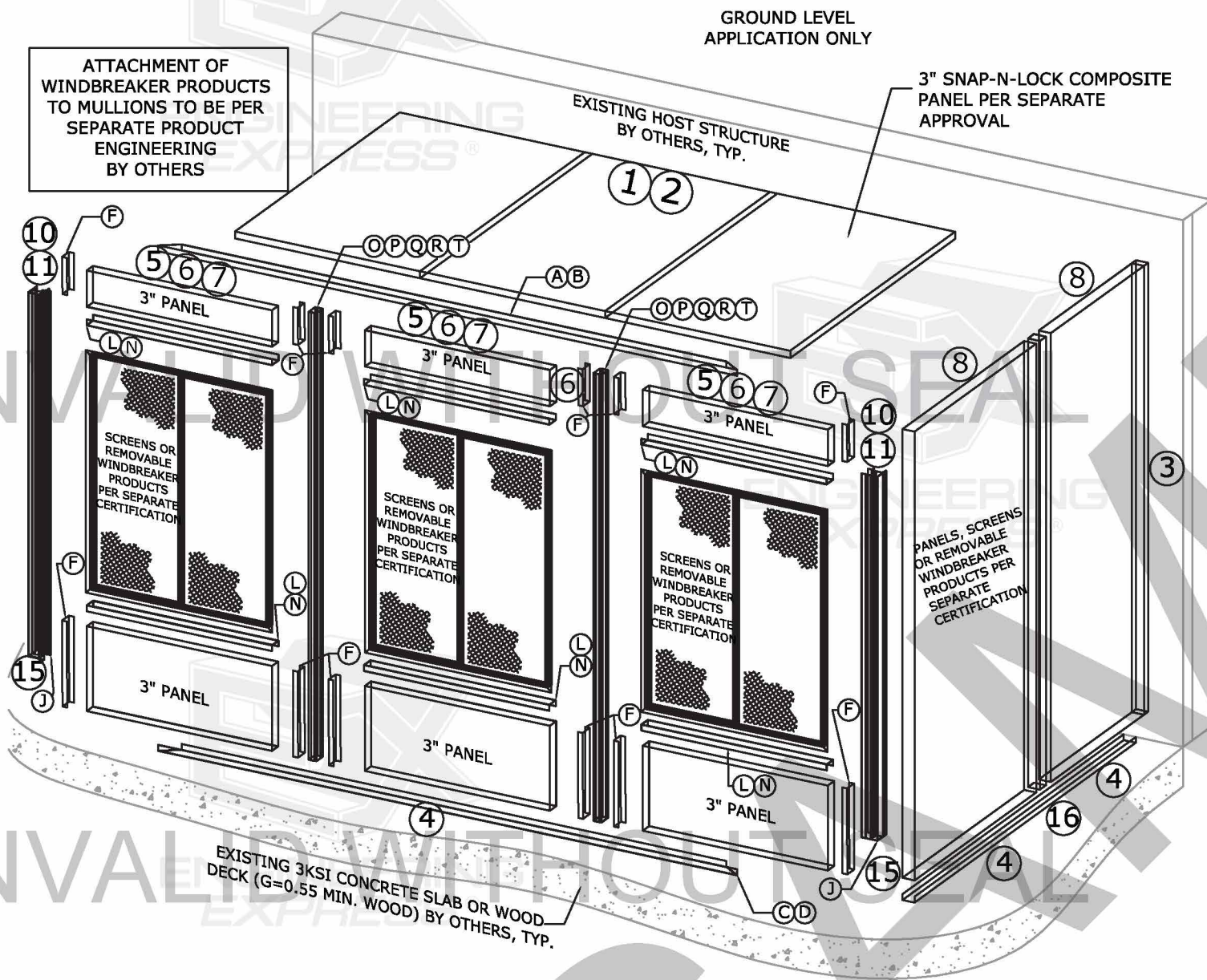




3" MODULAR ROOMS

OPEN, SCREENED & ACRYLIC WALL ROOM SYSTEMS MASTER PLAN SHEET



- THIS ENCLOSURE IS ONLY CERTIFIED AS **NON-HABITABLE** PER AAMA 2100
- THIS MASTER PLAN DOES **NOT APPLY** TO GLASS ENCLOSURES.
- ACRYLIC WINDOWS DESIGNED TO BE REMOVED AT 75MPH SUSTAINED WINDS.

COPIES NOT VALID FOR PERMIT

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 ASCE 7-16 AND CHAPTER 16 OF THE 2017 FLORIDA BUILDING CODE (6TH EDITION), THE 2020 FLORIDA BUILDING CODE (7TH EDITION) AND THE 2012/2015/2018 IBC/IRC, 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 LISTED THEN MOST STRINGENT APPLIES. DESIGN SHALL UTILIZE ASD DESIGN METHOD USING ASCE 7-16 OR ASCE 7-10 BASED.

