

GENERAL NOTES AND SPECIFICATIONS:

1. SERIES LS18 FLUSH OUTSWING COMMERCIAL STEEL DOOR, SHOWN ON THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) HAS BEEN VERIFIED FOR CODE COMPLIANCE IN ACCORDANCE WITH THE 2006 EDITION OF THE INTERNATIONAL BUILDING CODE, (IBC) AND INTERNATIONAL RESIDENTIAL CODE, (I.R.C.) WITH THE 2006 TEXAS REVISIONS, EFFECTIVE JANUARY 1, 2008.

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 7-05 STANDARD, AND SHALL NOT EXCEED THE DESIGN PRESSURE RATING INDICATED ON THIS SHEET.

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. 2005.

THIS DOOR'S ADEQUACY FOR WIND AND IMPACT LOAD HAS BEEN VERIFIED IN ACCORDANCE WITH SECTION 1609.1.4 AND R301.2.1.2 OF THE ABOVE MENTIONED CODES RESPECTIVELY AS PER FLORIDA HIGH VELOCITY HURRICANE ZONE PROTOCOLS TAS-201, TAS-202, TAS-203 AS PER FENESTRATION TESTING LABORATORY, INC. REPORT #FTL-1735, FTL-1736 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 OF THIS DRAWING.

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

4. ALL SCREWS INSTALLED AT SEAWARD AREAS 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, PER 2006 TEXAS REVISIONS TO SECTION 1716.1.2 OF THE 2006 I.B.C AND SECTION R324.1.1 OF THE 2006 I.R.C.

ALL SCREWS INSTALLED AT INLAND AREAS TO BE STAINLESS STEEL 304 OR 316 AISI SERIES AND MEET ASTM A167, OR HOT DIPPED GALVANIZED (AFTER FABRICATION) CARBON STEEL AS PER ASTM A123 OR ASTM A153, OR HOT DIPPED GALVANIZED OR GALVANNEALED (PRIOR TO FABRICATION) AND MEET ASTM A653; HOT DIP GALVANIZED OR ELECTRO GALVANIZED PER ASTM A641, MECHANICALLY DEPOSITED ZINC COATING PER ASTM B695 OR ELECTRO DEPOSITED ZINC COATINGS PER ASTM BL33, PER THE 2006 TEXAS REVISIONS TO SECTION 1716.1.2 OF THE 2006 I.B.C AND TO SECTION R324.1.2 OF THE 2006 I.R.C.

5. ALL WELDING TO CONFORM W/AMERICAN WELDING SOCIETY A.W.S. D.1.3 AND D-19.0 REGULATIONS. USE E60XX ELECTRODES

6. ALL ANCHORS FOR DOOR FRAME CONNECTIONS TO EXISTING STRUCTURE SHALL BE AS SPECIFIED ON THIS DRAWING. MAXIMUM ANCHORS SPACINGS SHALL BE AS PER SECTIONS OF THIS DRAWING.

7. PROVIDE MAX. LOAD BEARING SHIM SPACE AS INDICATED IN THIS DRAWING.

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 DOOR SCHEDULE ON THIS SHEET.

10. PROVIDE SPECIFIED SEALANT AT ALL DOOR FRAME AND THRESHOLD.

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

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

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

(d) SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.E.D. ENGINEER OF RECORD, ACTING AS A DELEGATED ENGINEER TO THE P.E.D. ENGINEER, SHALL SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWINGS FOR REVIEW.

(e) ORIGINAL P.E.D. SHALL BEAR THE DATE AND ORIGINAL 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 TEXAS DEPARTMENT OF INSURANCE REQUIREMENTS. ONE LABEL SHALL BE PLACED FOR EVERY OPENING.

SHEETS CONTENT:

PAGE #1 INDEX & COVER PAGE.

PAGES #1A, 2 & 3 HOLLOW METAL DOOR ASSEMBLY DETAILS.

PAGE #4 HOLLOW METAL DOOR COMPONENT DETAILS DETAILS.

PAGE #5 HOLLOW METAL FRAME COMPONENT DETAILS DETAILS.

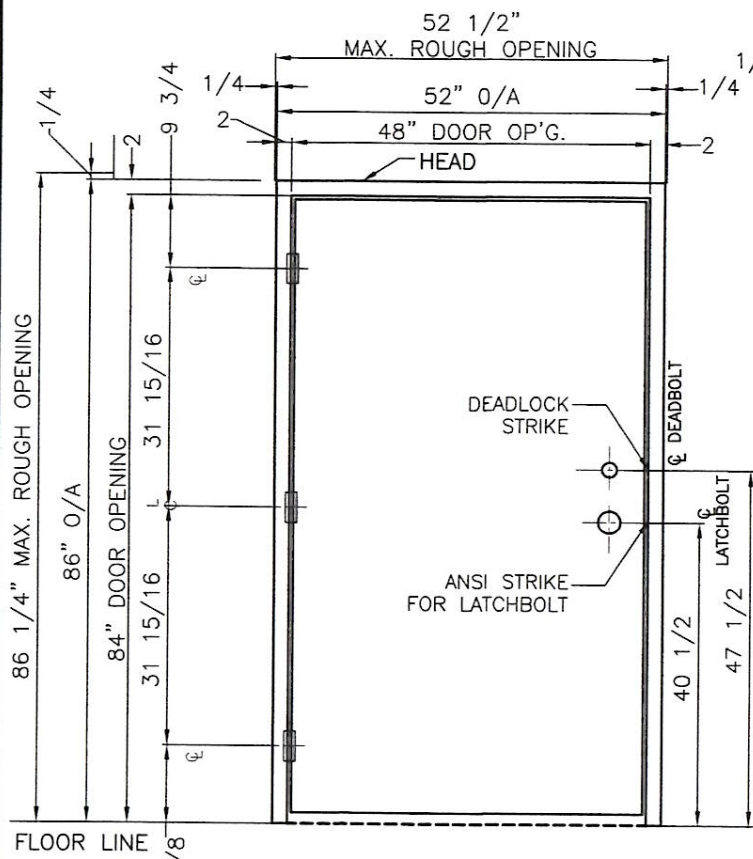
DOOR SCHEDULE		
Max. Design Pressure Rating		
	Where water infiltration Requirement is needed	Where water infiltration Requirement is not needed
Positive	Not Approved	+60 PSF
Negative	Not Approved	-60 PSF

