ROOF/SCREEN LAYOUT

BEAM

(LOADBEARING SIDE)

ALUM. KICKPLATE OPTIONAL, CHAIR-

RAIL HEIGHT NOT TO EXCEED 25%

OF TOTAL WALL HEIGHT

EXISTING

1 X 3 OPEN TO STRUCTURE

WITH 1/4" X 1 3/4" EMBED

TAPCONS OR #14 X 11/2" EMBED WOOD SCREWS 4" FROM ENDS, 24" MAX O.C.,

ADD FASTENERS 4" EACH SIDE OF CHAIR RAIL/EAVE

36" MAX WIDTH X 80" HIGH

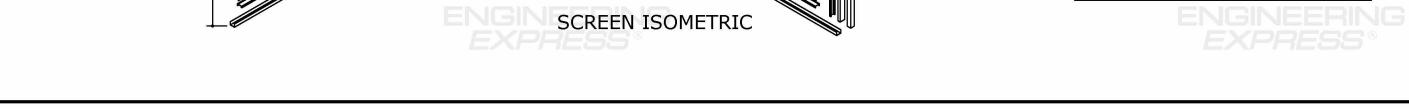
PUSH BAR, 8" KICKPLATE,

SCREEN DOOR: 1 X 2 FRAME, 3"

SELF-CLOSING, SELF-LATCHING

STRUCTURE

(BY OTHERS)



ALL BEAM

COLUMNS

OVER

SPLICES TO

BE CENTERED

(OPTIONAL IF

CARRY BEAM PER

ENGINEERING

COLUMN PER

SITE-SPECIFIC

ENGINEERING

TABLE OR

CHAIR RAIL PER DETAIL K

SHEET S3 OR SITE SPECIFIC ENGINEERING

(LOADBEARING

CONNECTING

TO WALL)

TABLE OR SITE-SPECIFIC

SIDE)

SCREEN ROOM AND EPS PANEL ROOF

MASTER PLAN SHEET

PER TABLE

SITE-SPECIFI

ENGINEERING

POST

3 X 3 CORNER

COPIES NOT VALID FOR PERMIT

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 CHAPTER 16 OF THE 2020 FLORIDA BUILDING CODE (7TH EDITION), 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.
- 2. DESIGN SHALL UTILIZE ASD DESIGN METHOD USING ASCE 7-16 OR ASCE 7-10 BASED ON APPLICABLE CODE.. *THIS DOCUMENT DOES NOT CERTIFY PRODUCT FOR USE AS A HABITABLE STRUCTURE.
- SCREEN ROOM APPLICATION ONLY. THE EXISTING STRUCTURE MUST BE CAPABLE OF SUPPORTING THE LOADED SUNROOM

- AS DETERMINED BY OTHERS. NO WARRANTY IS CONTAINED HEREIN.
 ALL EXTRUSIONS SHALL BE ALUMINUM ALLOY TYPE 6005-T5 OR BETTER.
 ALL FASTENERS TO BE ASTM F593, CW 316 STAINLESS STEEL, SAE GRADE 2 STEEL MIN,
 OR CADMIUM PLATED OR OTHER CORROSION RESISTANT MATERIAL AND SHALL COMPLY WITH THE 2015 ALUMINUM DESIGN MANUAL, THE ALUMINUM ASSOCIATION, INC., & APPLICABLE FEDERAL, STATE, AND LOCAL CODES.

