

GAULHOFER INDUSTRIE-HOLDING GmbH

SERIES "425" COMBINATION FIXED WINDOW (L.M. IMPACT)

INSTALLATION ANCHORAGE DETAILS

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

GENERAL NOTES:

1. THIS PRODUCT HAS BEEN EVALUATED TO COMPLY WITH THE CURRENT PROVISIONS OF THE FLORIDA BUILDING CODE (FBC) EXCLUDING THE HIGH VELOCITY HURRICANE ZONES (HVHZ).
2. ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE, MASONRY AND 2X FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE FOUNDATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
3. 1 BY BUCK OVER MASONRY AND/OR CONCRETE IS OPTIONAL. WHERE 1 BY BUCK IS NOT USED DISSIMILAR MATERIALS MUST BE SEPARATED WITH APPROVED COATING OR MEMBRANE. SELECTION OF COATING OR MEMBRANE IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
4. THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF THE INSTALLATION METHODS DEVIATE FROM THESE APPROVED DETAILS THIS WOULD REQUIRE FURTHER INVESTIGATION BY A LICENSED OR REGISTERED DESIGN PROFESSIONAL.
5. ALL SETTING BLOCKS AND GASKET MATERIALS SHALL BE IN COMPLIANCE WITH THE CURRENT EDITION OF THE FLORIDA BUILDING CODE. SETTING BLOCKS SHALL BE NEOPRENE WITH A 70 TO 90 SHORE A DUROMETER. GASKET MATERIALS SHALL BE EDPM WITH A MINIMUM 60 SHORE A DUROMETER.
6. IN NON-HVHZ AREAS WHERE WINDBORNE DEBRIS PROTECTION REQUIREMENTS EXIST, USE OF AN IMPACT PROTECTIVE SYSTEM COMPLYING WITH THE FBC REQUIREMENTS FOR OPENING PROTECTION IS NOT REQUIRED FOR THE PRODUCT(S) HEREIN.
7. MATERIALS:

7.1. FRAME: WOOD WITH SPECIFIC GRAVITY = 0.50
8. GLAZING:

8.1. GLASS MEETS THE REQUIREMENTS OF ASTM E1300-04e01.

8.2. SEE GLAZING DETAIL ON SHEET 7 OF 7.

8.3. GLASS SHALL MEET SAFETY GLAZING REQUIREMENTS PER CURRENT EDITION OF THE FLORIDA BUILDING CODE.

8.3.1. GLAZING DETAIL 1 (ANNEALED EXTERIOR MONOLITHIC LITE) SHALL BE USED WHEN PRODUCT INSTALLED IN NON-HVHZ LOCATIONS.

8.3.2. OPTIONALLY, GLAZING DETAIL 2 (TEMPERED EXTERIOR MONOLITHIC LITE) CAN BE USED WHEN PRODUCT INSTALLED IN NON-HVHZ LOCATIONS.

8.4. INTERLAYER: INTERLAYER: KURARAY AMERICA SENTRYGLAS PER CURRENT MIAMI DADE NOTICE OF ACCEPTANCE (N.O.A.)
9. DESIGNATIONS "O" STANDS FOR FIXED PANEL.

ANCHOR NOTES:

1. SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH A LOAD BEARING SHIM, SHIM WHERE SPACE OF 1/16" OR GREATER OCCURS. MAXIMUM ALLOWABLE SHIM STACK TO BE 1/4".
2. FOR ANCHORING INTO INSTALLATION CLIP (PROVIDED BY GAULHOFER) INTO MASONRY/CONCRETE USE 1/4" ADVANCED THREADFORM TAPCONS WITH SUFFICIENT LENGTH TO ACHIEVE THE FOLLOWING:

2.1. CONCRETE: 1-1/2" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 1-1/2" MINIMUM EDGE DISTANCE.

2.2. CMU/MASONRY: 1" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 2" MINIMUM EDGE DISTANCE.
3. FOR ANCHORING INSTALLATION CLIP (PROVIDED BY GAULHOFER) INTO WOOD FRAMING OR 2 BY BUCK USE #14 WOOD SCREWS (ANSI B18.6.1) WITH MINIMUM GRADE 2 STRENGTH AND WITH SUFFICIENT LENGTH TO ACHIEVE 1-1/2" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 1" MINIMUM EDGE DISTANCE.
4. INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:

4.1. WOOD - MINIMUM SPECIFIC GRAVITY OF 0.42 (NON-HVHZ).

4.2. CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI.

4.3. MASONRY - STRENGTH CONFORMANCE TO ASTM C-90 MEDIUM WEIGHT WITH COMPRESSIVE STRENGTH OF 1900 psi (DENSITY > 117 PCF).
5. ALL INSTALLATION ANCHORS SHALL HAVE A CORROSION RESISTANT COATING OR BE MADE OF CORROSION RESISTANT MATERIALS.

TABLE OF CONTENTS	
SHEET NO.	DESCRIPTION
1	GENERAL NOTES
2-4	ELEVATION & ANCHOR LAYOUTS
5-6	INSTALLATION DETAILS
7	COMBINATION MULLION AND GLAZING DETAILS