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

1. STRUCTURE SHALL BE FABRICATED IN ACCORDANCE WITH ALL GOVERNING CODES. CONTRACTOR SHALL INVESTIGATE AND CONFORM TO ALL LOCAL BUILDING CODE AMENDMENTS WHICH MAY APPLY.
2. WHILE THIS SYSTEM HAS BEEN REVIEWED TO WITHSTAND LOADS WITHIN THE LIMITATIONS SET FORTH HEREIN, SITE SPECIFIC APPLICATIONS SHALL BE REVIEWED FOR CONFORMANCE TO ALL LOADS, CODE RESTRICTIONS, CONNECTIONS, AND LOCAL CONDITIONS WHICH FALL BEYOND THE LIMITS OF THIS GENERIC MASTER PLAN. THIS PLAN IS FOR PERMIT ONLY. NO CERTIFICATION IS OFFERED FOR THE FINAL INSTALLED CONDITION BY THIS PLAN.
3. THE ARCHITECT/ENGINEER OF RECORD OR PERMITTING CONTRACTOR FOR THE PROJECT SHALL BE RESPONSIBLE FOR THE INTEGRITY OF ALL SUPPORTING SURFACES.
4. 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 PLACED AT THE HOST STRUCTURE, NOT ON THE SUNROOM.

ANCHORAGE

5. ALL FASTENERS TO BE #12 OR GREATER SAE GRADE 5 UNLESS NOTED OTHERWISE. FASTENERS 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.
 6. 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.
 7. ALL CONCRETE ANCHORS SHALL BE INSTALLED TO NON-CRACKED CONCRETE ONLY.
- #### MATERIALS
8. THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
 9. ALL ALUMINUM SHALL BE 6063-T6 ALLOY AND TEMPER UNLESS NOTED OTHERWISE.
 10. ALL CONCRETE TO REACH A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI IN 7 DAYS.
 11. ANY WOOD USED IN A PRIMARY CONNECTION SHALL BE SYP#2 OR BETTER.

OTHER

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. EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
15. ALTERATIONS, ADDITIONS OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.

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STRUCTALL BUILDING SYSTEMS
350 BURBANK ROAD
OLDSMAR, FL 34677
(851) 855-2627
3" MODULAR ROOM
OPENED, SCREENED * ACRYLIC WALL SYSTEMS
MASTER PLAN SHEET

REMARKS	DATE	DRWN	CHKD
UPDATE 2020	06/01/20	TT	FB

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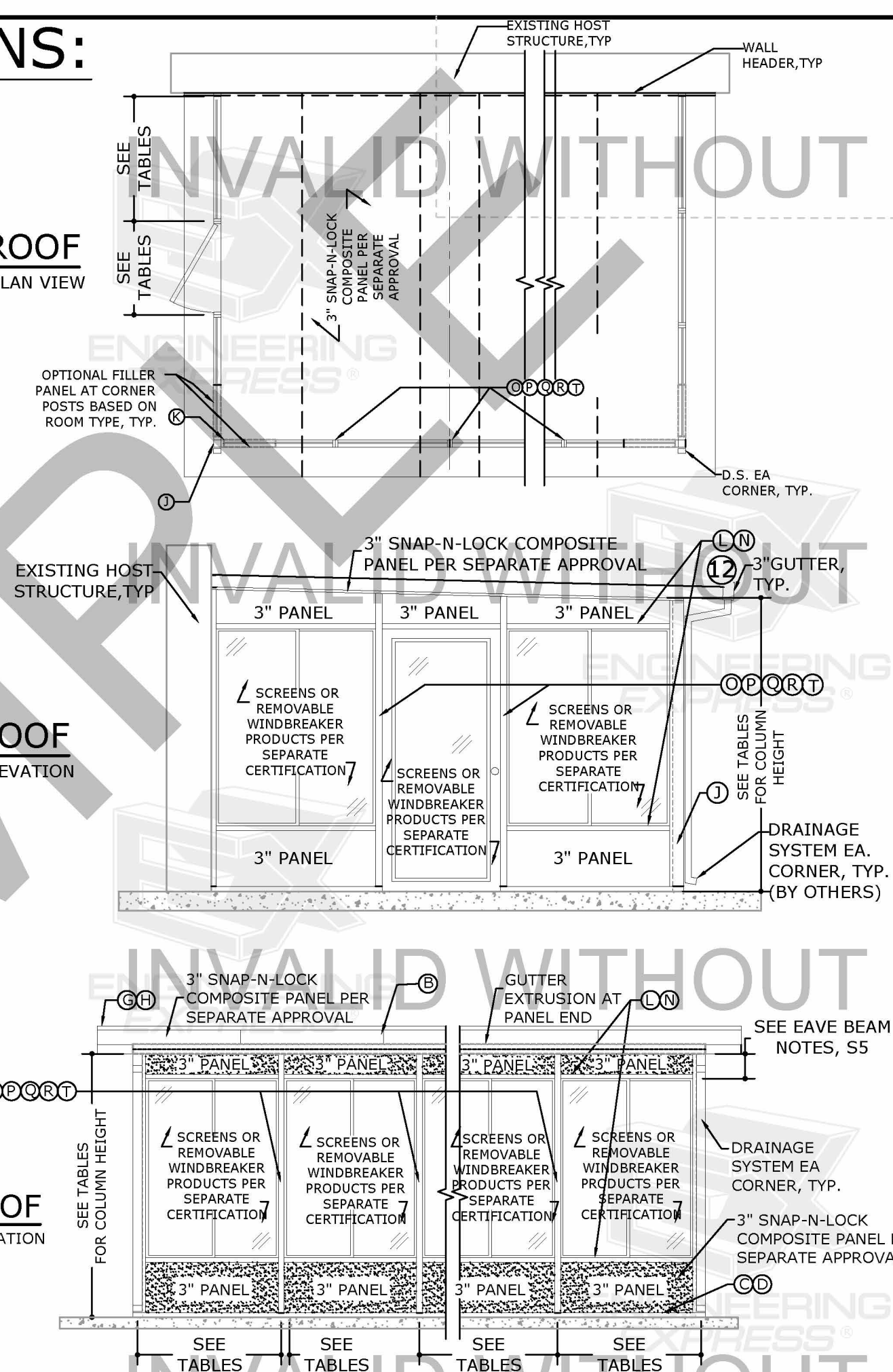
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1