GENERAL NOTES:

1) FASTENERS SHALL HAVE A HEAD AND/OR BE PROVIDED WITH ½" DIAMETER WASHER MINIMUM UNLESS NOTED OTHERWISE. FOR ALUMINUM MEMBERS ALL ANCHORS SHALL BE SPACED WITH 2xDIAMETER END DISTANCE AND 2.5xDIAMETER MIN. SPACING TO ADJACENT ANCHORS, UNLESS NOTED OTHERWISE. PROVIDE (5) PITCHES MIN PAST THE THREAD PLANE

- ALL SCREW CONNECTIONS.
 ANY FASTENER STRIPPED OR NOT ADEQUATELY HOLDING SHALL BE REPLACED.
 ALL CONCRETE ANCHORS MUST BE CARBON STEEL ITW, DEWALT, OR EQUIVALENT WITH 13/4" EMBEDMENT PAST FINISHES, 2 3" MIN. EDGE DISTANCE, FASTENED TO MINIMUM 3KSI
- UN-CRACKED CONCRETE. 4) IF REQUIRED BY CODE, THE EPS CORE SHALL BE SEPARATED FROM THE BUILDING INTERIOR BY A 15 MINUTE THERMAL BARRIER OF APPROVED 5/8 INCH GYPSUM WALLBOARD OR EQUAL. SUPERIOR MASON CAN PROVIDE UL1715 (INTERIOR) OR CLASS A(EXTERIOR)

- OTHER
 5) ALUMINUM MEMBERS IN CONTACT WITH CONCRETE & WOOD SHALL BE PROTECTED BY 'KOPPERS BITUMINOUS PAINT' OR MFR. EQUAL IN ACCORDANCE WITH APPLICABLE CODE

PANEL TO SATISFY CODE PROVIDED ALUM. & EPS MEÈT SPECS ÁBOVE.

- *KOPPERS BITUMINOUS PAINT* OR MFR. EQUAL IN ACCURDANCE WITH APPLICABLE CODE REQUIREMENTS.

 6) ELECTRICAL GROUND AND ALL RELATED WIRING AND CONSIDERATIONS TO BE DESIGNED BY OTHERS AS REQUIRED.

 7) EXISTING WOOD HOST STRUCTURE SHALL BE #2 SYP MIN. EXISTING METAL HOST STRUCTURE SHALL BE A36 STEEL OR 6063-T6 MIN ALUMINUM \$\frac{1}{2}\$" THICK MIN. EXISTING CONCRETE HOST STRUCTURE SHALL BE 3000 PSI MIN. STRUCTURAL ADHESIVE SHALL HAVE 1500 PSI MIN BOND STRENGTH, CONTINUOUS BEAD, PROVIDED AT ALL SURFACES & JOINTS TO WHERE YOU THE EXCEPT
- 8) THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC
- DOCUMENTS FOR USE IN CONJUNCTION WITH THIS DOCUMENT.

 9) ENGINEER SEAL AFFIXED HERETO VALIDATES STRUCTURAL DESIGN AS SHOWN ONLY.

 NO MEP WORK IS IMPLIED OR CERTIFIED & SHALL BE BY OTHERS. USE OF THIS SPECIFICATION BY CONTRACTOR, et al. INDEMNIFIES AND SAVES HARMLESS THIS ENGINEER FOR ALL COSTS AND DAMAGES INCLUDING LEGAL FEES AND APPELLATE FEES RESULTING FROM MATERIAL FABRICATION, SYSTEM ERECTION, AND CONSTRUCTION PRACTICES BEYOND THAT WHICH IS CALLED FOR BY LOCAL, STATE, AND FEDERAL CODES AND FROM DEVIATIONS
- 10) EXCEPT AS EXPRESSLY PROVIDED IN THIS SPECIFICATION, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.

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FOR ENGINEER CERTIFIED ORIGINALS MORE INFORMATION ABOUT THIS DOCUMENT OR SCAN THIS QR CODE

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160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-060 | (86) 306-999
TEAM@ENGINEERINGEXRESS.COM
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PRODUCT