GAULHOFER INDUSTRIE-HOLDING GmbH

A-8124 UBELBACH/STIERMARK

AUSTRIA

NATURELINE-78 FEN 425 COMBINATION

FIXED WINDOWS, O/O/O L.M. IMPACT NON-HVHZ

GENERAL NOTES

DRAWN: JRM

DWG NO. NL-0076

REV -

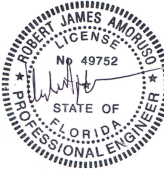
SCALE NTS

DATE 11/29/2016

SHEET 1 OF 7

ROBERT J. AMORUSO

FL. P.E. NO. 49752



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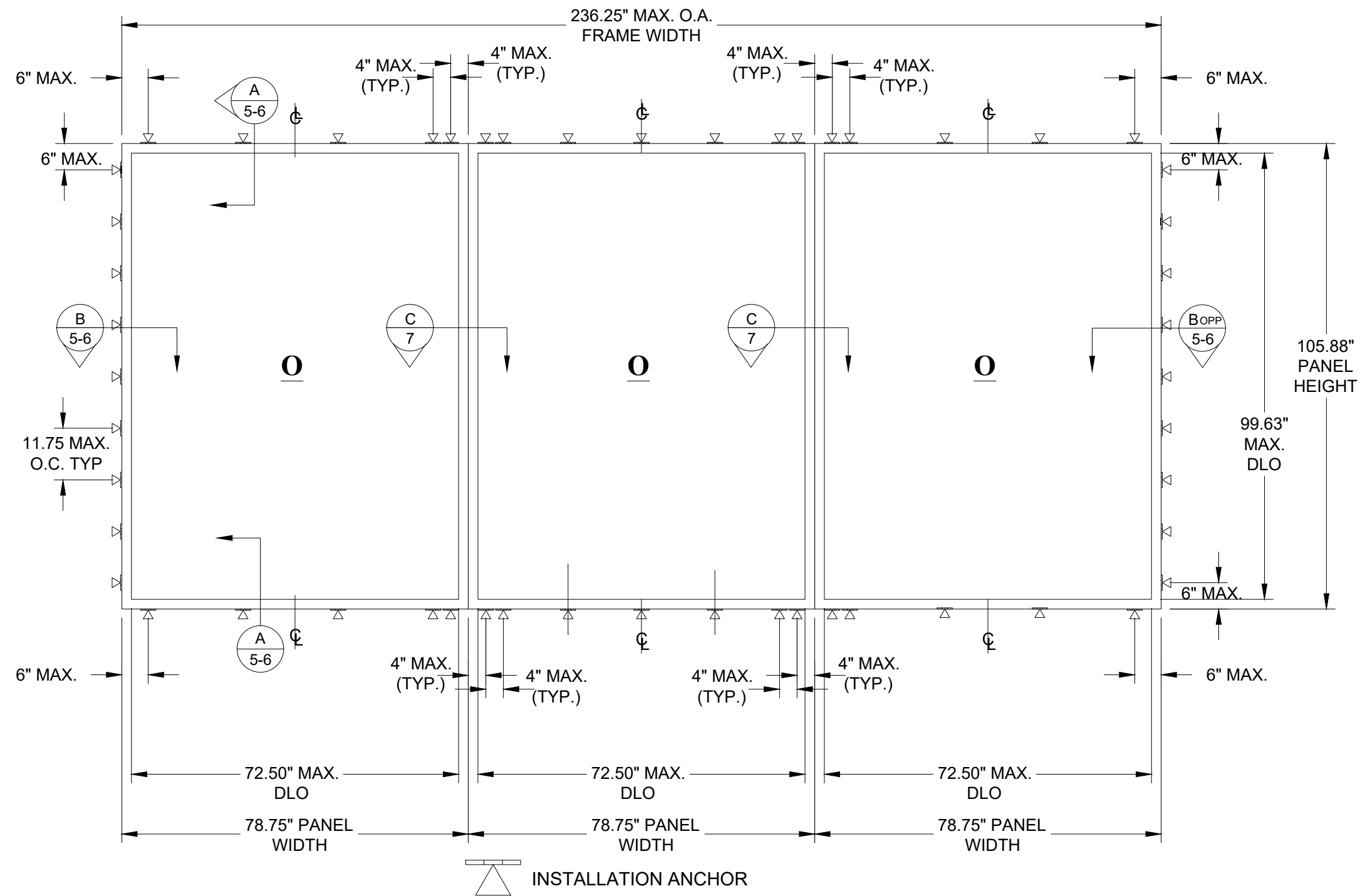
12472 LAKE UNDERHILL RD

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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



INSTALLATION ANCHOR
COMBINATION ASSEMBLY
BACK TO BACK MULLION
ANCHOR LAYOUT
INTERIOR VIEW

- NOTES
1. MAXIMUM PANEL D.L.O.: 72.50" X 99.63"
 2. MAXIMUM PANEL SIZE: 78.75" X 105.88"

DESIGN PRESSURE RATING	IMPACT RATING
+ 50.0 PSF / -50.0 PSF	WIND ZONE 3 MISSILE LEVEL D

APPROVED ELEVATIONS 000, 00, 0

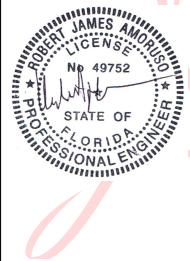
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A-8124 UBELBACH/STIEARMARK
AUSTRIA

NATURELINE-78 FEN 425 COMBINATION
FIXED WINDOWS, O/O/O L.M. IMPACT NON-HVHZ
ELEVATION AND ANCHOR LAYOUTS

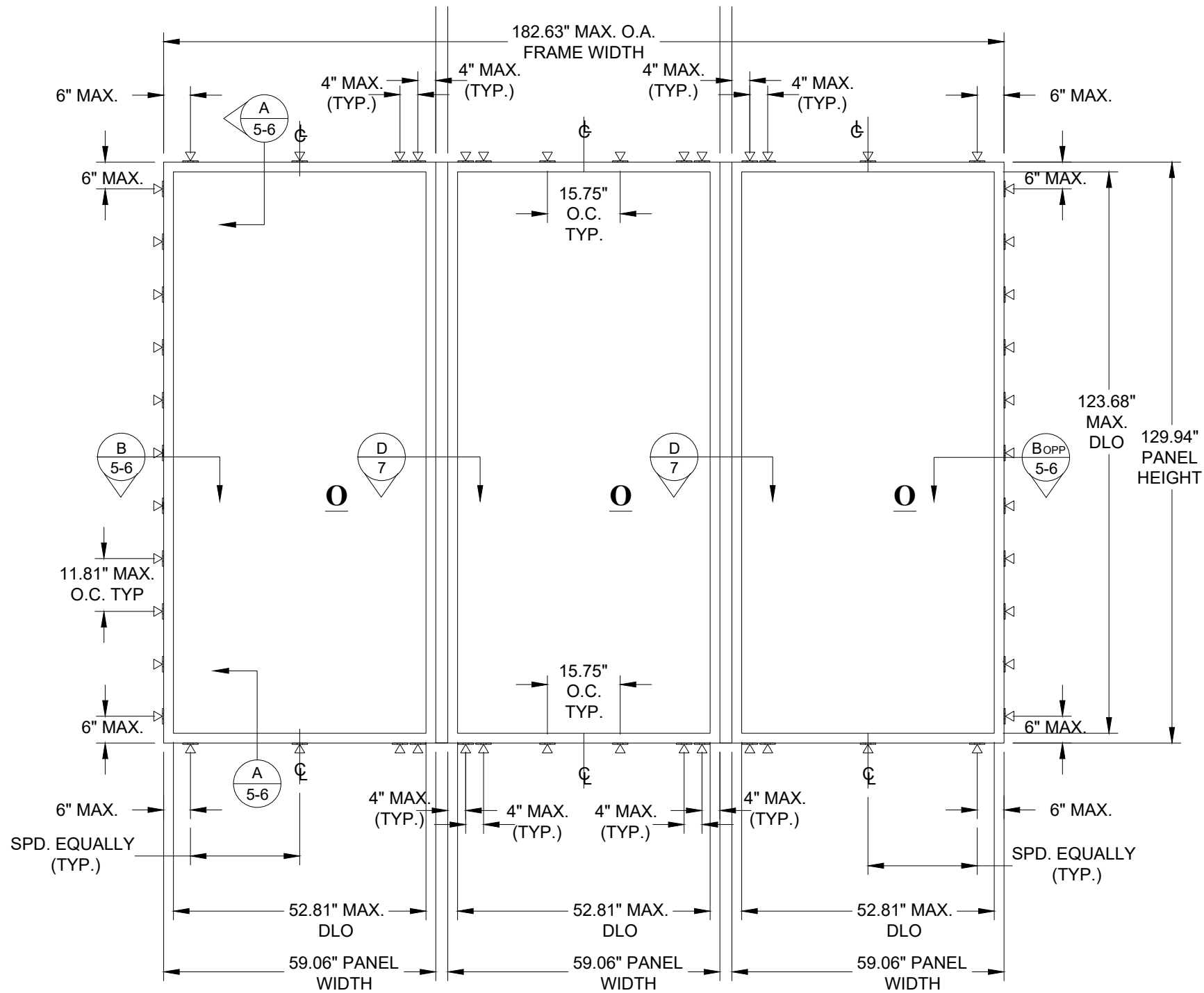
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SCALE NTS	DATE 11/29/2016	SHEET 2 OF 7

