

GUARDIAN 275

TRANSLUCENT HURRICANE SYSTEMS
SKYLIGHT / SLOPED GLAZED

GENERAL NOTES: FLORIDA BUILDING CODE 2020 - 7TH EDITION (NON HVHZ)

- 1- CODE: THIS PRODUCT HAS BEEN TESTED AND DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2020 - 7TH EDITION. NOT APPLICABLE FOR WIND ZONE 4 (Vult> 170 MPH) AND THE HIGH VELOCITY HURRICANE ZONES (HVHZ) MIAMI & BROWARD COUNTIES
- 2- DEFINITION: THIS PRODUCT IS A TRANSLUCENT SKYLIGHT COMPOSED OF A PANEL MADE OF FIBERGLASS AND ALUMINUM SECURED BY AN ALUMINUM PERIMETER FRAMING. THE SYSTEM IS LEVEL D IMPACT RESISTANT AND TESTED FOR USE IN ZONES 1, 2 OR 3 OF THE ASTM E 1996.
- 3- POSTING: A PERMANENT LABEL SHALL BE PROVIDED AS PER FBC AND IT SHALL BE PLACED ON A READILY VISIBLE LOCATION WITH A MINIMUM OF ONE LABEL PER OPENING
- 4- DESIGN LOADS: LOADS MUST BE CALCULATED BY A PROFESSIONAL ARCHITECT OR ENGINEER FOR EACH SPECIFIC PROJECT. THE CALCULATED DESIGNED PRESSURE MUST NOT EXCEED THE ALLOWABLE APPROVED PRESSURE.
- 5- MATERIAL: ALL ALUMINUM PARTS ARE MADE MADE OF 6063-T5 ALLOY AND FIBERGLASS MATERIAL TESTED IN ACCORDANCE WITH FBC CHAPTER 26
- 6- FASTENERS: ASSEMBLY SCREWS AND ANCHORS SHALL BE AS SPECIFIED IN THIS 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 UNIT 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.
- 8- 33 1/3% INCREASE IN ALLOWABLE LOADS HAVE NOT BEEN USED IN THE DESIGN OF THE ANCHORS FOR THIS PRODUCT APPROVAL. LOAD DURATION FACTOR OF 1.6 WAS USED FOR ANCHORS INTO WOOD.
- 9- DISSIMILAR MATERIALS: WHERE ALUMINUM IS IN CONTACT OR FASTENED TO DISSIMILAR MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL, INSTALLATION SHALL MEET THE REQUIREMENTS OF CHAPTER M.7 OF THE ALUMINUM DESIGN MANUAL 2015.
- 10- WOOD CURB TO BE PROVIDED BY OTHERS. THEY MUST BE PROPERLY DESIGNED TO TRANSFER LOADS TO THE STRUCTURE.
- 11- MOUNTING: (FBC SECTION 2405.4) SKYLIGHTS SET AT AN ANGLE OF LESS THAN 45° FROM THE HORIZONTAL PLANE SHALL BE MOUNTED AT LEAST 4" ABOVE THE PLANE OF THE ROOF ON A CURB. IN GROUP R-3 OCCUPANCIES, INSTALLATIONS WITHOUT A CURB SHALL BE PERMITTED ON ROOFS WITH A MINIMUM SLOPE OF 14 DEGREES (3:12 SLOPE) AND FOR SLOPE LESS THAN 14 DEGREES, SKYLIGHT SHALL BE MOUNTED AT LEAST 4" ABOVE ROOF PLANE.

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PRODUCT RATING:

• DEAD LOAD: DL= 3 PSF
• ASTM E330: DESIGNED RATING: Pd= ±65 PSF SAFETY FACTORS: SF=3 POSITIVE / SF=2 NEGATIVE TESTED LOAD: Ft= +195, -130 PSF
• ASTM E283: ±6.24 PSF - 0.04 cfm/ft ²
• ASTM E331: +15 PSF
• ASTM E1996 & ASTM E1886: MISSILE IMPACT: LEVEL D - 9 LB 2X4 LUMBER AT 50 ft/s CYCLIC PRESSURE: ±65 PSF
• LIMITATIONS: 1- NOT FOR USE IN HIGH VELOCITY HURRICANE ZONES (HVHZ), BROWARD & MIAMI-DADE COUNTIES) 2- NOT APPLICABLE FOR WIND ZONE 4 (Vult> 170 MPH) 3- MAXIMUM PANEL AREA MUST NOT EXCEED 40 SQF (60"X96")



