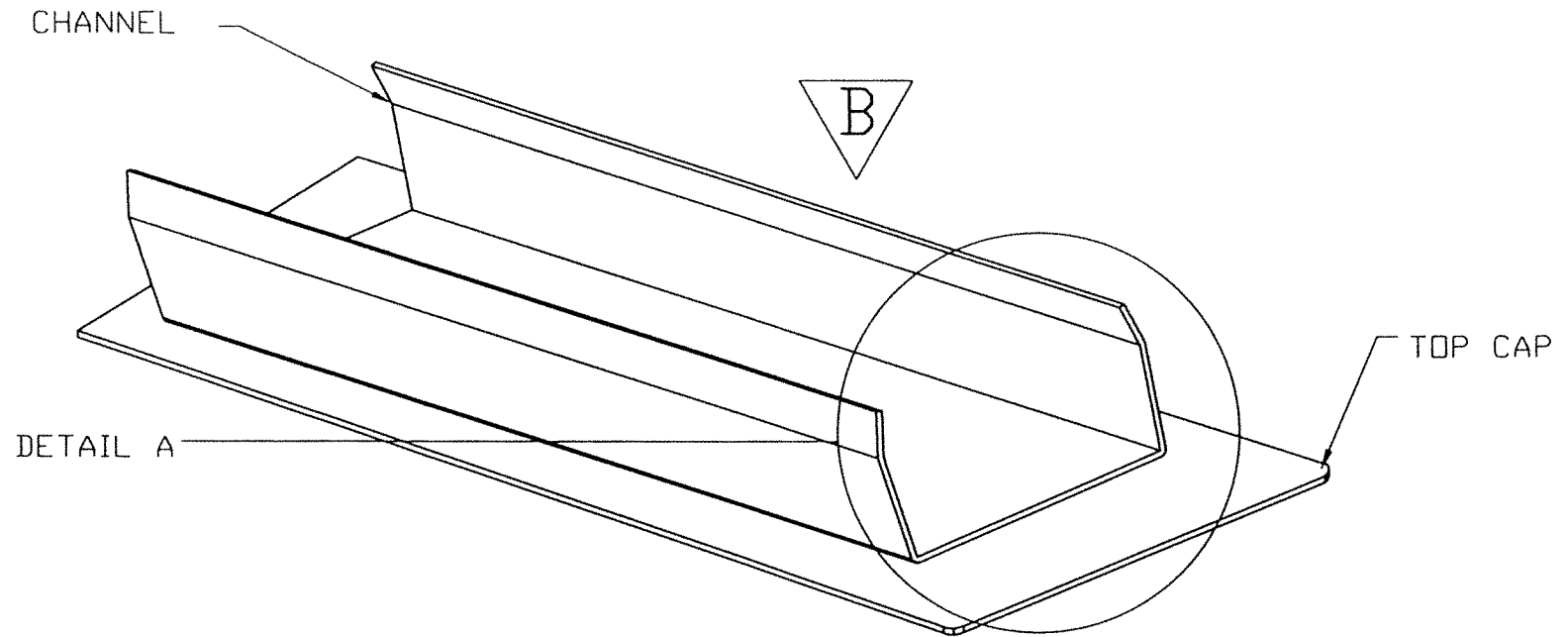
TILTECO INC.

TILLIT TESTING & ENGINEERING COMPANY
6355N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone: (305)871-1530 Fax: (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

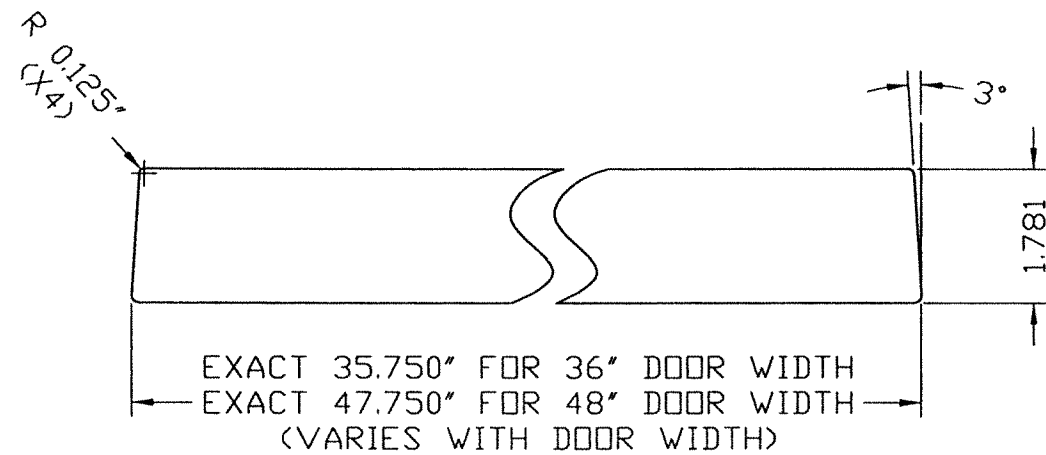
FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)					
DOUBLE & SINGLE SERIES LS18 OUTSWING COMMERCIAL GALVANNEAL OR STAINLESS STEEL DOOR W/ SERIES "AS" 18 GAGE GALVANNEAL OR STAINLESS STEEL FRAME FLUSH, EMBOSSED & GLAZED ASSEMBLIES - L.M.				DRAWN BY: Y.M.	
DAYBAR INDUSTRIES LTD 50 WEST DRIVE, BRAMPTON, ON CANADA, L6T 2J4 TEL: 905 625-8000 FAX: 905 625-4204				08/17/2023 DATE	
				23-174 DRAWING No	
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-150	08/17/2023	3		
2			4		
SHEET 13 OF 19					