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INSTALLATION ANCHOR
COMBINATION ASSEMBLY
REINFORCING MULLION
ANCHOR LAYOUT
INTERIOR VIEW

DESIGN PRESSURE RATING	IMPACT RATING
+ 45.0 PSF / -45.0 PSF	WIND ZONE 3 MISSILE LEVEL D

APPROVED ELEVATIONS 000, 00, 0

- NOTES
1. MAXIMUM PANEL D.L.O.: 52.813" X 123.68"
 2. MAXIMUM PANEL SIZE: 59.063" X 129.94"

REVISIONS			
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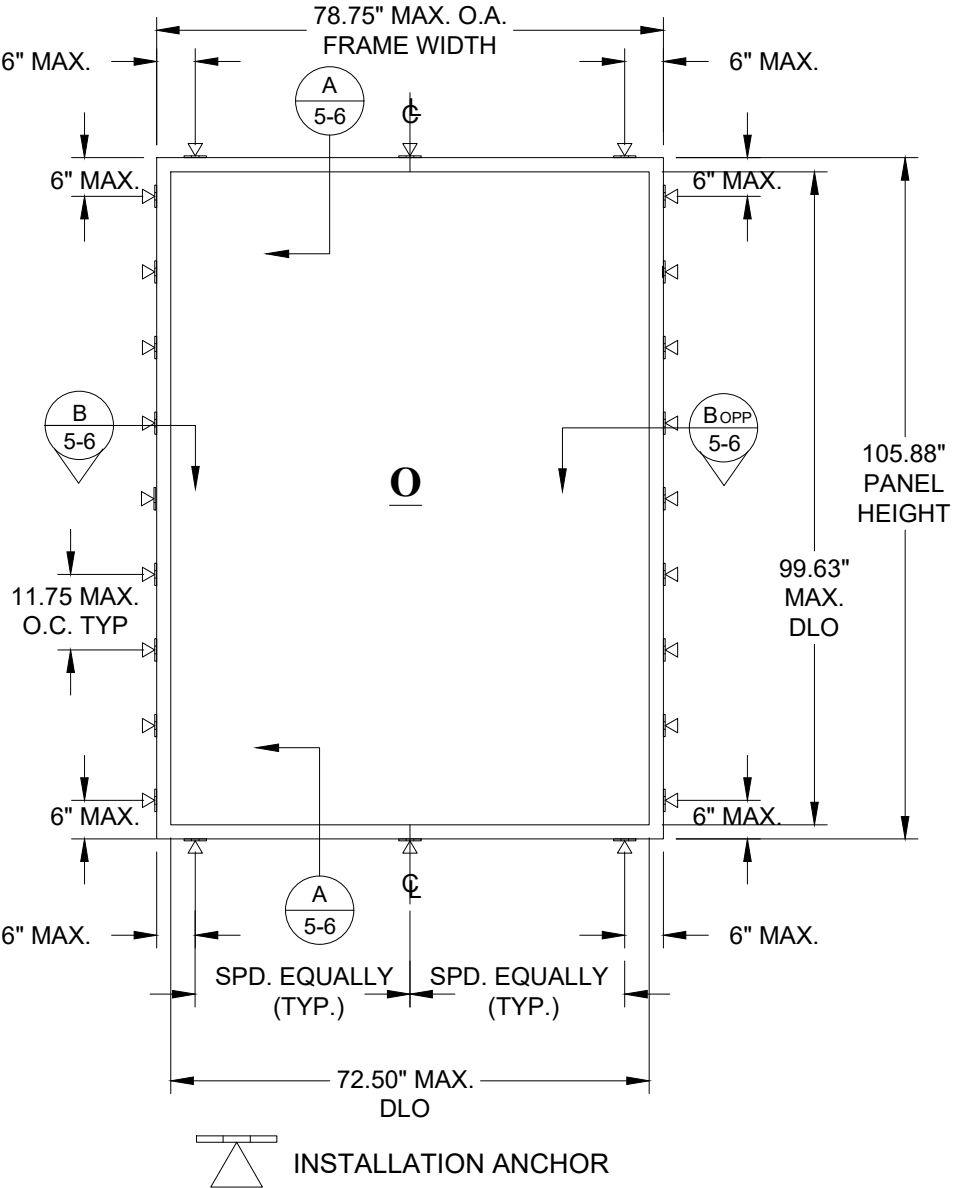
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DRAWN: JRM	DWG NO. NL-0076	REV -
SCALE NTS	DATE 11/29/2016	SHEET 3 OF 7

