

# 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

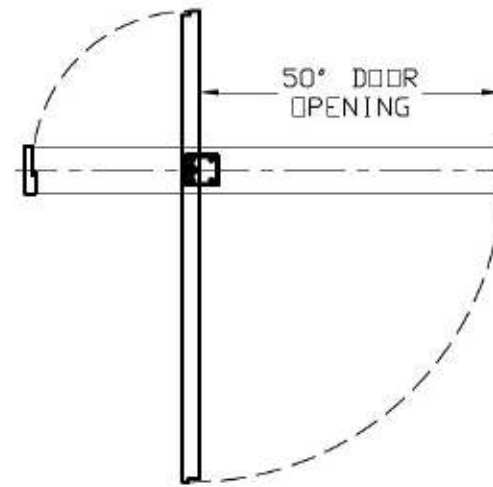
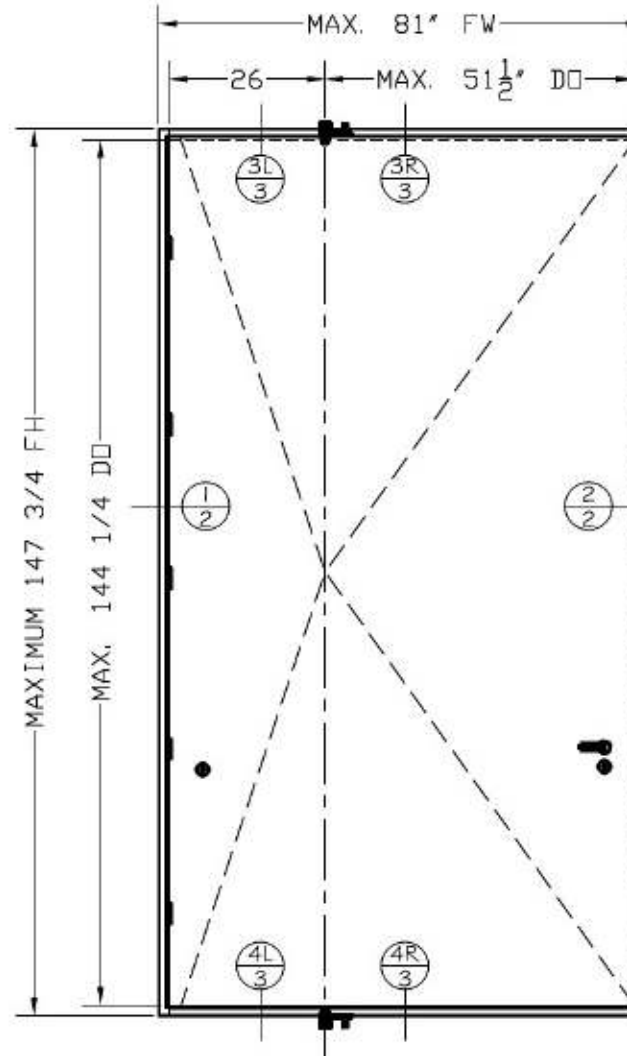
### GENERAL NOTES:

- 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/cm<sup>3</sup>.
  - 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.

### TABLE OF CONTENTS:

SHEET	DESCRIPTION
1 OF 8	GENERAL NOTES, TABLE OF CONTENTS, TYPICAL ELEVATION
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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

**PPMF Inc.**  
 ENGINEERING SERVICES - CA 32459  
 9715 W. BROWARD BLVD.  
 PLANTATION, FL 33324  
 PPMF@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

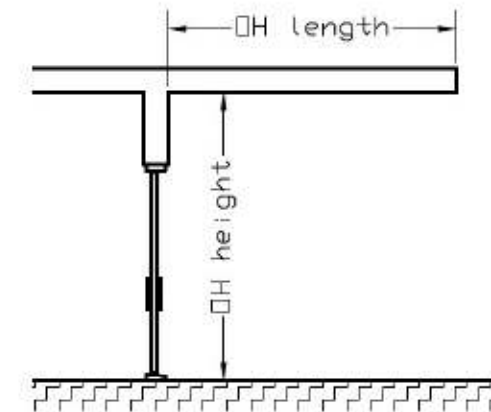
SHEET  
 1 OF 8

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)



