

I-PIVOT DOOR SERIES

OUTSWING PIVOT WOOD DOORS

FLORIDA STATE APPROVAL

CODE VERSION: FLORIDA BUILDING CODE 2023 - 8th EDITION

APPROVED FOR USE INSIDE HVHZ AND OUTSIDE HVHZ

CATEGORY: EXTERIOR DOORS -- SUBCATEGORY: SWINGING EXTERIOR DOOR ASSEMBLY

IMPACT RESISTANT: LARGE MISSILE

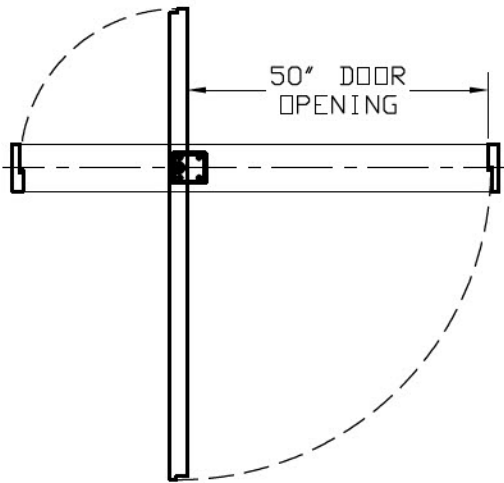
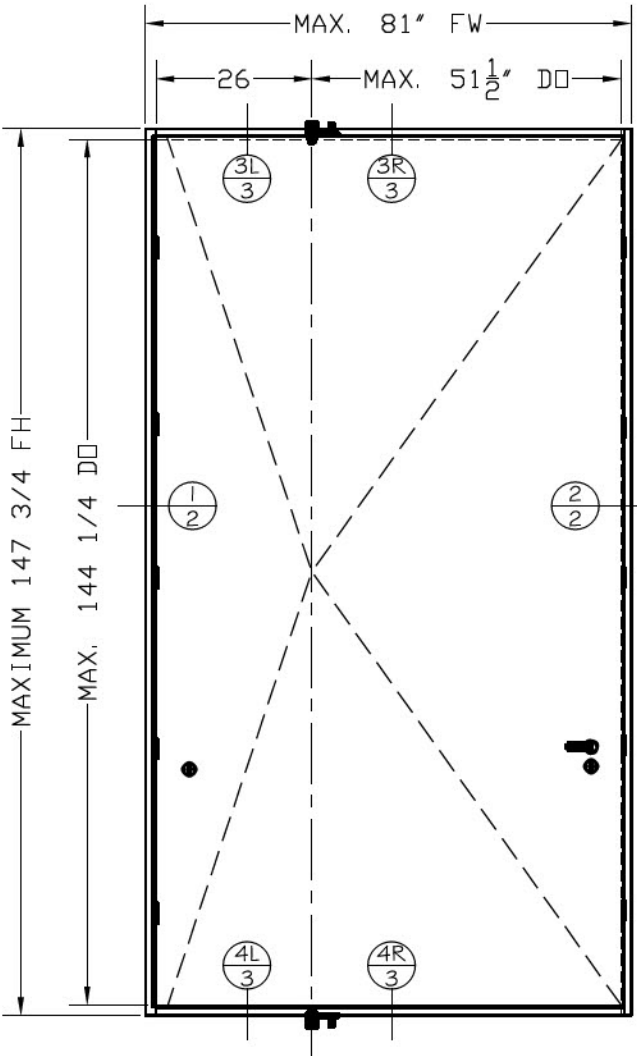
GENERAL NOTES:

- 1- CODE: THIS PRODUCT HAS BEEN TESTED UNDER PROTOCOLS TAS 201, 202 AND 203 AND DESIGNED IN ACCORDANCE WITH THE FBC 2023 - 8th EDITION INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ).
- 2- DEFINITION: THIS PRODUCT IS AN EXTERIOR OUT SWING WOOD TYPE DOOR DESIGNED, CONSTRUCTED AND TESTED TO PROVIDE PROTECTION FROM HURRICANE FORCE WINDS AND WIND BORNE DEBRIS (LARGE & SMALL MISSILE) WITHIN THE ALLOWABLE DESIGNED PRESSURES AND LIMITATIONS STATED IN THIS APPROVAL.
- 3- POSTING: PRODUCT SHALL BE LABELED AS PER FBC SECTION 1703.5. THE PERMANENT LABEL, MARKING OR ETCHING SHALL PROVIDE TRACEABILITY TO THE MANUFACTURER AND PRODUCT.
- 4- LOADS: DESIGNED LOAD CALCULATED BASED ON THE ASCE 7-22 AND PROVIDED BY A PROFESSIONAL ARCHITECT OR ENGINEER FOR EACH SPECIFIC PROJECT. THE CALCULATED DESIGNED PRESSURE MUST NOT EXCEED THE ALLOWABLE PRESSURES HERE IN SPECIFIED. THE DESIGN PRESSURES, AS DETERMINED FROM ASCE 7-22, ARE PERMITTED TO BE MULTIPLIED BY 0.6 AS PER THE FLORIDA BUILDING CODE.
- 5- MATERIAL:
- 5.1- ALL WOOD TO BE WITH MINIMUM 0.55 SPECIFIC GRAVITY CORRECTED FOR 12% MOISTURE CONTENT PER NDS 0.58 RAW. DENSITY OF BUTCHER BLOCK CONSTRUCTION WITH VENEER 0.535 g/cm³.
- 5.2- GLAZING: LAMINATED IMPACTED RATED AS SPECIFIED IN THIS APPROVAL
- 6- FASTENERS: ASSEMBLY SCREWS AND ANCHORS SHALL BE AS SPECIFIED IN THE CURRENT SET OF DRAWINGS.
- 7- USE: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, ARCHITECT OR ENGINEER OF RECORD TO VERIFY THE FOLLOWING:
- 7.1- THE STABILITY OF THE STRUCTURE WHERE THE PRODUCT IS TO BE ATTACHED INSURING PROPER ANCHORAGE.
- 7.2- THE SITE SPECIFIC PROJECT CRITERIA, SUCH AS BUT NOT LIMITED TO, LOCAL CODE REQUIREMENTS, DESIGNED PRESSURES ETC.
- 7.3- THAT THIS APPROVAL IS ADEQUATE TO THE SPECIFIC PROJECT.

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7 OF 8	FRAME COMPONENTS & BILL OF MATERIALS
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ELEVATION TESTED UNIT



Pedro Figueiredo

Digitally signed by
Pedro Figueiredo
Date: 2023.10.19
08:01:06 -04'00'

DIGITALLY SIGNED FOR 8 PAGES

THIS ITEM HAS BEEN DIGITALLY SIGNED AND
SEALED BY PEDRO DE FIGUEIREDO, PE 52609 ON
THE DATE INDICATED HERE.



Pedro De Figueiredo
10/19/2023

PPMIF Inc.
ENGINEERING SERVICES - CA 32459
9715 W. BROWARD BLVD.
PLANTATION, FL 33324
PPMIF@AOL.COM

PRODUCT:
I-PIVOT SERIES
OUTSWING PIVOT DOORS
LARGE & SMALL MISSILE
IMPACT RATED

MANUFACTURER:
WOOD FINISHING
SERVICES LLC
222 NE 27TH STREET
MIAMI- FLORIDA- 33137
TEL: (561) 939-3368

SCALE:

NA

DATE:

10/19/2023

DRAWING #

23-204

SHEET

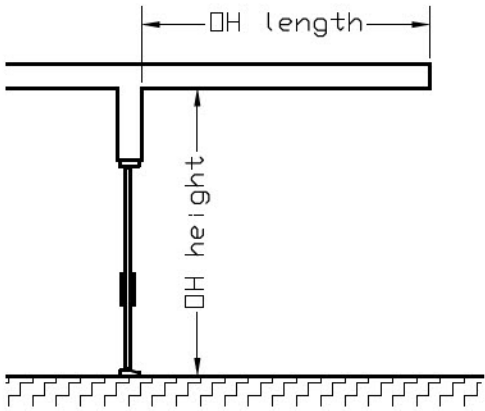
1 OF 8

DESIGN RATING (WIND)
Pd= +65 ** PSF, -65 PSF

TAS 202: +65, -65 PSF
TAS 203: +65 PSF, -65 PSF
TAS 201: LARGE & SMALL MISSILE

** PRODUCT POSITIVE PRESSURE TO BE LIMITED TO
+60 PSF FOR INSTALLATIONS WITHOUT AN OVERHANG
MEETING THE OH ratio= OH length/ OH height >= 1
DOOR COVERAGE (FBC 2023 SECTION 1709.5.1)

OPERATING FORCE
WATER RESISTANCE: ASTM E331
9 PSF -- (15% OF +60 PSF)
AIR INFILTRATION: ASTM E283
FORCE ENTRY: AAMA 1304 (SINGLE DOOR)



A circular professional engineer seal for Pedro M. De Figueiredo. The outer ring contains the text "PEDRO M. DE FIGUEIREDO" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. The inner circle contains the word "LICENSE" at the top, "No. 52609" in the center, and "STATE OF FLORIDA" at the bottom, also separated by two stars. The seal is red and black.

