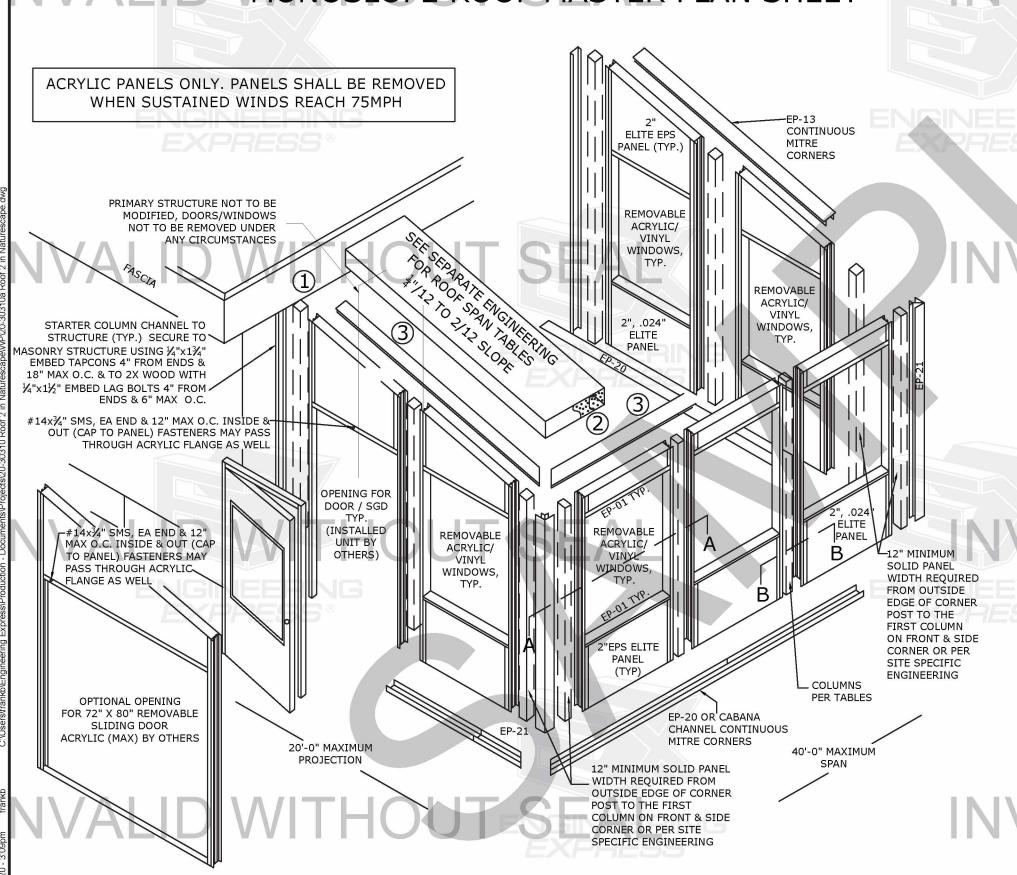
ELITE ALUMINUM CORPORATION

2" NATURESCAPE REMOVABLE ACRYLIC ROOM MONOSLOPE ROOF MASTER PLAN SHEET



COPIES NOT VALID FOR PERMIT

- POSITIVE & NEGATIVE DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED BY OTHERS ON A JOB-SPECIFIC BASIS USING ASD METHOD OF ASCE 7-16 OR ASCE
- THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE STRUCTURAL REQUIREMENTS OF THE 7TH EDITION FLORIDA BUILDING CODE (2020), 6TH EDITION FLORIDA BUILDING CODE (2017), 2012/2015/2018 INTERNATIONAL BUILDING CODES, 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. THIS DOCUMENT SHALL NOT BE USED OR REPRODUCED WITHOUT THE ORIGINAL SIGNATURE & RAISED SEAL OF FRANK L. BENNARDO, P.E. & MUST HAVE 'ELITE' IN RED ACROSS THE FACE OF THIS DRAWING. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.
- THE EXISTING STRUCTURE MUST BE CAPABLE OF SUPPORTING THE LOADED NATURESCAPE STRUCTURE AS DETERMINED BY OTHERS OR BY SPECIAL ENGINEERING BY UNDERSIGNED ENGINEER ATTACHED HERETO. NO WARRANTY IS CONTAINED HEREIN.
- EXISTING WOOD HOST STRUCTURE SHALL BE #2 SYP MIN. EXISTING CONCRETE HOST STRUCTURE SHALL BE 3000 PSI MIN. STRUCTURAL ADHESIVE SHALL HAVE 1500 PSI MIN BOND