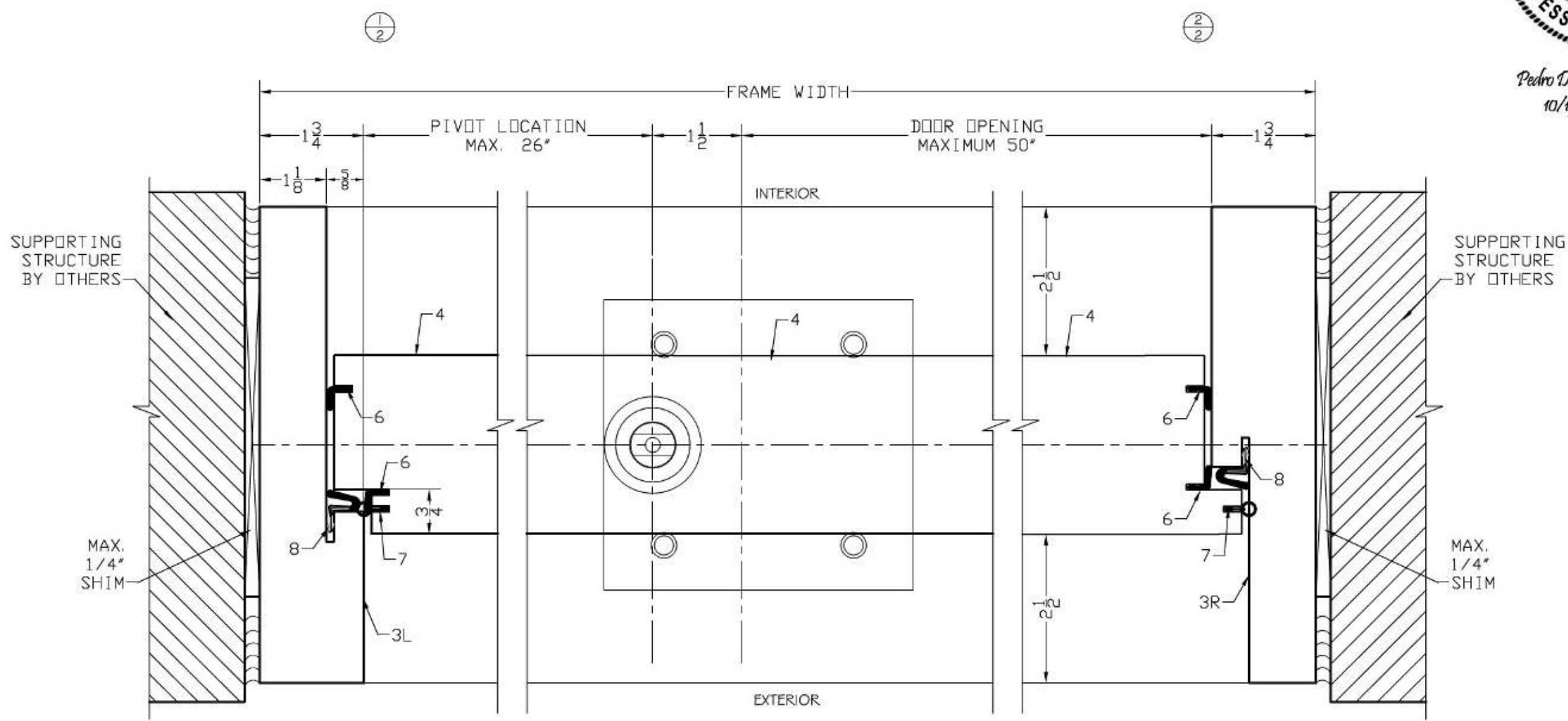
# HORIZONTAL SECTIONS



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SEE SHEET 4 FOR FRAME ANCHORAGE OPTIONS

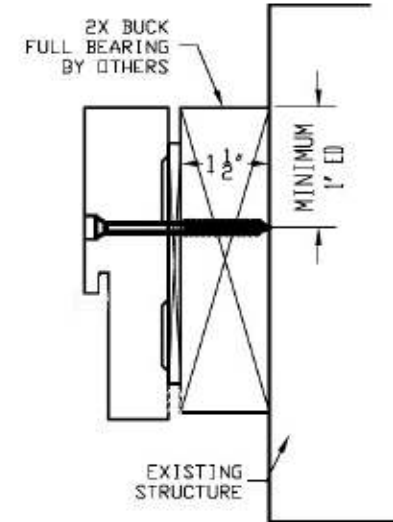
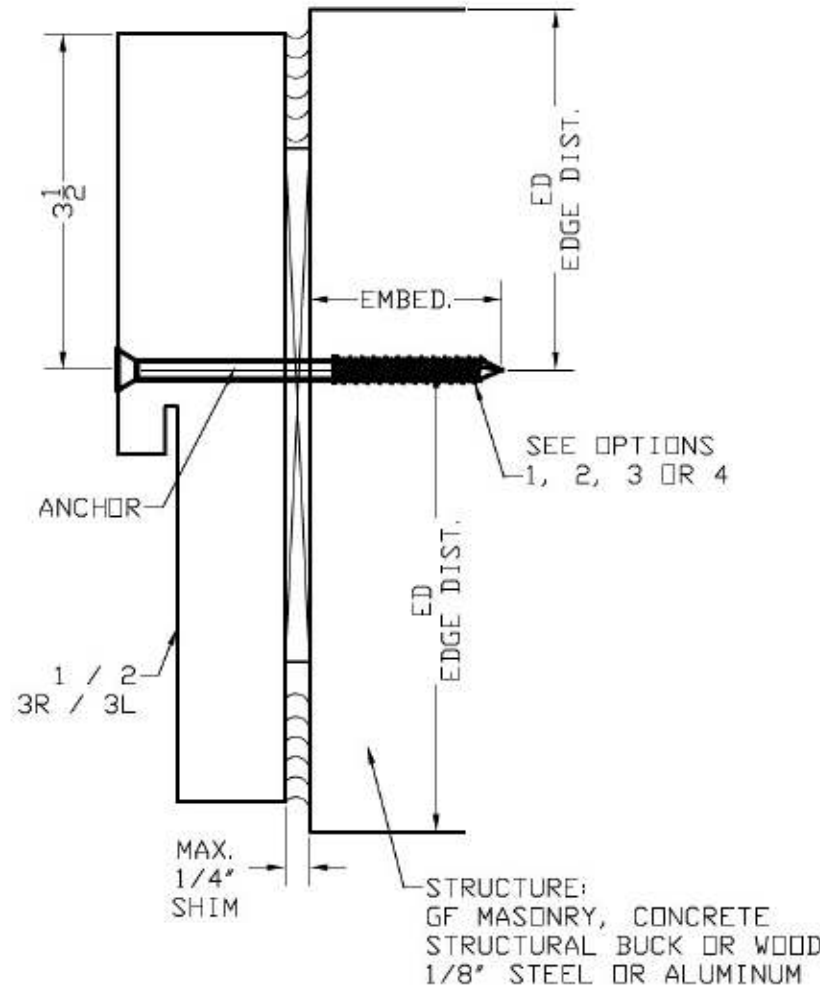
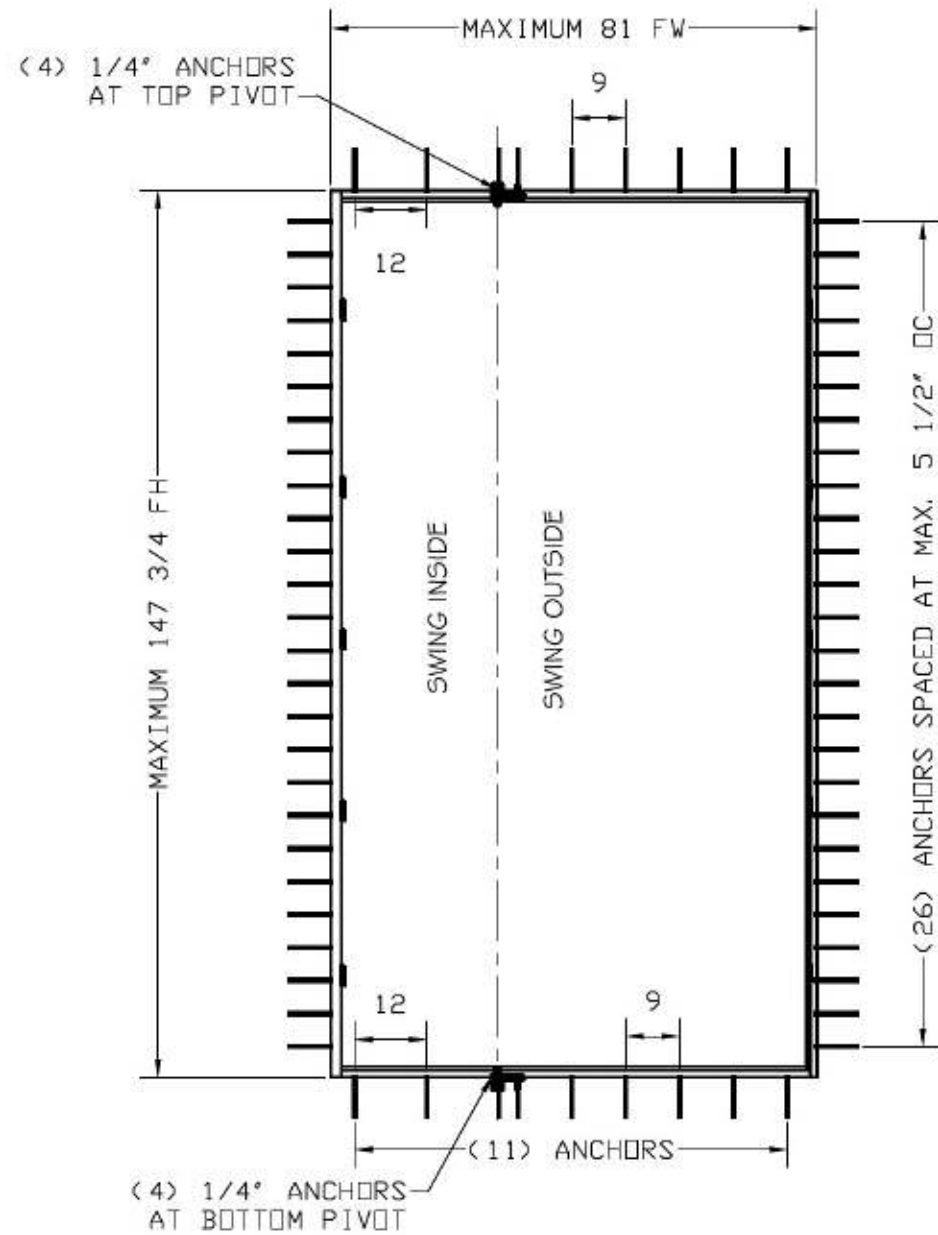
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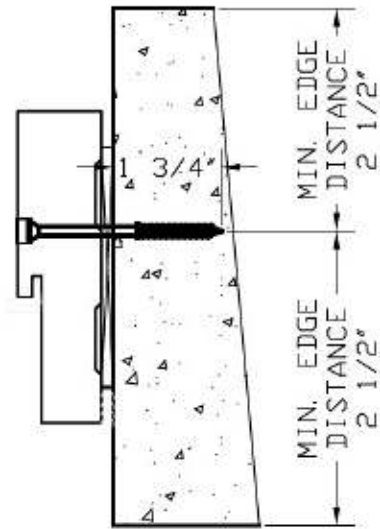
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# FRAME ANCHORAGE LAY-OUT AND OPTIONS