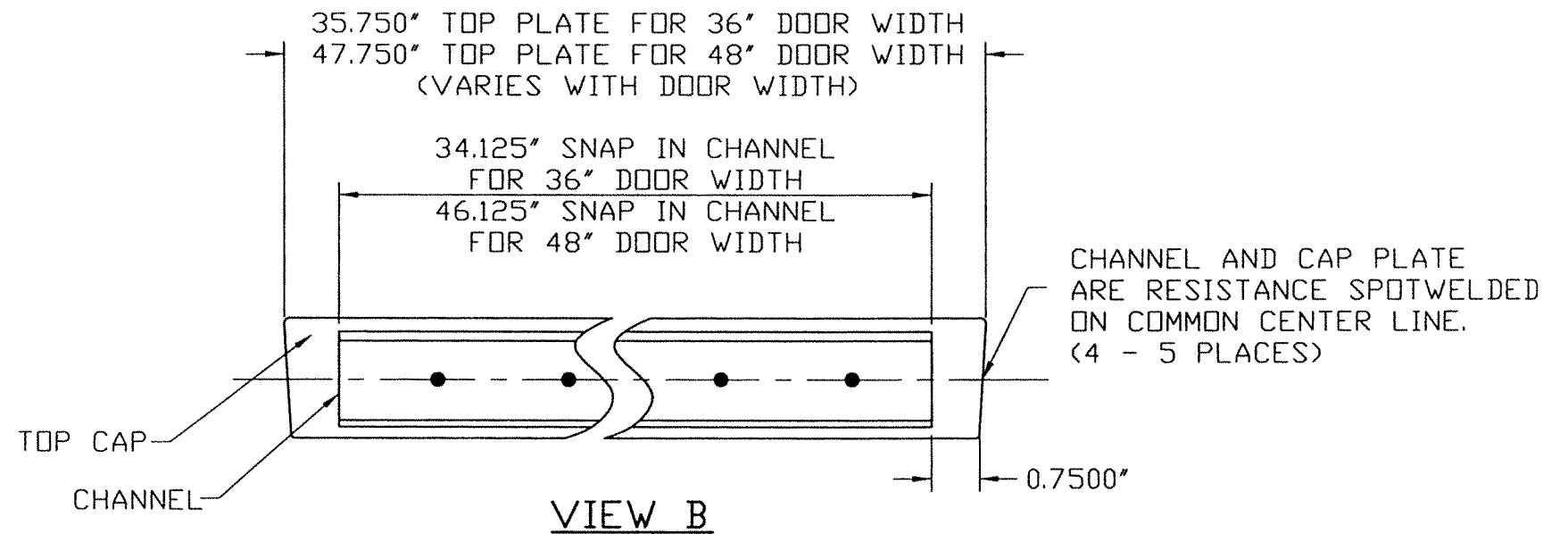
DETAIL A
SNAP IN CHANNEL



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



STANDARD TOP CAP

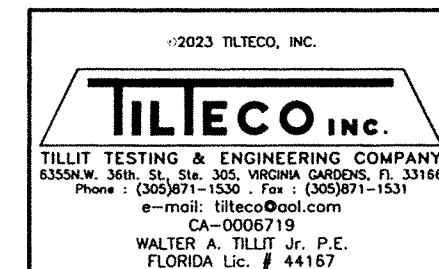
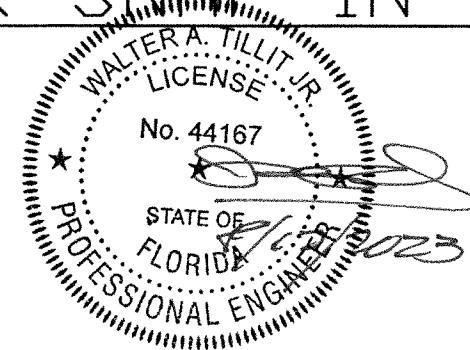


28 DOOR SNAP IN TOP CAP DETAIL

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



FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

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.

DAYBAR INDUSTRIES LTD

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

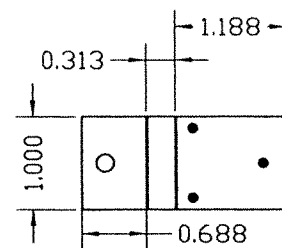
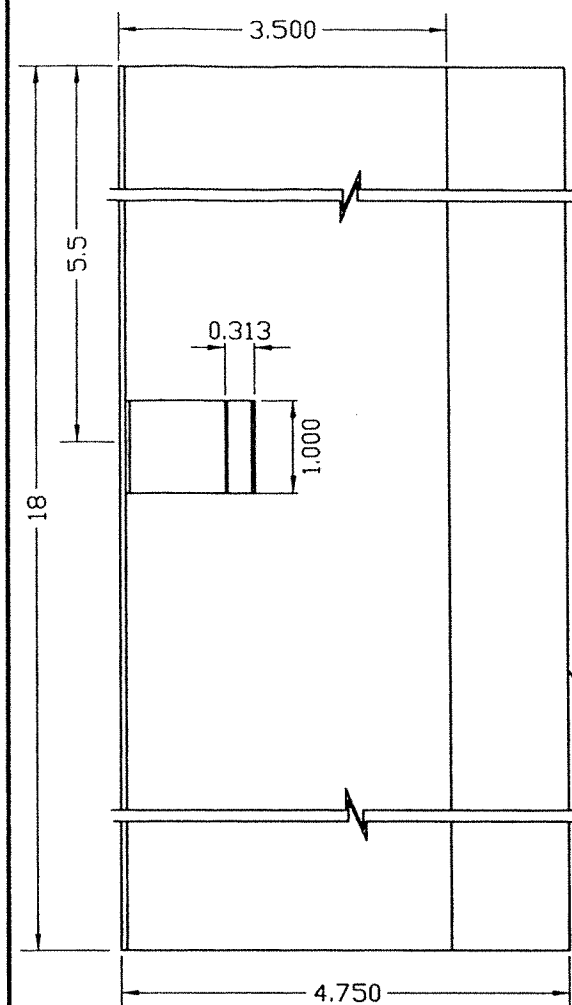
DRAWN BY:
Y.M.