MATERIALS

5. COMPOSITE ROOF AND WALL MEMBERS SHALL BE CONSTRUCTED USING MINIMUM TYPE 3005-H25
ALUMINUM FACINGS, (1) OR (2) PCF ASTM C-578 CARPENTER BRAND EPS. ADHERE TO ALUMINUM
FACINGS WITH ASHLAND CHEMICAL 2020D ISO GRIP, FABRICATION TO BE BY ELITE PANEL PRODUCTS ONLY IN ACCORDANCE WITH APPROVED FABRICATION METHODS & SPANS.

- ALL EXTRUSIONS SHALL BE ALUMINUM ALLOY TYPE 6063-T6 OR BETTER.
 THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALUMINUM MEMBERS FROM DISSIMILAR METALS
- 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. ELITE CAN PROVIDE UL1715 (INTERIOR) OR CLASS A(EXTERIOR) PANEL TO SATISFY CODE PROVIDED

- ALL FASTENERS TO BE ASTM F593, CW 316 STAINLESS STEEL, SAE GRADE 5 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.
- 10. 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 FOR ALL SCREW
- 11. ANY FASTENER STRIPPED OR NOT ADEQUATELY HOLDING SHALL BE REPLACED
- 12. ALL TAPCONS MUST BE ITW, DEWALT CARBON STEEL TAPCONS OR EQUIVALENT W/ 1¾" EMBED, 3" MIN. EDGE DISTANCE, FASTENED TO MINIMUM 3192PSI MIN., UN-CRACKED CONCRETE.

- OTHER:
 SOLID WALL PANELS SHALL NOT BE GREATER THAN 50% OF THE TOTAL WALL HEIGHT. 4. ACRYLIC WINDOWS & DOORS SHALL BE BY OTHERS IN ACCORDANCE WITH REQUIRED WIND ENCLOSURE IS NOT IMPACT RESISTANT.
 THIS ENCLOSURE IS NON-HABITABLE SPACE.
- 16. ELECTRICAL GROUND AND ALL RELATED WIRING AND CONSIDERATIONS TO BE DESIGNED BY
- 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 FOR USE IN CONJUNCTION WITH THIS DOCUMENT.
- ENGINEER SEAL AFFIXED HERETO VALIDATES STRUCTURAL DESIGN AS SHOWN ONLY. 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 OF THIS PLAN.
- EXCEPT AS EXPRESSLY PROVIDED IN THIS SPECIFICATION, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.

VISIT ECALC.IO/30310

FOR ENGINEER CERTIFIED ORIGINALS, BETTER TABLE ANSWERS, & MORE INFORMATION ABOUT THIS DOCUMENT OR SCAN THE QR CODE TO THE RIGHT