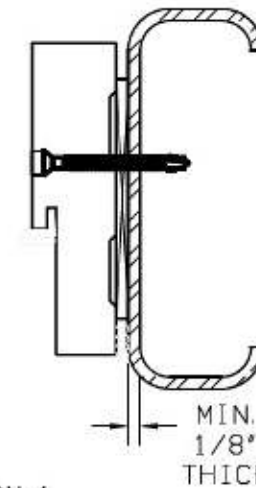
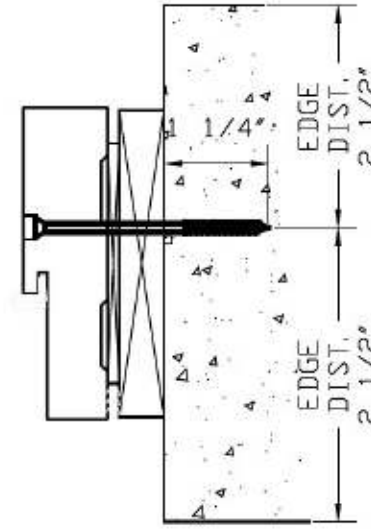


**OPTION 3**  
 FRAME MOUNTED DIRECTLY INTO 2X PT WOOD BUCK (SG >= 0.55) W/ MAX. 1/4" SHIM AND SECURED BY #14 S5 WOOD SCREWS OR 1/4" ULTRACONS WITH 1 1/2" MIN. EMBEDMENT. (REFER TO ELEVATIONS FOR ANCHORS QTY. AND LAY-OUT) 2X BUCK TO BE PROPERLY DESIGNED BY OTHERS.



**OPTION 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 SD5 (REFER TO ELEVATIONS FOR ANCHORS QTY. AND LAY-OUT) 1X BUCK TO BE PROPERLY DESIGNED BY OTHERS.



**OPTION 4**  
 FRAME MOUNTED DIRECTLY INTO METAL STRUCTURES W/ MAX. 1/4" SHIM, 1/4"-20 PFH SD5 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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# HARDWARE LAY-OUT