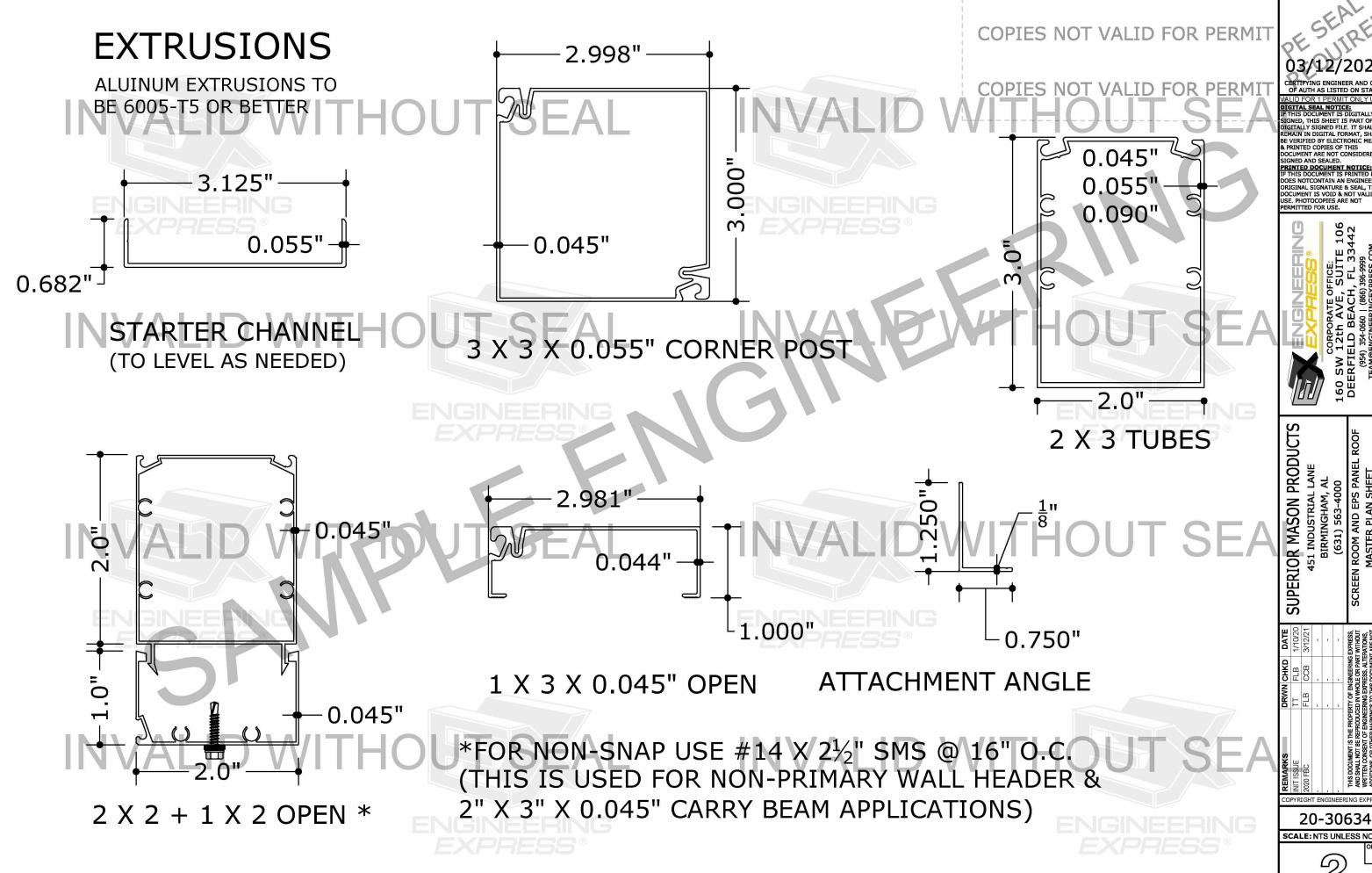
MASON

SUPERIOR

SCREEN ROOM AND EPS PANEL MASTER PLAN SHEET

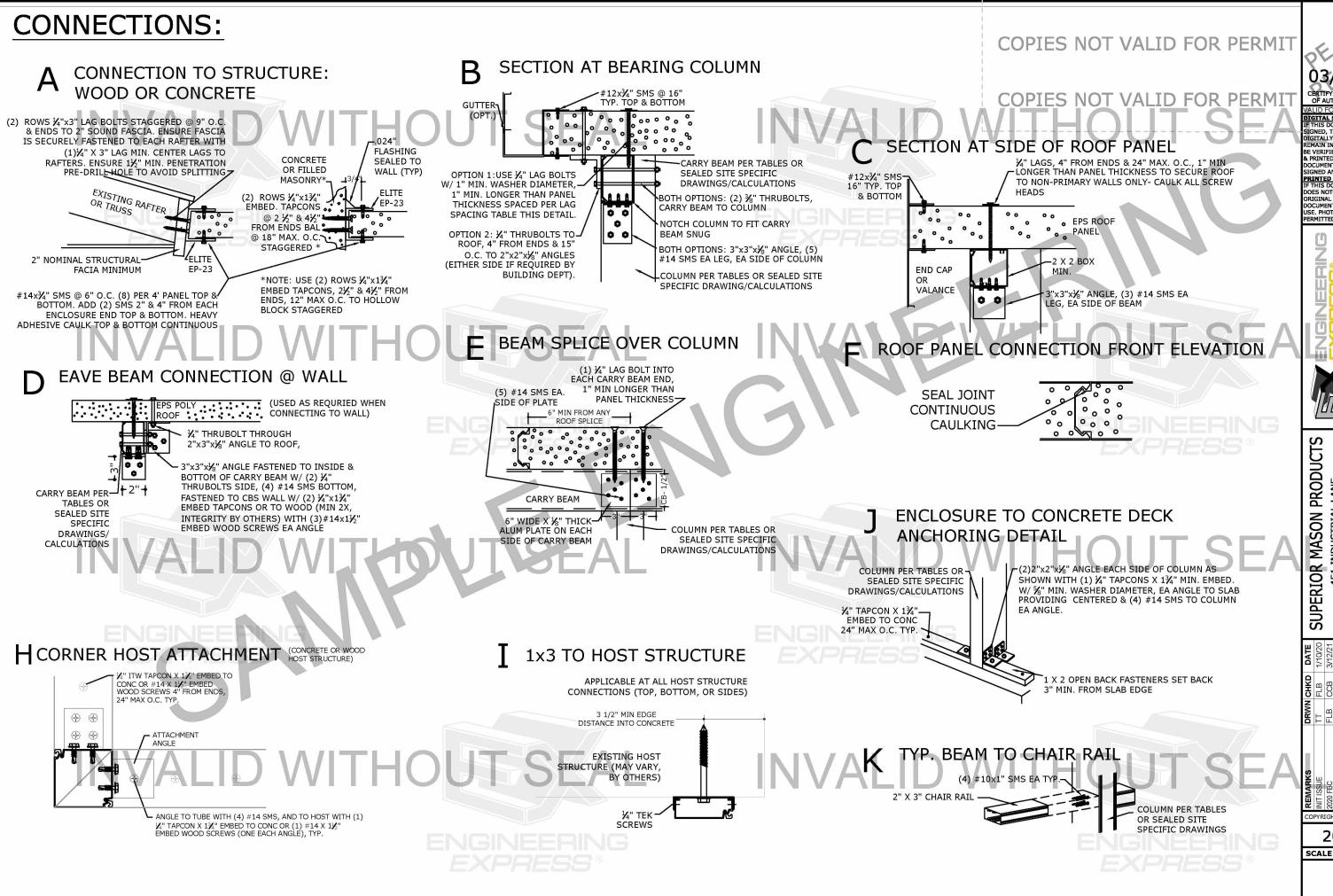
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SCALE: NTS UNLESS NOTED

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BIRMINGHAM, AL (631) 563-4000 N ROOM AND EPS PANEL F MASTER PLAN SHEET