ENGINEER SEAL
PEDRO DE FIGUEIREDO
PE 52609

PPM[®] Inc.
ENGINEERING SERVICES CA 92460

ENGINEERING SERVICES - CA 92433
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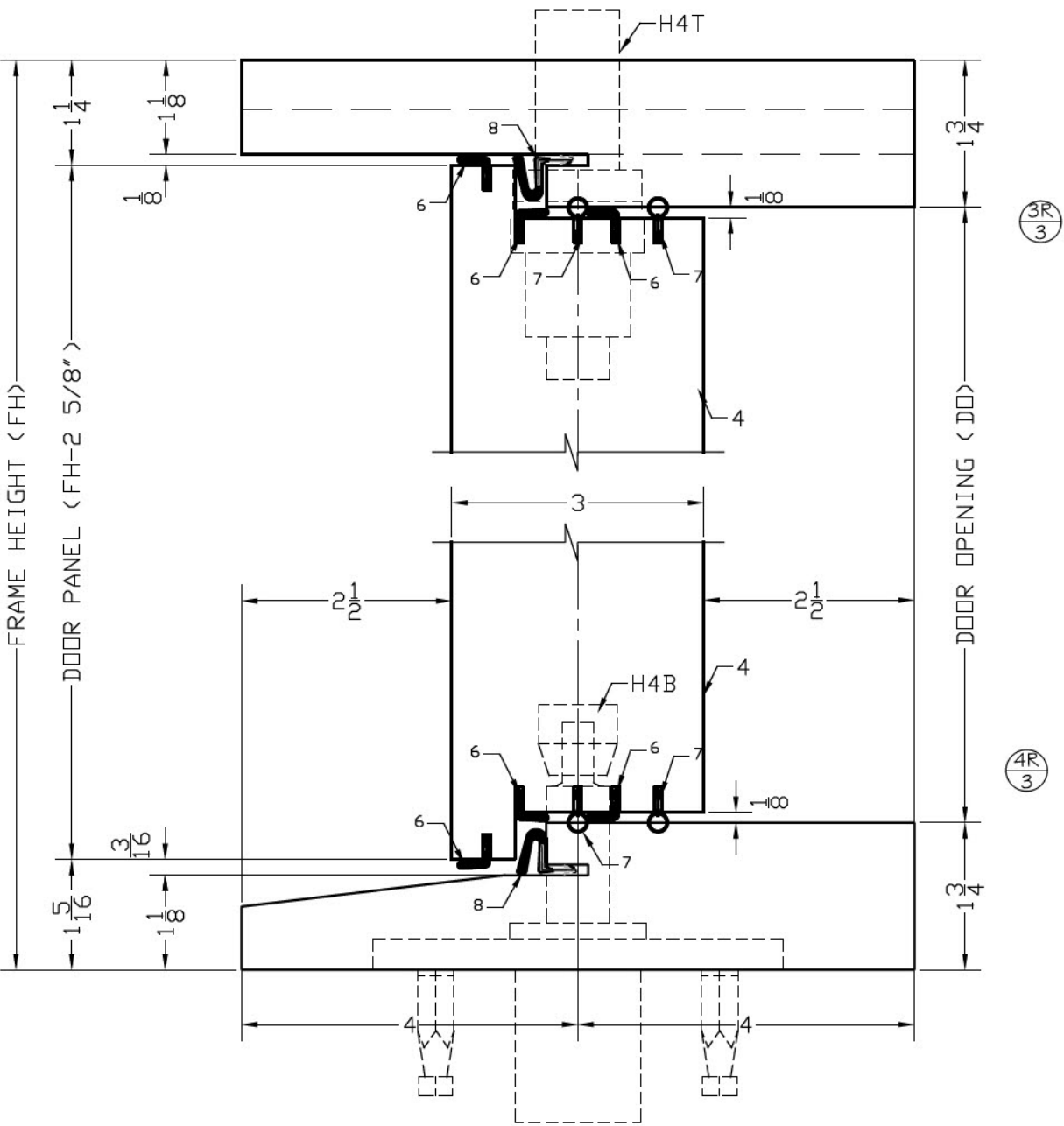
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SHEET
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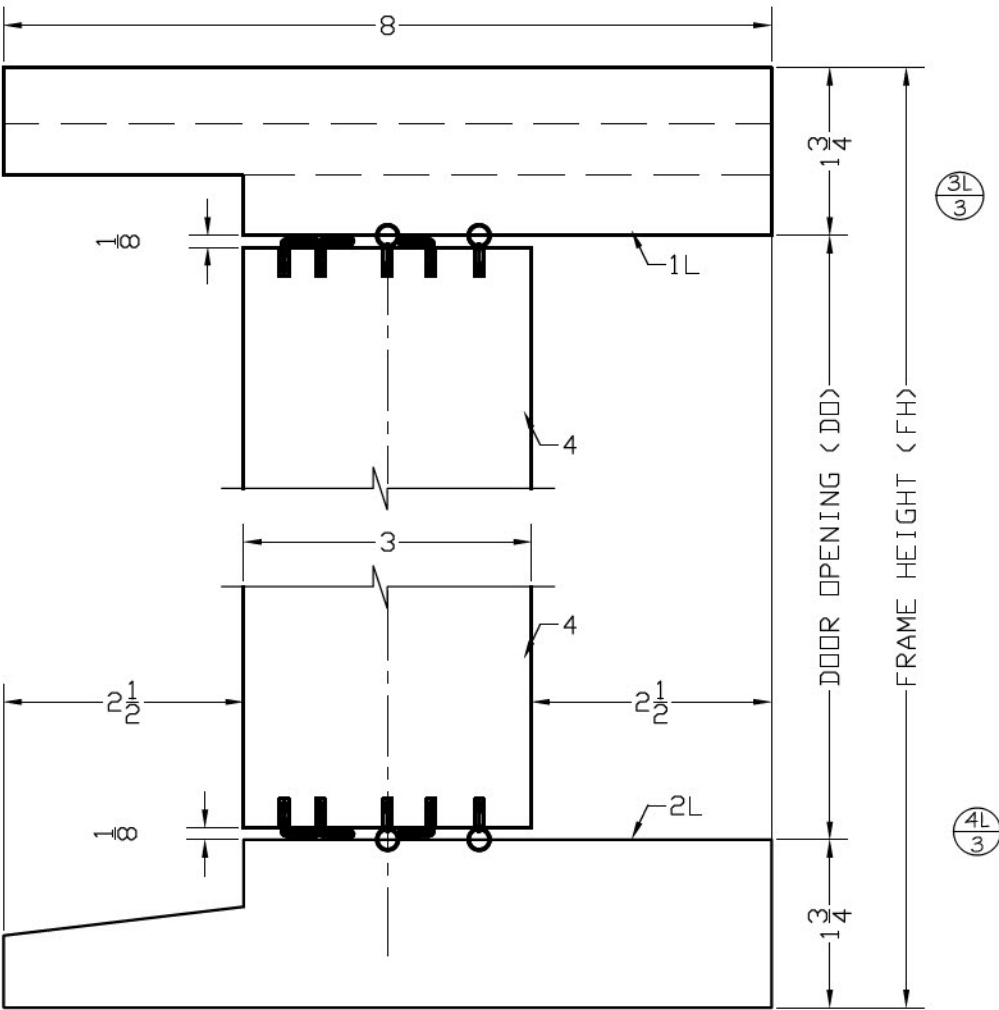