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

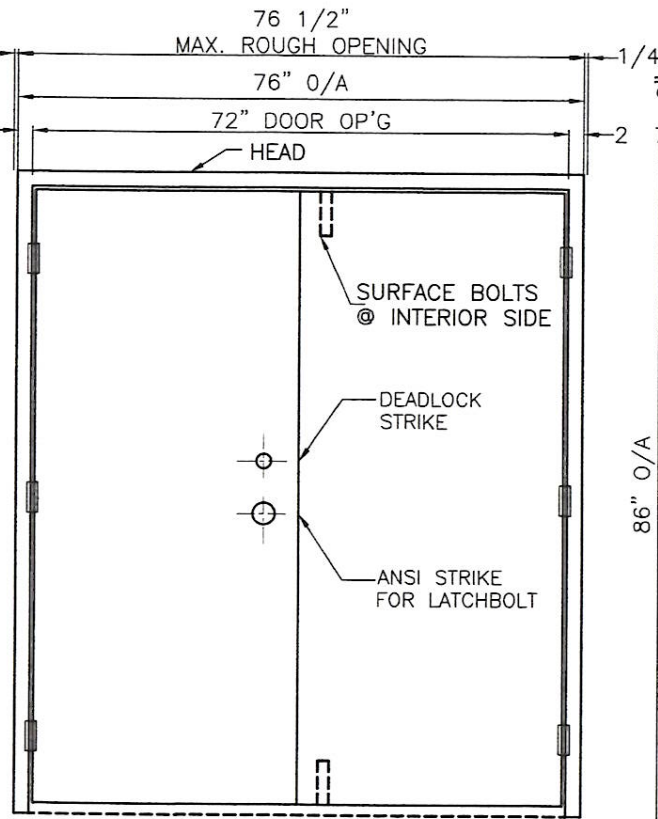


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 TEXAS LIC. # 90691
 FIRM REGISTRATION # F-13790

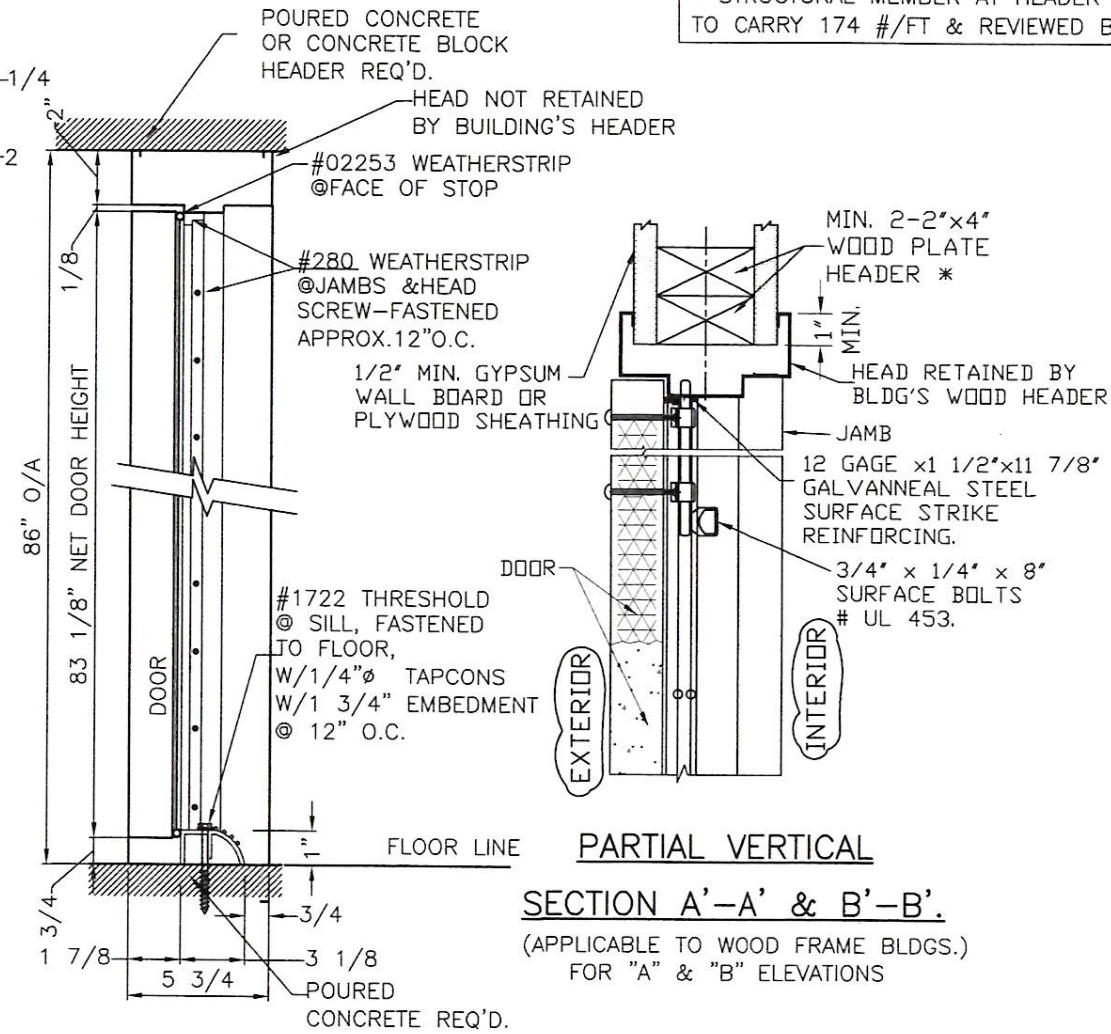
TEXAS DEPARTMENT OF INSURANCE - 2006					
SERIES LS18 FLUSH OUTSWING COMMERCIAL STEEL DOOR - L.M.					DRAWN BY: F.R.L.
DAYBAR INDUSTRIES LTD					5/23/17 DATE
50 WEST DRIVE, BRAMPTON, ON CANADA, L6T 2J4 TEL: 905 625-8000 FAX: 905 625-4204					17-058 DRAWING No
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1			3		
2			4		



ELEVATION "A"
SINGLE DOOR ASSEMBLY
EXTERIOR VIEW (OUTSWING)