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



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MONOSLOPE ROOF 'NATURESCAPE ACRYLIC OF MASTER PLAN SHEET

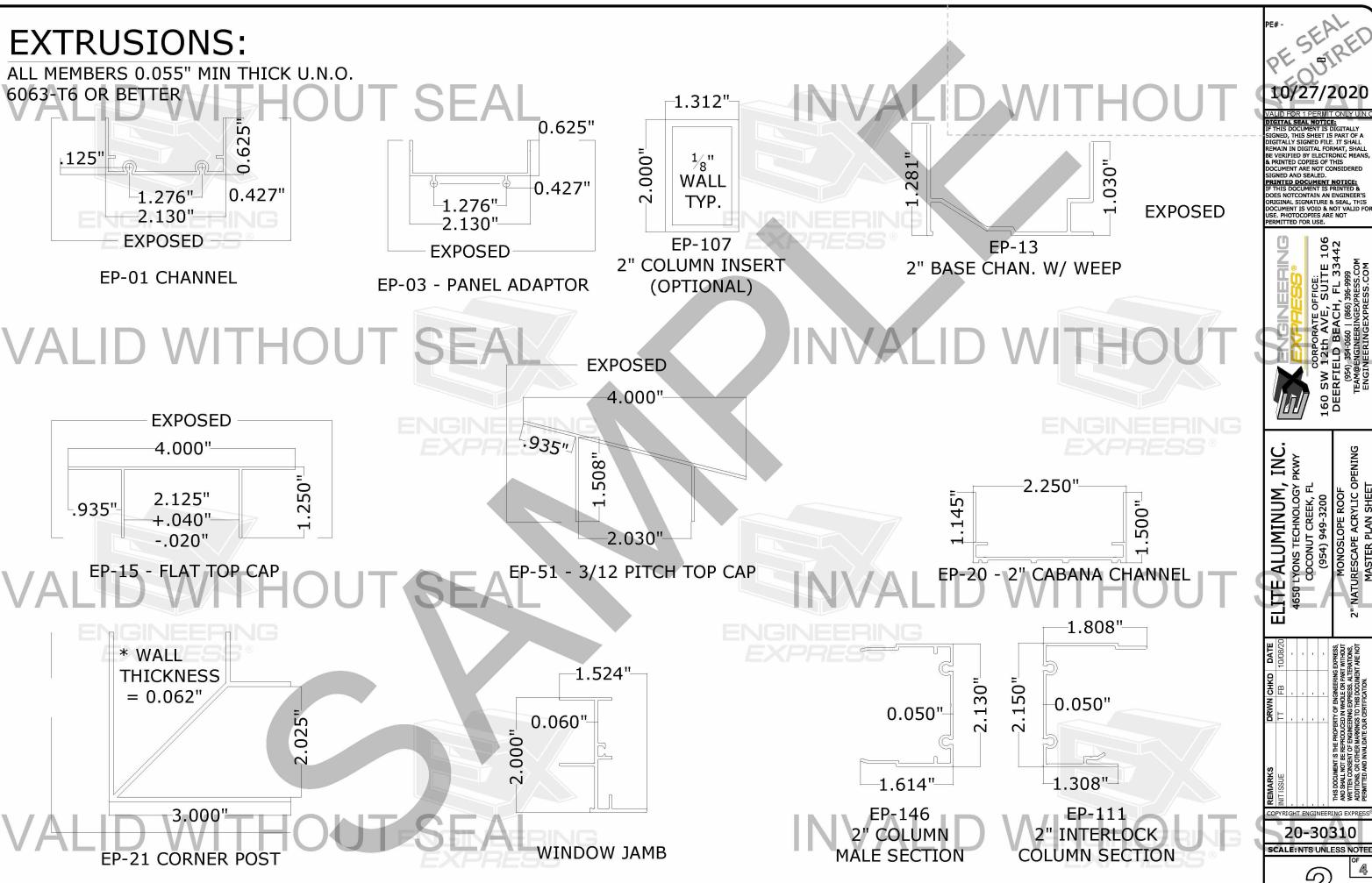
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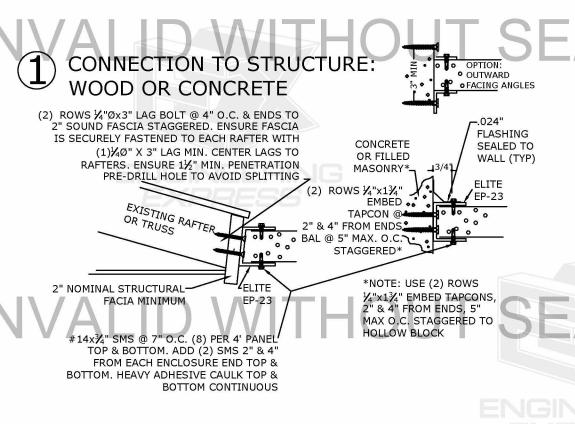




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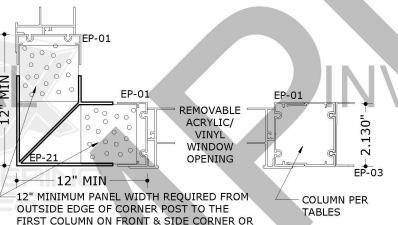
CONNECTIONS:



ROOF PANEL CONNECTION FRONT ELEVATION

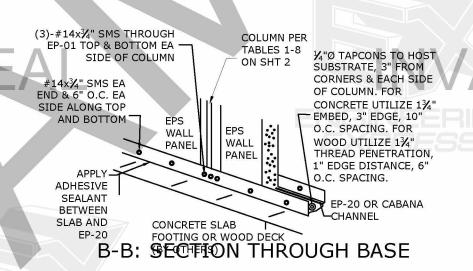
> SEE ROOF PANEL TABLE FOR SIZE & THICKNESS **SEAL JOINT** CONTINUOUS CAULKING

ROOF SPAN PER APPROVED ENGINEERING ROOF PITCH \(\frac{1}{4}\)"/12 TO 2/12

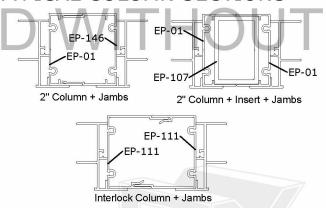


A-A: WALL SECTION THRU WINDOW

PER SITE SPECIFIC ENGINEERING



EP-20 OR CABANA CHANNEL



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TYPICAL ELEVATION SEE TABLES EP-13, 14, OR CABANA CHANNEL "MIN EP-03 2" WALL PANEL 6" MIN. DEPTH AT .23/4 LOADBEARING WALL WINDOW HEIGHT HEIGHT COLUMN PER TABLES FOR REMOVABLE ACRYLIC/VINYL NOTE: WINDOW, TYP. AVG COL WIDTH IS FROM USE CONTINUOUS BEAD - ACRYLIC STRUCTURAL ADHESIVE WINDOW FOR EP-01,03 TO WALL CENTER PANEL INSIDE & OUTSIDE TO NEXT WINDOW CENTER EP-03 OPTIONAL 2" WALL PANEL OR REMOVABLE ACRYLIC/VINYL

WALL TO ROOF SECTION

OPTION 1:USE 1/4"Ø LAG BOLTS W/ 1" MIN. WASHER DIAMETER, 1" MIN. LONGER THAN PANEL THICKNESS SPACED 3" FROM CORNERS AND EACH SIDE

OPTION 2: ¼"Ø THRUBOLTS TO ROOF & EP-13(OR EP-14), SPACE -12" MAX O/H-PER BOLT SPACING TABLE THIS-DETAIL TO 2"x2"x1/4" ANGLES (EITHER SIDE) GUTTER 1/8"x11/2" ALUM. 3" OR 4" EPS CONTINUOUS PLATE PANEL, TYP. PITCHED UNDER EP-13 (& EP-14) ·10 o FND CABANA CHANNEL EP-13, OR EP-14 L#12x¾" SMS, EA END & 6" ~#12x¾" SMS, AT PITCH 16" MAX O.C. **TOP & BOTTOM** #14x3/4" SMS EA END & 6" O.C. EA SIDE ADD (3) #14x3/4" SMS WINDOW/ EACH EP-01 TOP & BOTTOM DOOR

OPENING #14x3/4" SMS, EA END & 12" MAX O.C. INSIDE & OUT (CAP TO PANEL) FASTENERS MAY PASS THROUGH ACRYLIC FLANGE AS WELL

TYPICAL COLUMN SECTIONS

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MONOSLOPE ROOF "NATURESCAPE ACRYLIC OF MASTER PLAN SHEET

ROOF LOAD WIND LOAD 10, 20, 30, 40

	RU	JF LUAD	<u> VVIND</u>	WIND LOAD 10, 20, 30,				40
Column Max Roof		Windload	Wind Load	AVG Column Spacing W(ft)				
Туре	Span S(ft)	(psf)	(psf)	2	3	4	5	6
			10	10'-0''	10'-0''	9'-2"	8'-7''	7'-9''
		20	10	10'-0''	10'-0''	9'-2"	8'-7"	7'-9''
		20	10	10'-0''	10'-0''	9'-2"	8'-7''	7'-9''
			10	10'-0''	10'-0''	9'-2"	8'-7''	7'-9''
	1		10	10'-0''	10'-0''	8'-5"	7'-7''	6'-8''
	L	30	10	10'-0''	10'-0''	8'-5"	7'-7''	6'-8''
		30	10	10'-0''	10'-0''	8'-5"	7'-7''	6'-8''
	10		10	10'-0''	10'-0''	8'-5"	7'-7''	6'-8''
Naturescape 2" (Female+Male+Jamb)	EN	40	10	10'-0''	9'-7"	7'-7''	6'-7''	5'-7''
			10	10'-0''	9'-7"	7'-7''	6'-7''	5'-7''
			10	10'-0''	9'-7"	7'-7''	6'-7''	5'-7''
			10	10'-0''	9'-7"	7'-7''	6'-7''	5'-7''
		50	10	10'-0''	9'-0"	6'-10''	5'-8''	4'-5''
E			10	10'-0''	9'-0"	6'-10''	5'-8''	4'-5''
<u>+</u>		30	10	10'-0''	9'-0"	6'-10''	5'-8''	4'-5''
ma_			10	10'-0''	9'-0"	6'-10''	5'-8''	4'-5''
- F		20	10	10'-0''	9'-10''	7'-11"	7'-0''	6'-0''
5			10	10'-0''	9'-10''	7'-11"	7'-0''	6'-0''
g e			10	10'-0''	9'-10"	7'-11''	7'-0''	6'-0''
urescape	20	30	10	10'-0''	9'-10"	7'-11"	7'-0''	6'-0''
			10	10'-0''	8'-7"	6'-5''	5'-2''	-
Sa			10	10'-0''	8'-7"	6'-5''	5'-2''	-
			10	10'-0''	8'-7''	6'-5''	5'-2''	-
			10	10'-0''	8'-7''	6'-5''	5'-2''	_
		40	10	10'-0''	7'-4''	5'-0''	- 2.	-
			10	10'-0''	7'-4''	5'-0''	=:	-
			10	10'-0''	7'-4''	5'-0''	-	· - .
			10	10'-0''	7'-4''	5'-0''		
		50	10	9'-6''	6'-1''	-		-
			10	9'-6''	6'-1''		-2	-
			10	9'-6''	6'-1''	=	-8	=
			10	9'-6"	6'-1''	_	-01	_