VERTICAL SECTIONS

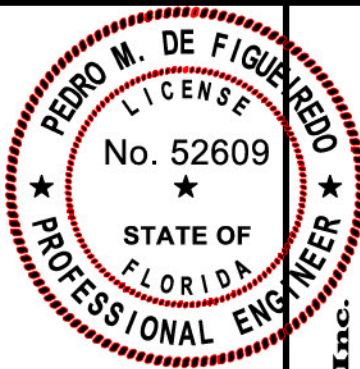
VERTICAL SECTION RIGHT SIDE OF PIVOT



VERTICAL SECTION LEFT SIDE OF PIVOT



SEE SHEET 4 FOR FRAME ANCHORAGE OPTIONS



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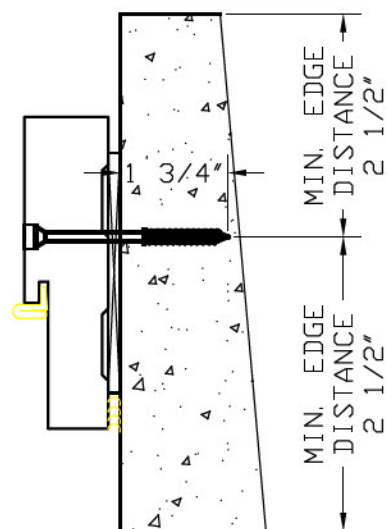
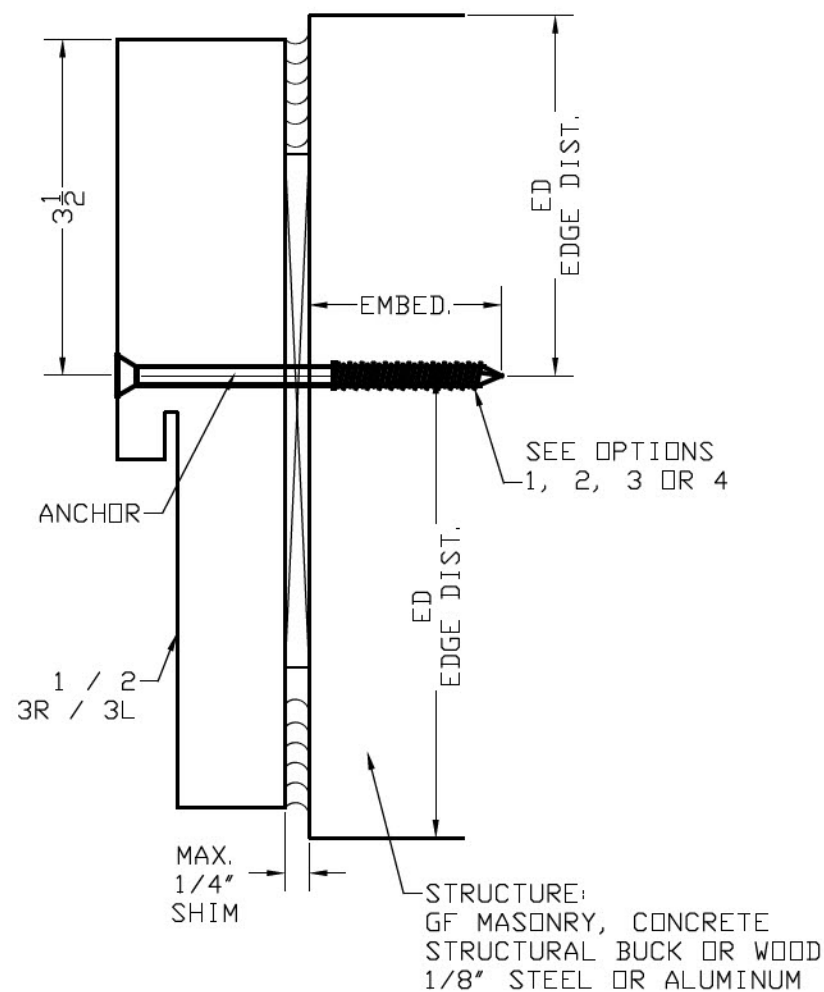
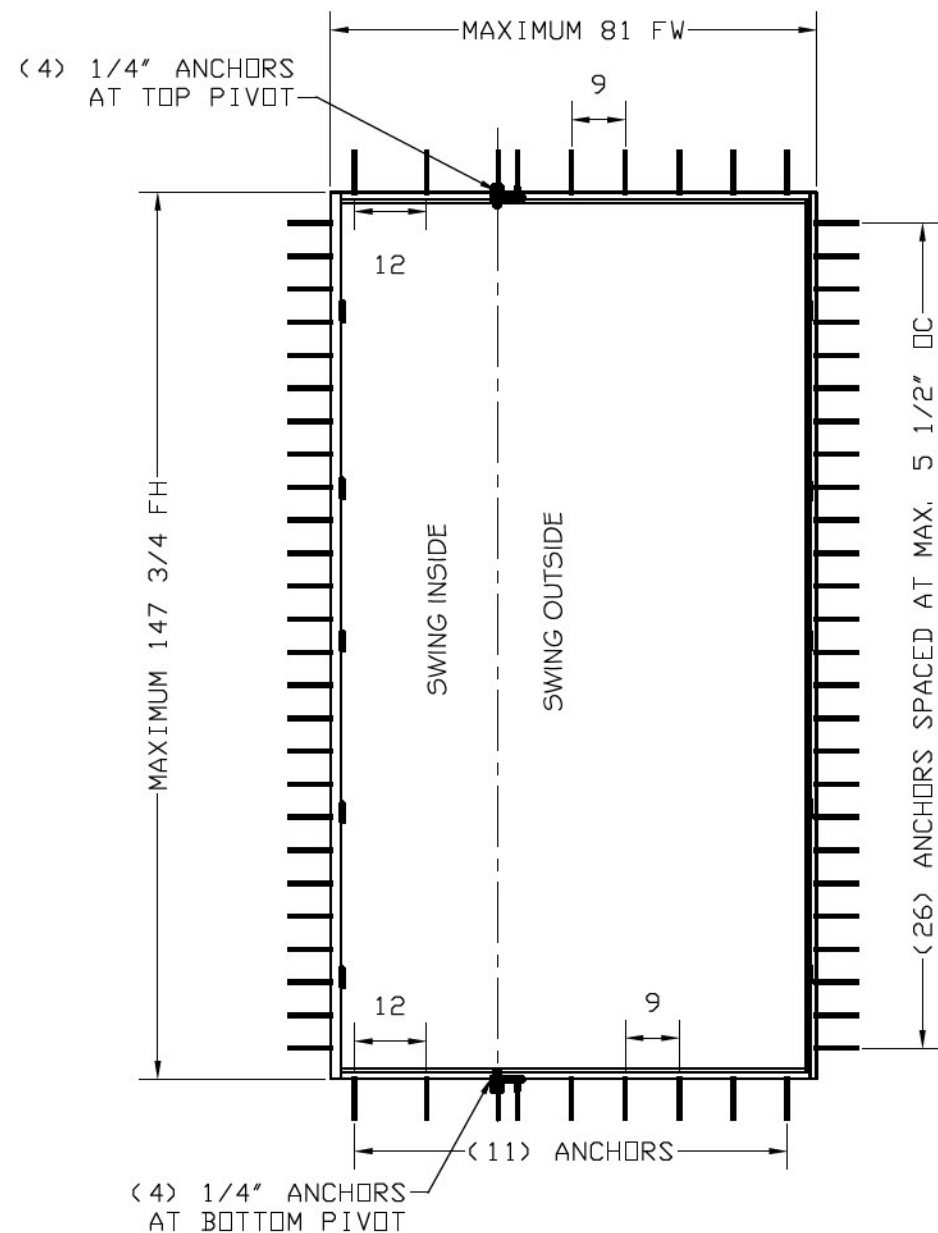
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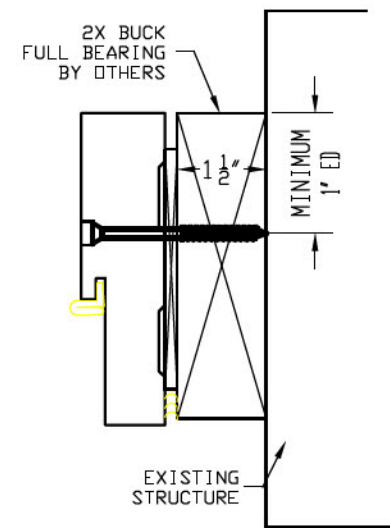
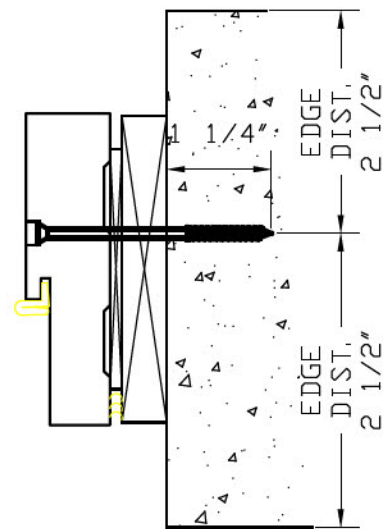
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FRAME ANCHORAGE LAY-OUT AND OPTIONS