08/17/2023
DATE

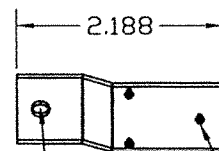
23-174
DRAWING No

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-150	08/17/2023	3		
2			4		

SHEET 14 OF 19



#12-24
SCREW



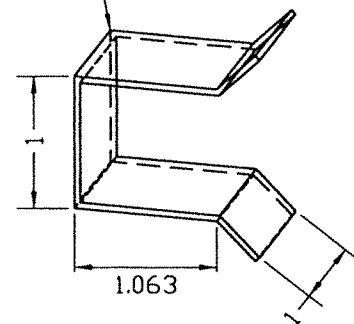
(3) 1/8"Ø
PROJECTION
WELDS

DOOR EDGE MOUNTING TAB

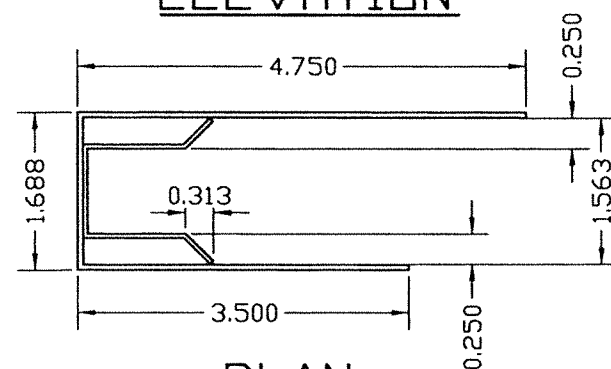
14 GA (0.074) MIN GALVANNEAL
STEEL OR STAINLESS STEEL

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



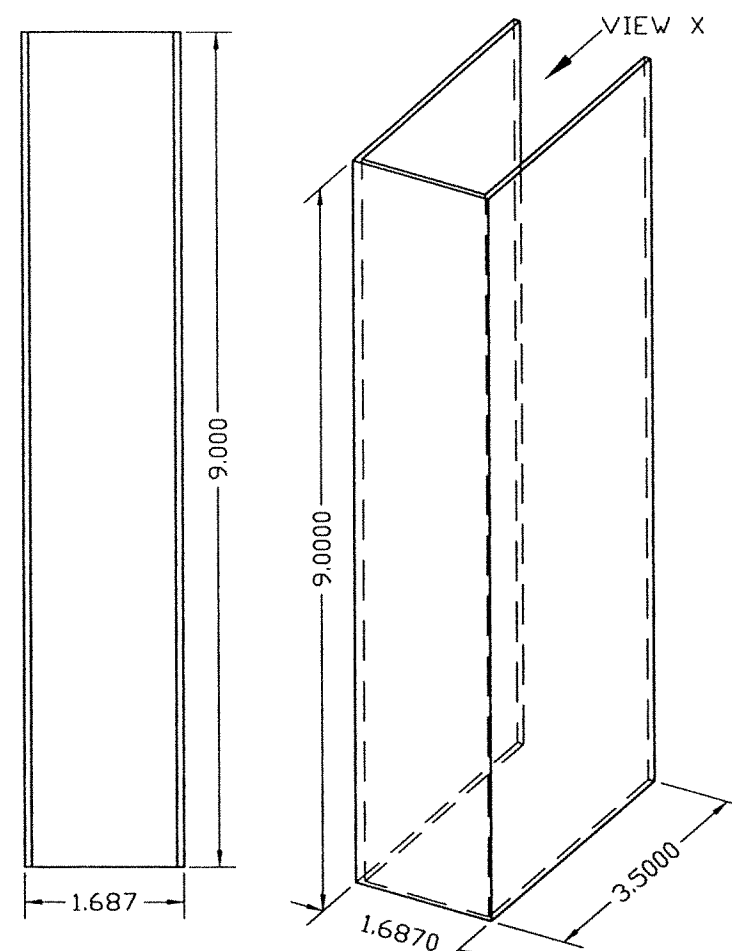
ELEVATION



PLAN

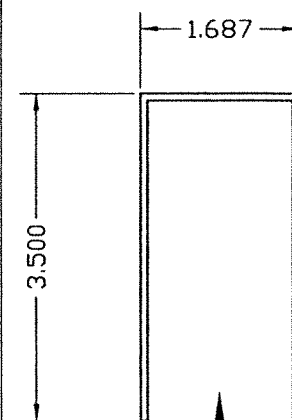
MATERIAL:
ALL GALVANNEAL STEEL OR
STAINLESS STEEL

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



VIEW X

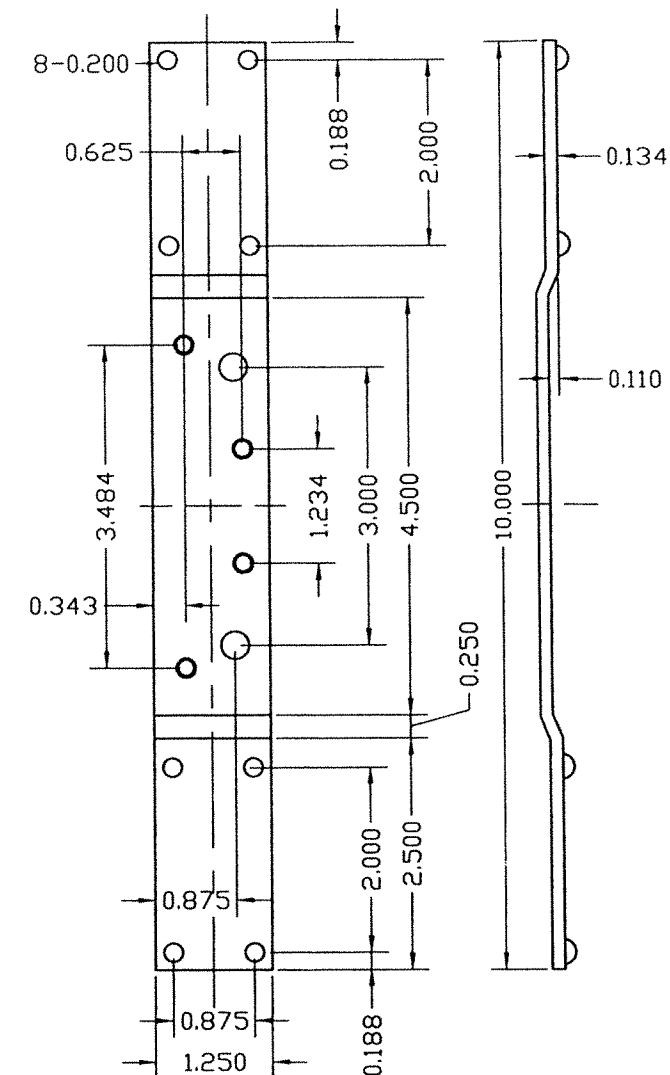
3D VIEW



PLAN

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

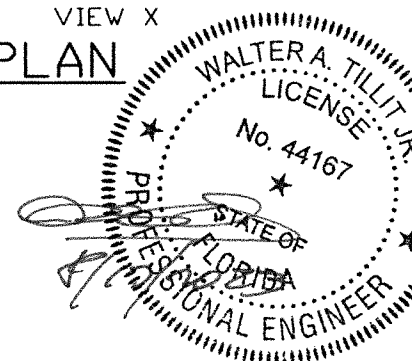
18 DOOR SURFACE BOLT REINFORCING DETAIL



17 4 1/2" HINGE BAR REINFORCING FOR DOOR

MATERIAL:
8 GAUGE
GALVANNEAL STEEL OR
STAINLESS STEEL

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)



©2023 TILTECO, INC.
TILTECO Inc.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305) 871-1530 • Fax : (305) 871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr., P.E.
FLORIDA Lic. # 44167

