

# 3" MODULAR GABLE ROOM

GLASS WALL NON-HABITABLE SUNROOM PERFORMANCE EVALUATION

THIS IS A NON-SITE-SPECIFIC PERFORMANCE EVALUATION. A DESIGN PROFESSIONAL SHALL BE RESPONSIBLE FOR CERTIFYING THE APPLICATION OF THIS INFORMATION TO ANY SITE-SPECIFIC LOCATION.

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ATTACHMENT OF GLAZING PRODUCTS TO MULLIONS TO BE PER SEPARATE PRODUCT APPROVAL OR SEPARATE ENGINEERING

EXISTING HOST

COMPOSITE ROOF-

PANEL, PER

3" SNAP-N-LOCK

SEPARATE **APPROVAL** 

1'-0"

MAX

**OVERHANG** 

TABLE

 $\mathbb{O}(P)$ 

EA CORNER, TYP.

DRAIN SPOUT.

THIS ENCLOSURE IS ONLY CERTIFIED AS **NON-HABITABLE PER AAMA 2100** 

GABLE GLASS ROOM

- THIS ENCLOSURE DOES NOT QUALIFY FOR MISSILE IMPACT RESISTANCE UNDER ANY CIRCUMSTANCE

- THIS ENCLOSURE MAY BE INSTALLED WITHIN OR OUTSIDE THE HIGH VELOCITY HURRICANE ZONE

**DESIGN NOTES:** 

POSITIVE AND NEGATIVE DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED BY OTHERS ON A JOB-SPECIFIC BASIS IN ACCORDANCE WITH THE STRUCTURAL REQUIREMENTS OF THE 2018/2021 IBC/IRC, 2023 (8th EDN) & 2020 (7th EDN) FLORIDA BUILDING CODE AS WELL AS CURRENT VERSIONS OF THE MN, NC, NJ, NY, OH, SC, & VA BUILDING CODES AS APPLICABLE. CODE ENFORCED COMPLIES WITH STATE OF SEAL AND IF MULTIPLE VERSIONS ARE LISTED THEN MOST STRINGENT APPLIES.

DESIGN SHALL UTILIZE ASD DESIGN METHOD USING ASCE 7-16 OR ASCE 7-22 CODES FOR SITE SPECIFIC APPLICATIONS AS APPLICABLE.

ENCLOSURE MAXIMUM MEAN (AVERAGE) ROOF HEIGHT= 15' ROOF LIVE LOAD: 20 PSF TO 40 PSF PER TABLE ROOF DEAD LOAD: 2 PSF USED IN TABLE

\*THIS DOCUMENT DOES **NOT** CERTIFY PRODUCT FOR USE AS A HABITABLE STRUCTURE AAMA 2100 SUNROOM CLASSIFICATION II, III, OR IV ONLY.

#### **GENERAL NOTES**

STRUCTURE SHALL BE FABRICATED IN ACCORDANCE WITH ALL GOVERNING CODES. CONTRACTOR SHALL INVESTIGATE AND CONFORM TO ALL LOCAL BUILDING CODE AMENDMENTS

THE ARCHITECT/ENGINEER OF RECORD OR PERMITTING CONTRACTOR FOR THE PROJECT SHALL BE RESPONSIBLE FOR THE INTEGRITY OF ALL SUPPORTING SURFACES.

THE HOST STRUCTURE SHALL NOT BE MODIFIED WITH THIS DESIGN - ALL EXISTING WINDOWS, DOORS, AND WALLS SHALL REMAIN IN PLACE. WHERE IMPACT PROTECTION IS REQUIRED, IT

SHALL BE CADMIUM-PLATED OR OTHERWISE CORROSION-RESISTANT MATERIAL AND SHALL COMPLY WITH "SPECIFICATIONS FOR ALUMINUM STRUCTURES" SECTION J.3.1 BY THE ALUMINUM ASSOCIATION, INC., & ANY APPLICABLE FEDERAL, STATE, AND/OR LOCAL CODES.

ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS. MINIMUM EMBEDMENT SHALL BE AS NOTED HEREIN. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES STUCCO, FOAM, BRICK, AND OTHER WALL FINISHES

ALL CONCRETE ANCHORS SHALL BE INSTALLED TO NON-CRACKED CONCRETE ONLY

THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.

ALL ALUMINUM SHALL BE 6063-T6 ALLOY AND TEMPER UNLESS NOTED OTHERWISE

ALL CONCRETE TO REACH A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI IN 7 DAYS.