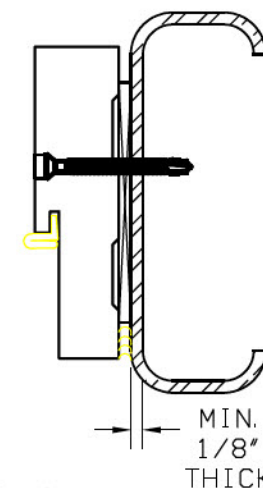


OPTION 1
FRAME MOUNTED DIRECTLY INTO SUBSTRATE WITH MAXIMUM 1/4" SHIM AND 1/4" ULTRACONS BY ELCO WITH 1 3/4" MIN. EMBEDMENT INTO GROUT FILLED MASONRY (JAMBS) OR INTO 3000 PSI CONCRETE. (REFER TO ELEVATIONS FOR ANCHORS QTY. AND LAY-OUT)

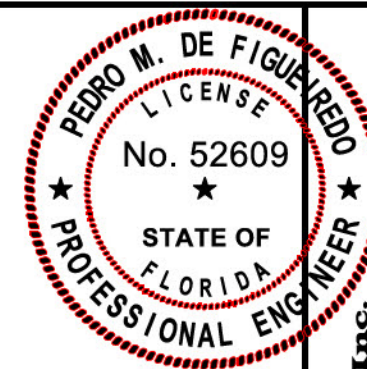
OPTION 2
FRAME MOUNTED WITH MAXIMUM 1/4" SHIM AND MAXIMUM 1X PT CONTINUOUS WOOD SPACER SECURED BY 1/4" ULTRACONS BY ELCO WITH 1 3/4" MIN. EMBEDMENT INTO GROUT FILLED MASONRY (JAMBS) OR INTO 3000 PSI CONCRETE. FOR INSTALLATION INTO METAL STRUCTURES USE 1/4-20 HWH GRADE 5 SDS. (REFER TO ELEVATIONS FOR ANCHORS QTY. AND LAY-OUT) 1X BUCK TO BE PROPERLY DESIGNED BY OTHERS.



OPTION 3
FRAME MOUNTED DIRECTLY INTO 2X PT WOOD BUCK (SG >= 0.55) W/ MAX. 1/4" SHIM AND SECURED BY #14 SS WOOD SCREWS OR 1/4" ULTRACONS WITH 1 1/2" MIN. EMBEDMENT. (REFER TO ELEVATIONS FOR ANCHORS QTY. AND LAY-OUT) 2X BUCK TO BE PROPERLY DESIGNED BY OTHERS.



OPTION 4
FRAME MOUNTED DIRECTLY INTO METAL STRUCTURES W/ MAX. 1/4" SHIM. 1/4"-20 PFH SDS GR 5 INTO MIN. 1/8" A36 STEEL OR 6063-T6 ALUMINUM. (REFER TO ELEVATIONS FOR ANCHORS QTY. AND LAY-OUT)