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ENGINEER SEAL
PEDRO DE FIGUEIREDO
PE 52609

PRODUCT:

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TRANSLUCENT HURRICANE SYSTEMS
SKYLIGHT / SLOPED GLAZED

MANUFACTURER:

7120 STEWARDT AVENUE
WAUSAU, WI 54401
TEL: (715) 842-4616
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SCALE:

NA

DATE:

07/18/2020

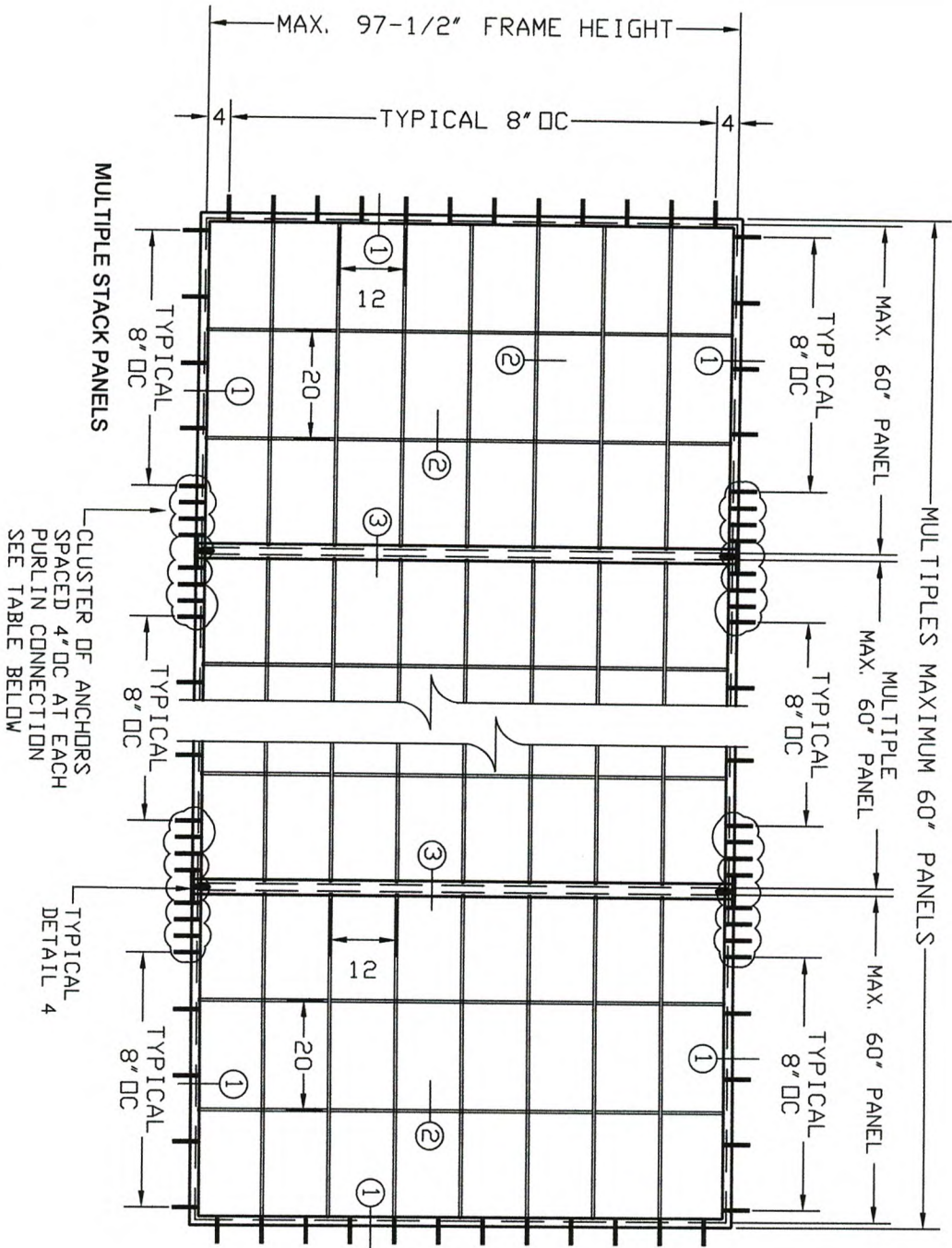
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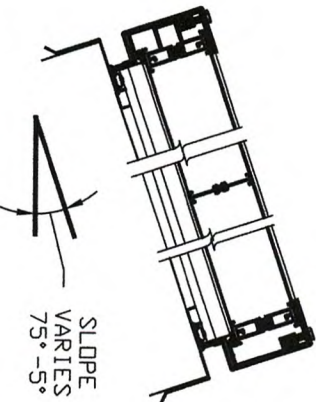
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TYPICAL CONFIGURATIONS