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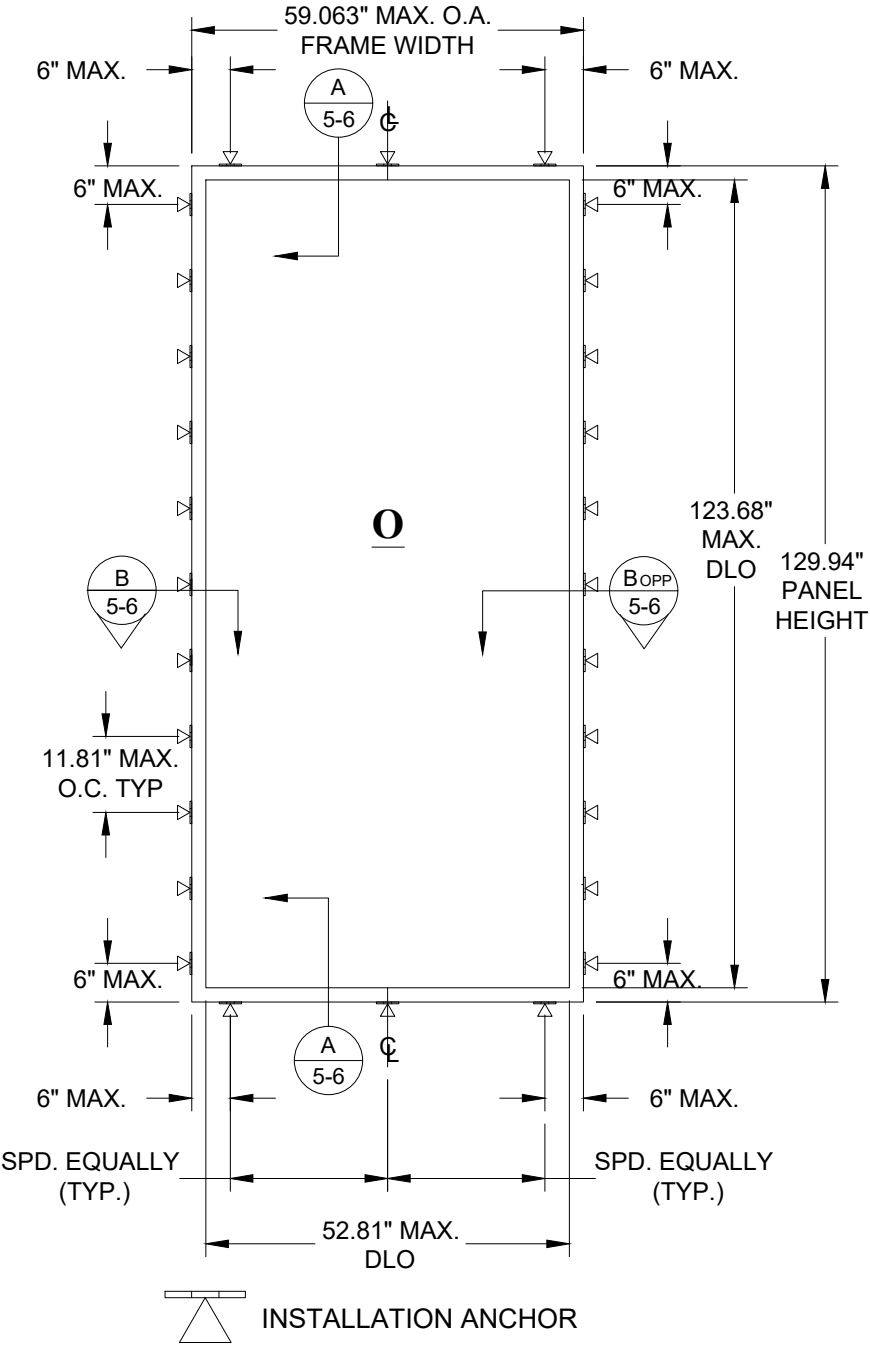
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**SINGLE WINDOW
ANCHOR LAYOUT
INTERIOR VIEW**

DESIGN PRESSURE RATING	IMPACT RATING
+ 50.0 PSF / -50.0 PSF	WIND ZONE 3 MISSILE LEVEL D

MISSILE LEVEL D, WIND ZONE 3 EQUIVALENT
APPROVED ELEVATIONS OOO, OO, O



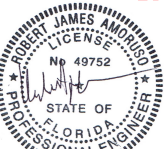
**SINGLE WINDOW
ANCHOR LAYOUT
INTERIOR VIEW**

DESIGN PRESSURE RATING	IMPACT RATING
+ 45.0 PSF / -45.0 PSF	WIND ZONE 3 MISSILE LEVEL D

MISSILE LEVEL D, WIND ZONE 3 EQUIVALENT
APPROVED ELEVATIONS OOO, OO, O

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DRAWN: JRM	DWG NO. NL-0076	REV —
SCALE NTS	DATE 11/29/2016	SHEET 4 OF 7