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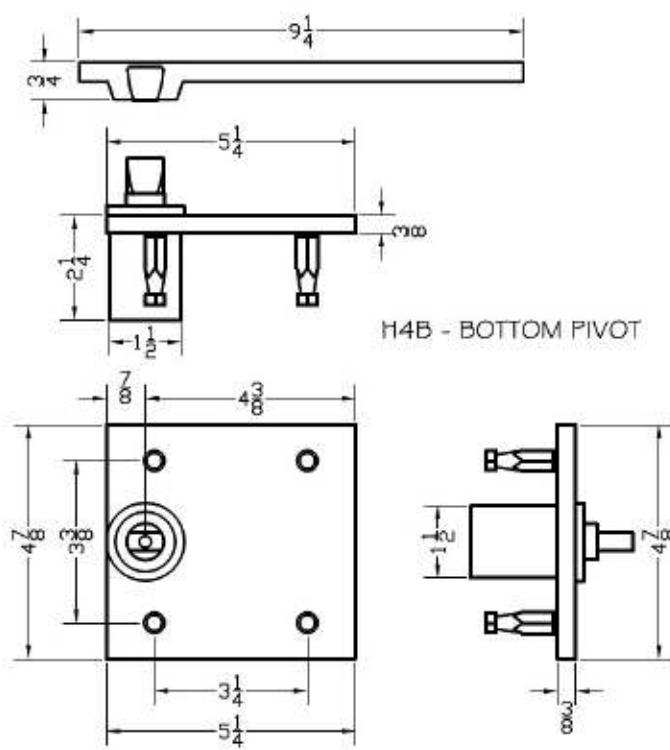
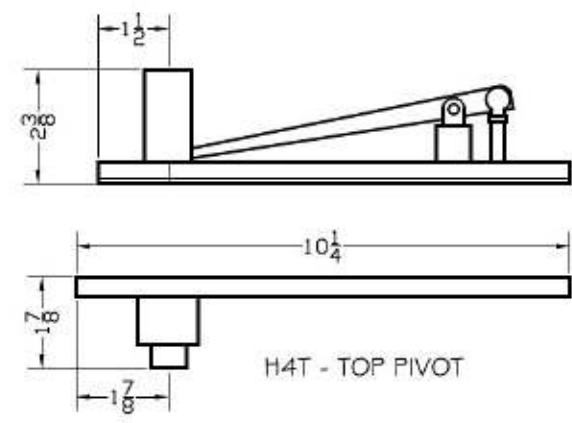
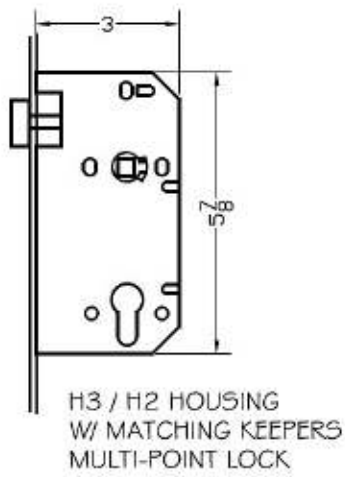
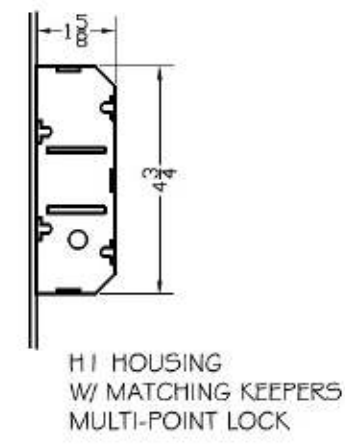
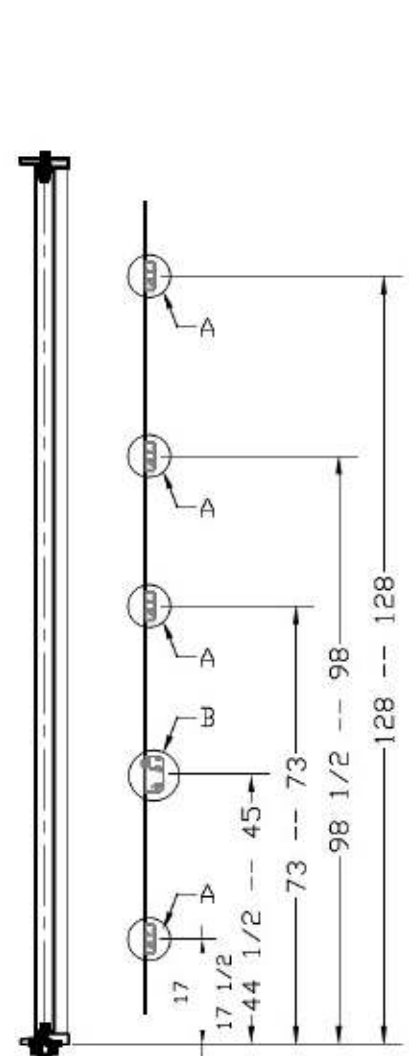
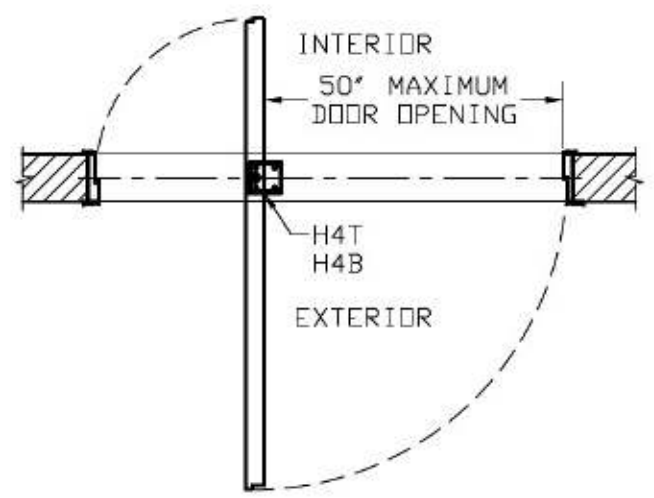
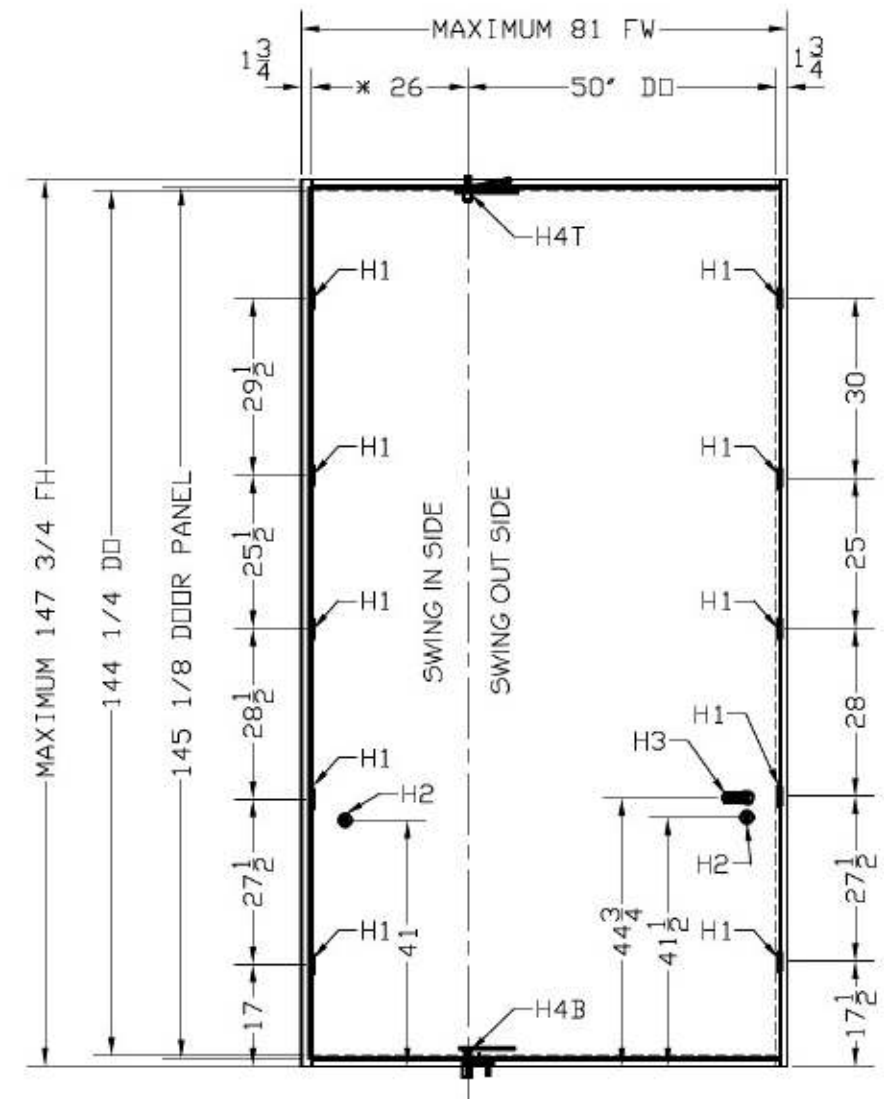
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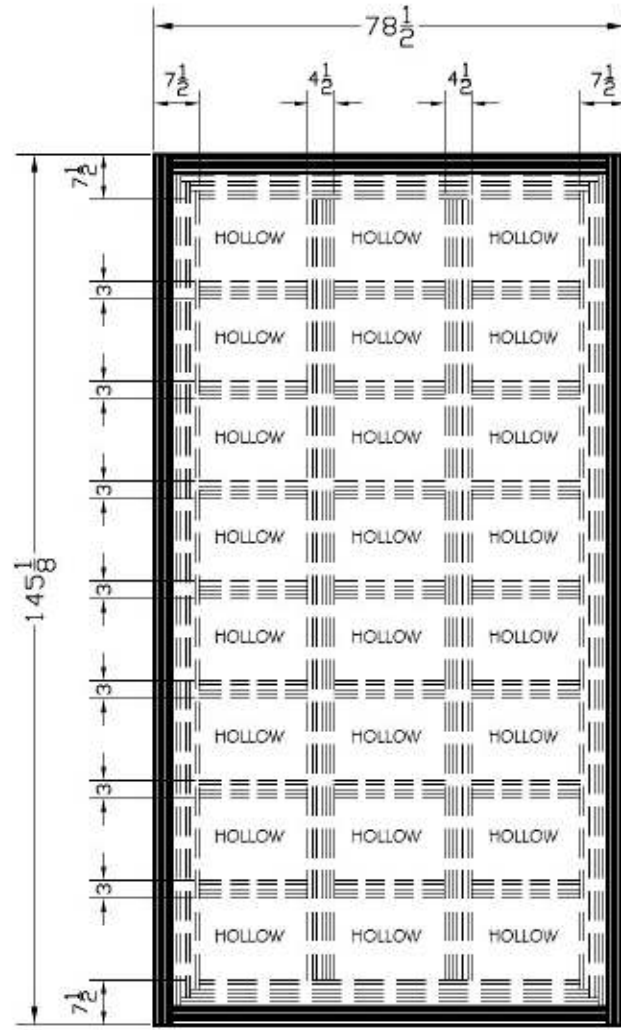
**HARDWARE NOTES:**