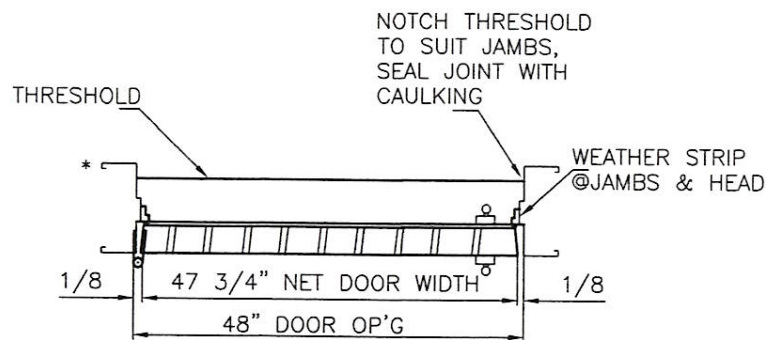


ELEVATION "B"
DOUBLE DOOR ASSEMBLY
EXTERIOR VIEW (OUTSWING)



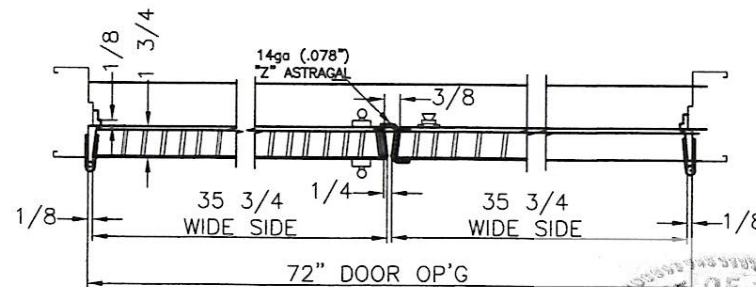
PARTIAL VERTICAL SECTION A'-A' & B'-B'
(APPLICABLE TO WOOD FRAME BLDGS.)
FOR "A" & "B" ELEVATIONS

VERTICAL SECTION:
FOR "A" & "B" ELEVATIONS



HORIZONTAL SECTION "A"

* SEE SHEET NUMBER 3 FOR JAMB ANCHORING DETAILS



HORIZONTAL SECTION "B"

