

# ELITE 2000 GABLE SCREEN WALL SYSTEM

## GENERAL NOTES:

1) THIS STRUCTURE HAS BEEN DESIGNED & COMPLIES WITH THE REQUIREMENTS OF THE 2014 FLORIDA BUILDING CODE. STRUCTURE SHALL BE FABRICATED IN ACCORDANCE WITH ALL GOVERNING CODES. CONTRACTOR SHALL INVESTIGATE AND CONFORM TO ALL LOCAL BUILDING CODE AMENDMENTS WHICH MAY APPLY. DESIGN CRITERIA OR SPANS BEYOND STATED HEREIN MAY REQUIRE ADDITIONAL SITE SPECIFIC SEALED ENGINEERING. ALL LOADS BASED ON SCREENS AT LEAST 60% OPEN, CATEGORY II,  $K_d=0.85$ , PARTIALLY ENCLOSED ( $G_{cpi}=+/-0.55$ ), 15' MRH PER FBC TABLE 2002.4(1), CATEGORY II PER AAMA/NPEA/NSA 2100-02, AND ASCE 7-10 AS APPLICABLE.

\*\* THIS DOCUMENT SHALL NOT BE USED OR REPRODUCED WITHOUT THE ORIGINAL SIGNATURE & RAISED SEAL OF C.T. "GUS" TARNOWSKI, P.E. & MUST HAVE 'ELITE' IN RED ACROSS THE FACE OF THIS DRAWING. ALTERATIONS, ADDITIONS, HIGHLIGHTING, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

2) THE EXISTING STRUCTURE MUST BE CAPABLE OF SUPPORTING THE LOADED COMPOSITE ROOF-SCREEN WALL STRUCTURE AS DETERMINED BY OTHERS OR BY SPECIAL ENGINEERING BY UNDERSIGNED ENGINEER ATTACHED HERETO. NO WARRANTY IS CONTAINED HEREIN.

3) COMPOSITE ROOF AND WALL MEMBERS SHALL BE CONSTRUCTED USING MINIMUM TYPE 3005-H25 ALUMINUM FACINGS, (1) OR (2) PCF ASTM C-578-83 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.

4) ALL EXTRUSIONS SHALL BE ALUMINUM ALLOY TYPE 6063-T6 ONLY.

5) ALL FASTENERS TO BE 2024-T4 OR 7075-T73 ALLOY, NON-MAGNETIC STAINLESS STEEL, SAE GRADE 5 STEEL MIN, OR CADMIUM PLATED OR OTHER CORROSION RESISTANT MATERIAL AND SHALL COMPLY WITH 2010 ALUMINUM DESIGN MANUAL- SECTION 5, THE ALUMINUM ASSOCIATION, INC., & APPLICABLE FEDERAL, STATE, AND LOCAL CODES.

6) FASTENERS SHALL HAVE A 1/2" DIA HEAD AND/OR BE PROVIDED WITH 1/2" DIAMETER WASHER MINIMUM UNLESS NOTED OTHERWISE.

7) ALL CONNECTIONS SHALL BE BOLTED OR FASTENED WITH SHEET METAL SCREWS AS SHOWN AND IN ACCORDANCE WITH PROPER FASTENING METHODS AND CODES. ANY FASTENER STRIPPED OR NOT ADEQUATELY HOLDING SHALL BE REPLACED.