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

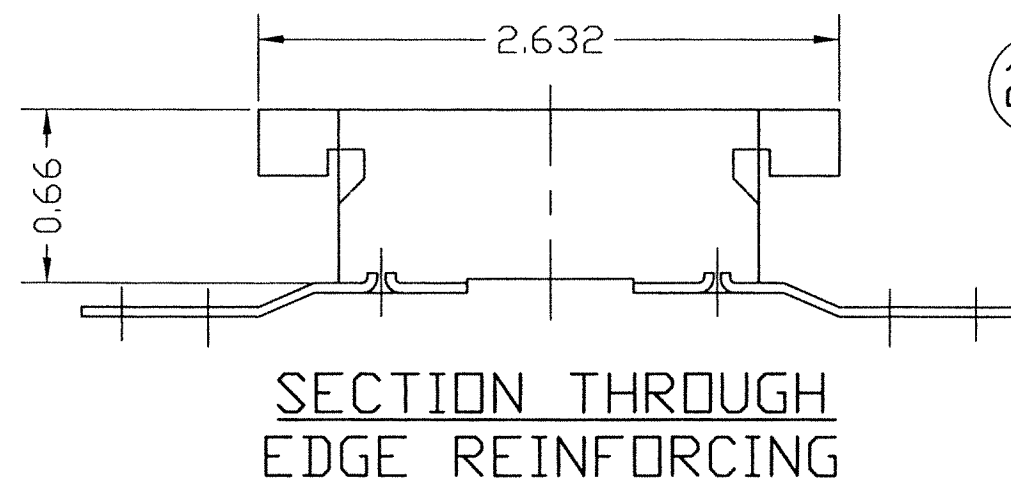
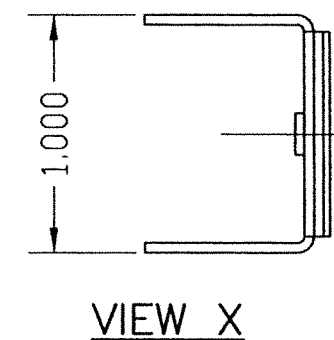
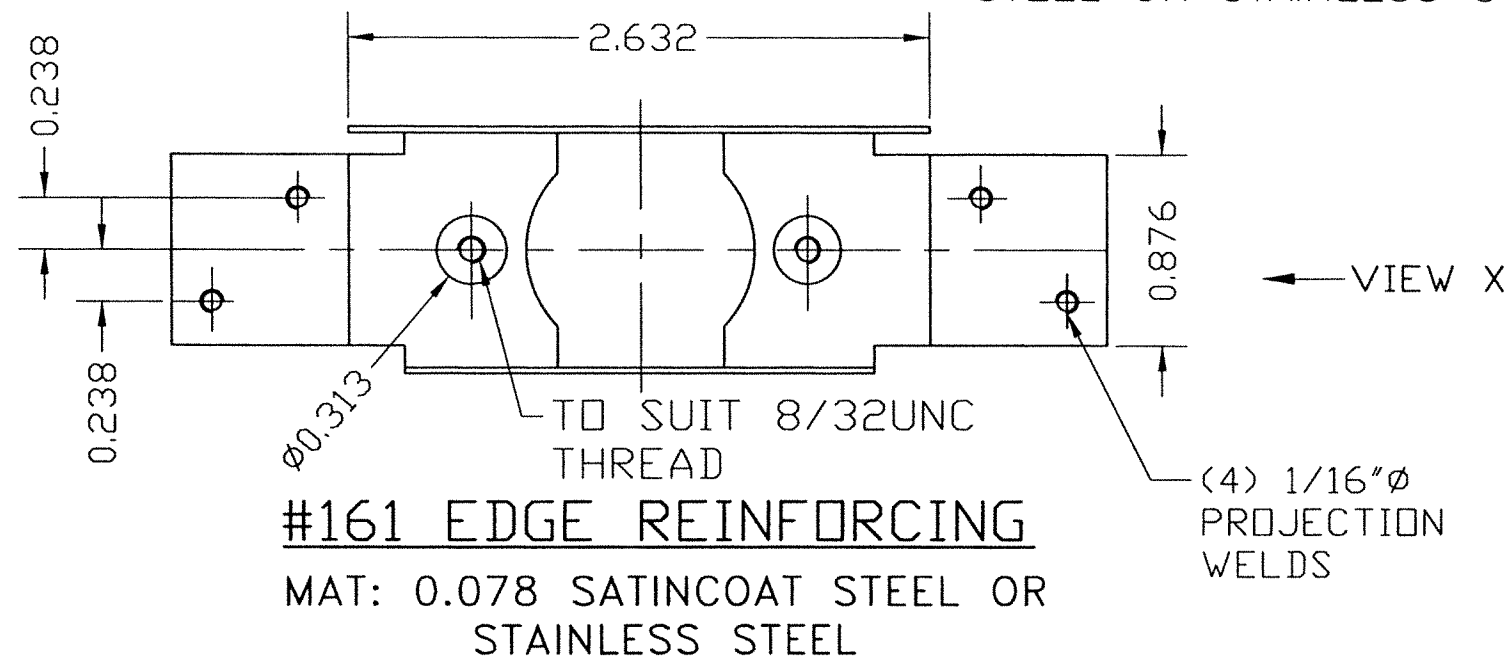
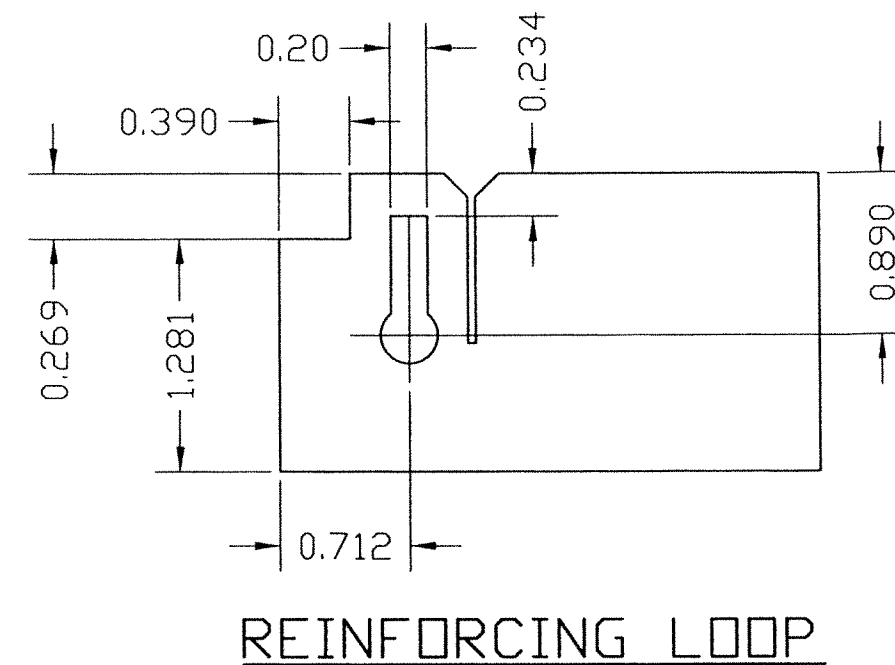