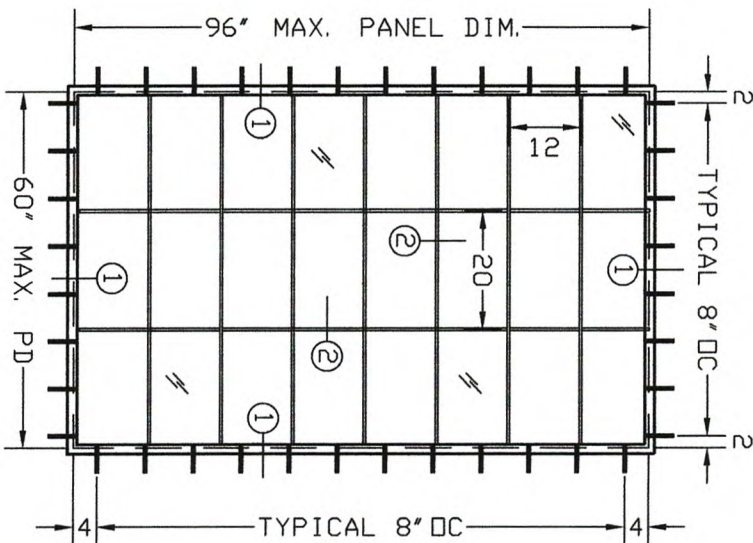
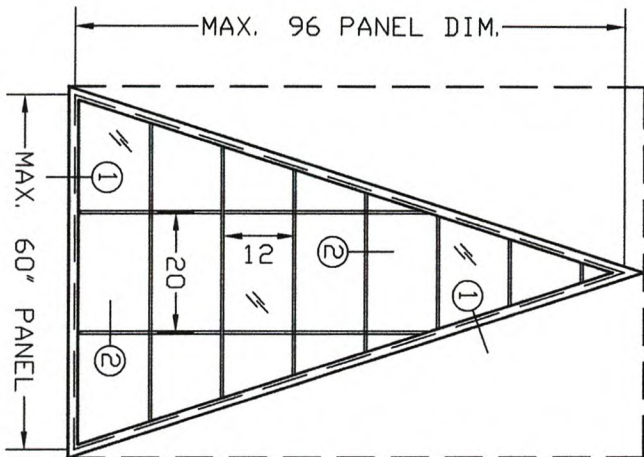


ANCHOR TYPE	A	B	C	D
PANEL WIDTH (IN)	60	60	60	60
PANEL HEIGHT (IN)	96	96	96	96
MINIMUM # OF CLUSTER ANCHORS	8	10	8	8

EXAMPLE:-
MODULE 60X96 PANEL
ANCHOR TYPE B IT WILL
REQUIRE 10 ANCHORS
IN CLUSTER OF 4" DC
AT 65 PSF RATING



THIS PRODUCT CAN BE USED AS A UNIT SKYLIGHT OR
DESIGNED TO FORM ESSENTIALLY THE ENTIRE ROOF



ANCHOR OPTIONS:

- A- 1/4" SS ITW TAPCON 1-1/4" DIRECTLY INTO 3000 PSI CONCRETE
- B- 1/4" SS ITW TAPCON 1-1/4" DIRECTLY INTO MASONRY
- C- 1/4" SS ITW TAPCON OR 1/4" SS SMS 1 1/2" DIRECTLY INTO MIN. 2X FT WOOD CURB (G>=.046)
- D- 1/4" SS SMS DIRECTLY INTO MIN. 1/8" METAL STRUCTURE (6063-T5 ALUM. OR A51M A36 STEEL)

ANCHORAGE NOTES:
1- PERIMETER FRAMING WITH TYPE A, B, C OR D ANCHORAGE OPTIONS.
2- SEE ELEVATIONS FOR ANCHORAGE LAY-OUT AND SPACING.