Column	Max Roof	Windload	Wind Load		AVG Col	umn Spa	cing W(ft)
Туре	Span S(ft)	psf)	(psf)	2	3	4	5	6
	_ /\		10	10'-0''	10'-0''	9'-5"	8'-10''	8'-1''
		20	10	10'-0''	10'-0"	9'-5"	8'-10''	8'-1"
		20	10	10'-0''	10'-0"	9'-5"	8'-10''	8'-1"
	10		10	10'-0''	10'-0''	9'-5''	8'-10''	8'-1''
		30	10	10'-0''	10'-0''	8'-9"	8'-0''	7'-1''
			10	10'-0''	10'-0"	8'-9"	8'-0''	7'-1''
			10	10'-0''	10'-0"	8'-9''	8'-0''	7'-1"
			10	10'-0''	10'-0''	8'-9''	8'-0''	7'-1''
			10	10'-0''	10'-0"	8'-0''	7'-1''	6'-1''
		40	10	10'-0''	10'-0''	8'-0''	7'-1''	6'-1"
d m		40	10	10'-0''	10'-0"	8'-0''	7'-1''	6'-1"
+ <u>+</u> a			10	10'-0''	10'-0''	8'-0''	7'-1''	6'-1"
퉅			10	10'-0''	9'-4''	7'-3''	6'-2"	5'-1"
킁			10	10'-0''	9'-4''	7'-3''	6'-2"	5'-1"
2		50	10	10'-0''	9'-4''	7'-3''	6'-2"	5'-1"
ě			10	10'-0''	9'-4''	7'-3''	6'-2"	5'-1"
ıte	A	20	10	10'-0''	10'-0''	8'-3"	7'-4''	6'-5"
			10	10'-0''	10'-0"	8'-3"	7'-4''	6'-5''
3e 2			10	10'-0''	10'-0"	8'-3"	7'-4''	6'-5"
<u> </u>			10	10'-0''	10'-0''	8'-3''	7'-4''	6'-5"
Naturescape 2" Interlock Column+Jamb			10	10'-0''	9'-1"	7'-0''	5'-9''	4'-7"
lati			10	10'-0''	9'-1"	7'-0''	5'-9"	4'-7"
ž 20			10	10'-0"	9'-1"	7'-0''	5'-9''	4'-7"
			10	10'-0''	9'-1"	7'-0''	5'-9''	4'-7''
	20	40	10	10'-0''	8'-0"	5'-7''	4'-2''	-
			® 10	10'-0''	8'-0"	5'-7''	4'-2''	-
			10	10'-0''	8'-0"	5'-7''	4'-2''	-
			10	10'-0''	8'-0"	5'-7''	4'-2''	-
		50	10	10'-0''		4'-4''	-/	_
			10	10'-0''	6'-10''		-	-
			10	10'-0''		200 10	-	2
			10		6'-10"		_	_