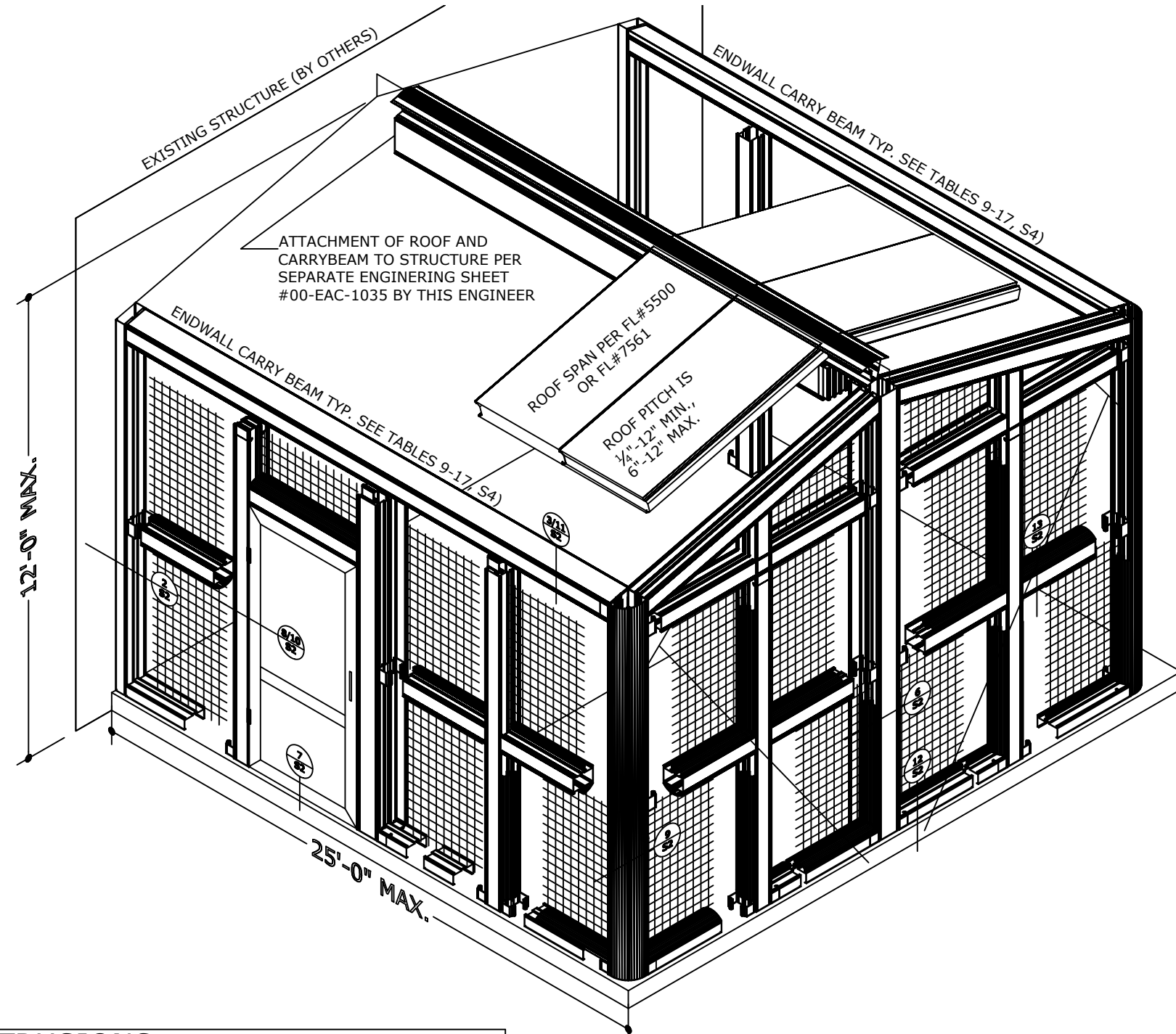
8) THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALUMINUM MEMBERS FROM DISSIMILAR METALS TO PREVENT ELECTROLYSIS.

9) ALL TAPCONS MUST BE ITW CARBON STEEL TAPCONS OR EQUIVALENT W/ 1 3/4" EMBED, 3" MIN. EDGE DISTANCE (UNLESS NOTED OTHERWISE), FASTENED TO MINIMUM 3000PSI CONCRETE.

10) MAXIMUM COLUMN SPACING = 8FT, MAX COLUMN HEIGHT = 12FT, MAX LIVE LOAD = 30PSF, MAX WIND VELOCITY & EXPOSURE = 180MPH, 'D', CONNECTIONS VALID UP TO MAX 6IN. ROOF SPAN PER ELITE ROOF FLORIDA STATEWIDE APPROVED SPAN TABLE. SITE SPECIFIC ENGINEERING REQUIRED FOR ANY DETAIL WHICH DEVIATES FROM THIS PLAN OR BEYOND THESE LIMITATIONS.

11) 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.

12) EXCEPT AS EXPRESSLY PROVIDED IN THIS SPECIFICATION, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.