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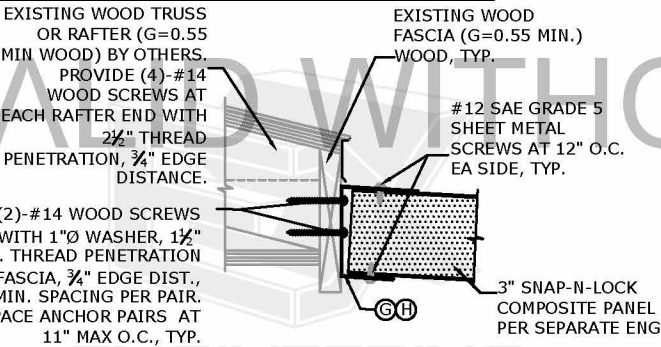


3 SLOPED ROOF
2 N.T.S. FRONT ELEVATION

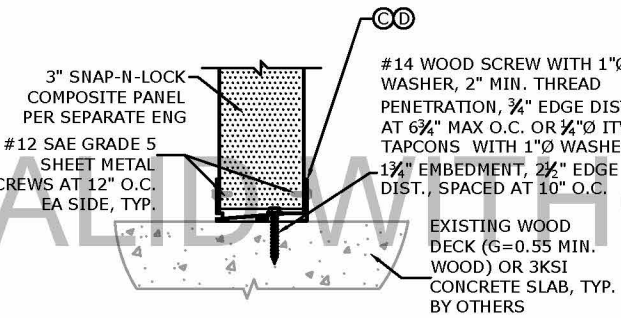


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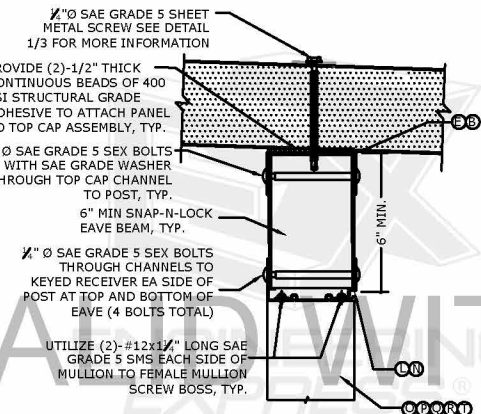
CONNECTIONS