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① PERIMETER DETAIL



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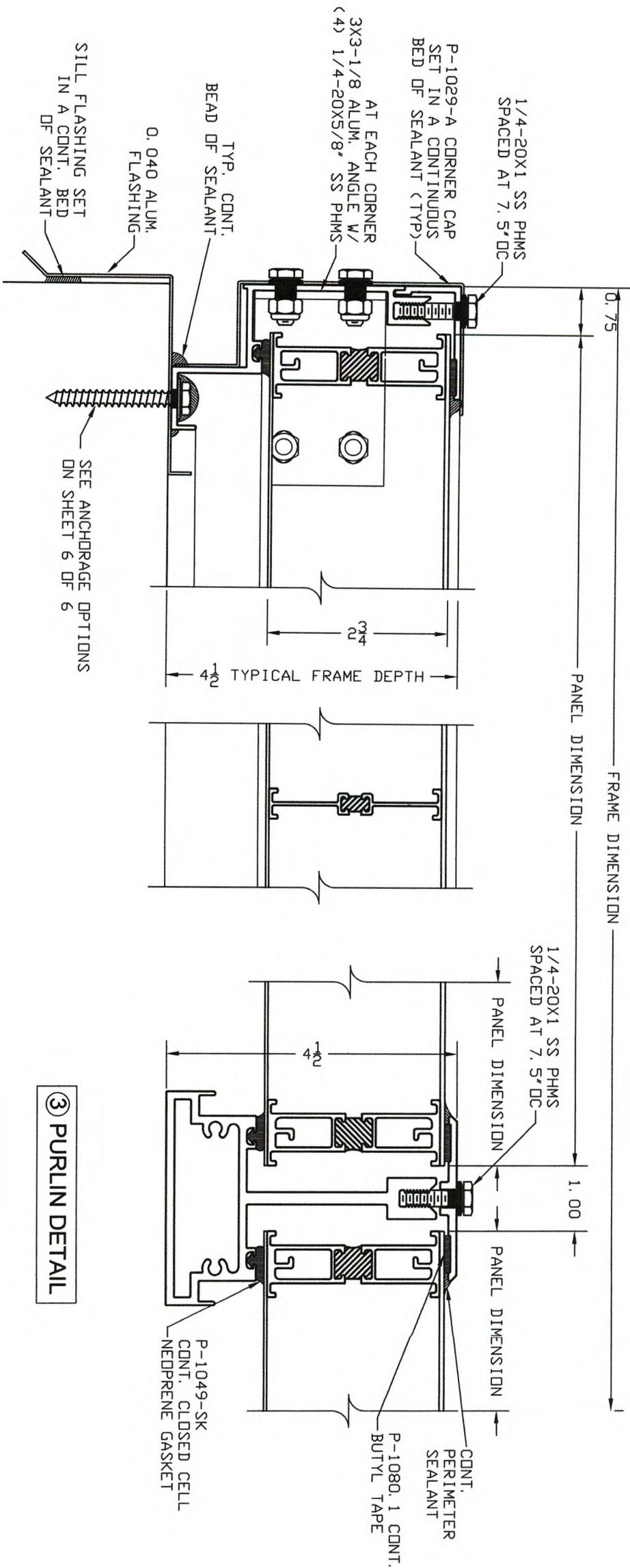
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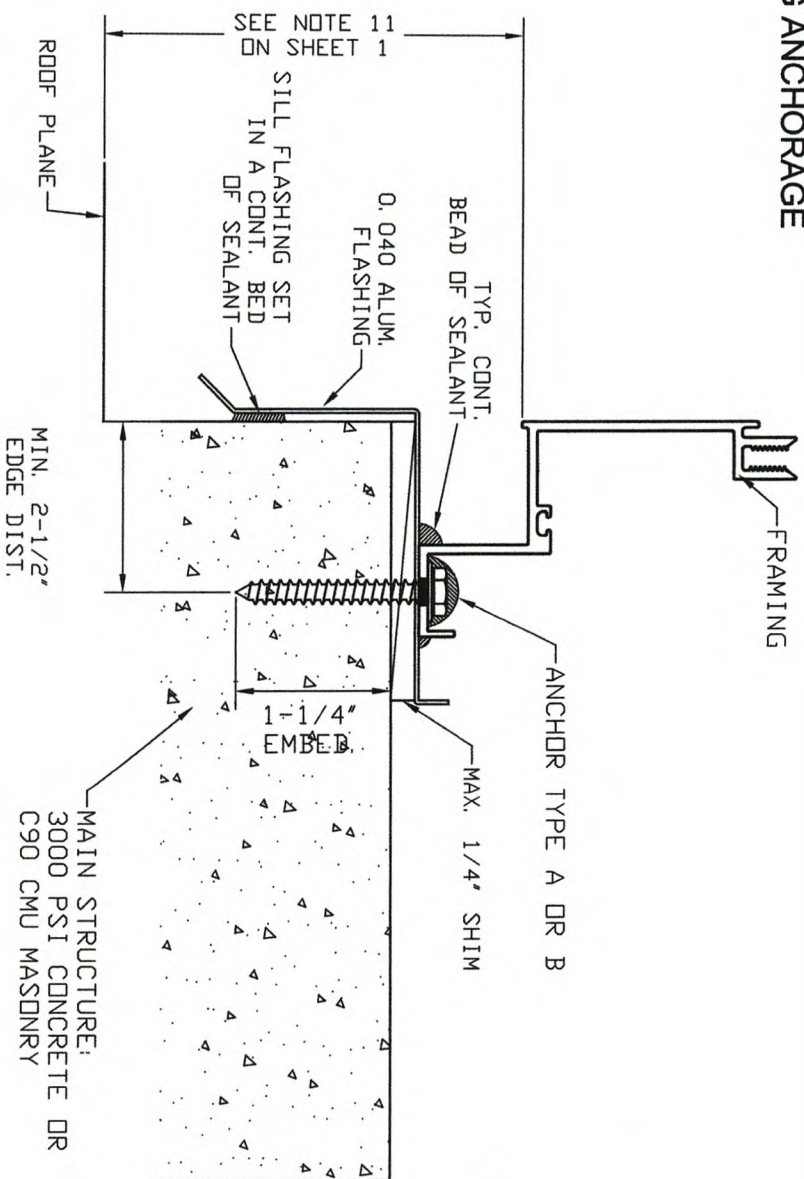