## EXTRUSIONS

6063-T6 ALLOY

<p>1 CARRY BEAMS/ COLUMNS/ MISC</p> <p>POOL BEAM USED FOR COLUMNS ONLY</p>	<p>2 CONNECTING BRACKET</p>	<p>3 OPEN BACK</p>	<p>4 ROUNDED CLIPS</p>	<p>TAPERED CLIPS</p>	<p>5 CORNER POSTS</p>	<p>6 FLAT CONNECTOR</p>	
<p>7 DOOR JAMBS</p>	<p>8 BOTTOM DOOR SWEEP</p>	<p>9 FLAT ADAPTOR</p>	<p>10 1/2 PITCH ROOF ADAPTOR</p>	<p>11 3/2 PITCH ROOF ADAPTOR</p>	<p>12 VARIABLE DEGREE CORNER POST</p>	<p>13 45 DEGREE CORNER POST</p>	<p>14 2.5 X 2 ROUNDED POST</p>

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VALID ONLY WITH RAISED ENGINEER SEAL

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1 OF 4  
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# END WALL CARRY BEAM CLEAR SPAN TABLE:

**TABLE 9: 130MPH, EXP 'C', 140MPH, EXP 'B'**

SCREEN WALL CARRY BEAM SPAN TABLE:							
BEAM	ROOF CLEAR SPAN						
	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	22'-0"
2.5x1.5	4'-9"	4'-6"	4'-2"	4'-0"	3'-9"	3'-7"	3'-4"
2.5x2.5	5'-10"	5'-5"	5'-1"	4'-9"	4'-6"	4'-4"	4'-0"
2.5x2.5 HVY	7'-8"	7'-4"	6'-10"	6'-7"	6'-2"	6'-0"	5'-6"
2.5x4	7'-8"	7'-2"	6'-8"	6'-5"	6'-0"	5'-9"	5'-4"
2.5x6	8'-0"	8'-0"	8'-0"	8'-0"	7'-9"	7'-6"	6'-10"
2.5x8	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"
2.5x10	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"

**TABLE 11: 150MPH, EXP 'C', 160MPH, EXP 'B'**

SCREEN WALL CARRY BEAM SPAN TABLE:							
BEAM	ROOF CLEAR SPAN						
	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
2.5x1.5	4'-7"	4'-4"	4'-1"	3'-10"	3'-7"	3'-6"	3'-5"
2.5x2.5	5'-8"	5'-4"	5'-0"	4'-8"	4'-6"	4'-4"	4'-1"
2.5x2.5 HVY	7'-8"	7'-4"	6'-9"	6'-6"	6'-1"	5'-10"	5'-7"
2.5x4	7'-6"	7'-0"	6'-7"	6'-2"	5'-10"	5'-8"	5'-5"
2.5x6	8'-0"	8'-0"	8'-0"	8'-0"	7'-7"	7'-4"	7'-0"
2.5x8	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"
2.5x10	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"

**TABLE 13: 170MPH, EXP 'C'**

SCREEN WALL CARRY BEAM SPAN TABLE:							
BEAM	ROOF CLEAR SPAN						
	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	17'-0"	18'-0"
2.5x1.5	4'-6"	4'-3"	4'-0"	3'-9"	3'-7"	3'-6"	3'-5"
2.5x2.5	5'-6"	5'-3"	4'-10"	4'-7"	4'-5"	4'-4"	4'-3"
2.5x2.5 HVY	7'-7"	7'-1"	6'-8"	6'-4"	6'-0"	5'-10"	5'-9"
2.5x4	7'-2"	6'-8"	6'-5"	6'-0"	5'-9"	5'-7"	5'-6"
2.5x6	8'-0"	8'-0"	8'-0"	7'-9"	7'-5"	7'-4"	7'-3"
2.5x8	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"
2.5x10	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"

**TABLE 15: 175MPH, EXP 'C'\***

SCREEN WALL CARRY BEAM SPAN TABLE:							
BEAM	ROOF CLEAR SPAN						
	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"
2.5x1.5	3'-5"	3'-9"	3'-8"	3'-6"	3'-5"	3'-4"	3'-2"
2.5x2.5	4'-10"	4'-7"	4'-6"	4'-3"	4'-2"	4'-0"	3'-10"
2.5x2.5 HVY	6'-8"	6'-5"	6'-1"	5'-10"	5'-8"	5'-6"	5'-4"
2.5x4	6'-5"	6'-2"	5'-10"	5'-8"	5'-6"	5'-4"	5'-2"
2.5x6	8'-0"	7'-10"	7'-7"	7'-5"	7'-1"	6'-10"	6'-8"
2.5x8	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"
2.5x10	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"