HOLLOW METAL DOOR ASSEMBLY DETAILS

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

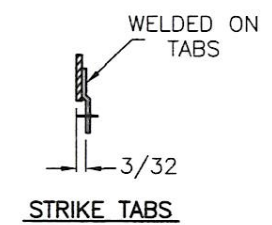
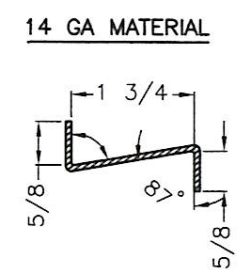
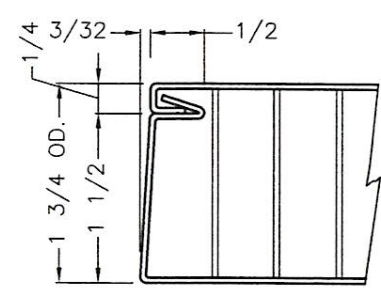
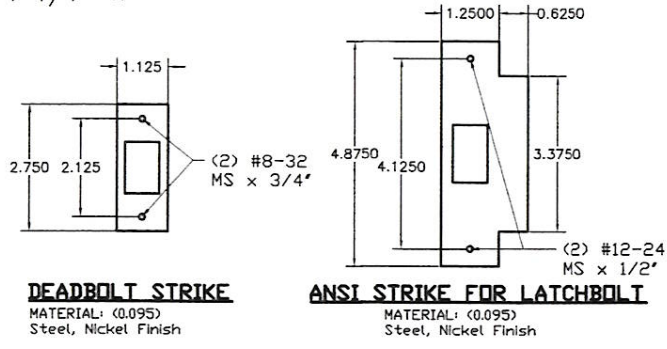
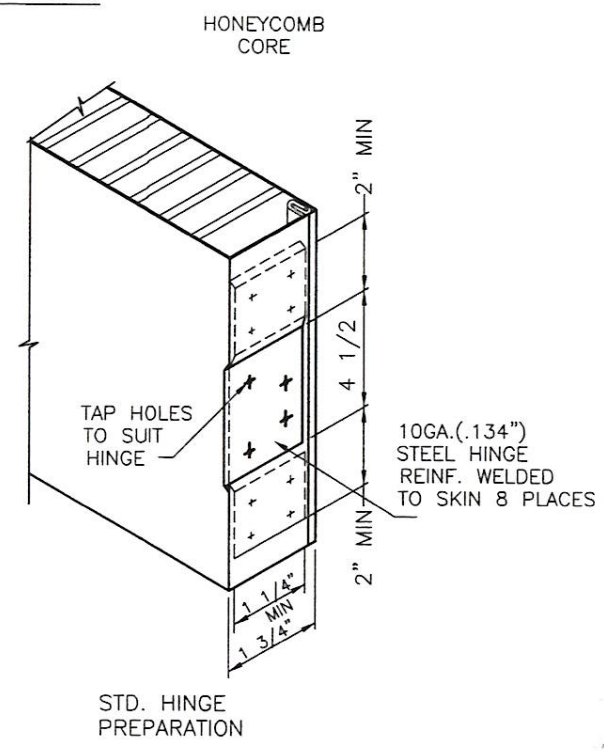
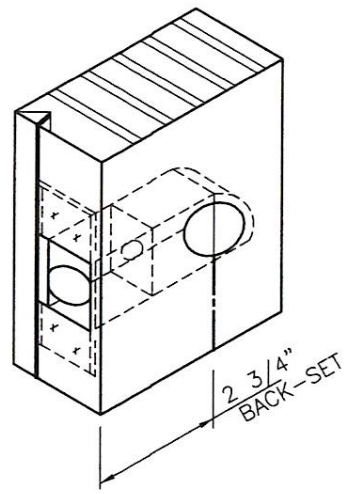
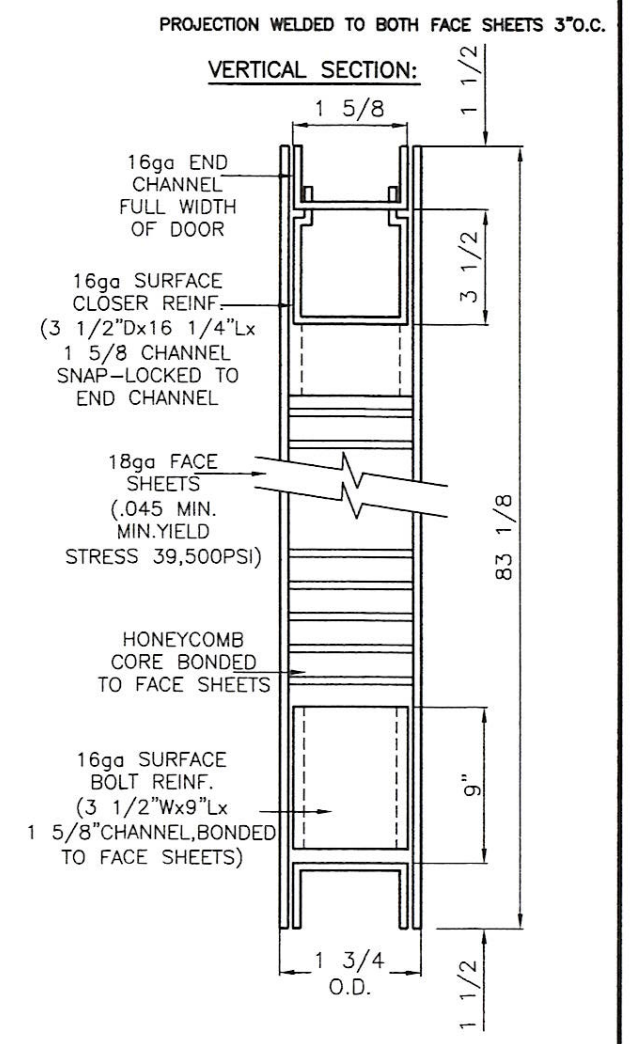
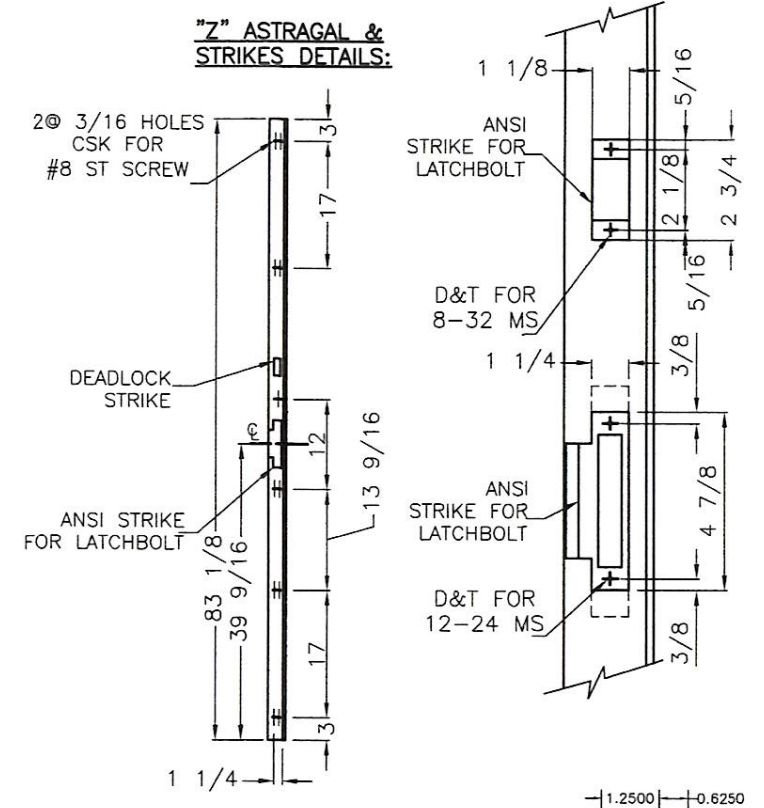
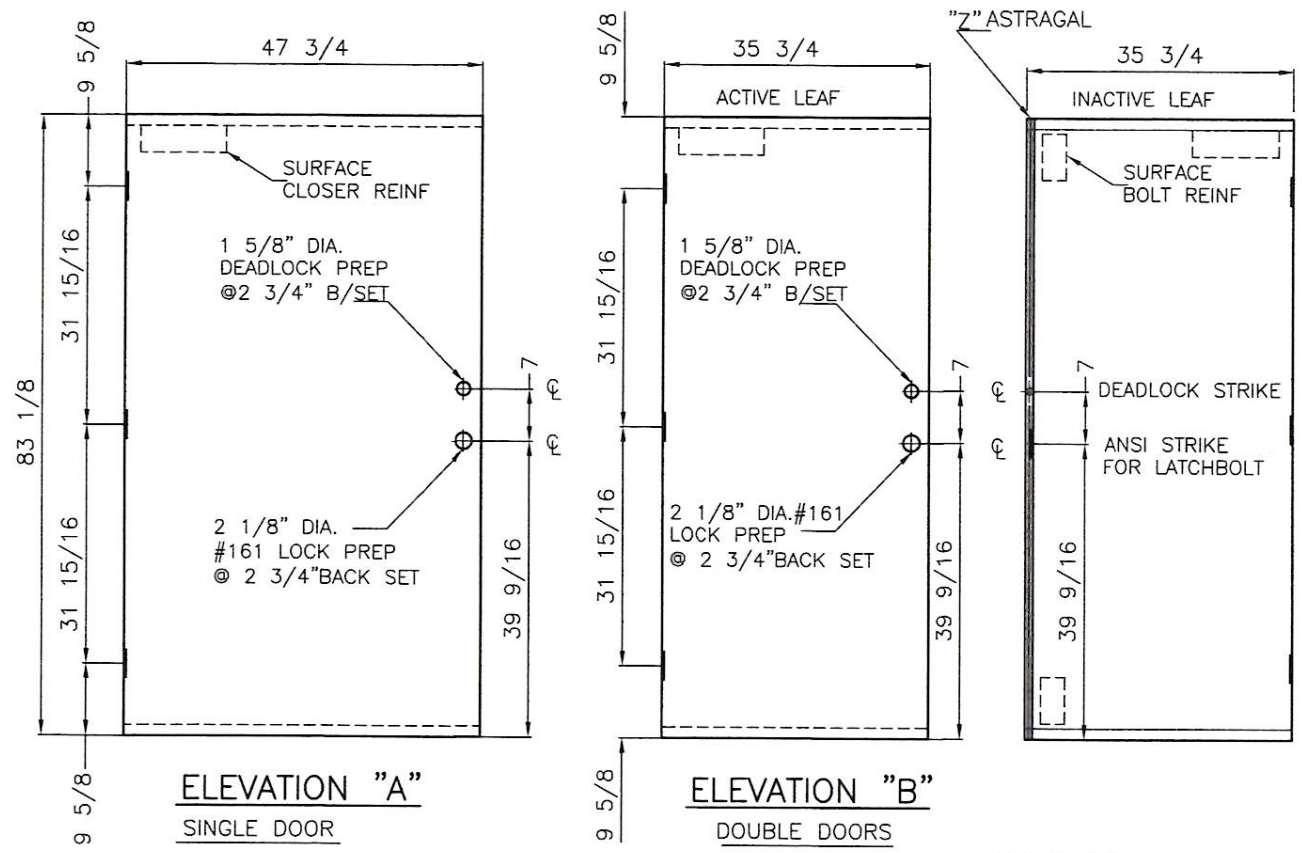
BILL OF MATERIALS:

- NOTE:**
ALL STEEL HOT-DIP GALVANIZED TO ASTM A653 (CQ,LQ), COATING DESIGNATION A25 (ZF75).
- FRAME:**
- JAMBS & HEAD: 16ga (.057" MIN.)
 - HINGE REINF: 10 ga (.134" MIN.)
 - STRIKE/DEADBOLT REINF: 14ga (.075" MIN.)
 - MORTAR GUARDS 22ga (.027").
- DOOR:**
- FACE SHEET: 18ga (.045" MIN.)
 - HINGE REINF: 10ga (.134" MIN.)
 - LOCK REINF., END CHANNELS, CLOSER REINF. 16ga (.057" MIN.)
 - SURFACE BOLT REINF.
 - ASTRAGAL & STRIKE
 - TABS: 14ga (.75" MIN.)
 - PAPER HONEY COMB CORE MF'D BY TENNECO PKG. BONDED TO INSIDE FACES.
- HARDWARE:**
- HINGES-4 1/2"x4" PENROD # PLPTSQSQ
 - LATCHSET-S.PARKER #B FMS 626
 - DEADLOCK-S.PARKER #92160
 - SURFACE BOLTS-3/4"x1/4"x8" #UL453
 - WEATHERSTRIP-AFCO #280, ALUM/VINYL @ SECURED W/#6x1/2" S.M.S.
 - +MD # 02253 ADHESIVE BACKED CLOSED CELL FOAM (1/8"x1/2")
 - THRESHOLD-AFCO # 1722, ALUM/VINYL SECURED W/ 1/4" TAPCONS W/1 3/4" EMBEDMENT OR #8x2" F.H. SMS. OR #10x2" F.H.W.S.
 - DEADLOCK STRIKE, 0.095" THK. STEEL, NICKEL FINISH, ATTACHED W/ (2) #8-32 MS x 3/4".
 - ANSI STRIKE FOR LATCHBOLT, 0.095" THK. STEEL, NICKEL FINISH, ATTACHED W/ (2) #12-24 MS x 1/2".

STATE OF TEXAS
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9069
LICENSED PROFESSIONAL ENGINEER
P.E. SEAL/SIGNATURE/DATE

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TEXAS LIC. # 90691
FIRM REGISTRATION # F-13790

TEXAS DEPARTMENT OF INSURANCE - 2006					
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DAYBAR INDUSTRIES LTD				5/23/17 DATE	
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REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	LOCKS' STRIKES	7/30/18	3		
2			4		
SHEET 1A OF 5					



161
STD. CYLINDRICAL
LOCK PREPARATION
(ANSI A115.2)

(DEADLOCK
PREPARATION
SIMILAR).

SEE DWG. NO.4
FOR REINFORCING
DETAILS

BILL OF MATERIALS:
NOTE:
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TO ASTM A653 (CQ,LFQ), COATING
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TABS: 14ga (.075" MIN.).
- PAPER HONEY COMB CORE MF'D BY
TENNECO PKG. BONDED TO INSIDE FACES.

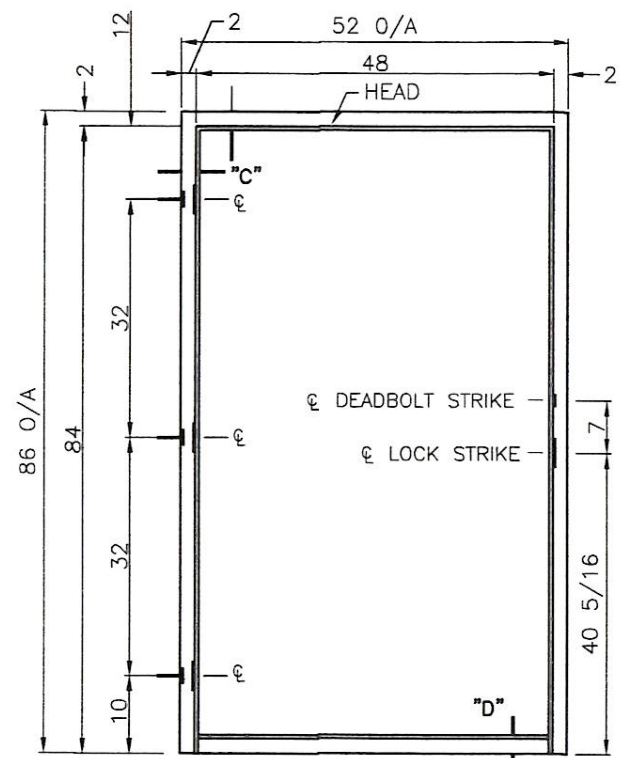
**HOLLOW METAL DOOR
ASSEMBLY DETAILS**

STATE OF TEXAS
WALTER A. TILLIT, JR.
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PROFESSIONAL ENGINEER
8/7/18
P.E. SEAL/SIGNATURE/DATE