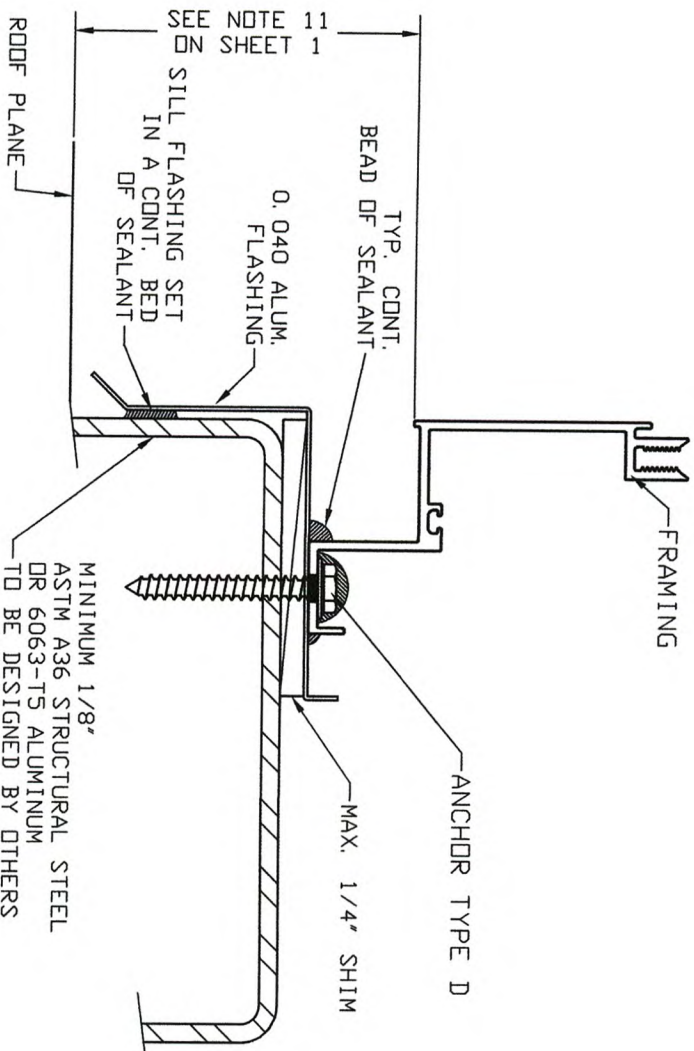
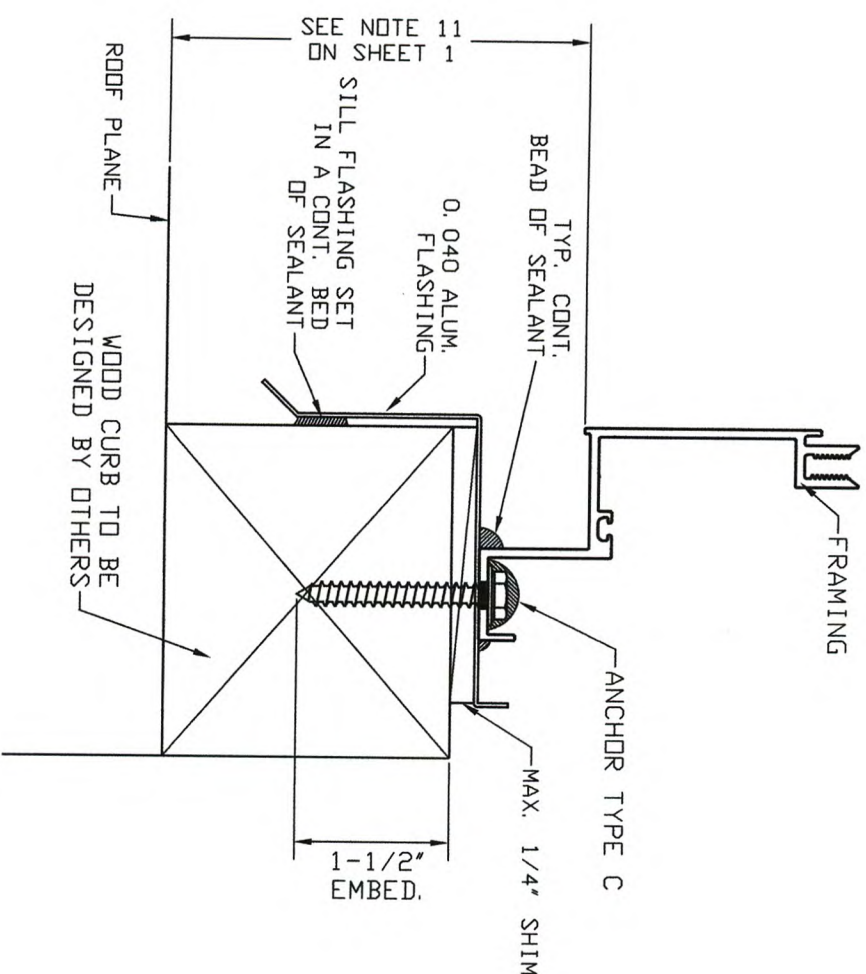
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DETAILS