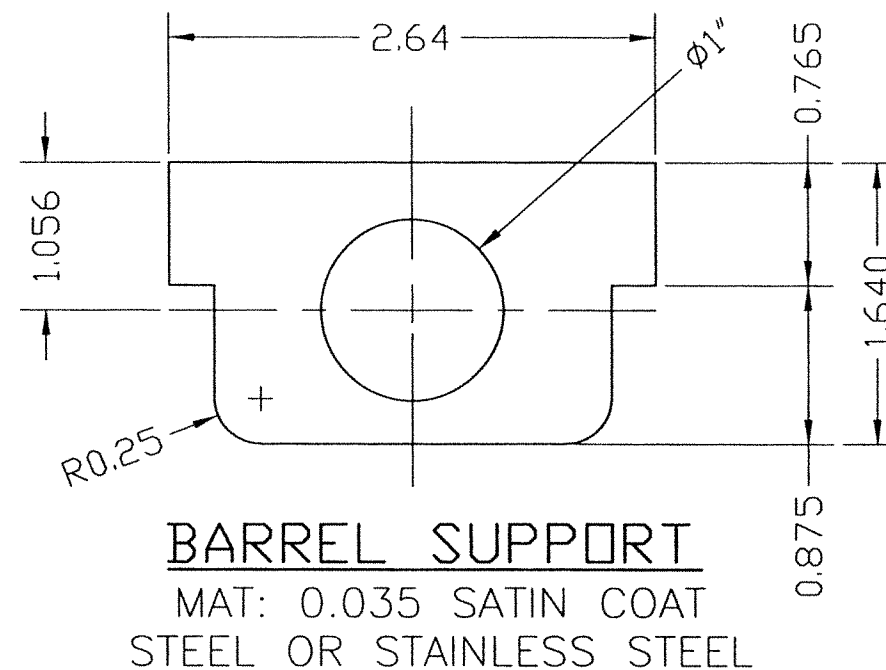
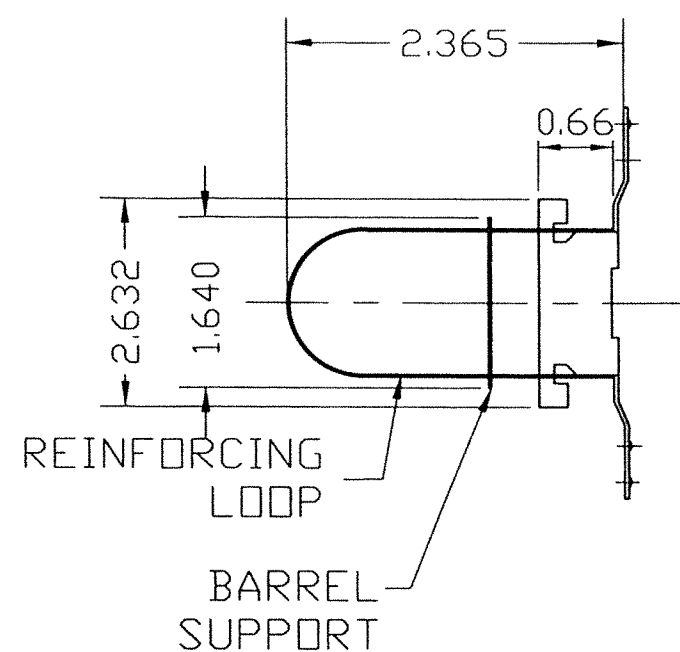
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-150	08/17/2023	3		
2			4		

DRAWN BY:
Y.M.