Column	Max Roof	Windload	Wind Load	AVG Column Spacing W(ft)				
Type	Span S(ft)	(psf)	(psf)	2	3	4	5	6
	A		10	10'-0''	10'-0''	10'-0''	10'-0''	10'-0''
N N		20	10	10'-0"	10'-0''	10'-0''	10'-0''	10'-0''
_		20	10	10'-0''	10'-0''	10'-0''	10'-0''	10'-0''
		_	10	10'-0''	10'-0''	10'-0''	10'-0''	10'-0''
			10	10'-0''	10'-0''	10'-0''	10'-0''	10'-0''
	10	30	10	10'-0''	10'-0''	10'-0''	10'-0''	10'-0''
			10	10'-0''	10'-0''	10'-0''	10'-0''	10'-0''
			10	10'-0''	10'-0''	10'-0''	10'-0''	10'-0''
		40	10	10'-0''	10'-0''	10'-0''	10'-0''	9'-9''
(q			10	10'-0''	10'-0''	10'-0''	10'-0''	9'-9"
am			10	10'-0''	10'-0''	10'-0''	10'-0''	9'-9"
rlock+Ja			10	10'-0''	10'-0''	10'-0''	10'-0''	9'-9''
		50	10	10'-0''	10'-0''	10'-0''	10'-0''	8'-9"
ıte			10	10'-0''	10'-0''	10'-0''	10'-0''	8'-9''
-			10	10'-0''	10'-0''	10'-0''	10'-0''	8'-9"
nale			10	10'-0''	10'-0''	10'-0''	10'-0''	8'-9"
Fen		20	10	10'-0''	10'-0''	10'-0''	10'-0''	10'-0''
(2*			10	10'-0''	10'-0''	10'-0''	10'-0''	10'-0"
2"			10	10'-0''	10'-0''	10'-0''	10'-0''	10'-0''
Naturescape 2" (2*Female+Interlock+Jamb)		<u> </u>	10	10'-0'	10'-0''	10'-0''	10'-0''	10'-0"
		30	10	10'-0''	10'-0''	10'-0''	9'-7''	8'-2"
ture			10	10'-0''	10'-0''	10'-0''	9'-7"	8'-2"
Nai			10	10'-0''	10'-0''	10'-0''	9'-7"	8'-2"
			10	10'-0''	10'-0''	10'-0''	9'-7''	8'-2"
		40	10	10'-0''	10'-0''	9'-7''	8'-0"	6'-3''
			10	10'-0''	10'-0''	9'-7"	8'-0''	6'-3''
			10	10'-0''	10'-0''	9'-7''	8'-0''	6'-3''
			10	10'-0''	10'-0''	9'-7''	8'-0''	6'-3''
		50	10	10'-0''	10'-0''	8'-2''	6'-3''	4'-4''
			10	10'-0''	10'-0''	8'-2''	6'-3''	4'-4''
			10	10'-0''	10'-0''	8'-2''	6'-3''	4'-4''
	17/		10	10'-0''	10'-0''	8'-2''	6'-3''	4'-4''

COLUMN TABLE NOTES:

- 2015 ALUMINUM DESIGN MANUAL, ALLOWABLE STRESS DESIGN METHOD USED IN ALL TABLES.
- 2. USE APPROPRIATE TABLE REQUIRED BY THE GOVERNING LOCAL BUILDING CODES. VERIFY REQUIREMENTS WITH BUILDING DEPARTMENT.
- 3. DEFLECTION LIMIT = L/60 USED IN TABLES. RESULTS NOT TO BE USED WITH GLASS WALLS.
- COLUMNS NOTED AS SUCH HAVE BEEN DESIGNED WITH THE JAMB OF AN ACRYLIC WINDOW MANUFACTURED BY CUSTOM WINDOWS. WINDOWS MAY BE EXCHANGED WITH EQUIVALENT OR STRONGER JAMBS, AS VERIFIED BY OTHERS.
- 5. COLUMN SPACING IS HALF THE DISTANCE TO THE LEFT ADDED TO HALF THE DISTANCE TO THE RIGHT OF THE BEAM (AVERAGE COLUMN SPACING, SEE ILLUSTRATION).
- VALUES BELOW ALLOWABLE CEILING HEIGHT INTENDED TO BE BUILT ON KNEEWALLS OR OTHER SUPPORTING STRUCTURES (CERTIFIED BY OTHERS).
- 7. IF USED, THERMALLY BROKEN COLUMNS SHALL HAVE THEIR MAX. ALLOWABLE HEIGHT REDUCED BY 10% (i.e. 9FT COLUMN SHALL BE REDUCED TO 8'-1")

ADD AVG COLUMN SPACING CHART HERE (SUNROOM)

NO BEAM TABLES, I MADE

ELITE ALUMINUM, INC.

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