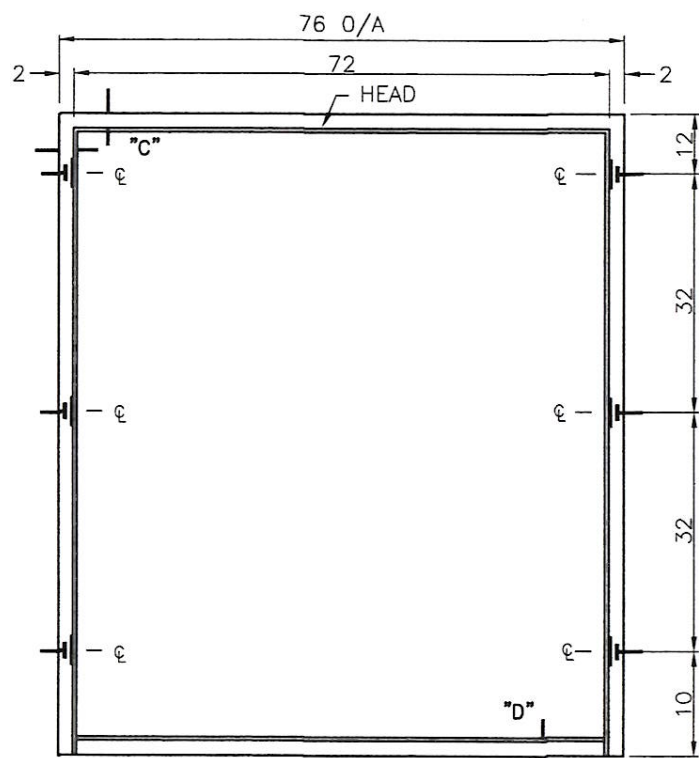
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1	LOCKS' STRIKES	7/30/18	3		
2			4		

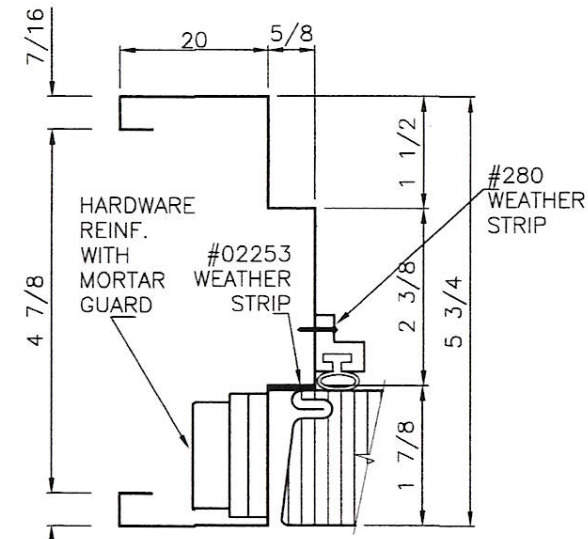
SHEET 2 OF 5



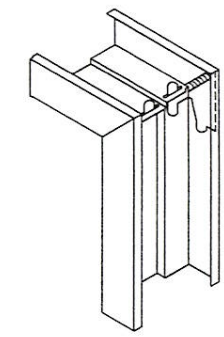
ELEVATION "A"
SINGLE DOOR FRAME



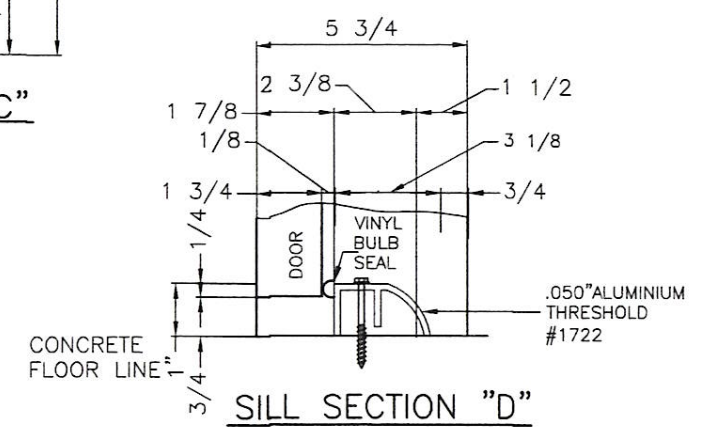
ELEVATION "B"
DOUBLE DOOR FRAME
JAMB ANCHOR LOCATION



JAMB SECTION "C"
(HEAD SIMILAR)
SEE SHEET NO.5 FOR REINFORCING DETAILS



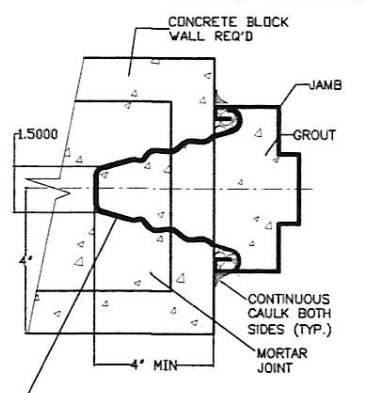
WELDED CORNER DETAIL
DIEMITTED CORNER CONT.
WELDED INSIDE FACES &
AT RETURNS



SILL SECTION "D"
#1722 THRESHOLD SCREWED TO SILL W/ 1 1/4" Ø TAPCONS W/ 1 3/4" EMBEDMENT @ 12" O.C.

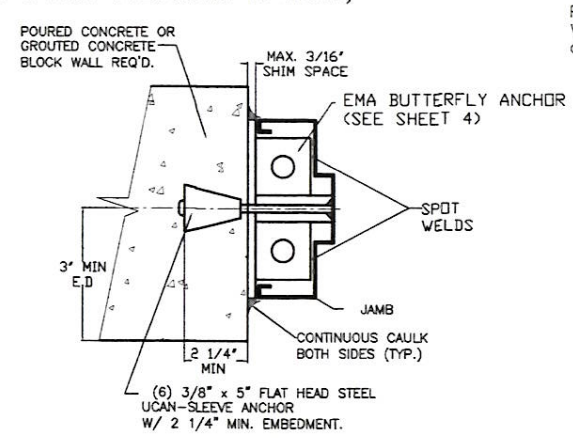
JAMB ANCHORING DETAILS:

(NO ANCHORS IN HEAD ARE REQUIRED WHEN HEADER & JAMBS SUBSTRATE IS CONCRETE OR GROUTED CONCRETE BLOCK HEAD IS REQ'D. TO BE RETAINED BY EXISTING BUILDINGS WOOD HEADER, WHEN HEADER & JAMBS SUBSTRATE IS WOOD)