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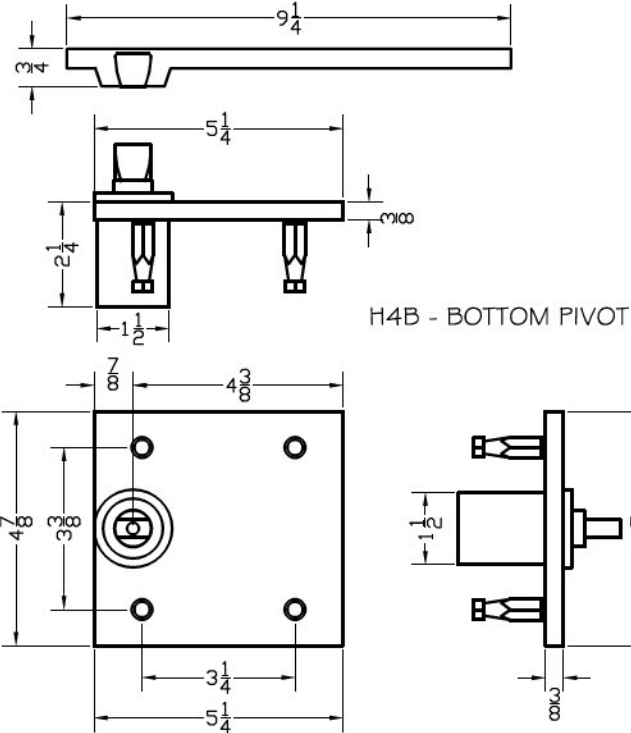
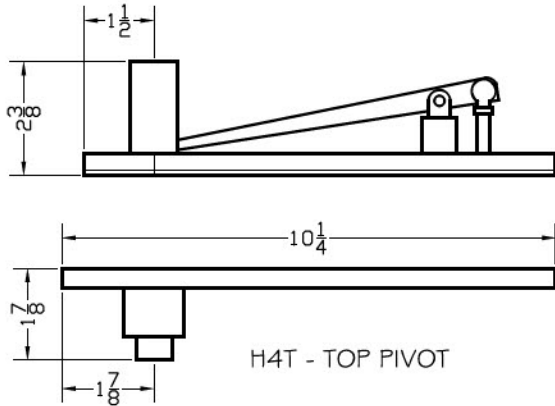
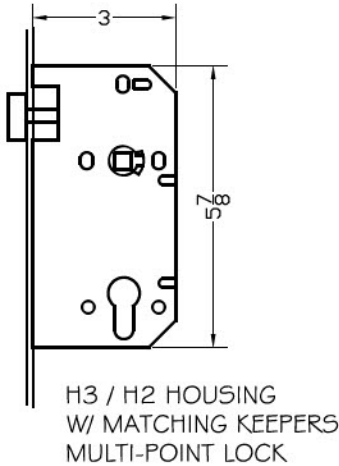
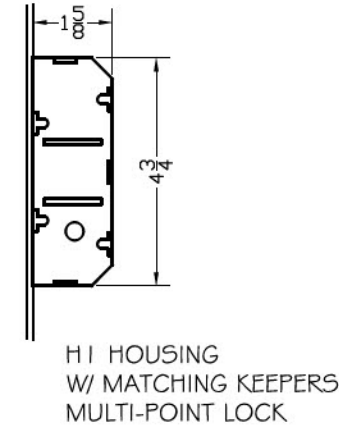
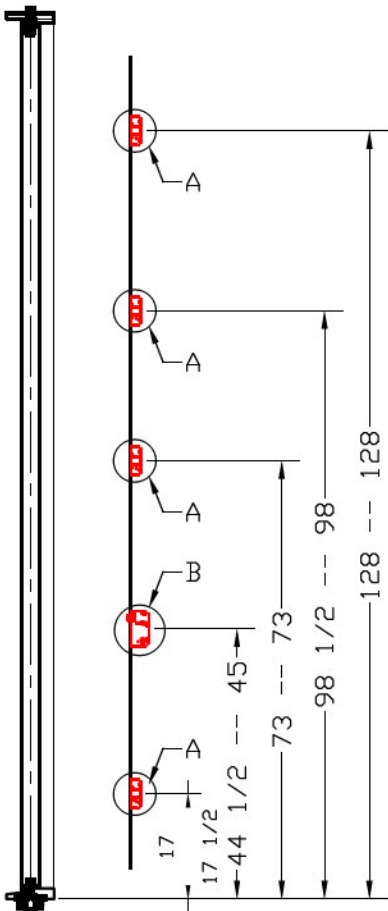
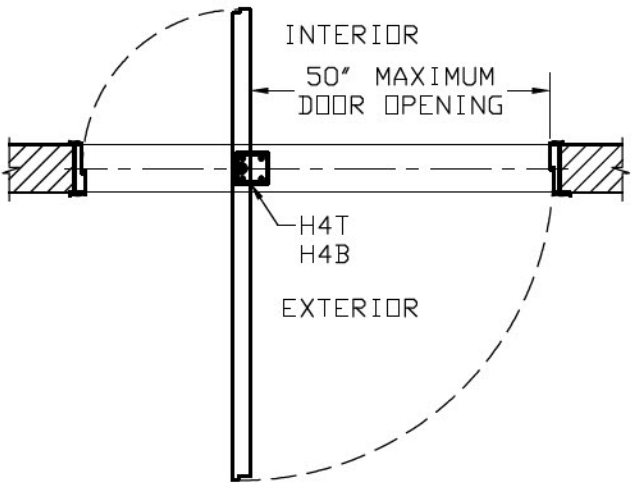
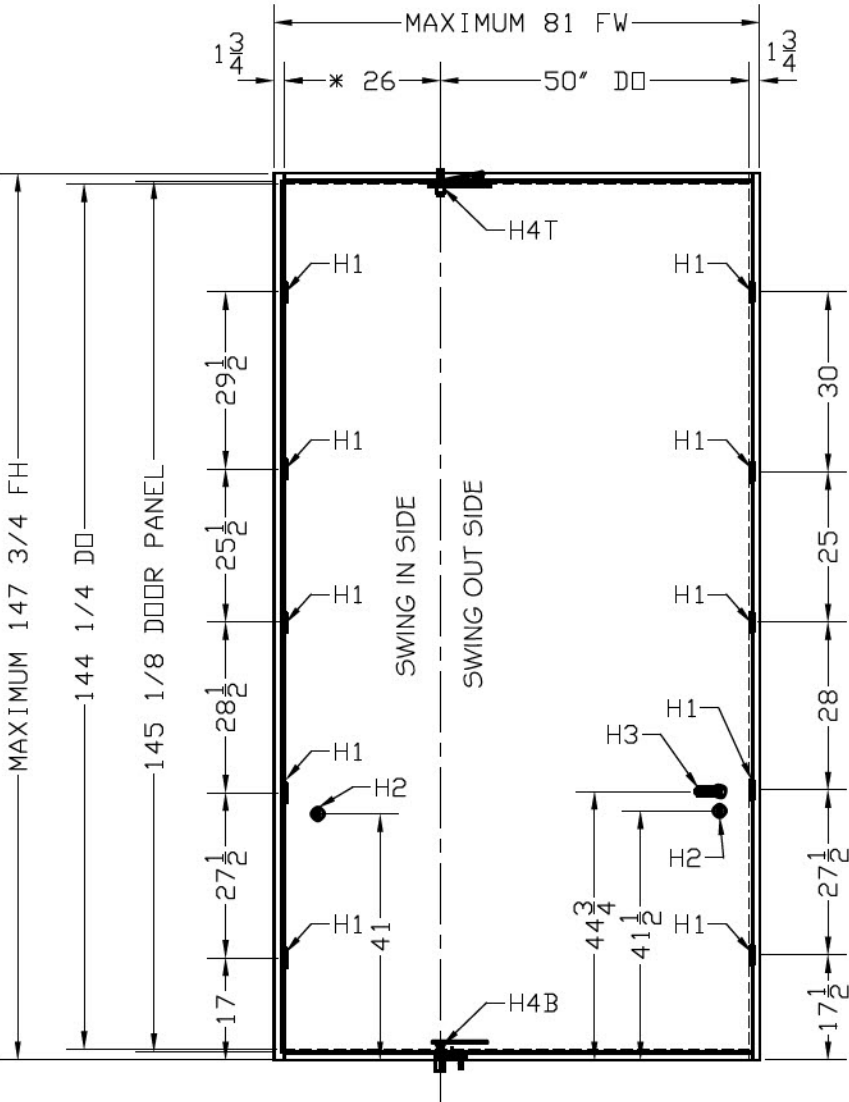
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HARDWARE LAY-OUT

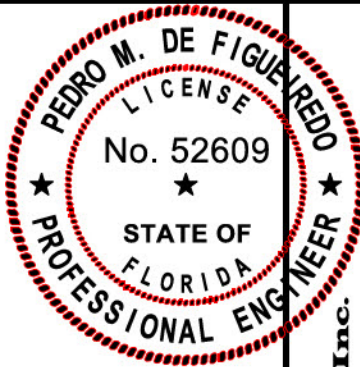


HARDWARE NOTES:

- H1 - FLUSH MOUNTED METTALIC KEEPERS WITH NO MARKINGS. SECURED TO JAMBS WITH (4) #8X 1 1/4" FLAT HEAD WOOD SCREWS. SEE ELEVATION FOR LOCATION.
- H2- SURFACE MOUNT MULTI-POINT LOCK SYSTEM WITH ACTIVATING KEY OPERATOR ON THE EXTERIOR AND THUMB TURN ON THE INTERIOR WITH PRODUCT MARKINGS NF. SECURED WITH (17) #8X 1 1/4" FLAT HEAD WOOD SCREWS. LOCATED AT 41" FROM THE BOTTOM.
- H3- SURFACE MOUNT METTALIC DEAD BOLT WITH KEY OPERATOR ON THE EXTERIOR AND THUMB TURN ON THE INTERIOR WITH PRODUCT MARKING WOOD FINISHING SERVICE. SECURED WITH (2) #8-36 X 1 1/8" OVAL HEAD MACHINE SCREWS. LOCATED AT 41 1/2" FROM THE BOTTOM.
- H4T- TOP PIVOT - SECURED TO BUCK WITH (4) 1/4" X 2 1/4" FLAT HEAD WOOD SCREWS
- H4B- BOTTOM PIVOT - SECURED TO BUCK WITH (4) 1/4" X 2 1/4" FLAT HEAD WOOD SCREWS

TABLE 1 (PIVOT LOCATION FUNCTION OF THE DOOR OPENING SIZE)

DOOR OPENING	* PIVOT LOCATION	MAXIMUM FRAME WIDTH
50"	26"	81"
48"	25"	78"
42"	22"	69"
36"	19"	60"
30"	16"	51"
24"	13"	42"