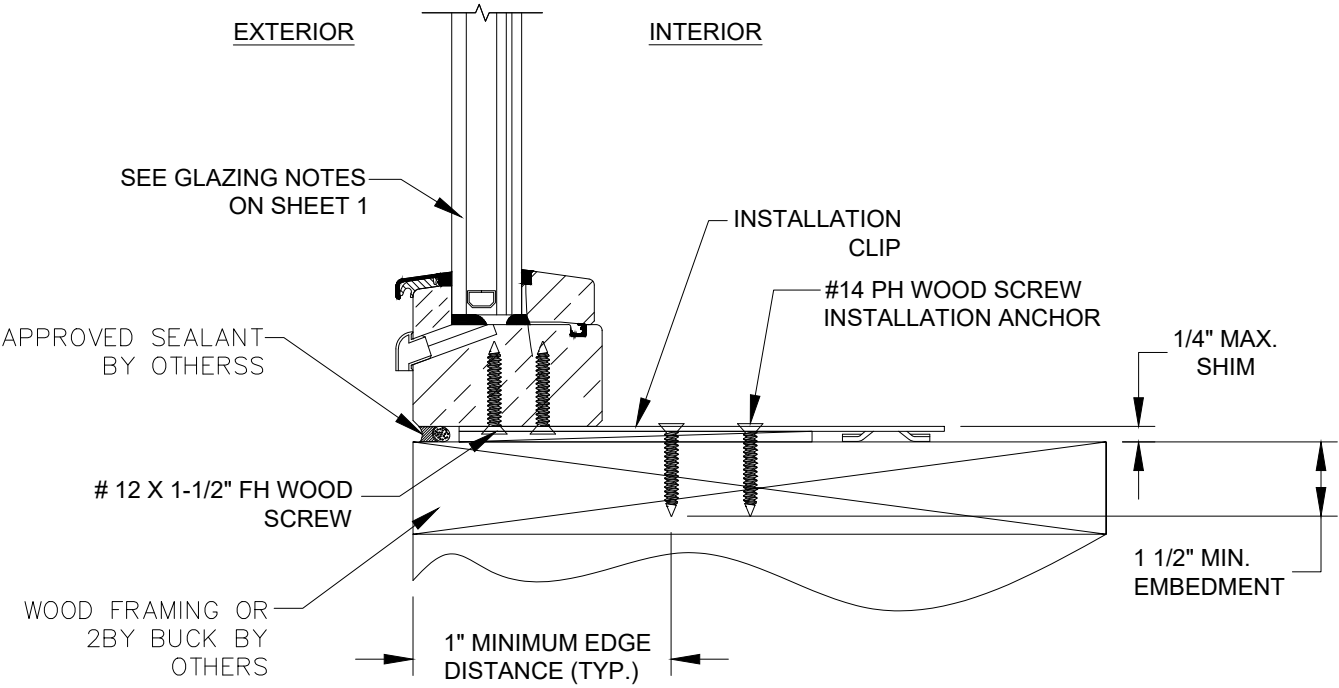
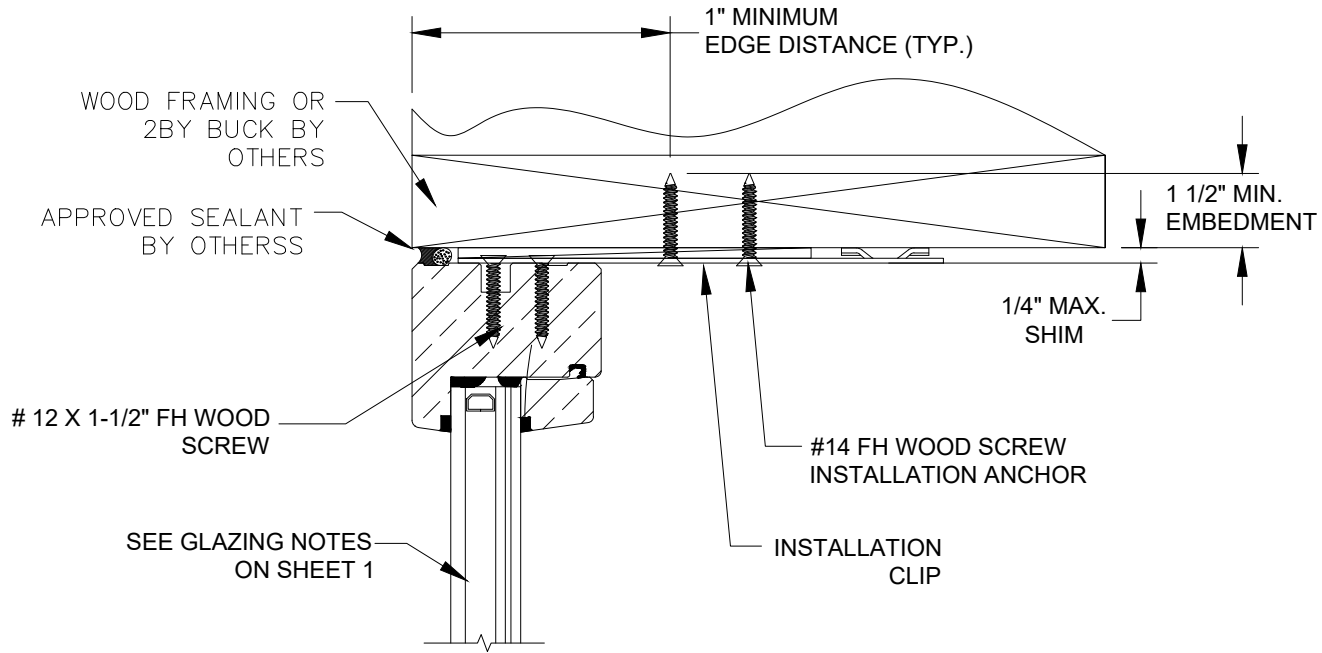
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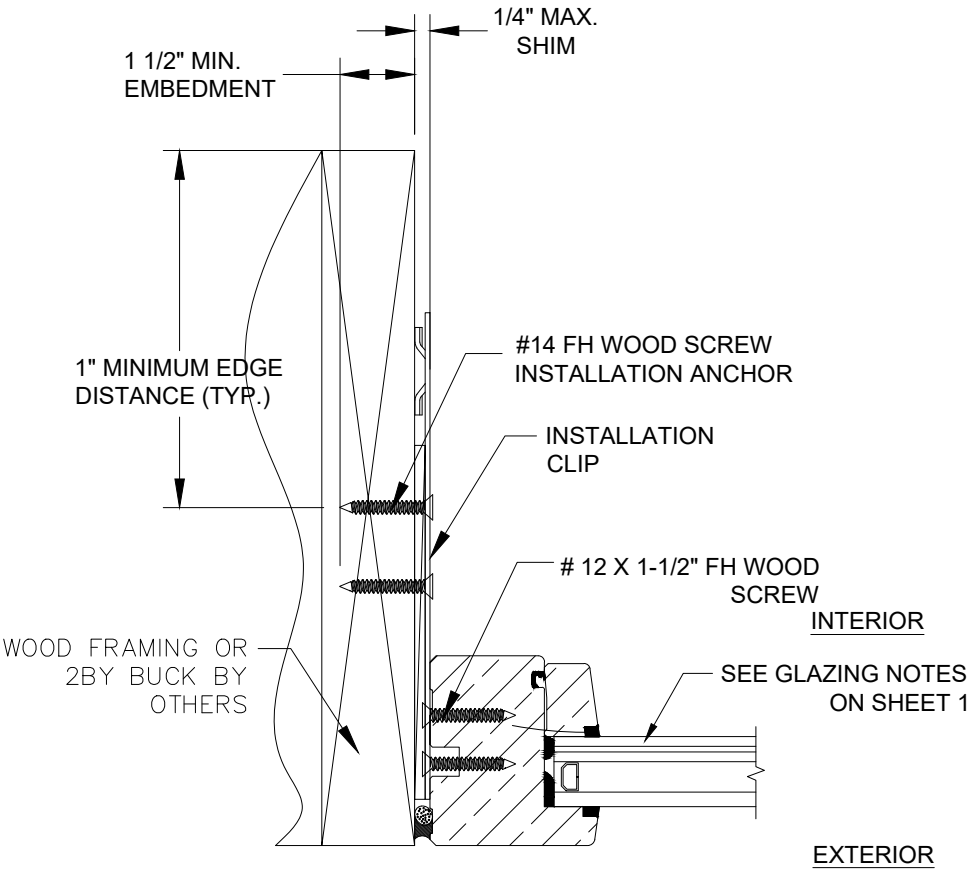
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A
5 **VERTICAL SECTION**
2 BY WOOD SUBSTRATE
CLIP INSTALLATION

- NOTES:
1. INTERIOR AND EXTERIOR FINISHES BY OTHERS NOT SHOWN FOR CLARITY.
 2. PERIMETER AND JOINT SEALANT BY OTHERS TO BE DESIGNED IN ACCORDANCE WITH ASTM E2112.