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3

Column	Max Roof	Live Load	Wind Load	AVG Column Spacing W(ft)				
Туре	Span S (ft)	Gravity (psf)	(psf)	3 /	/4	5 /	6	8
		VAA	20	7'-0"	6'-1''	5'-4''	5'-1''	4'-3''
		V ₂ ,=3	30	5'-8"	5'-0''	4'-4''	4'-2''	-
		20	40	5'-0''	4'-4''	-	-	-
			50	4'-5"	-//	-	_	_
			20 6'-7" 5'-8" 4'-10"	4'-6''	=			
		20	30	5'-5''	4'-8''		-	-
	10	30	40	4'-8''	4'-0''	9	-	-
		7011	50	4'-2"	AC	2	-	-
	10	$=\times$	20	6'-3''	5'-3''	4'-5''	_	-
	IN	40	30 5'-1" 4'-4	4'-4''	-	_	=	
		40	40	4'-5''	H	-	-	=
			50			i-	_	-
an a		50	20	6'-0''	4'-10''	-	-	-
ä			30	4'-10''	_	-	-	-
2" x 3" x 0.045" Tube			40	4'-2"		i	-	i
9			50	-	-	-	346	-
Ö			20	6'-5"	5'-5"	4'-7''	4'-2''	-
<u>_</u>			30	5'-3"	4'-5''		-	
× 1.			40	4'-6''	-	-	-	-
2			50	4'-0''	_	-	-	-
			20	5'-9''	4'-8"	-	2	2
		30	30	4'-8''		.=	-	æ
		30	40	4'-1''	-	:-	-	-
	20		50	-	-	-	-	-
	20		20	5'-1''	-	-	-	-
		40	30	4'-2''	_	-	_	-
		40	5759657	1				

Column	Max Roof	Live Load	Wind Load	AVG Column Spacing W(ft)				
Туре	Span S (ft)	Gravity (psf)	(psf)	3	4	5	6	8
	יו ל	C	20	9'-0''	7'-10''	6'-9"	6'-4''	5'-2"
		20	30	7'-4"	6'-4''	5'-6"	5'-2"	4'-3''
			40	6'-4''	5'-6"	4'-9''	4'-6"	ì
			50	5'-8"	5'-0''	4'-3''	4'-0''	/
		30	20	8'-5''	7'-1''	6'-0''	5'-5''	4'-1''
			30	6'-10''	5'-10"	4'-10''	4'-5"	-
			40	6'-0''	5'-0"	4'-2"		- 1
	10		50	5'-4''	4'-6''	-	1	- /-
		40	20	7'-10''	6'-5"	5'-2"	4'-6"	1
			30	6'-5"	5'-3''	4'-3''	ı	<u>.</u>
3" x 3" x 0.055" Tube		40	40	5'-6"	4'-6''	8	-	-
			50	5'-0"	4'-1''	-	-	-
		20	20	7'-3"	5'-9''	4'-5"	s =	=
				6'-0''	4'-8''	=	-	i n
			40	5'-1"	4'-1"	_	-	
8			50	4'-7''	-	Η	E-	-
×			20	8'-0''	6'-8''	5'-5"	4'-10''	-
m.			30	6'-6''	5'-5"	4'-5"	-	-
×			40	5'-8''	4'-8''	-	1	-
			50	5'-1"	4'-2''	-	-/	-
EN			20	7'-0''	5'-4''	-	-	-
			30	5'-8"	4'-5"	-		-
			40	5'-0"	-	- \	-	-
	20		50	4'-5"		-	-	-
			20	5'-11"	4'-1"	-	<u> </u>	-
		40	30	4'-10''	-	<u>.</u>	-	-
			40	4'-2"	-	8	-	=
			50		-	-	-	- 5
			20	4'-10''	=:	=	:=	-
		50	30	-	-	-	-	- 1
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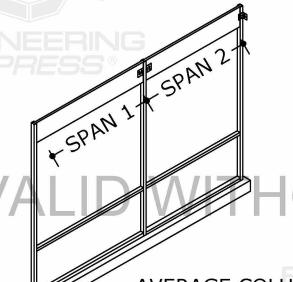
Column	Max Roof	Live Load	Wind Load	IES	v ç cal u	mn Spa	cing W(f	ĐD
Туре	Span S (ft)	Gravity (psf)	(psf)	3	4	5	6	8
			20 -	10'-0''	9'-5"	8'-1"	7'-8''	6'-3''
		20	30	8'-9''	7'-8"	6'-7''	6'-3''	5'-2''
		20	40	7'-7''	6'-8''	5'-9''	5'-5''	4'-5''
			50	6'-10''	6'-0''	5'-2''	4'-10''	- 4
			20	10'-0''	8'-7"	7'-2"	6'-7''	5'-0"
		30	30	8'-3''	7'-0''	5'-11''	5'-5''	4'-1''
\square		150	40	7'-2"	6'-1''	5'-1''	4'-8"	-
	10	l)	50	6'-5"	5'-5"	4'-7''	4'-2"	
/ / //	10		20	9'-5"	7'-9"	6'-3''	5'-6''	-
		40	30	7'-8''	6'-4''	5'-2''	4'-6''	-
			40	6'-8"	5'-6"	4'-5"	-	-
			50	6'-0"	5'-0"	-	-	-
ē			20	8'-9''	7'-0''	5'-5''	4'-5''	_
# <u>#</u>		50	30	1	5'-8"	4'-5''	-	-
3" x 3" x 0.090" Tube			40	6'-2''	5'-0"	-) [-
80			50	5'-7''	4'-5"	-		-
×			20	_	8'-0"	6'-7''	5'-10''	4'-1''
.e.	11	20	30		6'-7''	5'-5''	4'-10''	_
m m			40	000 0 0000	5'-8"	4'-8''	4'-2''	-
			50	6'-1''	5'-1"	4'-2''	-	
			20	8'-5''	6'-7''	5'-0''		
		30	30 40		5'-4"	4'-0''	-2	
			50	6'-0'' 5'-4''	4'-8'' 4'-2''		*	
	20		20	5 -4 7'-3''	5'-1"	-	=	
			30	7 -3 5'-11''	3 -1 4'-2"		-	
		40	40	5'-1"	+ -Z			E
			50	4'-7''				
		7	20	6'-0''		_	_	
		5 N M	30	4'-11"			_	_ 11
		50	40	4'-3"	= (-	_	-
			50	_	-		U	