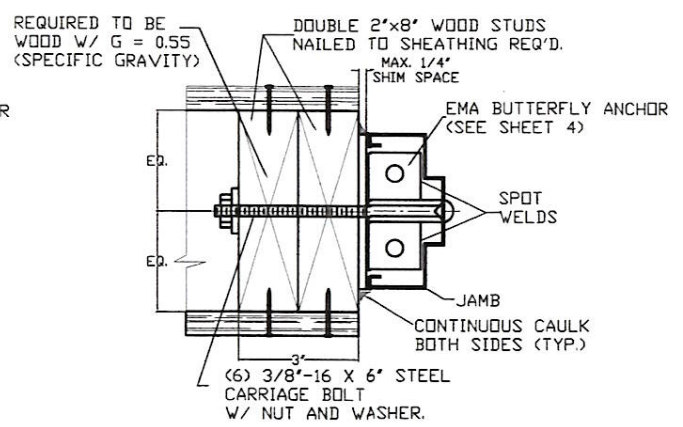
(6) MASONRY WIRE ANCHORS (0.175", SEE SHEET 4) IN HORIZ. MORTAR JOINTS; FILL JAMBS SOLID WITH GROUT PER ASTM C476 W/ MIN. COMPRESSION STRENGTH OF 2.5 Ksi.

WIRE ANCHOR INSTALLATION TO MASONRY WALLS



(6) 3/8" x 5" FLAT HEAD STEEL UCAN-SLEEVE ANCHOR W/ 2 1/4" MIN. EMBEDMENT.

INSTALLATION OF UCAN SLEEVE ANCHORS TO MASONRY WALLS



(6) 3/8"-16 X 6" STEEL CARRIAGE BOLT W/ NUT AND WASHER.

INSTALLATION OF 3/8" CARRIAGE BOLT TO WOOD FRAME WALLS

BILL OF MATERIALS:

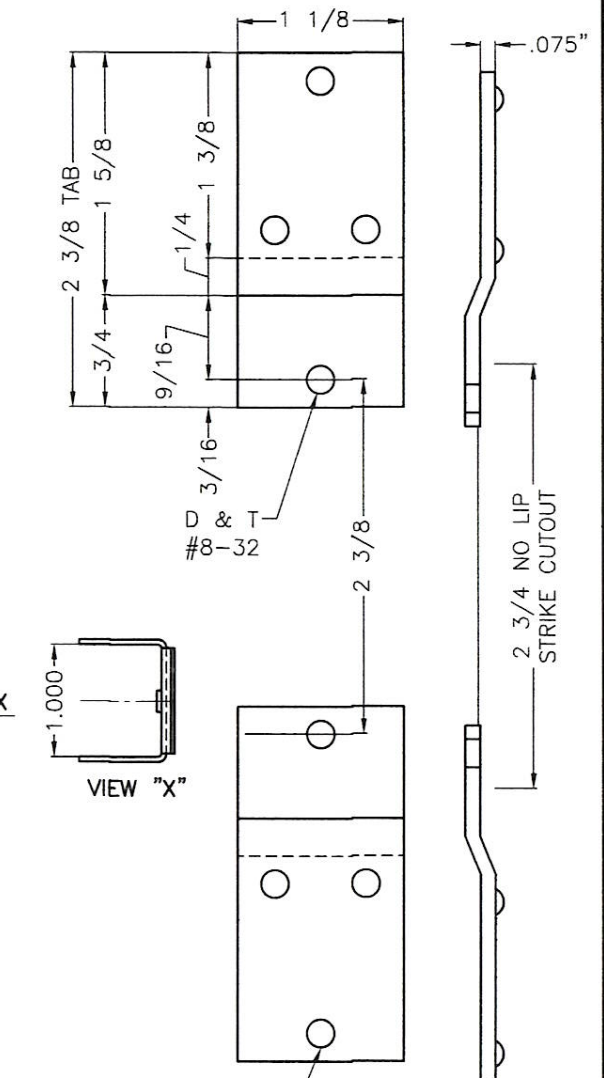
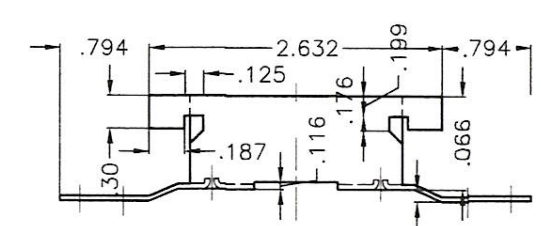
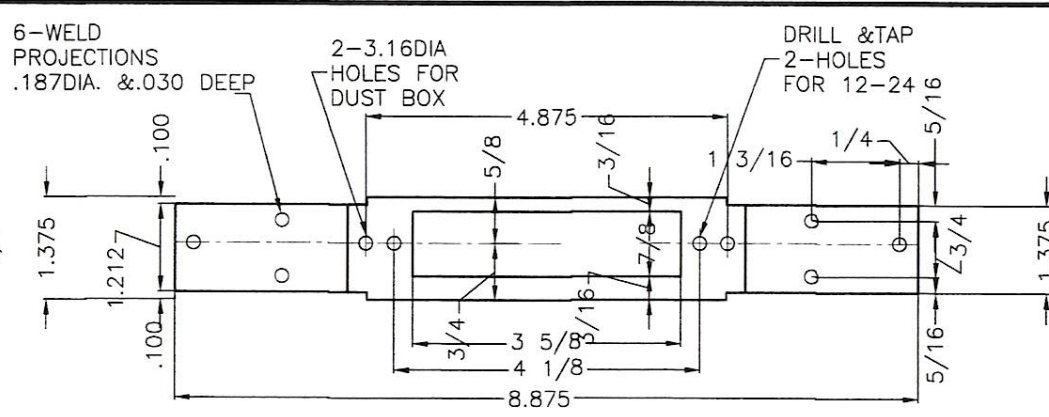
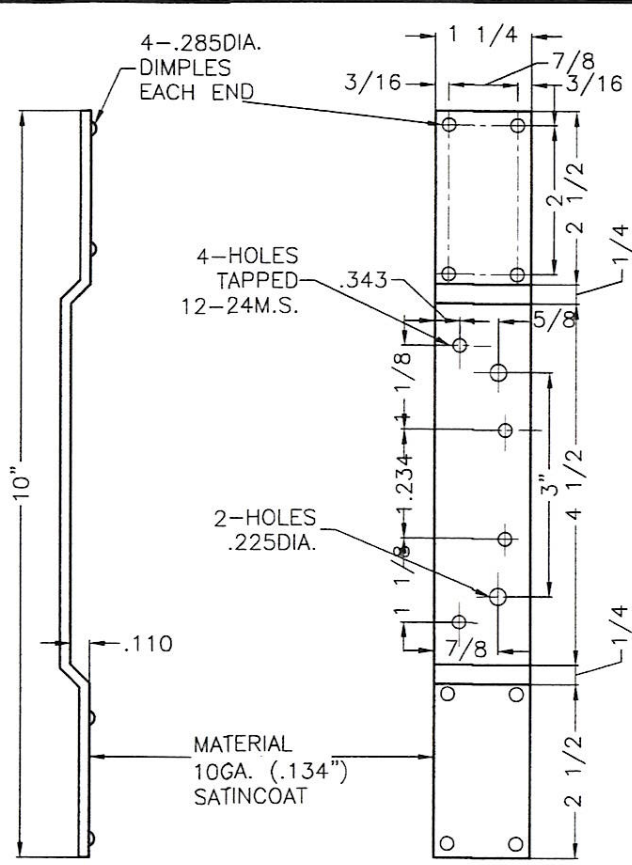
- NOTE:**
ALL STEEL HOT-DIP GALVANIZED TO ASTM A653 (CQ,LFQ), COATING DESIGNATION A25 (ZF75).
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HOLLOW METAL DOOR ASSEMBLY DETAILS