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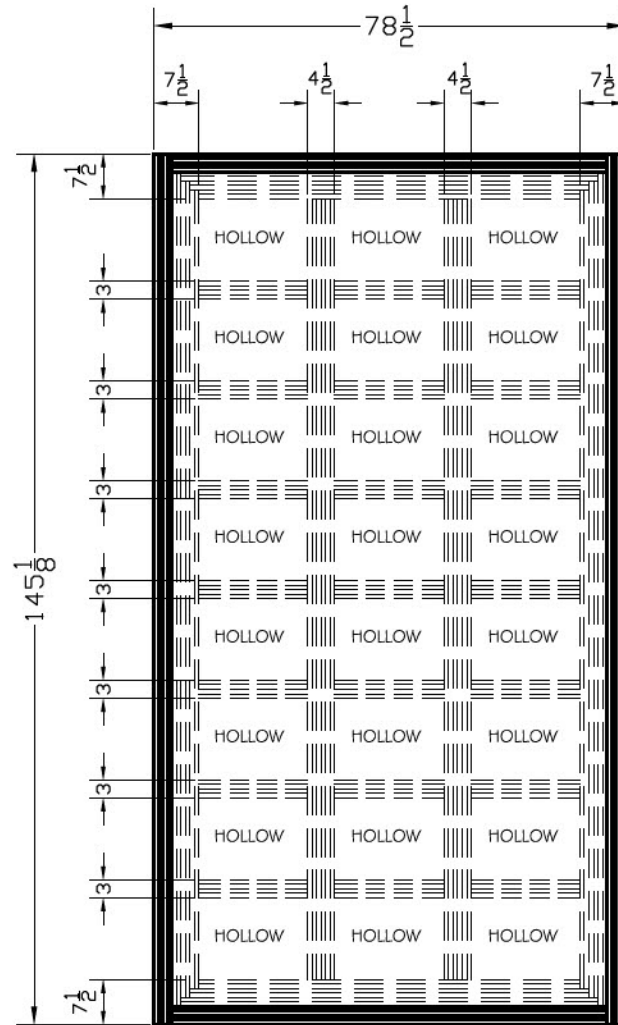
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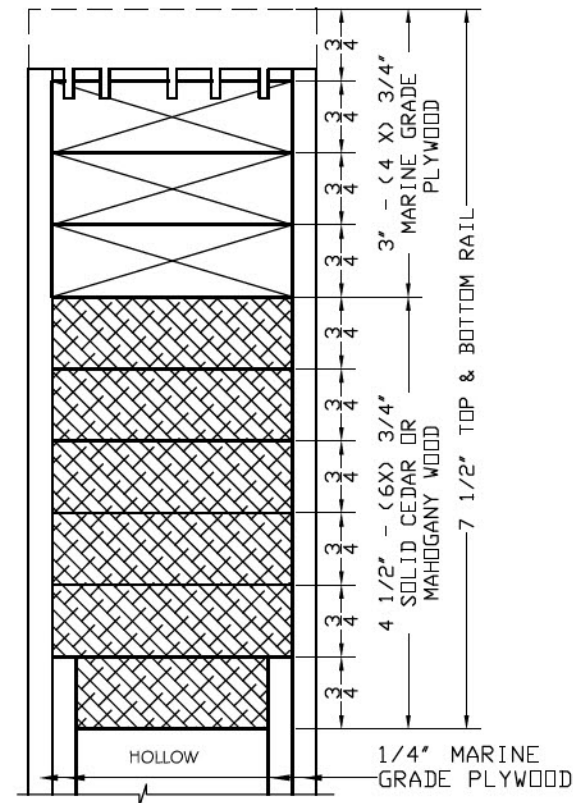
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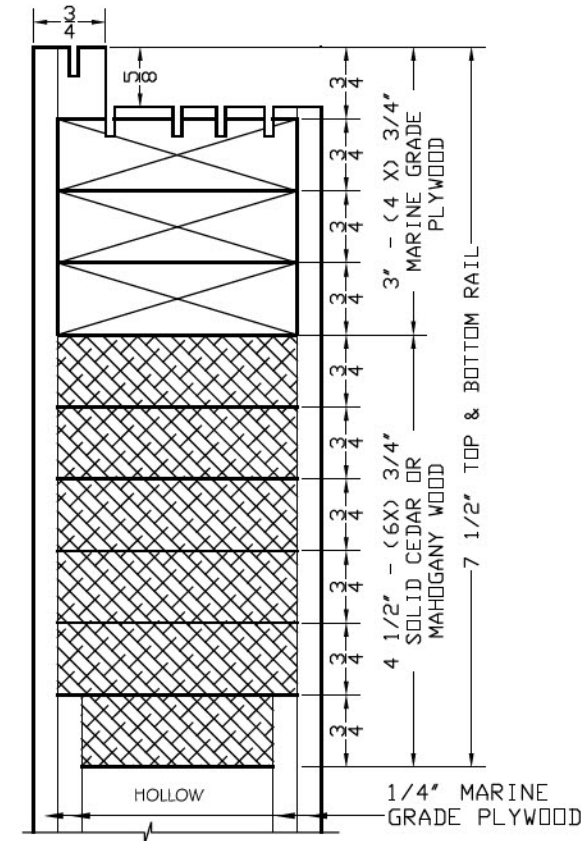
DOOR COMPONENTS



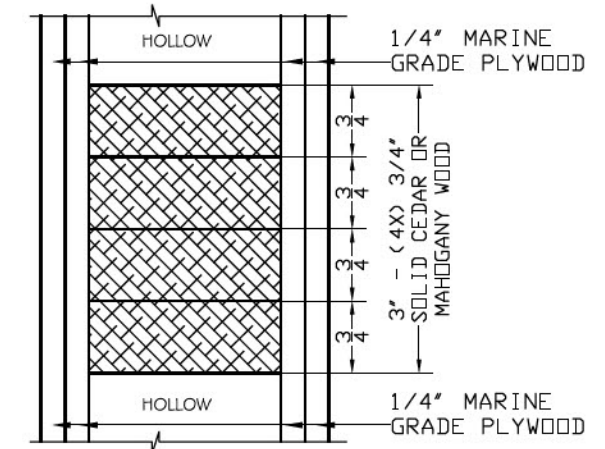
4- DOOR SLAB CONSTRUCTION LAY-OUT
DOOR PANEL CONSTRUCTED USING CEDAR OR MAHOGANY WOOD AND MARINE GRADE PLYWOOD. WOOD SECTIONS SECURED TOGETHER USING MULTI-BOND ADVANTAGE II GLUE