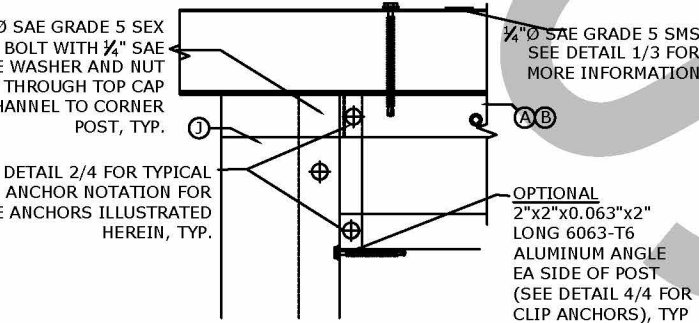
1 ROOF PANEL TO WOOD HOST
SECTION



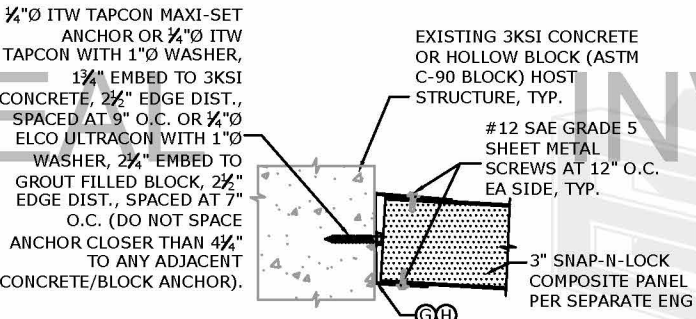
4 WALL PANEL TO HOST BASE
SECTION



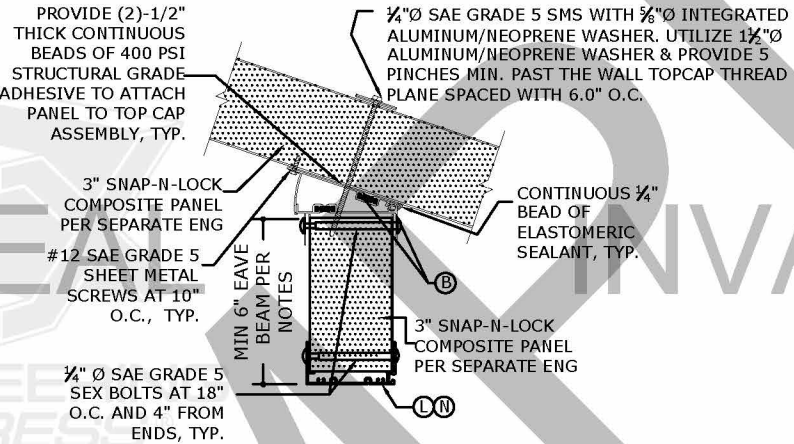
7 CONNECTION AT EAVE & POST
SECTION



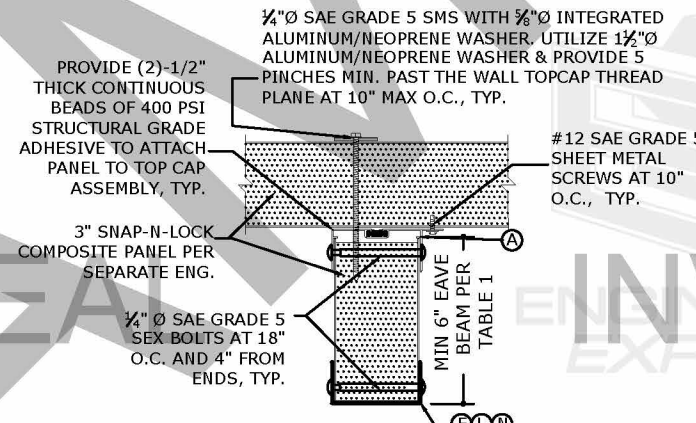
9 FAN BEAM IN PANEL ROOF
DETAIL



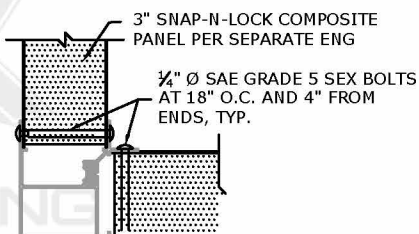
2 ROOF PANEL TO BLOCK HOST
SECTION



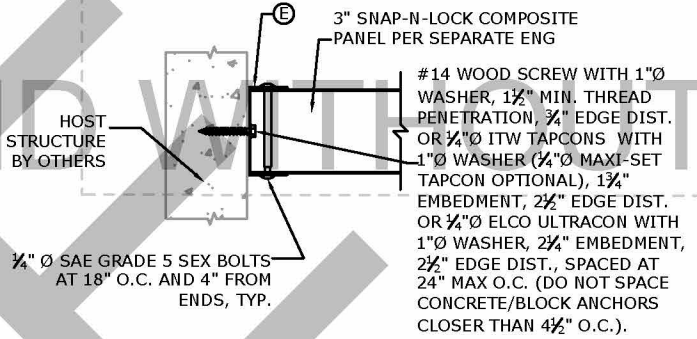
5 ROOF TO WALL PANEL AT EAVE
SECTION



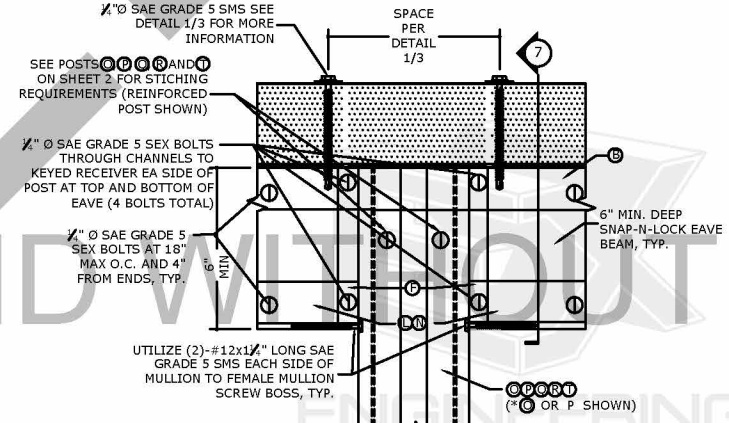
8 ROOF TO WALL PANEL AT RAKE
SECTION



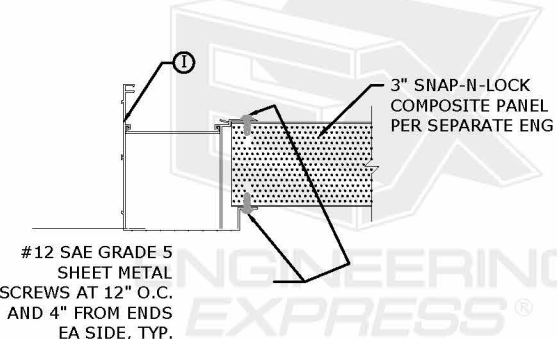
6 CONNECTION AT EAVE & POST
ELEVATION



3 WALL PANEL TO HOST SIDE WALL
SECTION



9 FAN BEAM IN PANEL ROOF
DETAIL



6 CONNECTION AT EAVE & POST
ELEVATION

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STRUCTURAL BUILDING SYSTEMS

350 BURBANK ROAD
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3" MODULAR ROOM
OPENED, SCREENED * ACRYLIC WALL SYSTEMS
MASTER PLAN SHEET