B
5 **HORIZONTAL SECTION**
2 BY WOOD SUBSTRATE
CLIP INSTALLATION

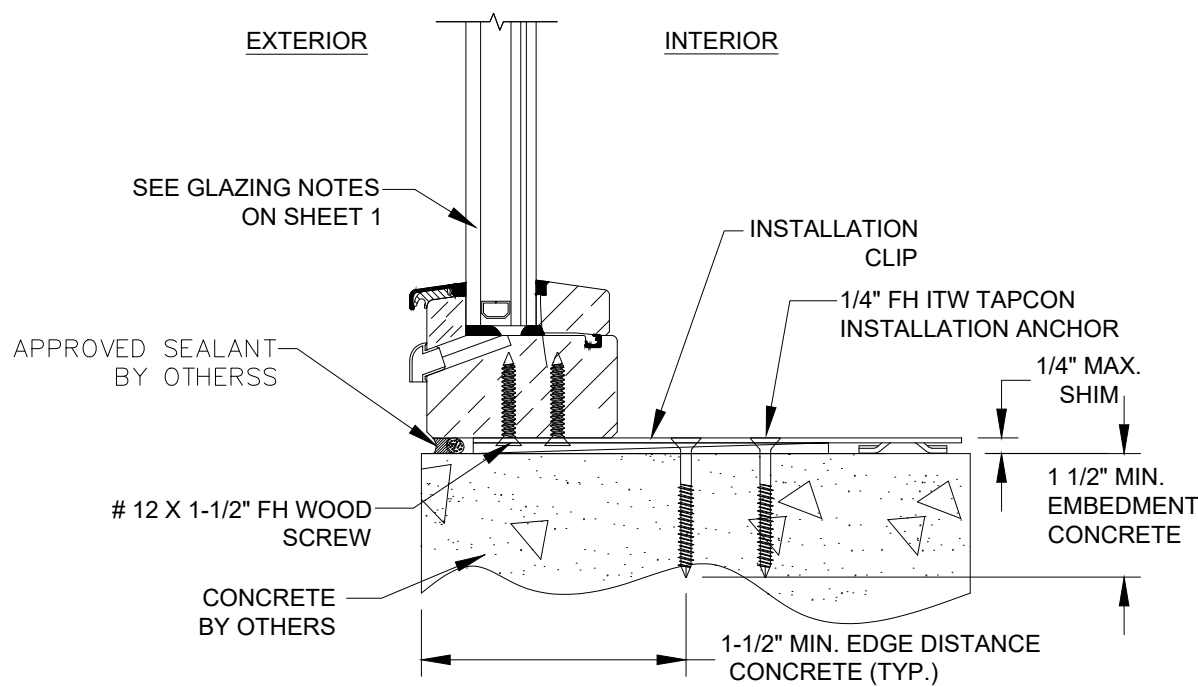
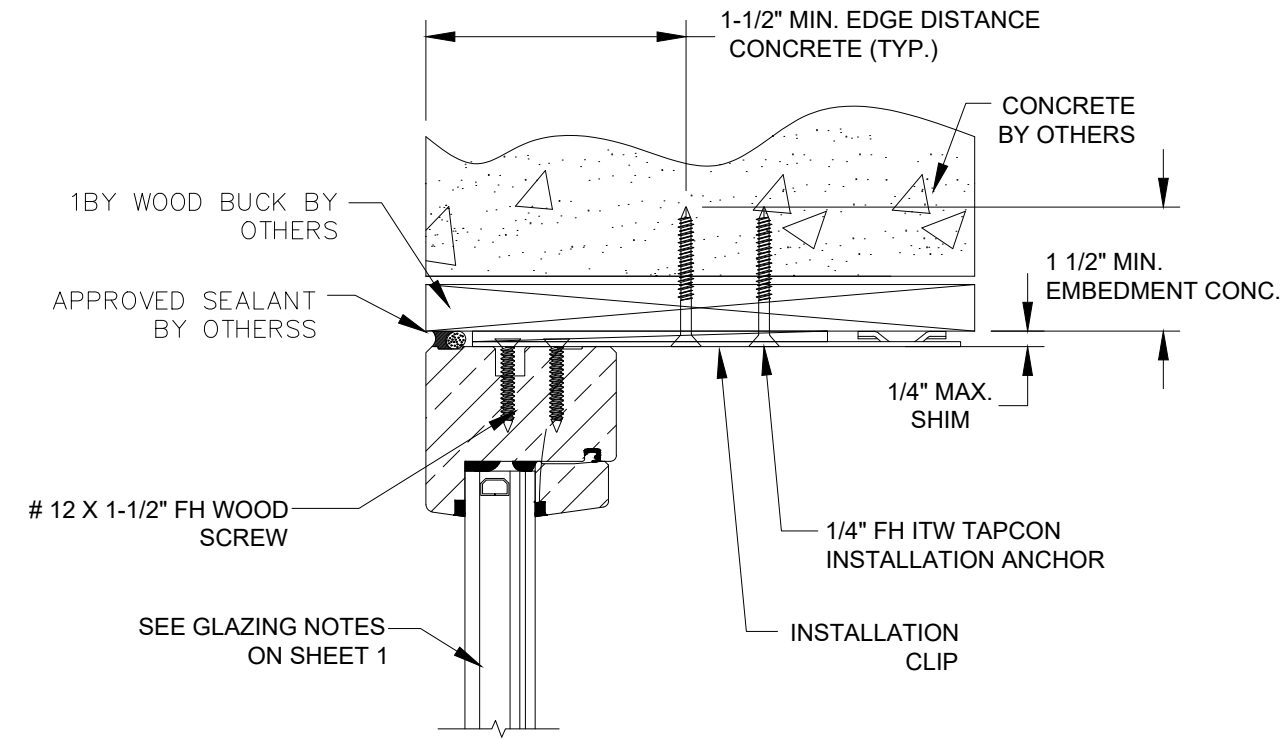
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NATURELINE-78 FEN 425 COMBINATION FIXED WINDOWS, 0/0/0 L.M. IMPACT NON-HVHZ ANCHOR STRAP INSTALLATION-WOOD FRAME		
DRAWN: JRM	DWG NO. NL-0076	REV -
SCALE NTS	DATE 11/29/2016	SHEET 5 OF 7

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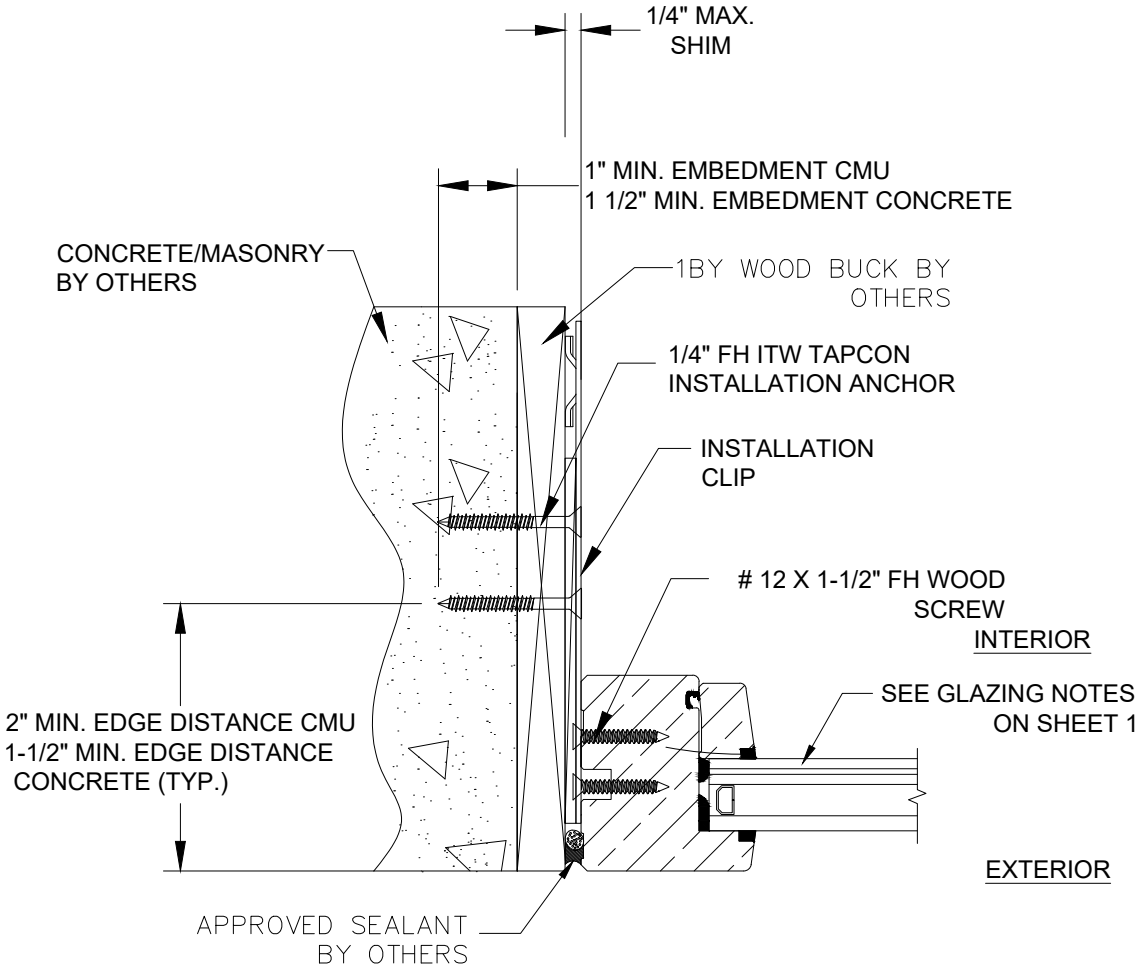
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REV	DESCRIPTION	DATE	APPROVED