10. ANY WOOD USED IN A PRIMARY CONNECTION SHALL BE SYP#2 OR BETTER.

THE SYSTEM DETAILED HEREIN IS GENERIC & DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. THESE PLANS SHALL BE USED ALONG WITH SITE SPECIFIC PLANS & INFORMATION BY

12. ENGINEER SEAL AFFIXED HERETO VALIDATES STRUCTURAL DESIGN AS SHOWN ONLY. USE OF THIS SPECIFICATION BY CONTRACTOR, et. al. INDEMNIFIES & SAVES HARMLESS THIS ENGINEER FOR ALL COST & DAMAGES INCLUDING LEGAL FEES & APPELLATE FEES RESULTING FROM MATERIAL FABRICATION, SYSTEM ERECTION, & CONSTRUCTION PRACTICES BEYOND THAT WHICH IS CALLED FOR BY LOCAL, STATE, & FEDERAL CODES & FROM DEVIATIONS OF THIS PLAN

13. THIS ENGINEER HAS NOT VISITED THIS JOBSITE. INFORMATION CONTAINED HEREIN IS BASED ON CONTRACTOR SUPPLIED DATA AND MEASUREMENTS. THIS ENGINEER SHALL NOT BE HELD RESPONSIBLE OR LIABLE IN ANY WAY FOR ERRONEOUS OR INACCURATE DATA OR MEASUREMENTS. WORK SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. THIS ENGINEER SHALL BE NOTIFIED AND GIVEN AN OPPORTUNITY TO REEVALUATE OUR WORK UPON DISCOVERY OF ANY INACCURATE INFORMATION PRIOR TO MODIFICATION OF EXISTING FIELD CONDITIONS AND FABRICATION AND INSTALLATION OF MATERIALS.

14. ALTERATIONS, ADDITIONS OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.

15. EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.

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FOR ENGINEER CERTIFIED ORIGINALS & MORE INFORMATION ABOUT THIS DOCUMENT OR SCAN THE QR CODE TO THE RIGHT >