- H1 - FLUSH MOUNTED METTALIC KEEPERS WITH NO MARKINGS. SECURED TO JAMB5 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

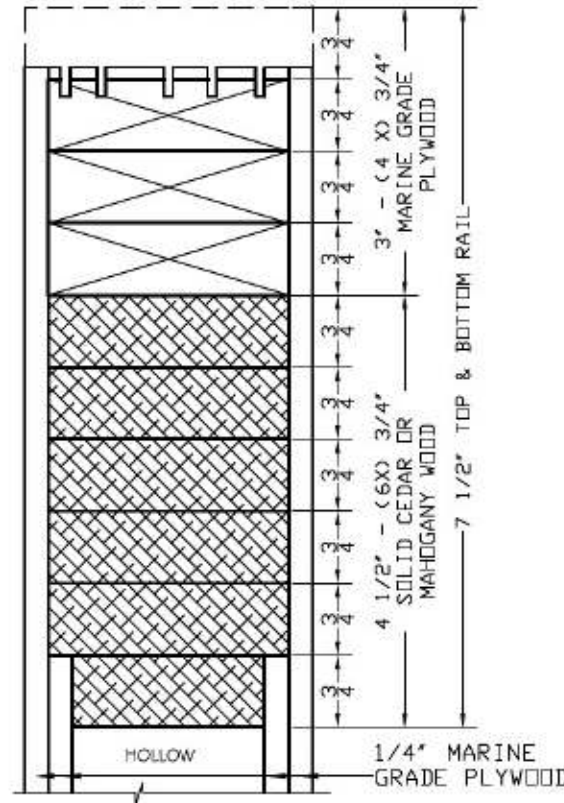
TABLE 1 (PIVOT LOCATION FUNCTION OF THE DOOR OPENING SIZE)

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"