A
6

**VERTICAL SECTION
CONCRETE SUBSTRATE
CLIP INSTALLATION**

- NOTES:
1. INTERIOR AND EXTERIOR FINISHES BY OTHERS NOT SHOWN FOR CLARITY.
 2. PERIMETER AND JOINT SEALANT BY OTHERS TO BE DESIGNED IN ACCORDANCE WITH ASTM E2112.



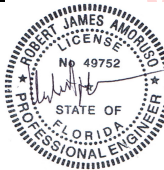
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6

**HORIZONTAL SECTION
CONC. / MASONRY SUBSTRATE
CLIP INSTALLATION**

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NATURELINE-78 FEN 425 COMBINATION FIXED WINDOWS, 0/0/0 L.M. IMPACT NON-HVHZ ANCHOR STRAP INSTALLATION -CONCRETE/MASONRY		
DRAWN: JRM	DWG NO. NL-0076	REV -
SCALE NTS	DATE 11/29/2016	SHEET 6 OF 7

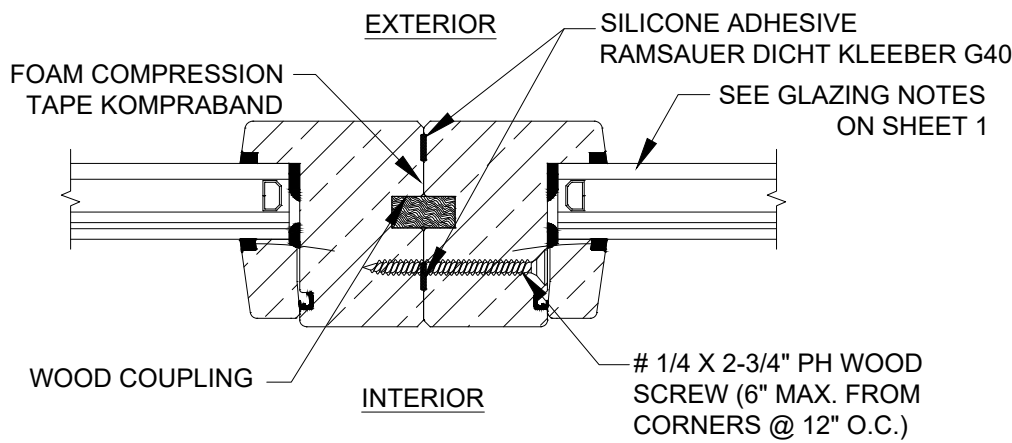
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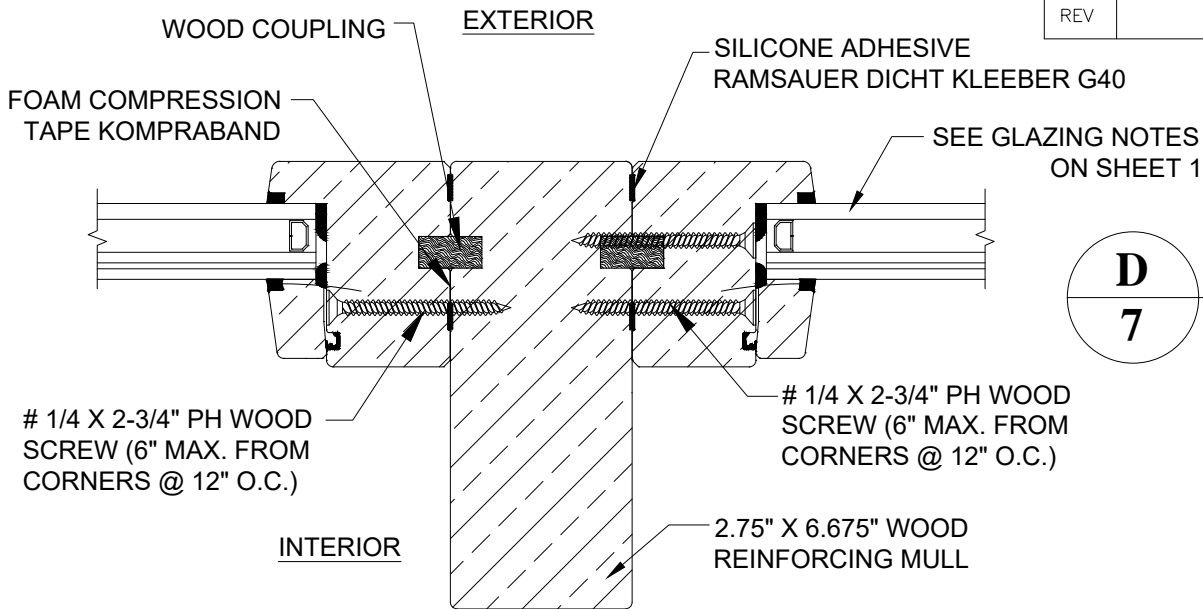