VISIT ENGINEERINGEXPRESS.COM/STORE FOR ADDITIONAL PLANS, REPORTS & RESOURCES



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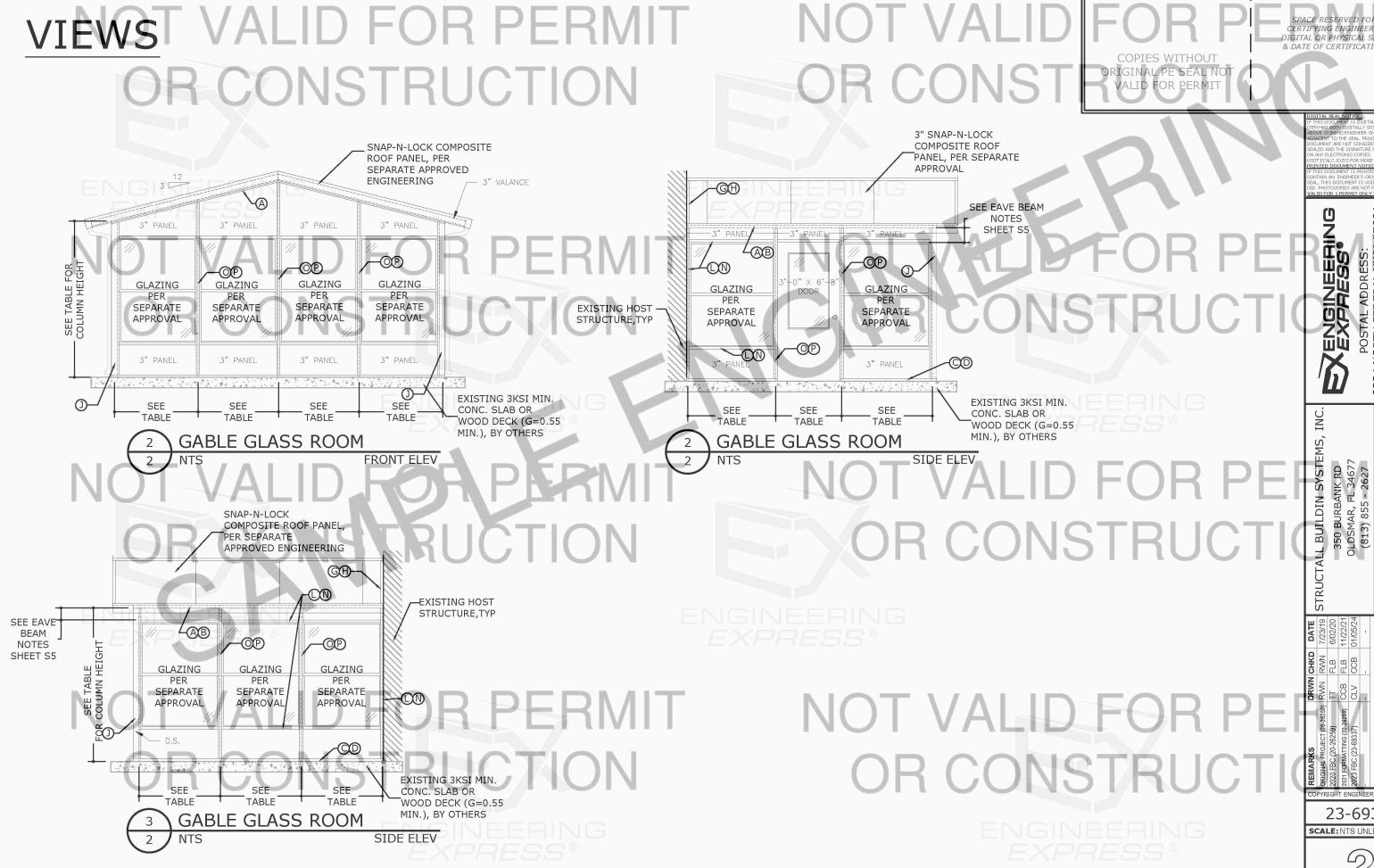
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