**TABLE 9-16 NOTES:**

- 1) 2010 ALUMINUM DESIGN MANUAL, ALLOWABLE STRESS DESIGN METHOD USED IN ALL TABLES.
- 2) USE APPROPRIATE TABLE REQUIRED BY THE FLORIDA BUILDING CODE & GOVERNING LOCAL BUILDING CODES. VERIFY REQUIREMENTS WITH BUILDING DEPARTMENT.
- 3) DEFLECTION LIMIT = L/120 \*.
- 4) MAXIMUM EAVE BEAM SPANS ONLY NOTED IN TABLES 9-16.
- 5) 10PSF MINIMUM SOLID ROOF LIVE LOAD USED OR RESPECTIVE ROOF WINDLOAD (PER FBC TABLE 2002.4)USED, WHICHEVER GOVERNS.
- 6) ROOF CLEAR SPAN IS FROM HOST STRUCTURE TO THE CARRY BEAM.
- 7) 12" MAXIMUM OVERHANG ON FRONT AND SIDES OF ENCLOSURE.
- 8) COLUMNS TO BE Laterally SUPPORTED EVERY 8' MAX.
- 9) ALL WIND SPEEDS SHOWN ARE ULTIMATE DESIGN WIND SPEEDS (Vult)

\*HVHZ ONLY, IF ROOF CLEAR SPAN IS <= 12FT, DEFLECTION = L/80, IF ROOF CLEAR SPAN IS > 12FT, DEFLECTION = L/180, MINIMUM SOLID ROOF LIVE LOAD = 30PSF

**TABLE 10: 140MPH, EXP 'C', 150MPH, EXP 'B'**

SCREEN WALL CARRY BEAM SPAN TABLE:							
BEAM	ROOF CLEAR SPAN						
	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	22'-0"
2.5x1.5	4'-8"	4'-5"	4'-1"	3'-10"	3'-8"	3'-6"	3'-4"
2.5x2.5	5'-9"	5'-5"	5'-0"	4'-8"	4'-6"	4'-4"	4'-0"
2.5x2.5 HVY	7'-8"	7'-4"	6'-10"	6'-6"	6'-2"	5'-10"	5'-5"
2.5x4	7'-7"	7'-1"	6'-7"	6'-4"	6'-0"	5'-8"	5'-4"
2.5x6	8'-0"	8'-0"	8'-0"	8'-0"	7'-8"	7'-5"	6'-9"
2.5x8	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"
2.5x10	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"

**TABLE 12: 160MPH, EXP 'C', 170MPH, EXP 'B'**

SCREEN WALL CARRY BEAM SPAN TABLE:							
BEAM	ROOF CLEAR SPAN						
	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	19'-0"
2.5x1.5	4'-7"	4'-4"	4'-0"	3'-9"	3'-7"	3'-6"	3'-5"
2.5x2.5	5'-7"	5'-2"	4'-10"	4'-8"	4'-5"	4'-2"	4'-1"
2.5x2.5 HVY	7'-8"	7'-2"	6'-9"	6'-5"	6'-1"	5'-9"	5'-8"
2.5x4	7'-4"	6'-10"	6'-6"	6'-1"	5'-9"	5'-7"	5'-6"
2.5x6	8'-0"	8'-0"	8'-0"	7'-10"	7'-6"	7'-3"	7'-1"
2.5x8	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"
2.5x10	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"

**TABLE 14: 170MPH, EXP 'C'\***

SCREEN WALL CARRY BEAM SPAN TABLE:							
BEAM	ROOF CLEAR SPAN						
	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"
2.5x1.5	4'-6"	4'-4"	4'-1"	4'-0"	3'-10"	3'-8"	3'-7"
2.5x2.5	5'-6"	5'-2"	5'-0"	4'-10"	4'-8"	4'-6"	4'-4"
2.5x2.5 HVY	7'-5"	7'-1"	6'-10"	6'-8"	6'-5"	6'-2"	6'-0"
2.5x4	7'-2"	7'-0"	6'-8"	6'-4"	6'-2"	6'-0"	5'-9"
2.5x6	8'-0"	8'-0"	8'-0"	8'-0"	7'-9"	7'-8"	7'-7"
2.5x8	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"
2.5x10	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"