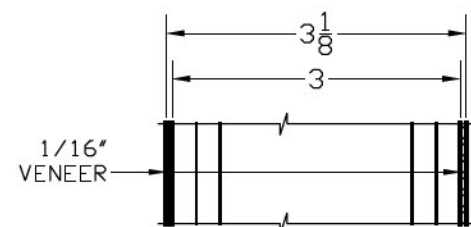
4- DOOR SLAB
PERIMETER TOP & BOTTOM RAIL
LEFT SIDE OF THE PIVOT



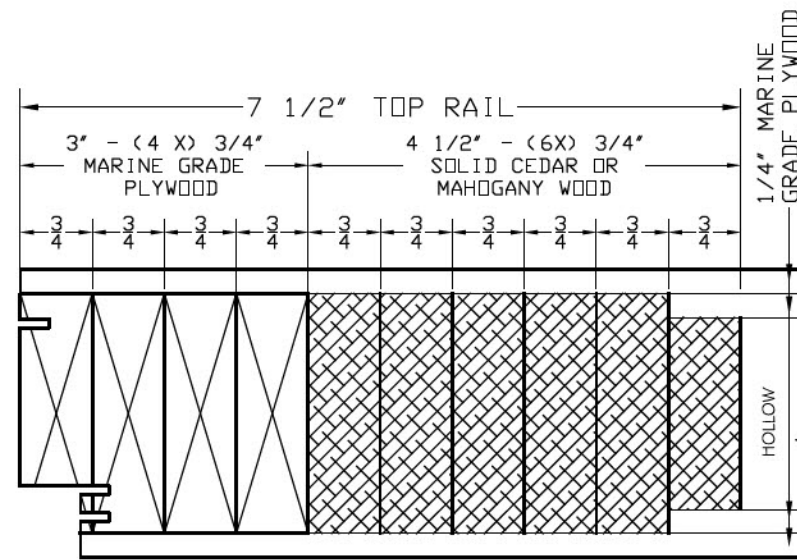
4- DOOR SLAB
PERIMETER TOP & BOTTOM RAIL
RIGHT SIDE OF THE PIVOT



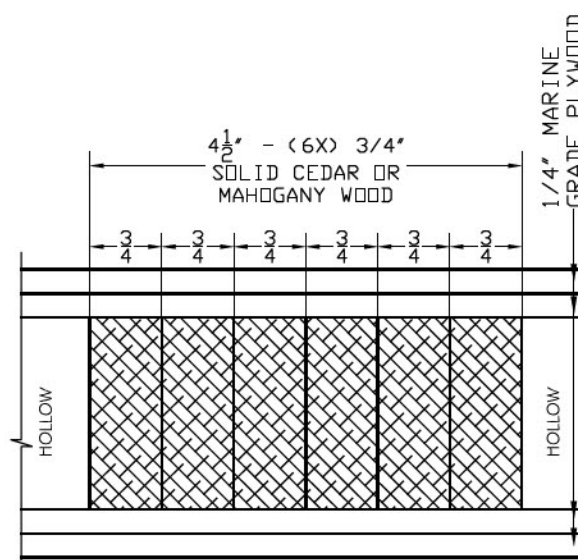
4- DOOR SLAB
HORIZONTAL STIFFENER



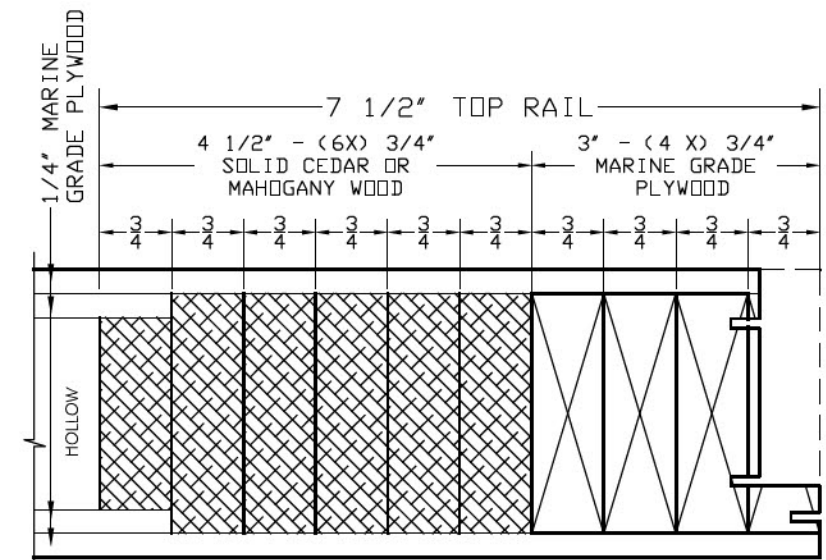
OPTIONAL CLADDING:
1/16" MAHOGANY VENEER
VENEER GLUED WITH
EPOXY RESIN



4- DOOR SLAB
PERIMETER SIDE RAIL LAY-OUT - LEFT SIDE OF THE PIVOT



4- DOOR SLAB
VERTICAL STIFFENER



4- DOOR SLAB
PERIMETER SIDE RAIL LAY-OUT - RIGHT SIDE OF THE PIVOT



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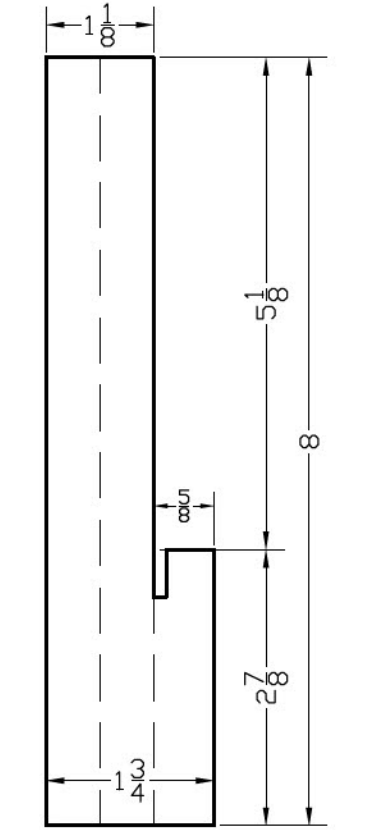
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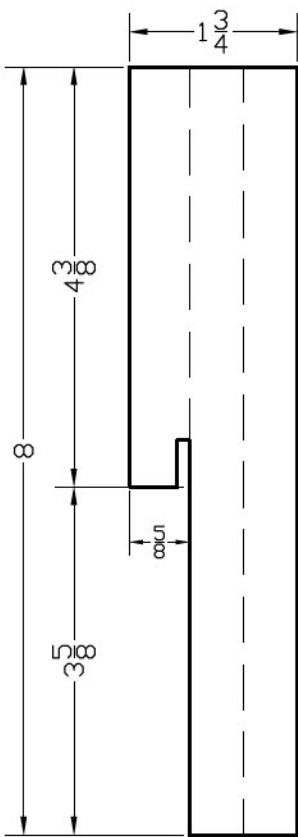
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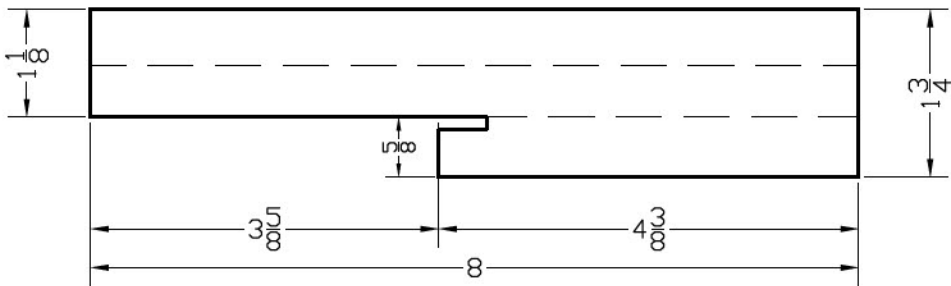
FRAME COMPONENTS