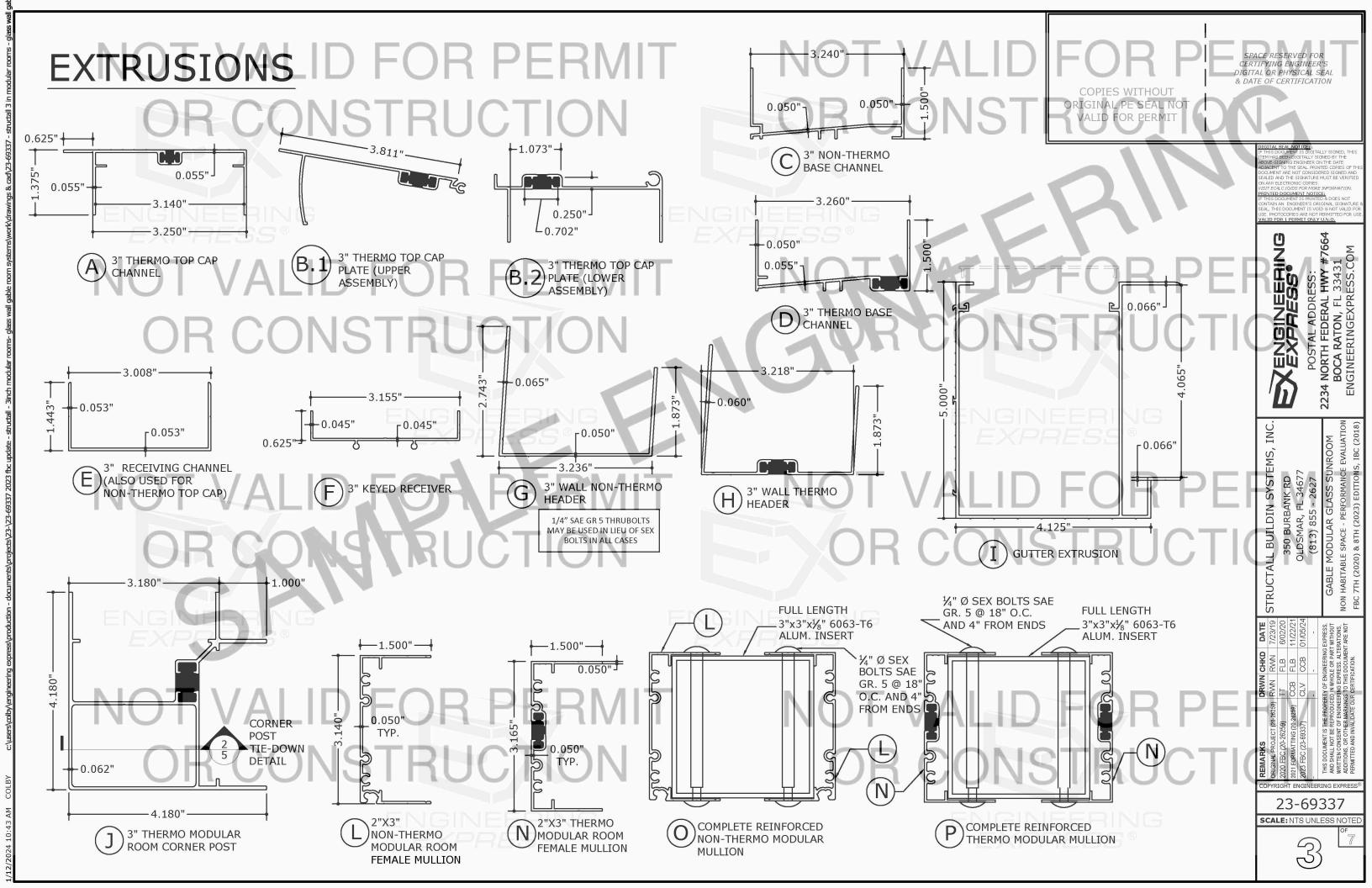
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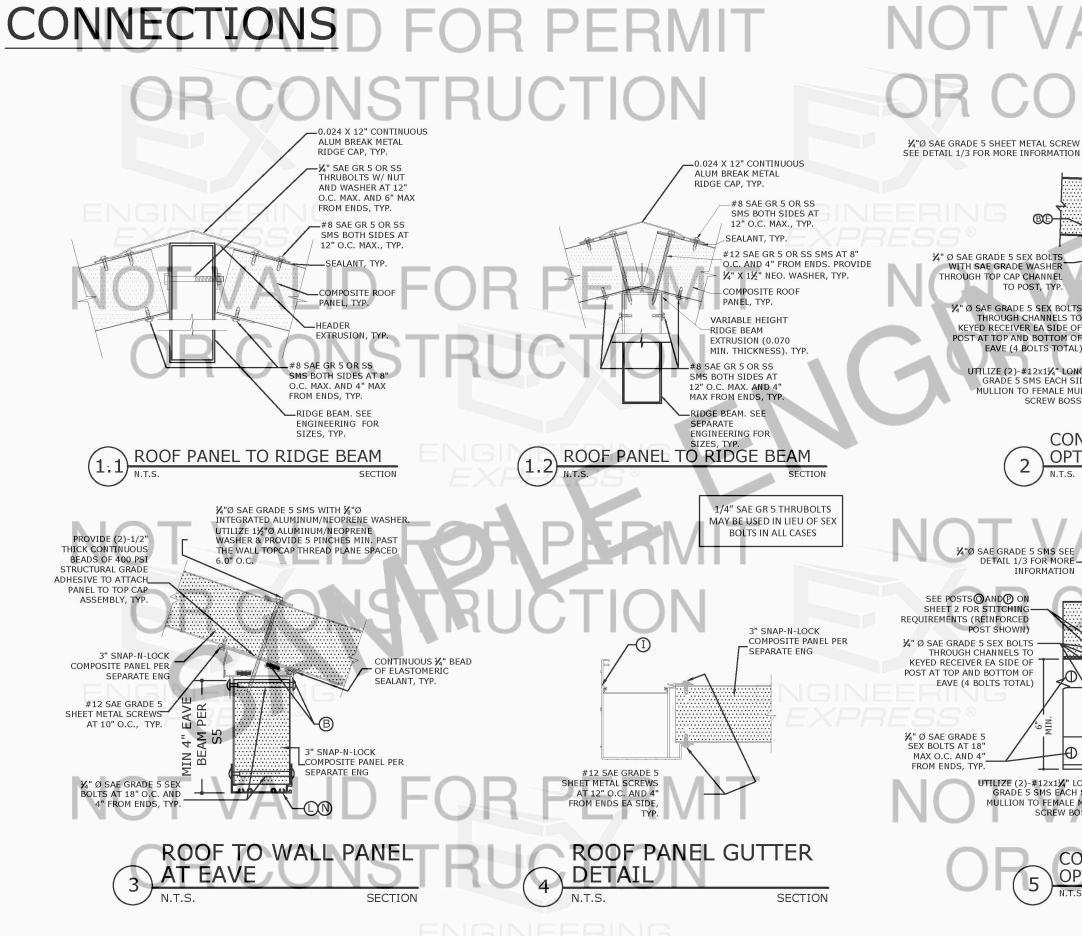
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2