REMARKS	DRWN	CHKD	DATE
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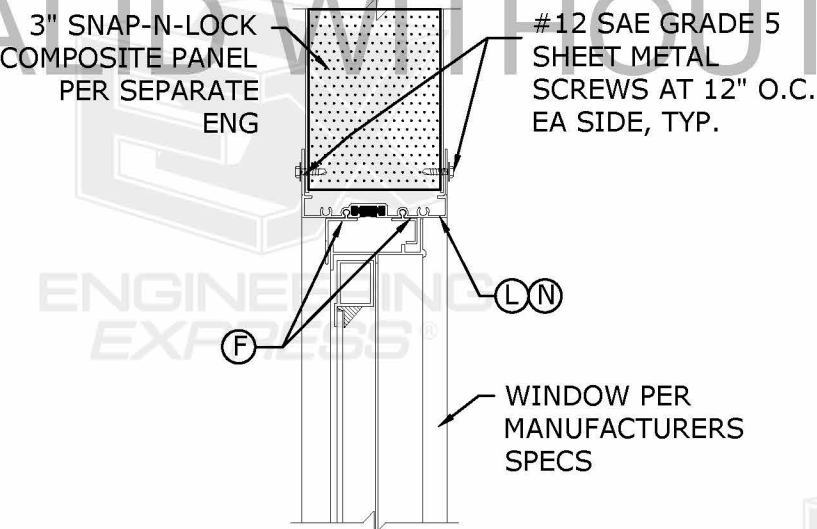
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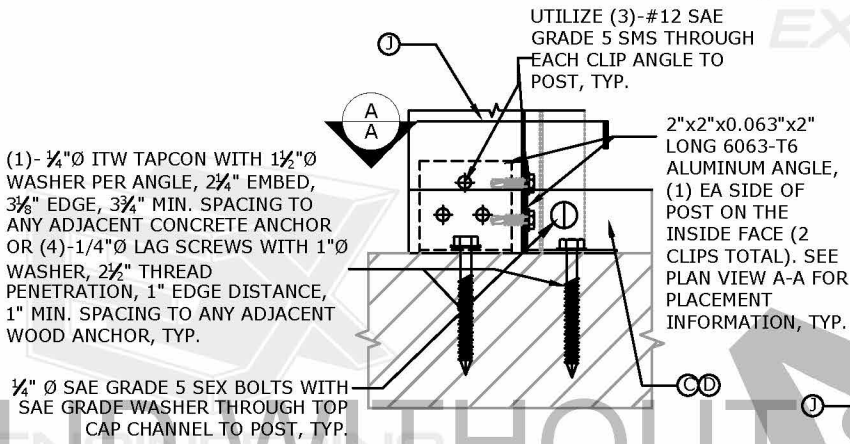
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3

CONNECTIONS



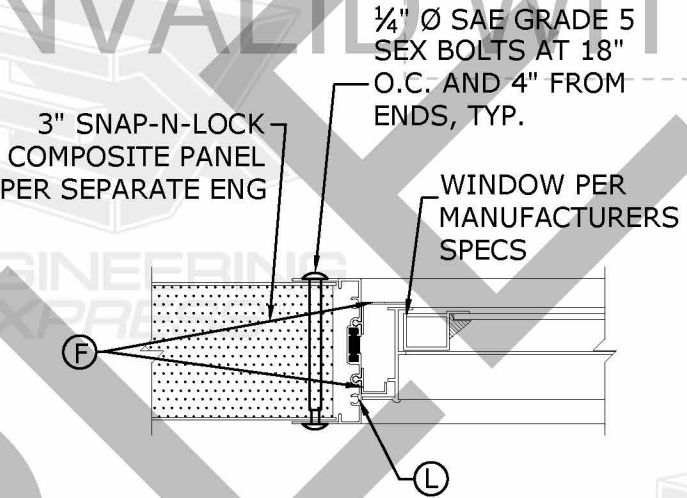
13 HEAD/SILL PANEL FILL
N.T.S. DETAIL



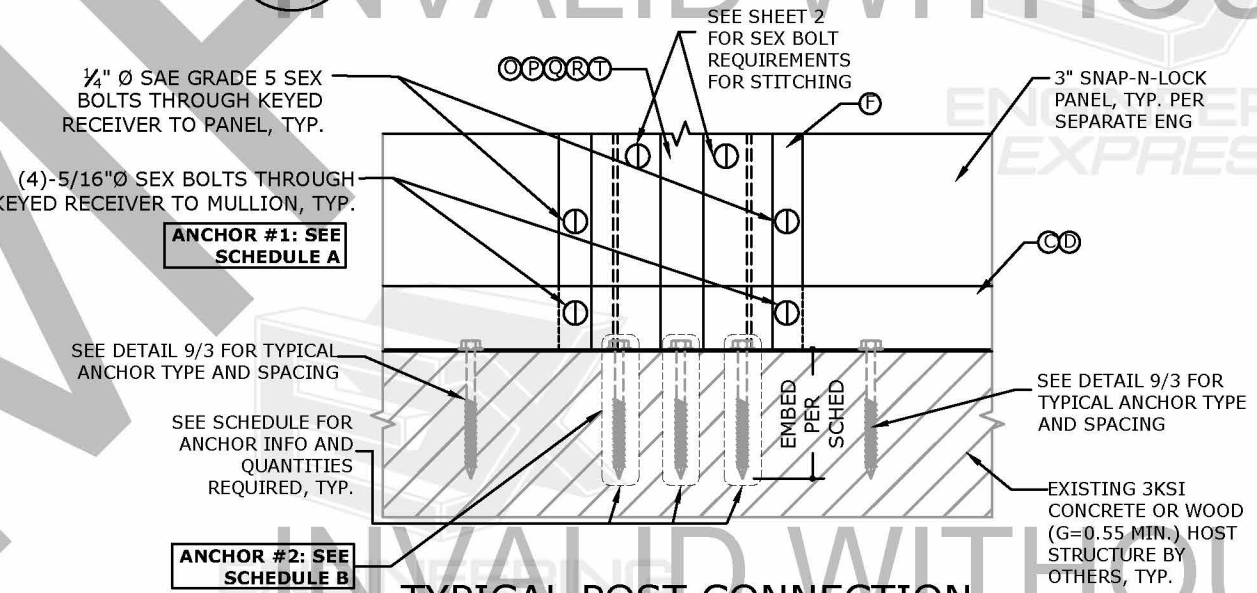
15 TYPICAL CORNER POST TIE-DOWN FOR ALL SYSTEMS
N.T.S. DETAIL

ANCHOR # 1 SCHEDULE A:

WIND TIER	ANCHOR TYPE	DESCRIPTION
up to 20 psf	1	(1)- 1/4" SAE GRADE 5 SEX BOLT WITH 1/4" SAE GRADE WASHER
from 20 psf to 30 psf	1	(1)- 3/8" SAE GRADE 5 SEX BOLT WITH 3/8" SAE GRADE WASHER



14 WIND JAMB AT PANEL FILL
N.T.S. DETAIL



16 TYPICAL POST CONNECTION FOR GLASS WALL SYSTEMS
N.T.S. DETAIL

ANCHOR #2 SCHEDULE B:

WIND TIER	ANCHOR 2 SUBSTRATE	QUANTITY REQUIRED
up to 20 psf	CONNECTION AT CONCRETE	(2)- 3/8" ITW TAPCONS WITH 1 1/2" WASHER, 2 1/2" EMBED, 3" EDGE, 4" SPACING, TYP.
	CONNECTION AT WOOD	(3)- 1/4" LAG SCREWS 1 1/2" WASHER, 2 1/2" THREAD PENETRATION, 1" EDGE, 1" SPACING
from 20 psf to 30 psf	CONNECTION AT CONCRETE	(2)- 3/8" ITW TAPCONS WITH 1 1/2" WASHER, 2 1/2" EMBED, 3" EDGE, 4" SPACING, TYP.
	CONNECTION AT WOOD	(4)- 1/4" LAG SCREWS 1 1/2" WASHER, 2 1/2" THREAD PENETRATION, 1" EDGE, 1" SPACING

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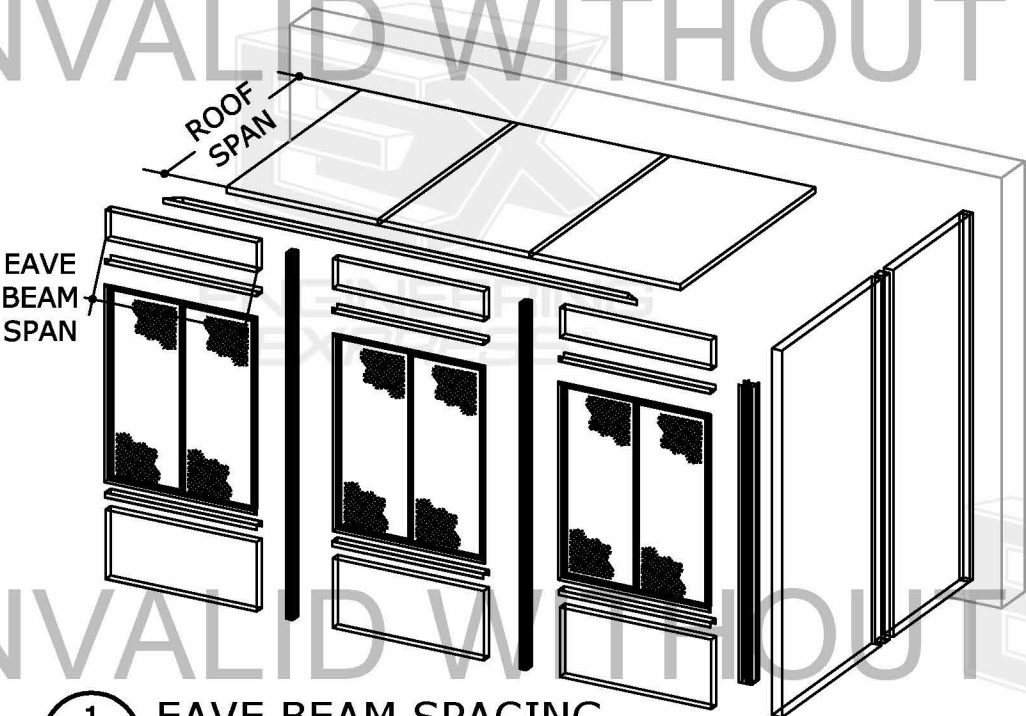
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EAVE BEAM