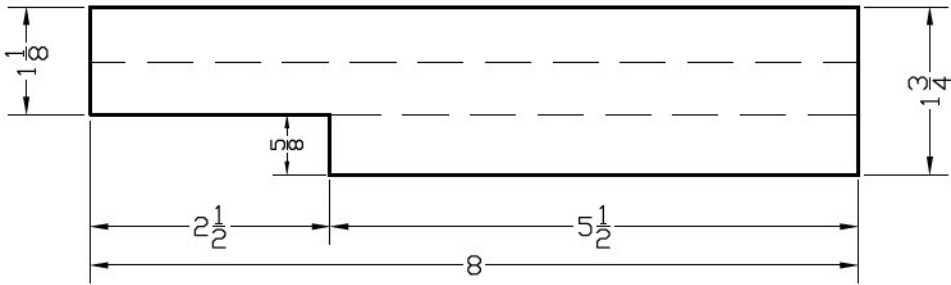
3L- IN-SWING SIDE JAMB
LAMINATED MAHOGANY WOOD



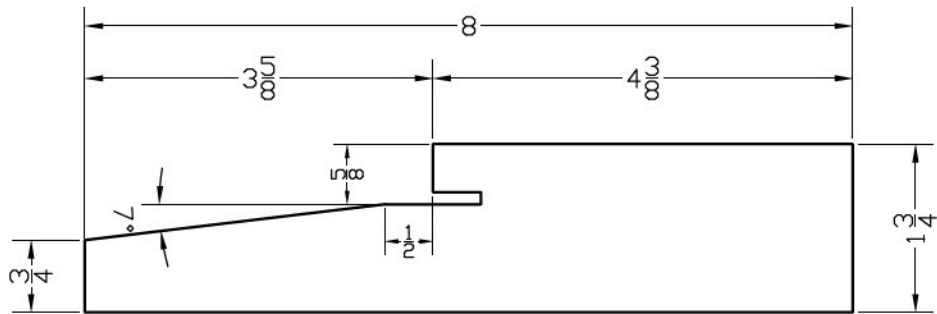
3R- OUT-SWING SIDE JAMB
LAMINATED MAHOGANY WOOD



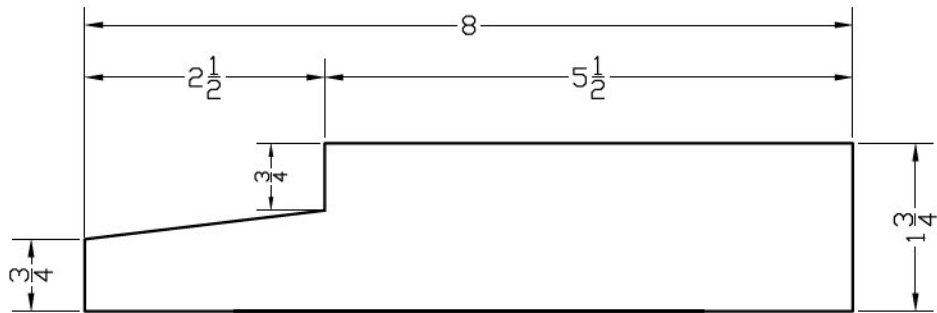
1R- HEADER LAMINATED MAHOGANY WOOD
RIGHT SIDE OF THE PIVOT



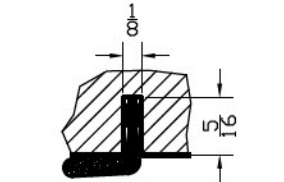
1L- HEADER LAMINATED MAHOGANY WOOD
LEFT SIDE OF THE PIVOT



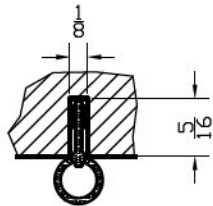
2R- SILL - SOLID MAHOGANY WOOD
RIGHT SIDE OF THE PIVOT



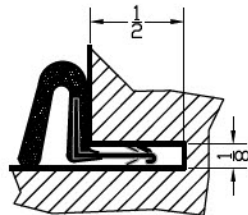
2L- SILL - SOLID MAHOGANY WOOD
LEFT SIDE OF PIVOT



6- DOOR WEATHERSTRIP
QEZ 320 BY SCHLEGEL



7- DOOR WEATHERSTRIP
AP 425 D BY SCHLEGEL



8- FRAME WEATHERSTRIP
QEBD 650 BY SCHLEGEL

BILL OF MATERIALS:

PART#	DESCRIPTION	MATERIAL
1	1 3/4 X 8 HEADER	LAMINATED WOOD
2	1 3/4 X 8 THRESHOLD	SOLID WOOD
3L	1 3/4 X 8 JAMB	LAMINATED WOOD
3R	1 3/4 X 8 JAMB	LAMINATED WOOD
4	DOOR PANEL	ENGINEER WOOD - SEE LAY-OUT
5		
6	DOOR WEATHERSTRIP	QEZ 320 BY SCHLEGEL
7	DOOR WEATHERSTRIP	AP 425 D BY SCHLEGEL
8	FRAME WEATHERSTRIP	QEBD 650 BY SCHLEGEL
H1	MULTI-POINT LOCK	HARDWARE 1 - METALLIC
H2	MULTI-POINT LOCK	HARDWARE 2 - METALLIC
H3	MULTI-POINT LOCK	HARDWARE 3 - METALLIC
H4T	TOP PIVOT	HARDWARE 4T - METALLIC
H4B	BOTTOM PIVOT	HARDWARE 4B - METALLIC



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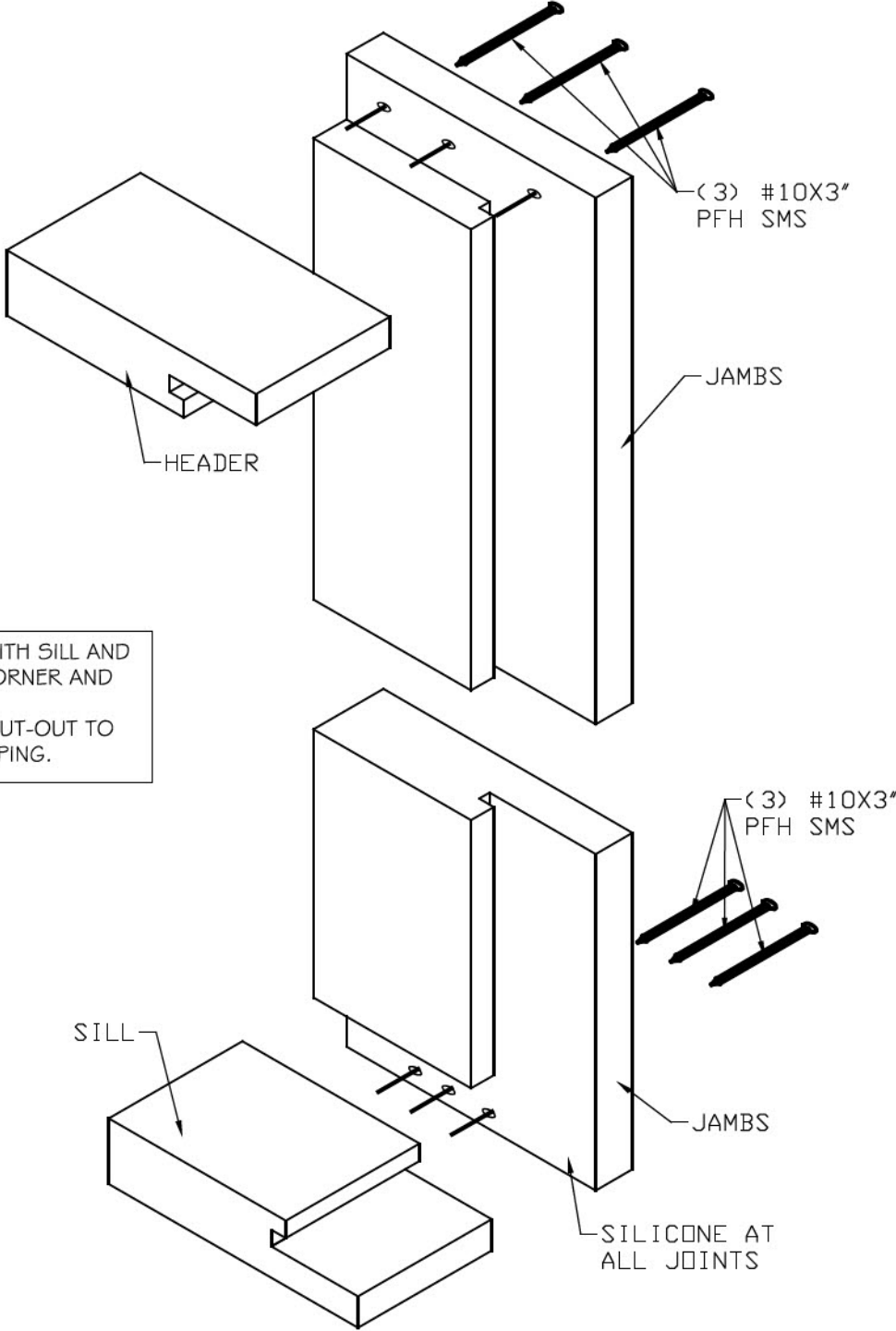
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FRAME ASSEMBLY



FRAME CONSTRUCTION:

THE JAMBS WERE RABBET AND BUTT JOINED WITH SILL AND HEADER USING (3) #10X3" PFH SMS IN EACH CORNER AND SEALED USING SILICONE
THE JAMBS, HEADER AND SILL HAD A NOTCH CUT-OUT TO ALLOW THE PLACEMENT OF THE WEATHERSTRIPPING.

SEALANT:
EXTERIOR PERIMETER WAS CAULKED WITH SIKAFLEX-1A SILICONE SEALANT. THE WOOD FINISHING SERVICE GLUE PART #M3 WAS USED TO GLUE THE MORTISE AND TENON JOINT.



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PPMIF Inc.
ENGINEERING SERVICES - CA 32459
9715 W. BROWARD BLVD.
PLANTATION, FL 33324
PPMIF@AOL.COM

PRODUCT:
I-PIVOT SERIES
OUTSWING PIVOT DOORS
LARGE & SMALL MISSILE
IMPACT RATED

MANUFACTURER:
WOOD FINISHING SERVICES LLC
222 NE 27TH STREET
MIAMI- FLORIDA- 33137
TEL: (561) 939-3368

SCALE:
NA
DATE:
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