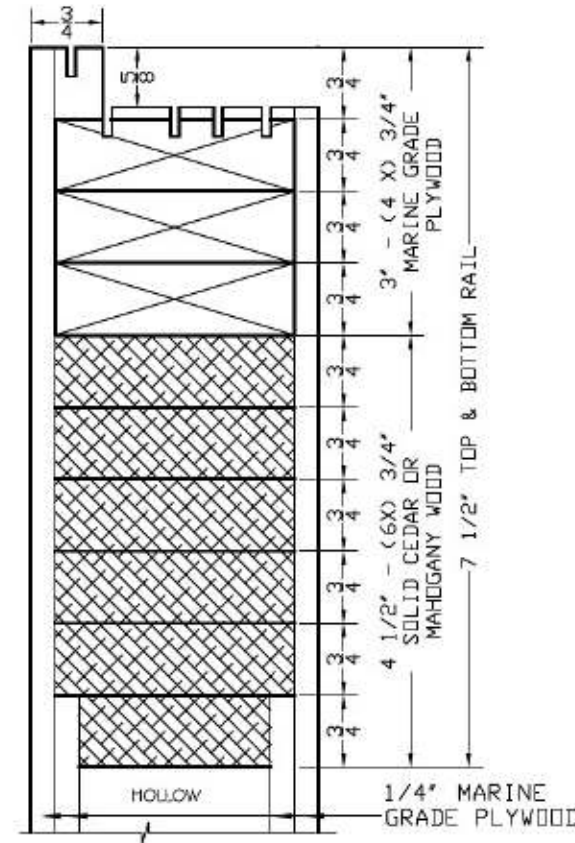
# DOOR COMPONENTS



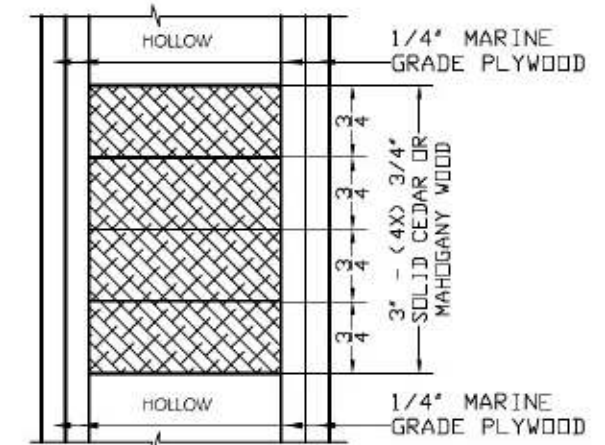
4- DOOR SLAB CONSTRUCTION LAY-OUT  
DOOR PANEL CONSTRUCTED USING CEDAR OR MAHOGANY WOOD AND MARINE GRADE PLYWOOD. WOOD SECTIONS SECURED TOGETHER USING MULTI-BOND ADVANTAGE II GLUE