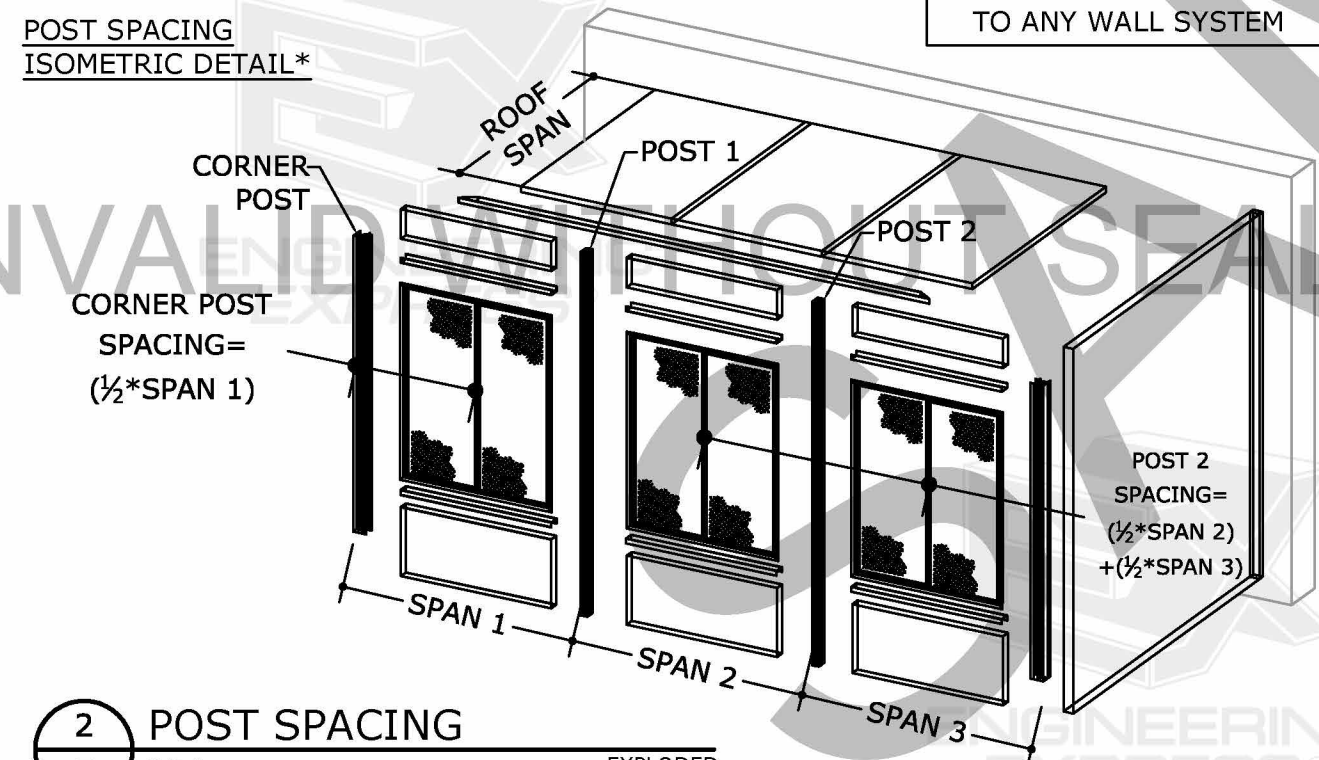
EAVE BEAM CLEAR SPAN
ISOMETRIC DETAIL*



1 EAVE BEAM SPACING
2 N.T.S.

POST HEIGHT:

POST SPACING
ISOMETRIC DETAIL*



2 POST SPACING
5 N.T.S.

*OPEN WALL SYSTEM IS SHOWN FOR CLARITY, THIS ISOMETRIC IS APPLICABLE TO ANY WALL SYSTEM

EAVE BEAM NOTES:

6" 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"

7" OR GREATER PANEL DEPTH:

EAVE BEAM SPAN= 6'-0" UP TO 60PSF
AT 16' CLEAR ROOF SPAN

SITE SPECIFIC ENGINEERING FOR
ADDITIONAL SPANS
DEFLECTION LIMIT = L/60.

*OPEN WALL SYSTEM IS SHOWN FOR CLARITY, THIS ISOMETRIC IS APPLICABLE TO ANY WALL SYSTEM

TABLES 1 & 2:

SCREEN WALL ALLOWABLE POST HEIGHT:

COLUMN TYPE	MAX ROOF SPAN S (FT)	LIVE LOAD GRAVITY (PSF)	WIND LOAD (PSF)	AVERAGE COLUMN SPACING W(FT)				
				3	4	5	6	7
3" Mod Room (Male+ Female)	12	20	20	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			30	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			40	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			50	10'-0"	10'-0"	10'-0"	10'-0"	9'-2"
		30	20	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			30	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			40	10'-0"	10'-0"	10'-0"	10'-0"	9'-8"
			50	10'-0"	10'-0"	10'-0"	9'-7"	8'-8"
		40	20	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			30	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			40	10'-0"	10'-0"	10'-0"	10'-0"	9'-1"
			50	10'-0"	10'-0"	10'-0"	9'-1"	8'-2"
	50	20	20	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			30	10'-0"	10'-0"	10'-0"	10'-0"	9'-10"
			40	10'-0"	10'-0"	10'-0"	9'-8"	8'-6"
			50	10'-0"	10'-0"	9'-11"	8'-7"	7'-7"

COLUMN TYPE	MAX ROOF SPAN S (FT)	LIVE LOAD GRAVITY (PSF)	WIND LOAD (PSF)	AVERAGE COLUMN SPACING W(FT)				
				3	4	5	6	7
3" Thermo Mod Room (Male+ Female)	12	20	20	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			30	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			40	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			50	10'-0"	10'-0"	10'-0"	10'-0"	9'-8"
		30	20	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			30	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			40	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			50	10'-0"	10'-0"	10'-0"	10'-0"	9'-8"
		40	20	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			30	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			40	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			50	10'-0"	10'-0"	10'-0"	10'-0"	9'-8"
	50	20	20	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			30	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			40	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			50	10'-0"	10'-0"	10'-0"	10'-0"	9'-8"

TABLE 1 & 2 NOTES:

- DEFLECTION LIMIT = L/60 USED IN TABLE RESULTS.
- VALUES BELOW ALLOWABLE CEILING HEIGHT INTENDED TO BE BUILT ON KNEEWALLS OR OTHER SUPPORTING STRUCTURES (CERTIFIED BY OTHERS).
- RESULTS FOR THERMALLY BROKEN POSTS SHALL BE REDUCED BY 10% TO ACCOUNT FOR THERMAL BREAK STRENGTH LOSS.