NOTES FOR ALL TABLES

50 20

30 40 4'-6"

- 1) ROOF SPAN IS TOTAL CLEAR ROOF SPAN ACTING ON EAVE BEAM AS NOTED ON ISOMETRIC DETAIL, SHEET S1.
- 2) LIMITING VALUES MAY BE HIGHER THAN COLUMN SPACING DUE TO AVERAGING OF ADJACENT BAYS.
- 3) 2015 ALUMINUM DESIGN MANUAL, ALLOWABLE STRESS DESIGN METHOD USED IN ALL TABLES.
- 4) USE APPROPRIATE VALUES REQUIRED BY THE GOVERNING BUILDING CODES. VERIFY REQUIREMENTS WITH BUILDING DEPARTMENT BEFORE USE.
- 5) 6005-T5 ALUMINUM ALLOY OR BETTER USED IN TABLES.
- 6) DEFLECTION LIMIT = L/60 USED IN TABLES.
- 7) COLUMN SPACING IS HALF THE DISTANCE TO THE LEFT ADDED TO HALF THE DISTANCE TO THE RIGHT OF THE COLUMN (AVERAGE COLUMN SPACING, SEE ILLUSTRATION).
- 8) VALUES BELOW ALLOWABLE CEILING HEIGHT INTENDED TO BE BUILT ON KNEEWALLS OR OTHER SUPPORTING STRUCTURES (SUPPORTING STRUCTURES CERTIFIED BY OTHERS).
- 9) LOAD TABLES TO BE SELECTED BY A SITE SPECIFIC DESIGN PROFESSIONAL.