(B)(E)

TO POST, TYP.

EAVE (4 BOLTS TOTAL)

UTILIZE (2)-#12x11/4" LONG SAE

GRADE 5 SMS EACH SIDE OF

MULLION TO FEMALE MULLION

SCREW BOSS, TYP.

1/4" Ø SAE GRADE 5 SEX BOLTS THROUGH CHANNELS TO

KEYED RECEIVER EA SIDE OF

POST AT TOP AND BOTTOM OF

¼" Ø SAE GRADE 5 SEX BOLTS

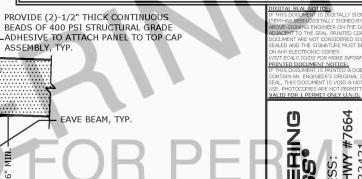
WITH SAE GRADE WASHER

THROUGH TOP CAP CHANNEL

ORIGINAL PE SEAL NOT

FOR PERMIT

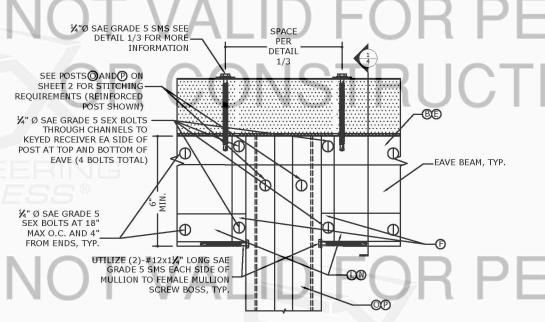
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**CONNECTION AT EAVE & POST** 

OPTION #1

SECTION



**CONNECTION AT EAVE & POST** ELEVATION

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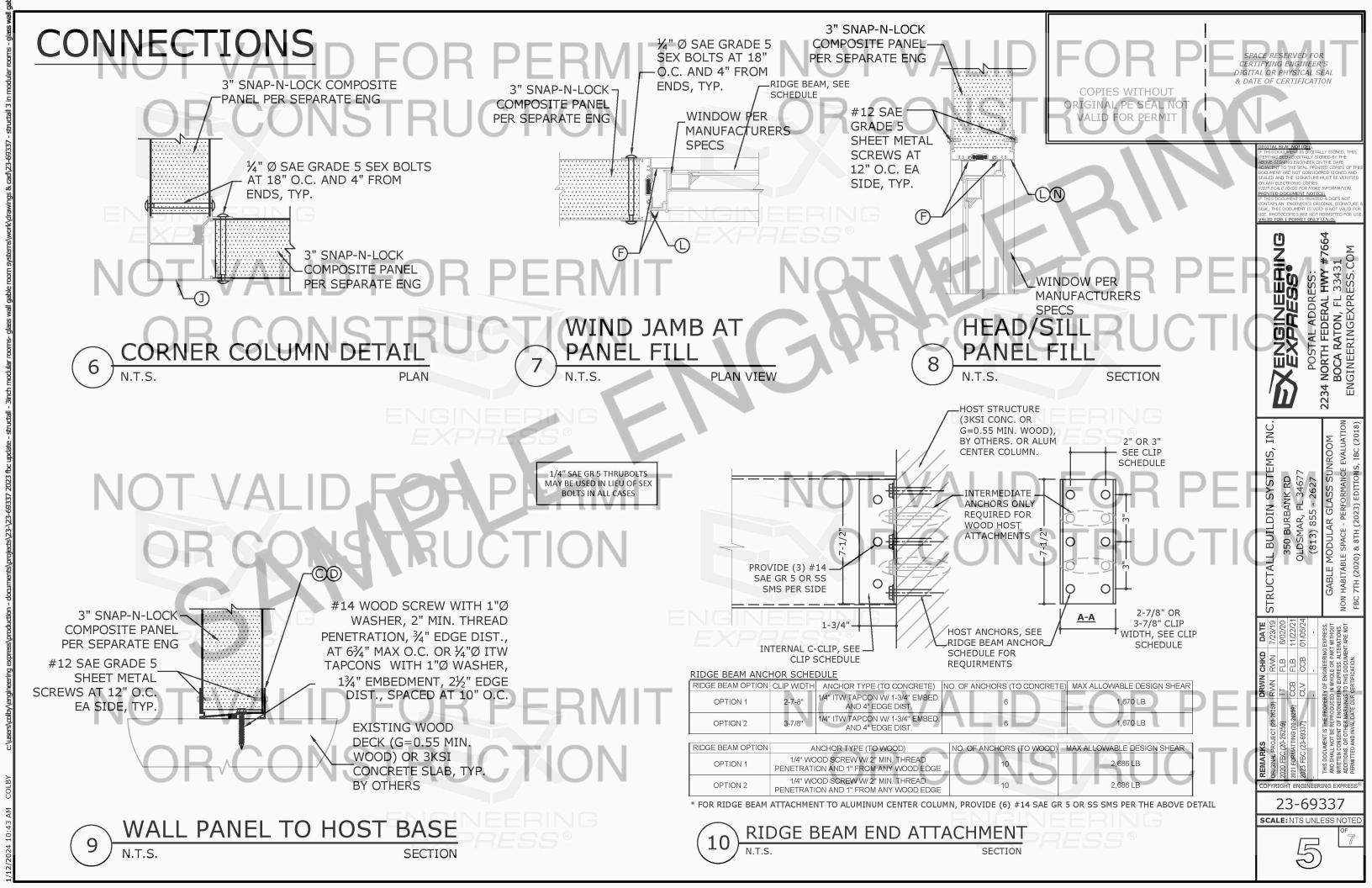
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STRUCTALL BUILDIN SYSTEMS,