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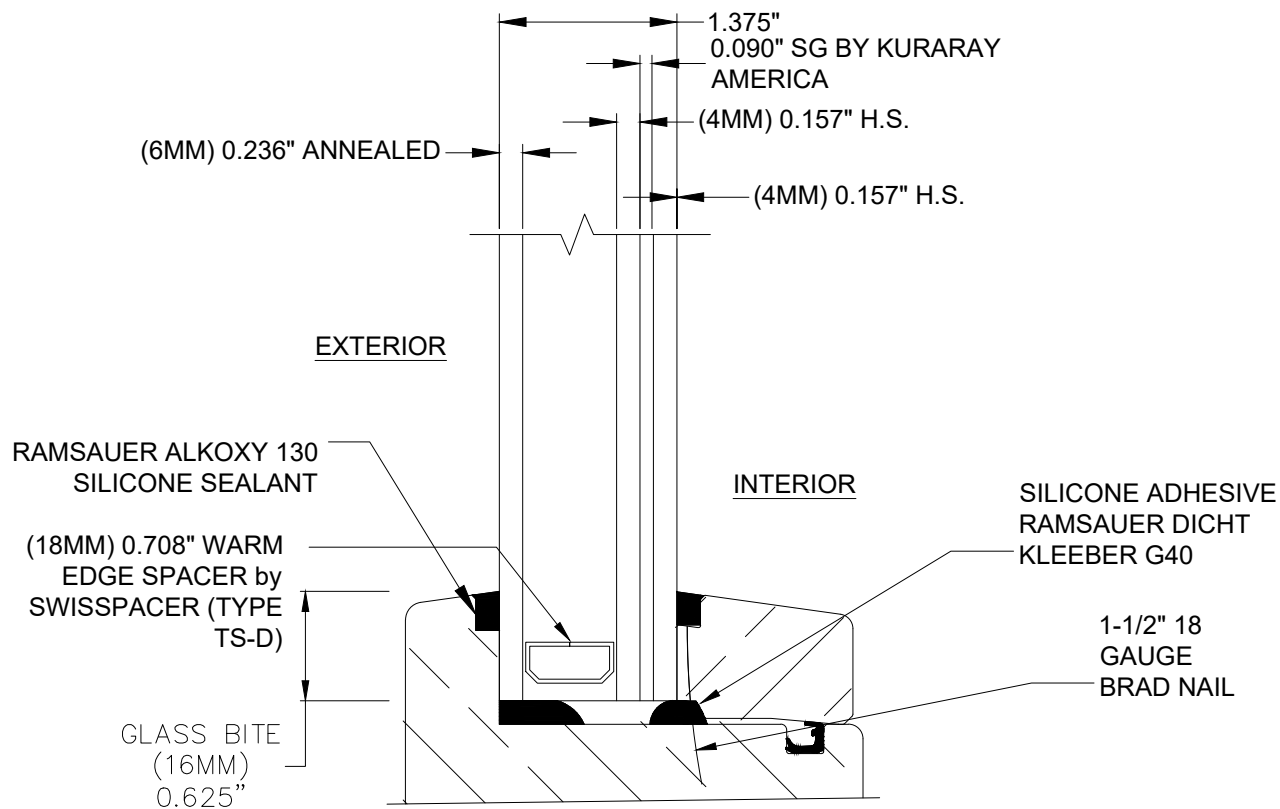
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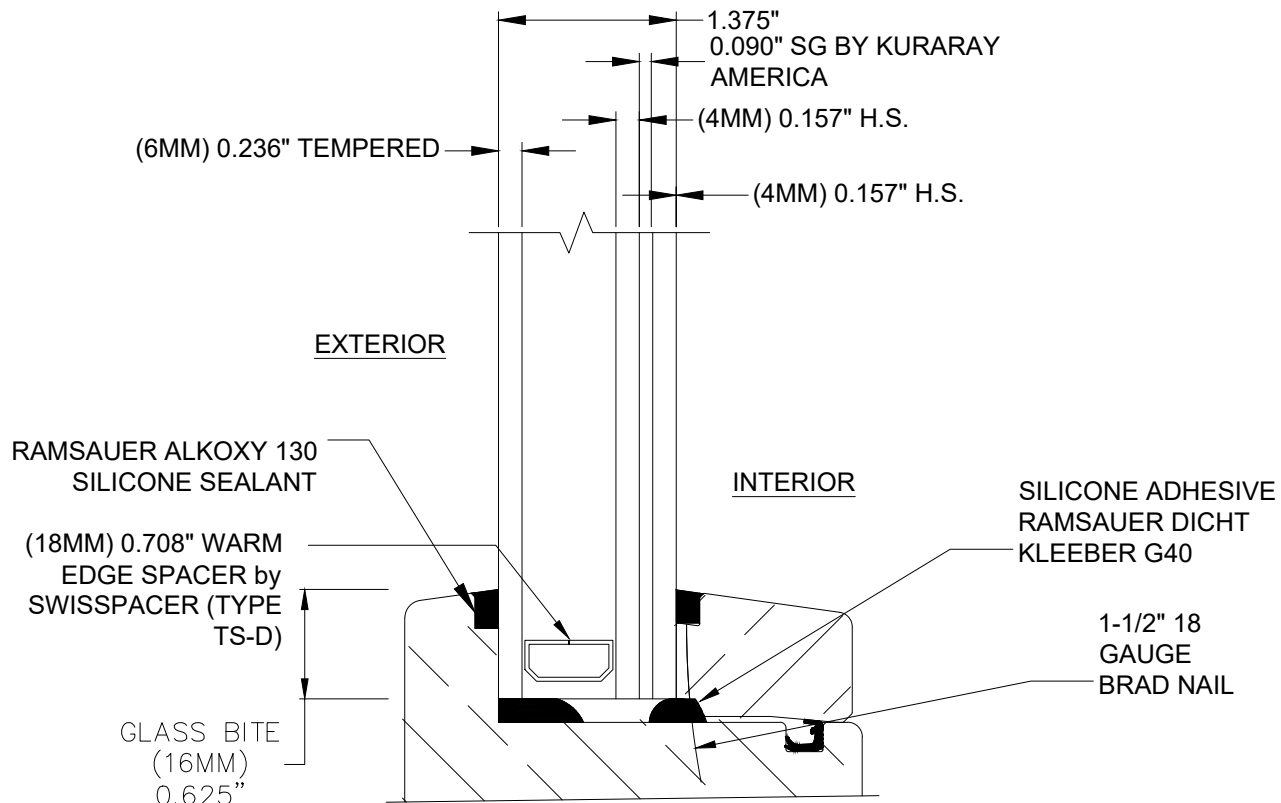
C
7 **JAMB CROSS SECTION**
FIXED WINDOWS W/STD. COUPLING
COMBINATION ASSEMBLY MULL



D
7 **JAMB CROSS SECTION**
FIXED WINDOWS W/REINFORCING
MULLION COMBINATION
ASSEMBLY MULL



GLAZING DETAIL 1



GLAZING DETAIL 2
(OPTIONAL)

GAULHOFER INDUSTRIE-HOLDING GmbH A-8124 UBELBACH/STEIERMARK AUSTRIA		
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SCALE NTS	DATE 11/29/2016	SHEET 7 OF 7

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