AVERAGE COLUMN SPACING = SPAN 1 + SPAN 2 /2

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CARRY BEAM ALLOWABLE SPAN TABLE:

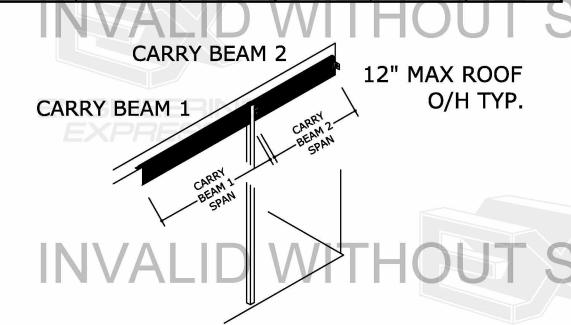
BEAM	ROOF LOAD	MAX BEAM SPAN						
TYPE	(PSF)	3	4	5	6	8		
×	20	9'-4''	8'-6''	7'-11''	7'-5''	6'-7''		
x 3") 0.045" Tube	30	7'-7''	7'-0''	6'-5''	6'-0''	5'-5''		
2" x 3" > 0.045" Tube	40	6'-7''	6'-0''	5'-7''	5'-3''	4'-8''		
2	50	5'-11''	5'-5''	5'-0''	4'-8''	4'-2''		

BEAM	ROOF LOAD	MAX BEAM SPAN						
TYPE	(PSF)	3	4	5	6	8		
Y	20	11'-1''	10'-1''	9'-4''	8'-9"	7'-10''		
x 3" 3 055" ube	30	9'-0''	8'-3''	7'-8''	7'-2"	6'-5''		
3" x 0.0 Tu	40	7'-10''	7'-2"	6'-7''	6'-2"	5'-6''		
	50	7'-0''	6'-5"	6'-0''	5'-6"	5'-0"		

BEAM	ROOF LOAD	MAX BEAM SPAN						
TYPE	(PSF)	3	4	5	6	8		
×	2 0	13'-3''	12'-1"	11'-2"	10'-6''	9'-4''		
3". 90"	30	10'-10''	9'-11''	9'-2''	8'-7''	7'-8"		
3" x 0.0	40	9'-4''	8'-7''	8'-0''	7'-5"	6'-8''		
m	50	8'-5''	7'-8''	7'-1''	6'-8''	6'-0''		

WIND SPEED TO PRESSUE CONVERSION GUIDE

	WIND	ASCE	I D V	PERMIT			
5	SPEED	EXPOSURE	ZON	VE 4	ZOI	NE 5	$S \vdash A$
	(MPH)	CATEGORY	UP (+)	DOWN (-)	UP (+)	DOWN (-)	
		В	8.9	-13.8	8.9	-17.1	
	120	С	13.1	-20.4	13.1	-25.2	
		D	15.9	-24.8	15.9	-30.6	
		В	10.4	-16.2	10.4	-20.0	
	130	С	15.4	-24.0	15.4	-29.6	
		D	18.6	-29.1	18.6	-35.9	
		В	12.1	-18.8	12.1	-23.2	
	140	C	17.8	-27.8	17.8	-34.3	
		D_	21.6	-33.7	21.6	-41.7	$S \vdash \Delta$
	1.1	В	13.8	-21.6	13.8	-26.7	
	150	C	20.4	-31.9	20.4	-39.4	
		D	24.8	-38.7	24.8	-47.8	
		В	15.8	-24.6	15.8	-30.4	RING
7	160	С	8.2	-12.8	8.2	-15.8	5 ®
		D	28.2	-44.1	28.2	-54.4	
		В	17.8	-27.8	17.8	-34.3	
	170	С	26.3	-41.0	26.3	-50.6	
		D	_31.9	49.8	31.9	-61.4	



CARRY BEAM SPAN DEFINED: EACH CARRY BEAM SHALL BE DESIGNED SEPARATELY

SUPERIOR MASON PRODUCTS

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