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07/28/2020

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3" MODULAR ROOM
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MASTER PLAN SHEET

DATE 06/01/20
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TABLES 3 & 4:

REMOVABLE ACRYLIC ALLOWABLE POST HEIGHT:

COLUMN TYPE	MAX ROOF SPAN S (FT)	LIVE LOAD GRAVITY (PSF)	WIND LOAD (PSF)	AVERAGE COLUMN SPACING W(FT)				
				3	4	5	6	7
3" Mod Room (Male+ Female)	12	20	20	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			30	10'-0"	10'-0"	10'-0"	9'-8"	8'-9"
			40	10'-0"	10'-0"	9'-4"	8'-4"	7'-7"
			50	10'-0"	9'-5"	8'-4"	7'-6"	6'-10"
		30	20	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			30	10'-0"	10'-0"	10'-0"	9'-2"	8'-3"
			40	10'-0"	10'-0"	9'-0"	8'-0"	7'-2"
			50	10'-0"	9'-2"	8'-0"	7'-1"	6'-5"
		40	20	10'-0"	10'-0"	10'-0"	10'-0"	9'-6"
			30	10'-0"	10'-0"	9'-11"	8'-9"	7'-9"
			40	10'-0"	9'-11"	8'-7"	7'-7"	6'-9"
			50	10'-0"	8'-10"	7'-8"	6'-9"	6'-0"
	50	20	10'-0"	10'-0"	10'-0"	10'-0"	9'-0"	9'-0"
		30	10'-0"	10'-0"	9'-6"	8'-3"	7'-3"	7'-3"
		40	10'-0"	9'-7"	8'-2"	7'-2"	6'-4"	6'-4"
		50	10'-0"	8'-7"	7'-4"	6'-5"	5'-8"	5'-8"

COLUMN TYPE	MAX ROOF SPAN S (FT)	LIVE LOAD GRAVITY (PSF)	WIND LOAD (PSF)	AVERAGE COLUMN SPACING W(FT)				
				3	4	5	6	7
3" Thermo Mod Room (Male+ Female)	12	20	20	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			30	10'-0"	10'-0"	10'-0"	9'-5"	8'-7"
			40	10'-0"	10'-0"	9'-2"	8'-3"	7'-7"
			50	10'-0"	9'-3"	8'-3"	7'-6"	6'-11"
		30	20	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			30	10'-0"	10'-0"	10'-0"	9'-8"	8'-10"
			40	10'-0"	10'-0"	9'-3"	8'-5"	7'-9"
			50	10'-0"	9'-4"	8'-4"	7'-6"	7'-0"
		40	20	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			30	10'-0"	10'-0"	9'-8"	9'-0"	9'-0"
			40	10'-0"	10'-0"	9'-3"	8'-5"	7'-9"
			50	10'-0"	9'-4"	8'-4"	7'-7"	7'-0"
	50	20	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
		30	10'-0"	10'-0"	10'-0"	9'-9"	9'-0"	9'-0"
		40	10'-0"	10'-0"	9'-3"	8'-5"	7'-9"	7'-9"
		50	10'-0"	9'-4"	8'-4"	7'-7"	7'-0"	7'-0"

TABLE NOTES:

- THESE SPANS CONSIDER A MAXIMUM OF 24" HIGH SOLID BOTTOM PANEL & 9" HEADER AREA. ALTERNATE CONFIGURATIONS REQUIRE ADDITIONAL ENGINEERING.
- DEFLECTION LIMIT = L/60 USED IN TABLE RESULTS.
- VALUES BELOW ALLOWABLE CEILING HEIGHT INTENDED TO BE BUILT ON KNEEWALLS OR OTHER SUPPORTING STRUCTURES (CERTIFIED BY OTHERS).
- RESULTS FOR THERMALLY BROKEN POSTS SHALL BE REDUCED BY 10% TO ACCOUNT FOR THERMAL BREAK STRENGTH LOSS.

TABLE 5 & 6:

OPEN WALL ALLOWABLE POST HEIGHT:

COLUMN TYPE	MAX ROOF SPAN S (FT)	LIVE LOAD GRAVITY (PSF)	WIND LOAD (PSF)	AVERAGE COLUMN SPACING W(FT)				
				3	4	5	6	7
3" Mod Room (Male+ Female)	12	20	20	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			30	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			40	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			50	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
		30	20	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			30	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			40	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			50	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
		40	20	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			30	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			40	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			50	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
	50	20	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
		30	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
		40	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
		50	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"

COLUMN TYPE	MAX ROOF SPAN S (FT)	LIVE LOAD GRAVITY (PSF)	WIND LOAD (PSF)	AVERAGE COLUMN SPACING W(FT)				
				3	4	5	6	7
3" Thermo Mod Room (Male+ Female)	12	20	20	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			30	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			40	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			50	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
		30	20	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			30	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			40	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			50	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
		40	20	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			30	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			40	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			50	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
	50	20	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
		30	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
		40	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
		50	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"

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FRANK BENNARDO, P.E.

07/28/2020

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