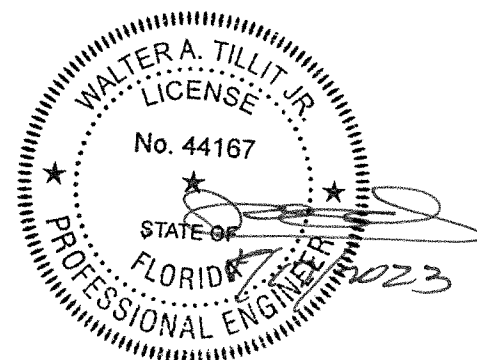
08/17/2023
DATE

23-174
DRAWING No

SHEET 15 OF 19



(24) #161 CYLINDRICAL LOCK AND DEAD BOLT
REINFORCEMENT DETAIL



©2023 TILTECO, INC.

TILTECO inc.

TILLIT TESTING & ENGINEERING COMPANY
6355N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 : Fax : (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr., P.E.
FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

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

DAYBAR INDUSTRIES LTD

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

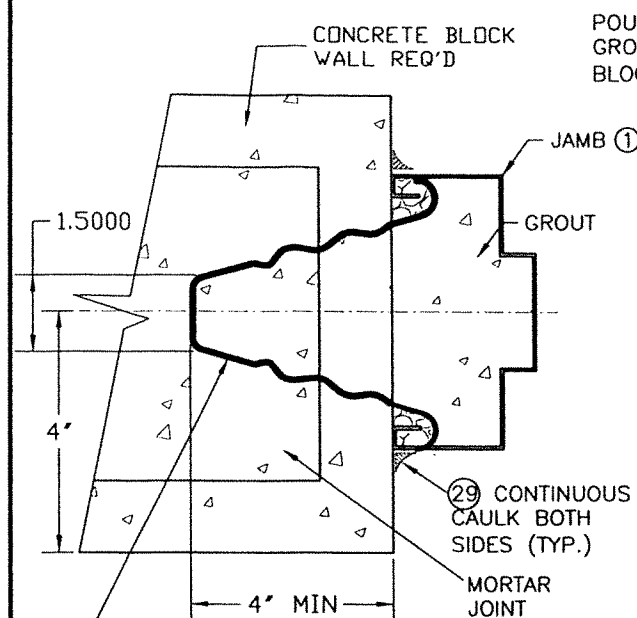
DRAWN BY:
Y.M.

08/17/2023
DATE

23-174
DRAWING No

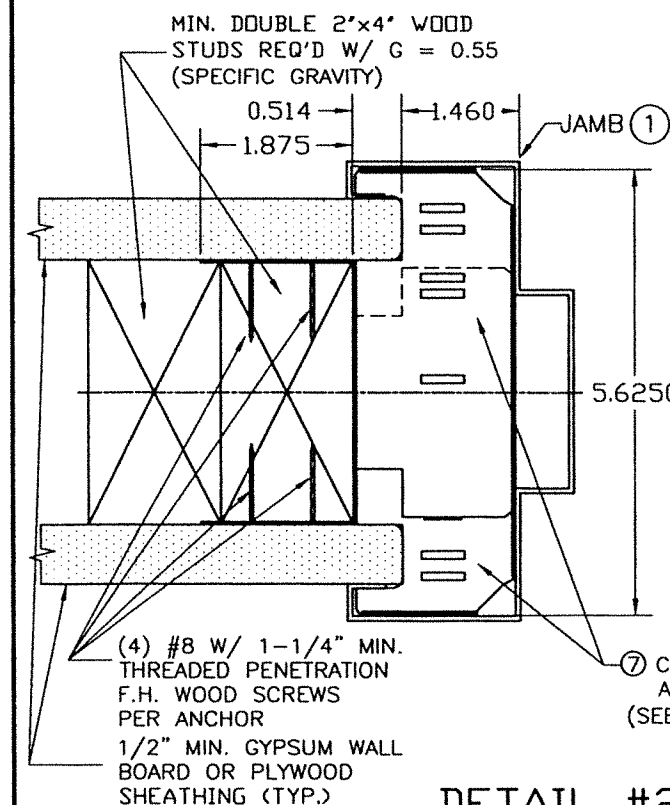
SHEET 16 OF 19

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-150	08/17/2023	3		
2			4		

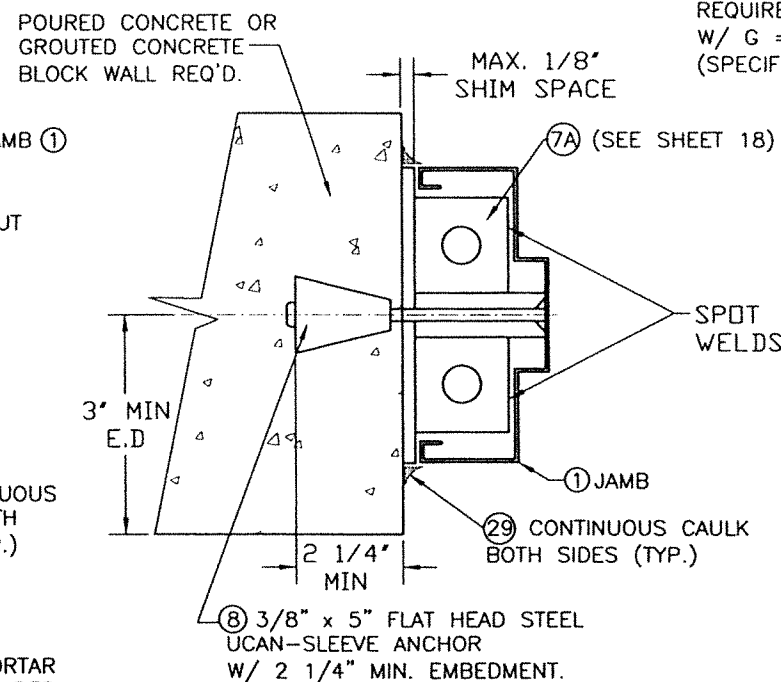


⑥ MASONRY WIRE ANCHORS IN HORIZ. MORTAR JOINTS; FILL JAMBS ① SOLID WITH GROUT PER ASTM C476 W/ MIN. COMPRESSION STRENGTH OF 2.5 Ksi (SEE SHEET 18)