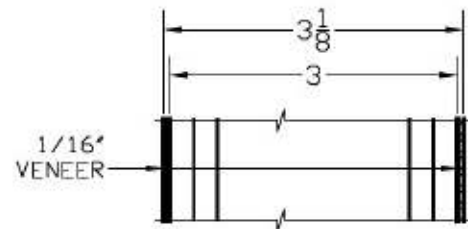
4- DOOR SLAB  
PERIMETER TOP & BOTTOM RAIL  
LEFT SIDE OF THE PIVOT



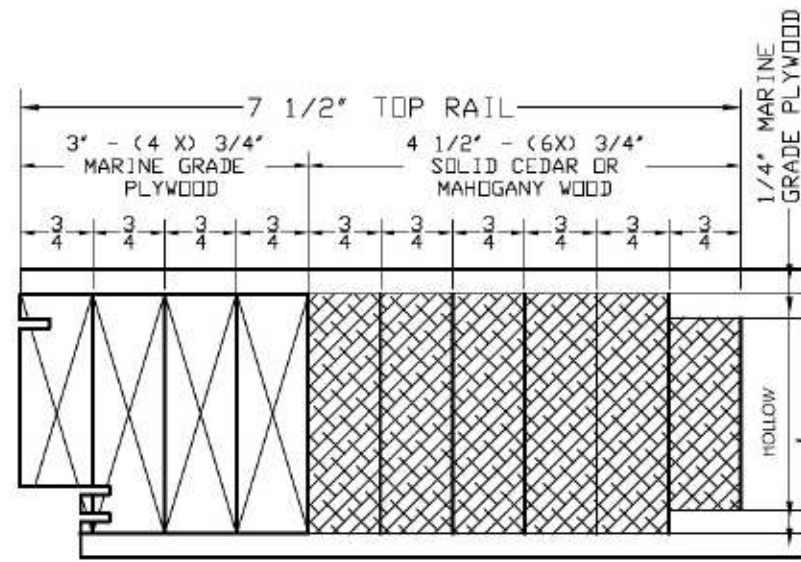
4- DOOR SLAB  
PERIMETER TOP & BOTTOM RAIL  
RIGHT SIDE OF THE PIVOT



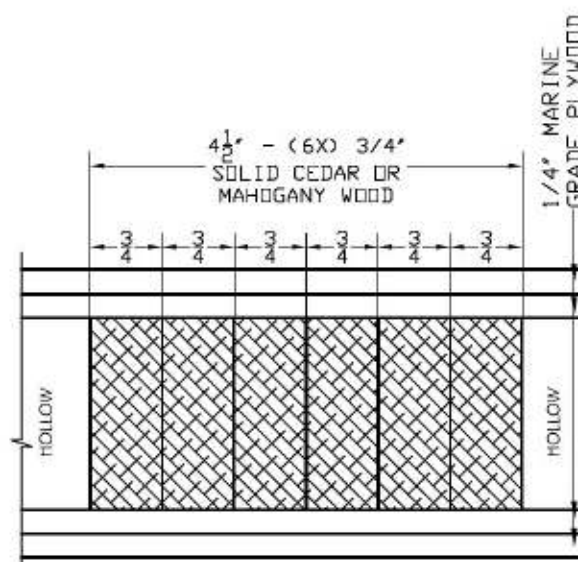
4- DOOR SLAB  
HORIZONTAL STIFFENER



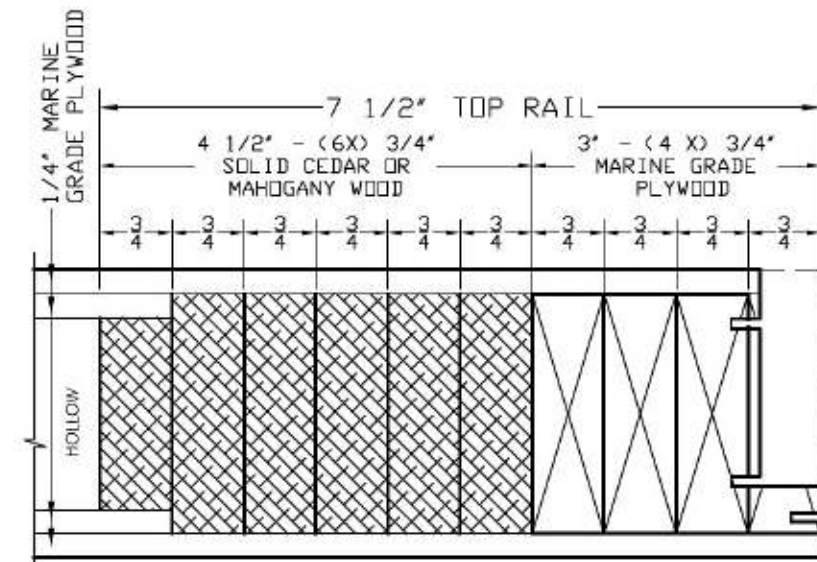
OPTIONAL CLADDING:  
1/16" MAHOGANY VENEER  
VENEER GLUED WITH  
EPOXY RESIN



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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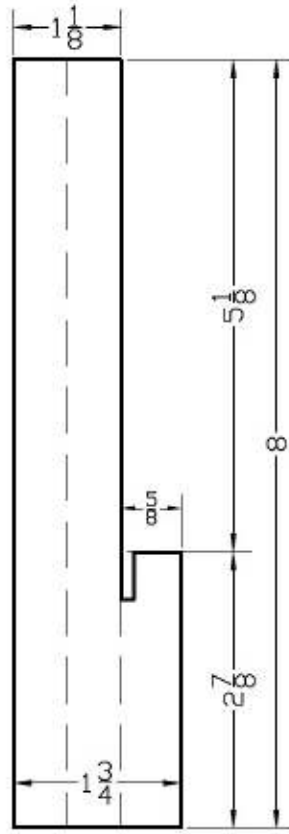
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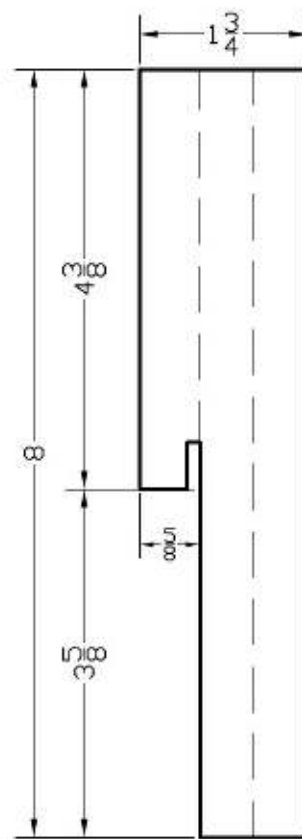
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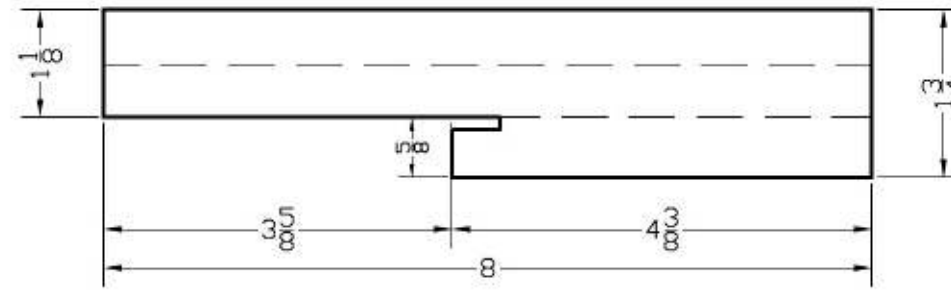
# FRAME COMPONENTS