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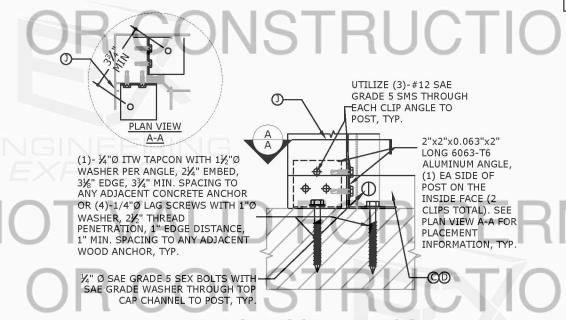
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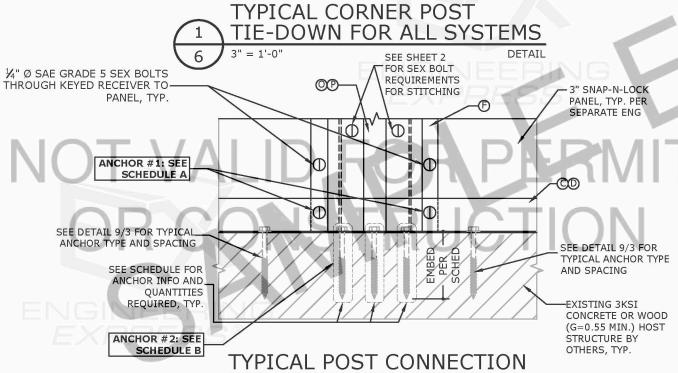




# POST CONNECTION P

MAY BE USED IN LIEU OF SEX **BOLTS IN ALL CASES** 





FOR GLASS WALL SYSTEMS

### ANCHOR TYPE #1 SCHEDULE A:

WIND TIER	ANCHOR TYPE	DESCRIPTION	-
UP TO 25 PSF	1	(2)-3/8"Ø SAE GRADE 5 SEX BOLT WITH 3/8" SAE GRADE WASHER	7

## ANCHOR TYPE #2 SCHEDULE B:

	WIND TIER	ANCHOR 2 SUBSTRATE	QUANTITY REQUIRED
	UP TO 25 PSF	CONNECTION AT CONCRETE	(2)-3/8"Ø ITW TAPCONS WITH 1½"Ø WASHER, 2½ " EMBED, 3" EDGE, 4" SPACING, TYP.
		CONNECTION AT WOOD	(4)-1/4"Ø LAG SCREWS 1½"Ø WASHER, 2½" THREAD PENETRATION, 1" EDGE, 1" SPACING