**TABLE 16: 180MPH, EXP 'D'\***

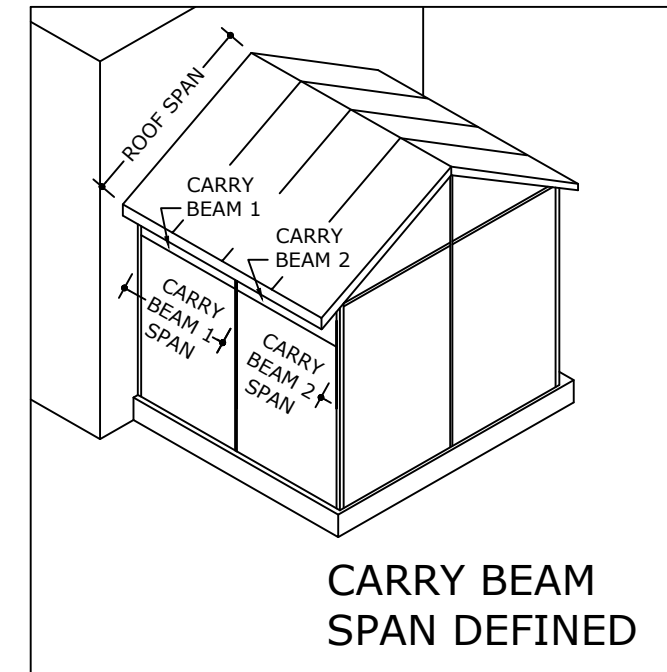
SCREEN WALL CARRY BEAM SPAN TABLE:							
BEAM	ROOF CLEAR SPAN						
	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"
2.5x1.5	3'-6"	3'-5"	3'-2"	3'-1"	N/A	N/A	N/A
2.5x2.5	4'-4"	4'-1"	3'-10"	3'-9"	3'-7"	3'-6"	3'-5"
2.5x2.5 HVY	5'-10"	5'-7"	5'-5"	5'-2"	5'-0"	4'-9"	4'-8"
2.5x4	5'-7"	5'-5"	5'-2"	5'-0"	4'-9"	4'-8"	4'-6"
2.5x6	7'-4"	7'-0"	6'-8"	6'-6"	6'-3"	6'-0"	5'-10"
2.5x8	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"
2.5x10	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"

**TABLE 17: CHAIR RAIL SPANS**

CHAIR RAIL SPAN TABLE					
VELOCITY & EXPOSURES	MULLION MEMBER	7' WALL HEIGHT	8' WALL HEIGHT	9' WALL HEIGHT	10' WALL HEIGHT
130 'C'	2.5x1.5	8'-0"	8'-0"	8'-0"	8'-0"
140 'B'	2.5x2.5	8'-0"	8'-0"	8'-0"	8'-0"
140 'C'	2.5x1.5	8'-0"	8'-0"	8'-0"	8'-0"
150 'B'	2.5x2.5	8'-0"	8'-0"	8'-0"	8'-0"
150 'C'	2.5x1.5	8'-0"	8'-0"	8'-0"	7'-8"
160 'B'	2.5x2.5	8'-0"	8'-0"	8'-0"	8'-0"
160 'C'	2.5x1.5	8'-0"	8'-0"	7'-7"	7'-2"
170 'B'	2.5x2.5	8'-0"	8'-0"	8'-0"	8'-0"
170 'C'	2.5x1.5	8'-0"	7'-6"	7'-1"	6'-8"
	2.5x2.5	8'-0"	8'-0"	8'-0"	8'-0"
170 'C' HVHZ	2.5x1.5	8'-0"	8'-0"	8'-0"	8'-0"
175 'C' HVHZ	2.5x2.5	8'-0"	8'-0"	8'-0"	8'-0"
180 'D' HVHZ	2.5x1.5	8'-0"	7'-10"	7'-5"	7'-0"
	2.5x2.5	8'-0"	8'-0"	8'-0"	8'-0"

**TABLE 17 NOTES:**

- 1) ALLOWABLE STRESS DESIGN USED IN ALL TABLES.
- 2) TABLE 17 SOLVES FOR THE MAXIMUM SPAN OF THE CHAIRRAIL ACCORDING TO THE MAX COLUMN HEIGHTS.
- 3) COLUMNS TO BE Laterally SUPPORTED EVERY 8' MAX.



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ELITE 2000 GABLE - SCREEN WALLS

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