FRAMING ANCHORAGE



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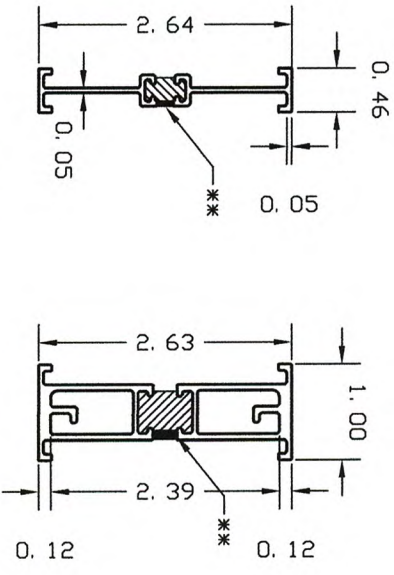
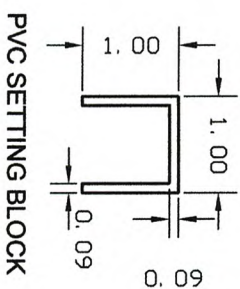
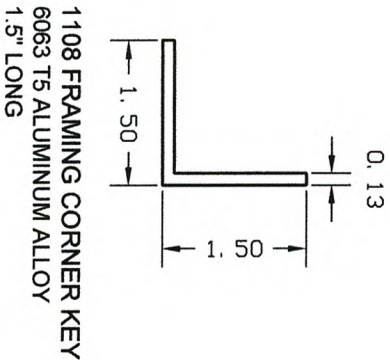
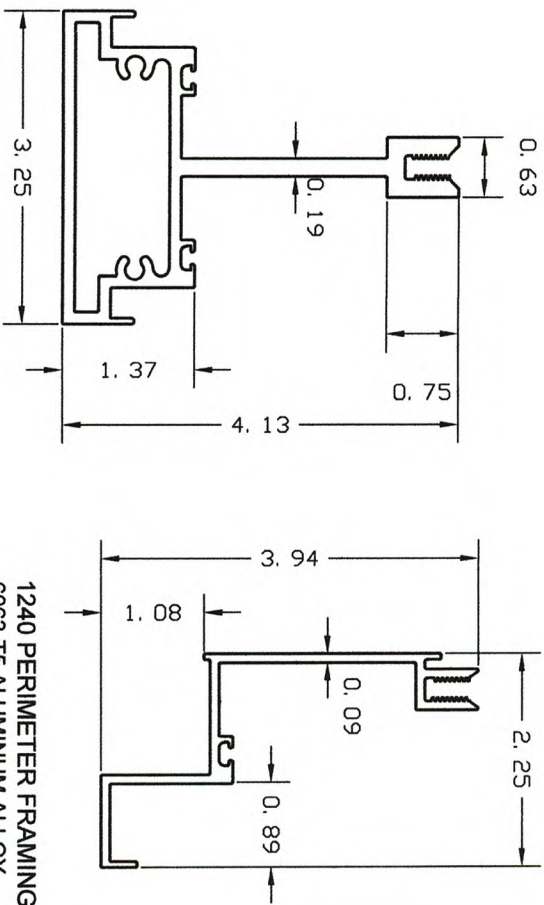
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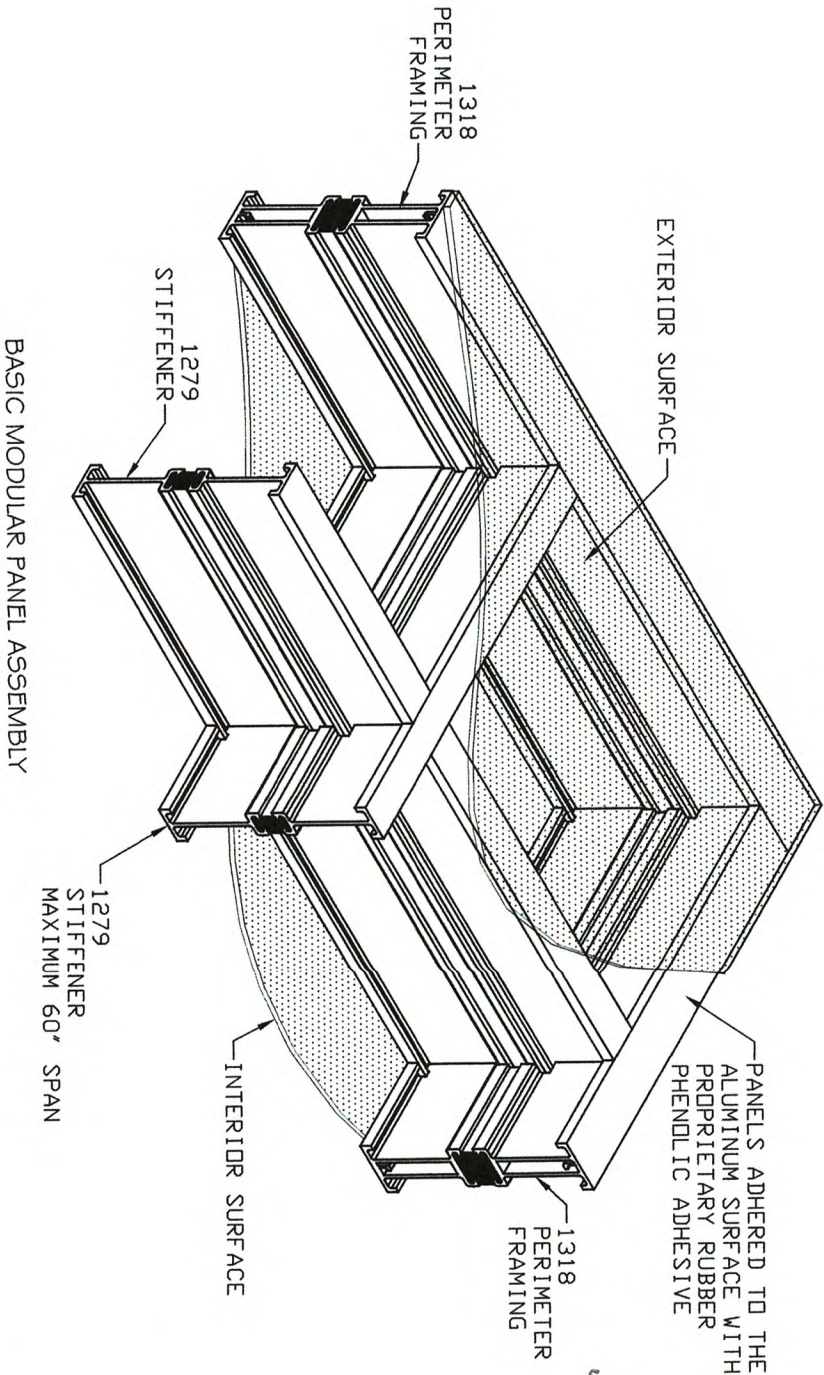
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FRAMING COMPONENTS