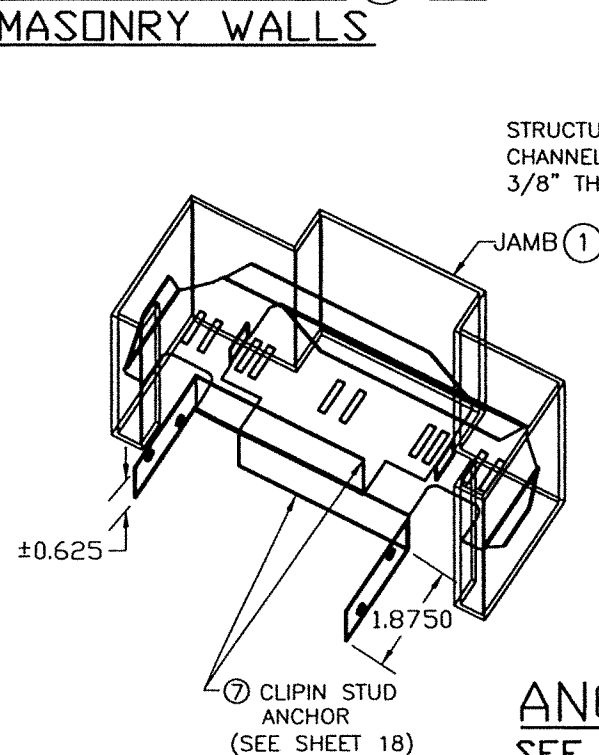
DETAIL #21
WIRE ANCHOR ⑥
INSTALLATION TO
MASONRY WALLS



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

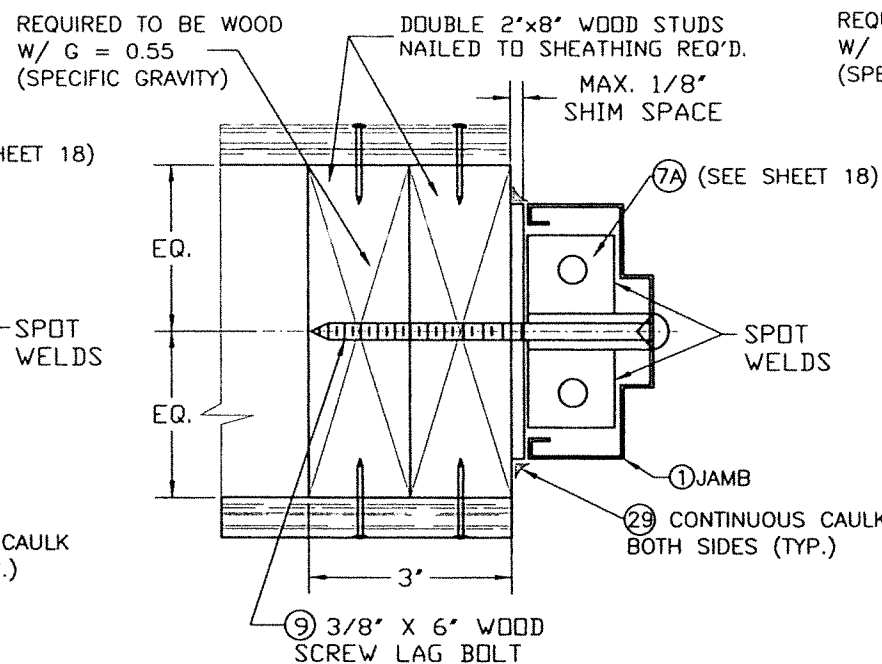
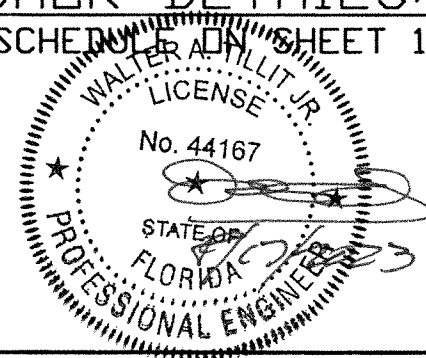