EAVE BEAM CLEAR SPAN

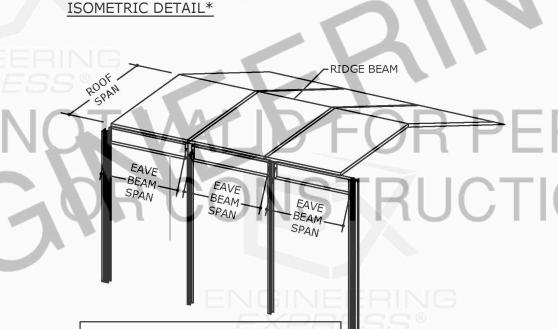
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## **EAVE BEAM SPANS:**

**EAVE-BEAM** 

\* GLAZING NOT SHOWN

FOR CLARITY

SPACING ISOMETRIC

#### 4" MIN. PANEL DEPTH:

EAVE BEAM SPAN = 5'-0" UP TO 50PSF EAVE BEAM SPAN= 6'-0" UP TO 40PSF MAX ALLOWABLE CLEAR ROOF SPAN = 12'-0"

#### 8" OR GREATER PANEL DEPTH:

EAVE BEAM SPAN= 6'-0" UP TO 60PSF AT 20' CLEAR ROOF SPAN

SITE SPECIFIC ENGINEERING FOR ADDITIONAL SPANS DEFLECTION LIMIT = L/180.

# POST ALLOWABLE SPAN HEIGHTS

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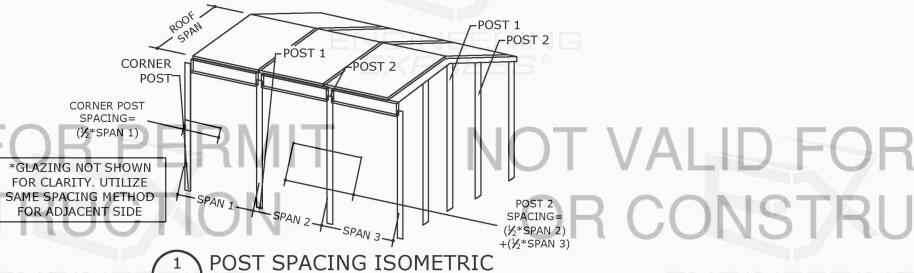
	Lateral Wind Load	Max Roof Load	AVERAGE C/C POST SPACING (FT)			
POST TYPE			2'-0"	3'-0"	4'-0"	5'-0"
	PSF	PSF	ALLOWABLE POST HEIGHT (FT)			
3" MOD ROOM (FEMALE +	20 PSF	40 PSF	12'-0"	12'-0"	12'-0"	11'-5''
FEMALE) w/ 3x3 INSERT	30 PSF	40 PSF	12'-0"	11'-10''	10'-9''	9'-12''
3" THERMO MOD ROOM	20 PSF	40 PSF	12'-0"	12'-0"	12'-0"	11'-5''
(FEMALE + FEMALE) w/ 3x3 INSERT	30 PSF	40 PSF	12'-0"	11'-10''	10'-9"	9'-12''
THERMO MOD ROOM CORNER	20 PSF	30 PSF	12'-0"	12'-0"	11'-4''	10'-2''
POST	30 PSF	40 PSF	12'-0"	10'-8''	9'-3''	8'-3''

#### TABLE NOTES:

- 1. SPANS APPLY TO MORE CRITICAL LOAD BEARING
- SIDE OF ENCLOSURE.

  2. ROOF LIVE LOAD CONSIDERS COMPRESSION ON POST UP TO 20' TOTAL ROOF SUPPORTING SPAN & LISTED AVERAGE COLUMN SPACING.
- 3. SPANS FOR THERMALLY BROKEN POSTS SHALL BE REDUCED BY 10%.
- 4. DEFLECTION LIMIT = L/180.
- 5. VALUES BELOW ALLOWABLE CEILING HEIGHT OR POST HEIGHT MAY BE BUILT ON KNEEWALLS OR OTHER SUPPORTING STRUCTURES (CERTIFIED BY OTHERS)
- LOADING CRITERIA CONSIDERED IS THE GOVERNING CASE OF THE FOLLOWING SCENARIOS:
- 2PSF ROOF DEAD LOAD & 20 PSF-40 PSF SOLID ROOF LIVE LOAD USED IN TABLES
- WALL WIND LOADS TO BE APLLIED PER ASCE 7-22 OR ASCE 7-16 C&C METHOD (THESE ARE PERFORMANCE TABLES).

# AVERAGE POST SPACING DEFINED \*



ISOMETRIC

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