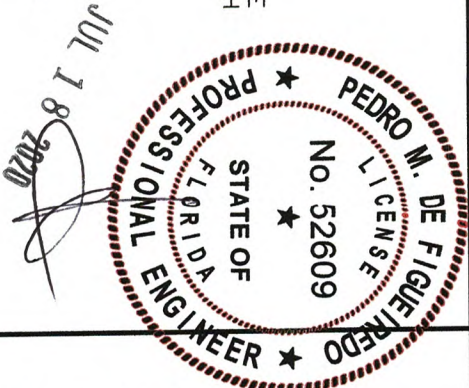
** ALTERNATE NON THERMALLY BROKEN SYSTEM CAN BE USE IF BRIDGE REMAINS

PANEL COMPONENTS



PANEL CONFIGURATION:
EXTERIOR SURFACE: 0.070" FIBERGLASS PANEL
INTERIOR SURFACE: 0.045" FIBERGLASS PANEL
NOMINAL GRID SIZE: 12" X 20"
MAXIMUM 1279 SPAN: 60"

INTERIOR SURFACE PANEL	
0.045 FRCW STANDARD FIRE RATED TRANSLUCENT FIBERGLASS SHEET	
ASTM E84:	FLAME SPREAD INDEX - 20 SMOKE DEVELOPED INDEX - 150 (≤450 FBC 2606.4)
ASTM D1929:	SELF IGNITION - 912 °F (≥650 FBC 2606.4) FLASH IGNITION - 872 °F
ASTM D635:	CLASS CC1
EXTERIOR SURFACE	
0.070 STCMW/ ULTIMATE SERIES HIGH IMPACT TRANSLUCENT FIBERGLASS SHEET	
ASTM E84:	FLAME SPREAD INDEX - 170 SMOKE DEVELOPED INDEX - 350 (≤450 FBC 2606.4)
ASTM D1929:	SELF IGNITION - 860 °F (≥650 FBC 2606.4) FLASH IGNITION - 752 °F
ASTM D635:	BURNING RATE - 24.8 mm/min. (CLASS CC2)



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