DETAIL #22
INSTALLATION OF UCAN
SLEEVE ANCHORS ⑧ TO
MASONRY WALLS

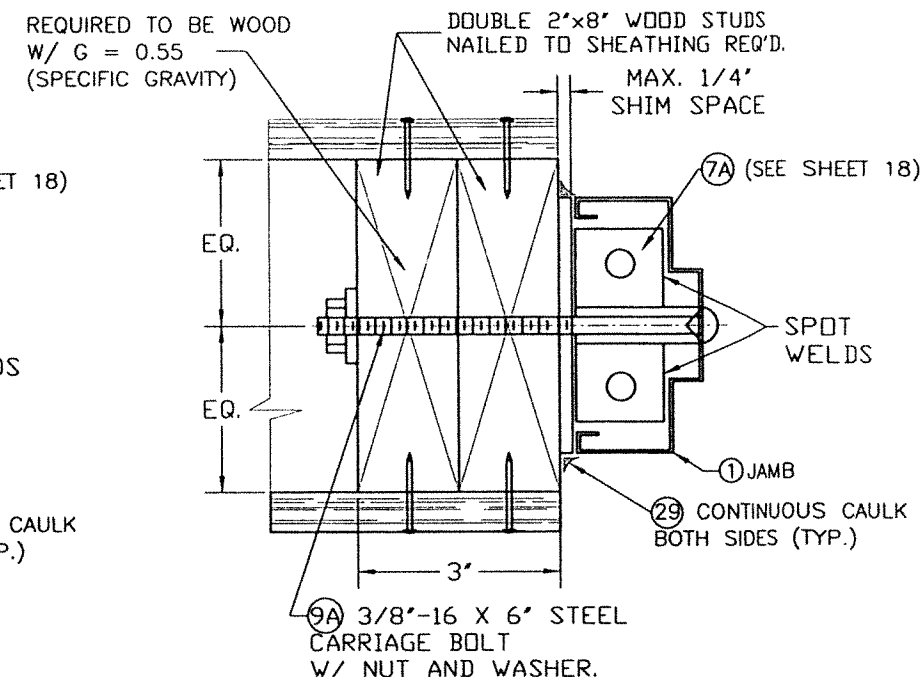


DETAIL #23A
INSTALLATION OF 3/8"
F.H. M.S. ⑨B TO STEEL CHANNEL

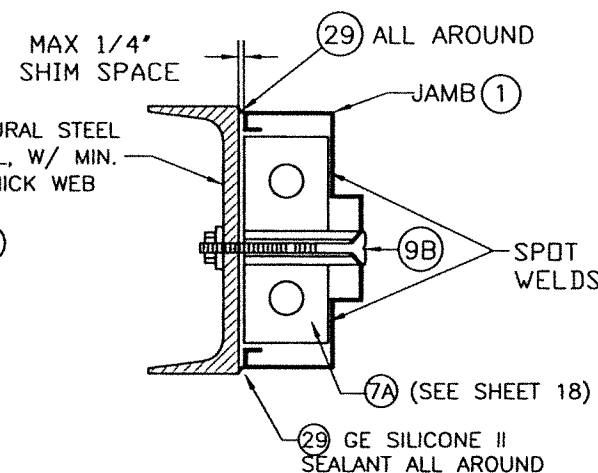
ANCHOR DETAILS:
SEE SCHEDULE ON SHEET 18



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 #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

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC.

TILTECO Inc.

TILLIT TESTING & ENGINEERING COMPANY
6355N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 : Fax : (305)871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

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.					
DAYBAR INDUSTRIES LTD					
50 WEST DRIVE, BRAMPTON, ON CANADA, L6T 2J4 TEL: 905 625-8000 FAX: 905 625-4204					
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-150	08/17/2023	3		
2			4		
DRAWN BY: Y.M.					08/17/2023 DATE
23-174					DRAWING No
SHEET 17 OF 19					



Technical drawing showing two views of a mechanical component, likely a bracket or connector, with dimensions and labels.

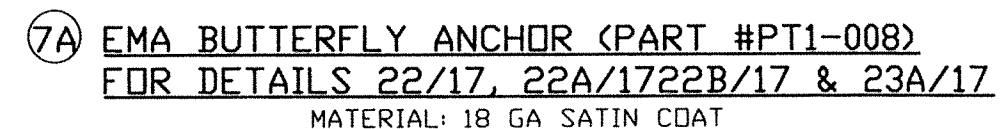
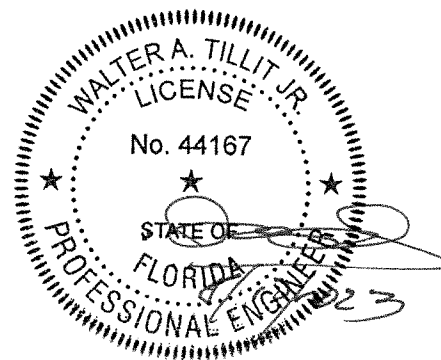
Top View (Isometric):

- Label: LEAF TO SNAP ANOTHER PIECE
- Dimensions: $1 \frac{13}{16}$, $7/16$, $4 \frac{1}{8}$, $3/4$, $5/8$, $2 \frac{1}{2}$, $1 \frac{13}{16}$, $5/8$, $9/16$, $1/2$.
- Note: $3/32 \times 1/2$ HOLES TO PERMIT SNAP TO ANOTHER PIECE

Bottom View (Isometric):

- Label: LEAF TO SNAP ANOTHER PIECE
- Dimensions: $1 \frac{13}{16}$, $7/16$, $4 \frac{1}{8}$, $3/4$, $5/8$, $2 \frac{1}{2}$, $1 \frac{13}{16}$, $5/8$, $9/16$, $1/2$.
- Note: $3/32 \times 1/2$ HOLES TO PERMIT SNAP TO ANOTHER PIECE

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



FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

©2023 TILTECO, INC.

The logo for TILTECO INC. features the company name in a bold, sans-serif font. The word "TILTECO" is significantly larger and more prominent than "INC.", which is positioned to its right. The text is contained within a trapezoidal frame that tapers towards the top.

TILLIT TESTING & ENGINEERING COMPANY
6355N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166

Phone : (305)871-1530 . Fax : (305)871-1531

e-mail: tilteco@aol.com

CA-0006719

WALTER A. TILLIT JR. P.E.

FLORIDA Lic. # 44167

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.

DAYBAR INDUSTRIES LTD

50 WEST DRIVE, BRAMPTON,

ON CANADA, L6T 2J4

TEL: 905 625-8000

FAX: 905 625-4204

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-150	08/17/2023	3		
2			4		

DRAWN BY:

Y.M.

08/17/2023

DATE

23-174

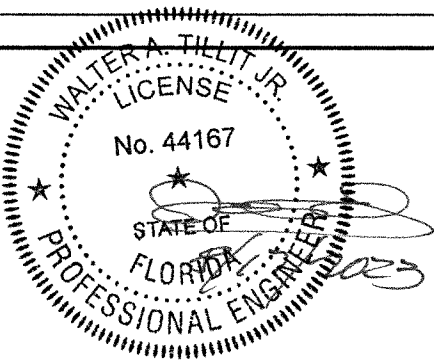
DRAWING No

SHEET 18 OF 1

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/EMBOSSD DOOR 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 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)
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/V 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	4.5" X 4.5" STANDARD WEIGHT (.134 THICK), 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: SCHALGE-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)	NEOPRENE	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, OR POLYURETHANE OR MINERAL BOARD.	0.75" THICK DOOR CORE: EXPANDED POLYSTYRENE SOLID SLAB RIGID BOARD TYPE 1. PCF COMFORMING TO ASTM C578 BY DYPLAST PRODUCTS LLC, OR 3/4" CELL PAPER HONEYCOMB, OR 1.5 PCF POLYURETHANE OR 12.5 PCF MINERAL BOARD.	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 DOW CORNING STRUCTURAL SILICONE	N/A	

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



©2023 TILTECO, INC.

TILTECO inc.

TILLIT TESTING & ENGINEERING COMPANY
 6355N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
 Phone : (305)871-1530 . Fax : (305)871-1531
 e-mail: tilteco@aol.com
 CA-0006719
 WALTER A. TILLIT Jr. P.E.
 FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (HIGH VELOCITY HURRICANE ZONE)

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

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

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 20-150	08/17/2023	3		
2			4		

DRAWN BY:
Y.M.

08/17/2023
DATE

23-174
DRAWING No

SHEET 19 OF 19