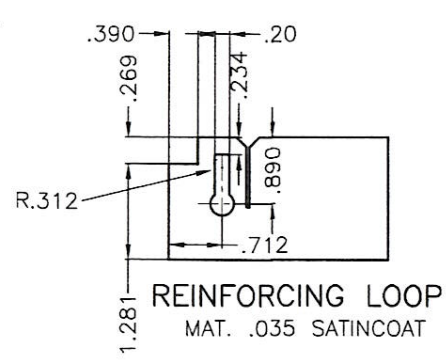
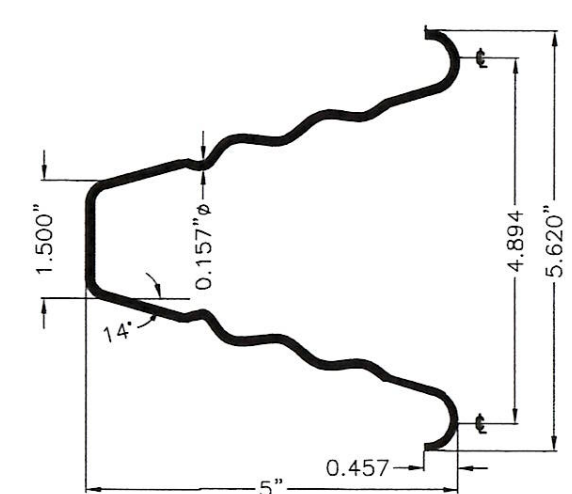
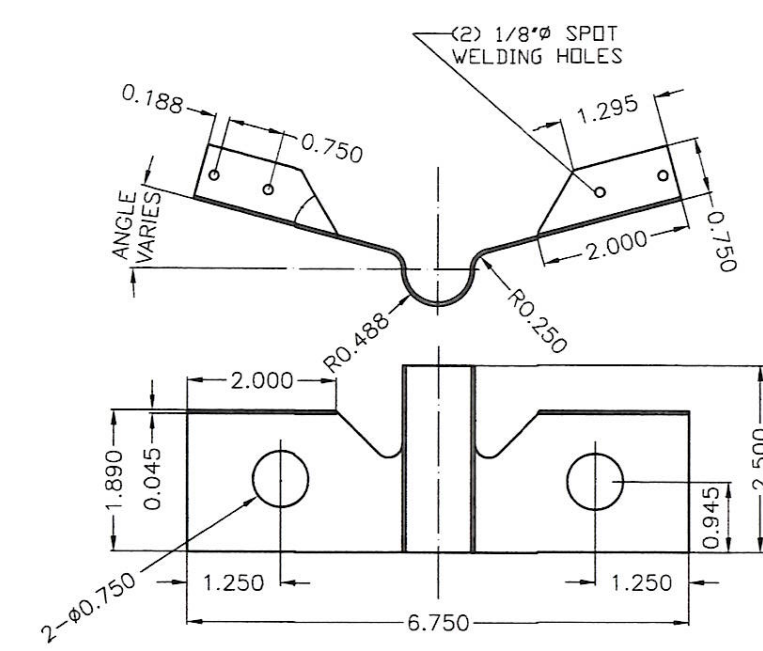
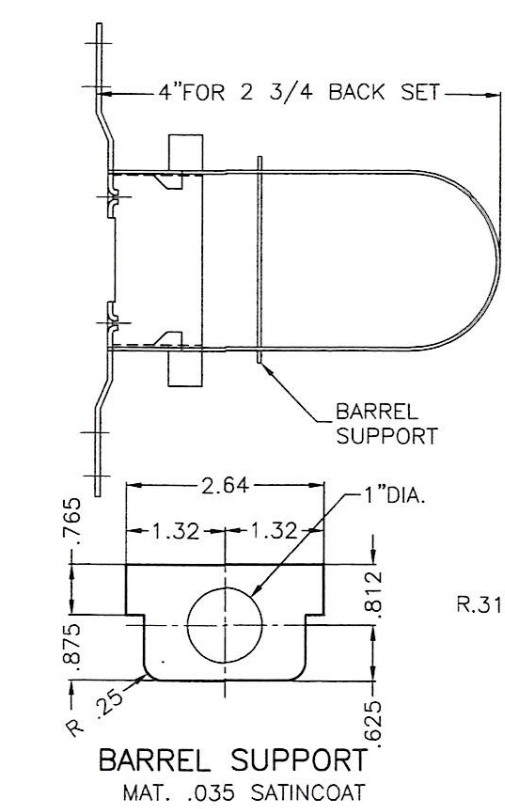
WALTER A. TILLIT JR.
9069
5/2/18
P.E. SEAL/SIGNATURE/DATE

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REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1			3		
2			4		
SHEET 3 OF 5					



DOOR HINGE REINFORCING



HOLLOW METAL DOOR COMPONENT DETAILS

STATE OF TEXAS
 WALTER A. TILLIT JR.
 90691
 5/23/18
 P.E. SEAL/SIGNATURE/DATE

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TEL: 905 625-8000 FAX: 905 625-4204				SHEET 4 OF 5	
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1			3		
2			4		