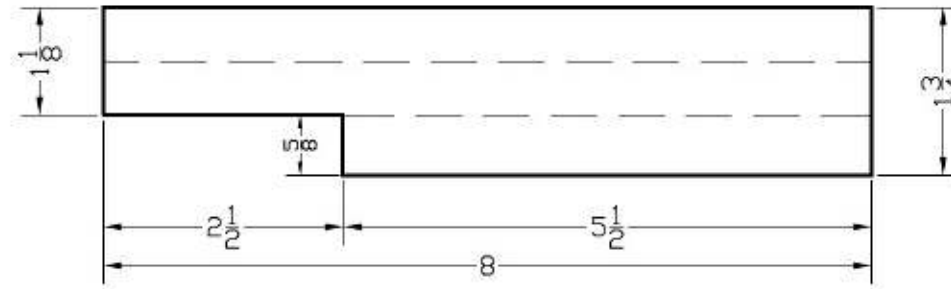
3L- IN-SWING SIDE JAMB  
LAMINATED MAHOGANY WOOD



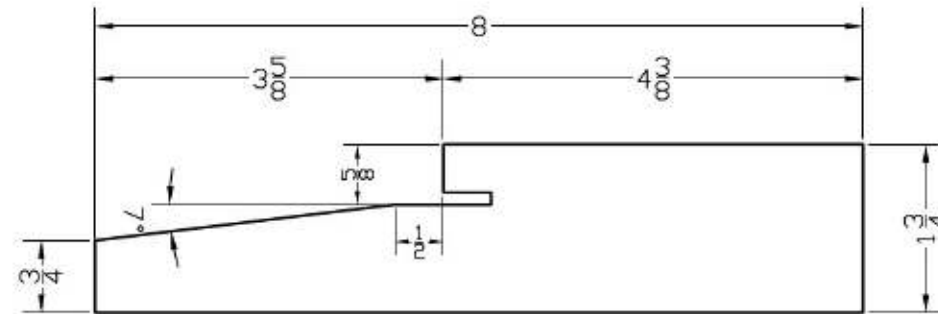
3R- OUT-SWING SIDE JAMB  
LAMINATED MAHOGANY WOOD



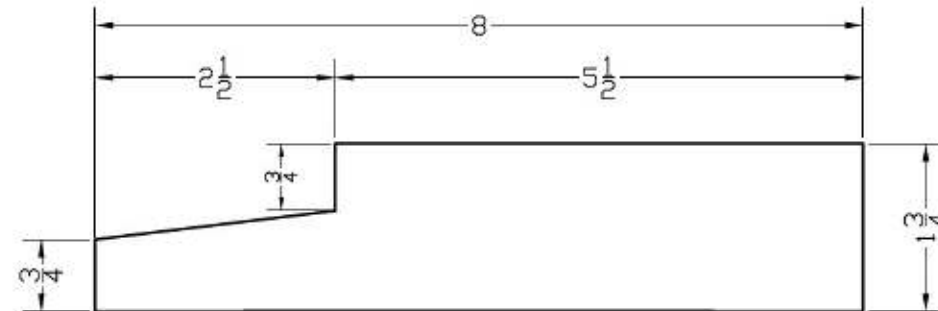
1R- HEADER LAMINATED MAHOGANY WOOD  
RIGHT SIDE OF THE PIVOT



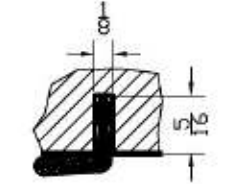
1L- HEADER LAMINATED MAHOGANY WOOD  
LEFT SIDE OF THE PIVOT



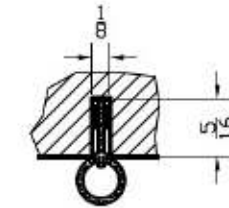
2R- SILL - SOLID MAHOGANY WOOD  
RIGHT SIDE OF THE PIVOT



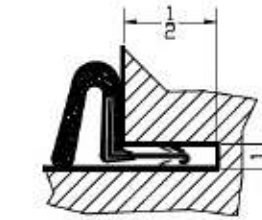
2L- SILL - SOLID MAHOGANY WOOD  
LEFT SIDE OF PIVOT



6- DOOR WEATHERSTRIP  
QEZ 320 BY SCHLEGEL



7- DOOR WEATHERSTRIP  
AP 425 D BY SCHLEGEL



8- FRAME WEATHERSTRIP  
QEBD 650 BY SCHLEGEL



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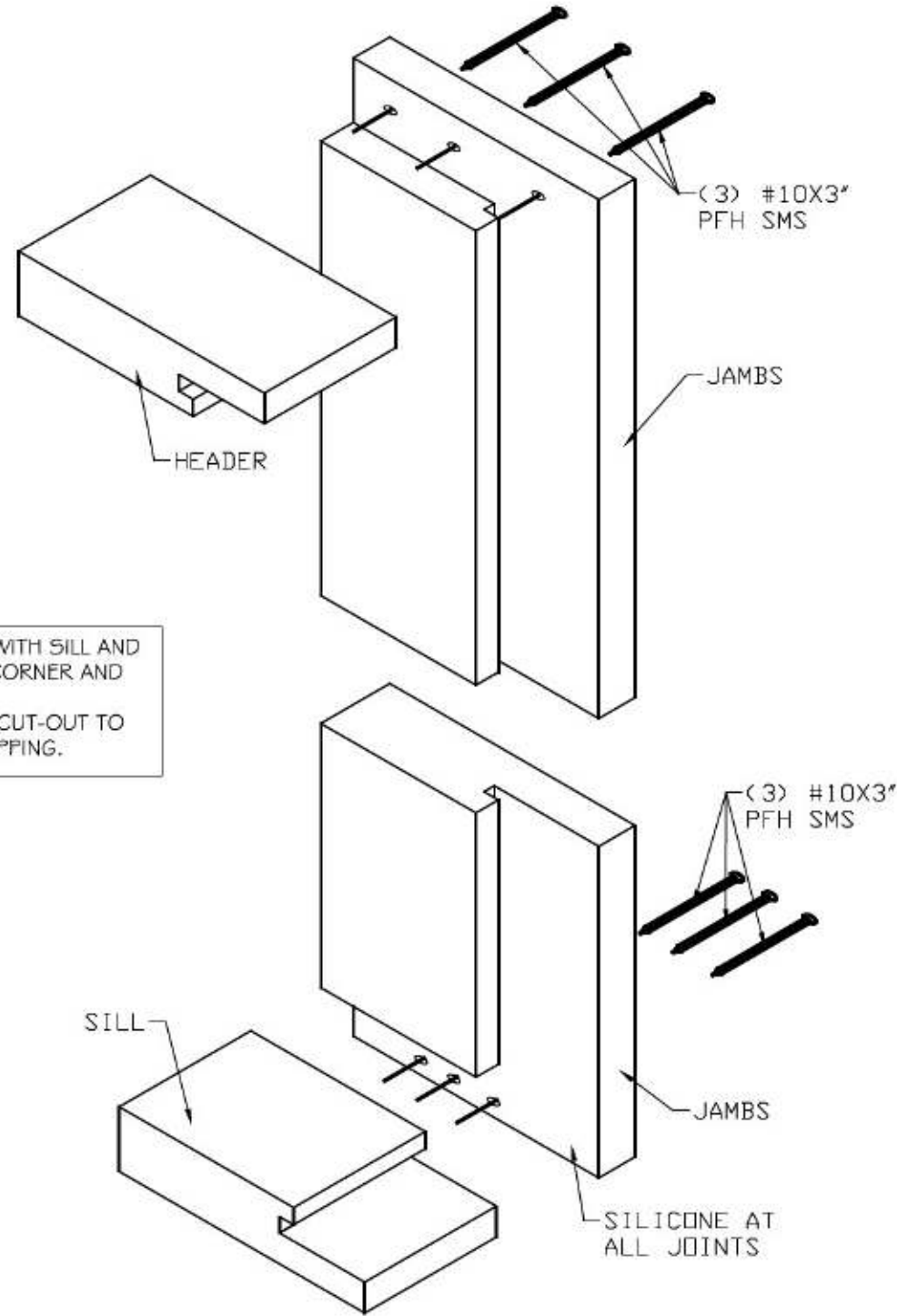
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## BILL OF MATERIALS:

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

# 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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