

FOUR SEASONS BUILDING PRODUCTS

SCREEN, ACRYLIC, & VINYL ROOM ENCLOSURE MASTER PLAN

GENERAL NOTES:

- FOUNDATIONS**
 - ALL SUBSTRUCTURES INCLUDING BUT NOT LIMITED TO FOUNDATIONS & DECKS SHALL BE DESIGNED BY OTHERS.
 - CONNECTION DETAILS SHOWN ON DRAWINGS INDICATE MINIMUM REQUIREMENTS BASED ON CAPACITY OF COMPONENTS. THE ACTUAL CONNECTIONS TO SUBSTRUCTURE SHALL BE DESIGNED BY OTHERS.
 - STRUCTURES DESIGNED USING THIS DOCUMENT SHALL BE LIMITED TO A MAXIMUM PROJECTION OF 16 FT. FOR A 4" EXISTING SLAB AND 20 FT. WITH A TYPE II FOOTING FROM THE HOST STRUCTURE.
 - FREESTANDING STRUCTURES SHALL BE LIMITED TO THE MAXIMUM SPANS AND SIZE LIMITS OF COMPONENT PARTS. LARGER STRUCTURES WILL REQUIRE SITE SPECIFIC ENGINEERING.
- EXISTING STRUCTURES**
 - THE CAPACITY OF THE EXISTING OR NEW STRUCTURE TO RESIST ALL LOADS IMPOSED BY THE ENCLOSURE SHALL BE EVALUATED BY OTHERS.
 - CONNECTION DETAILS SHOWN ON DRAWINGS INDICATE MINIMUM REQUIREMENTS BASED ON CAPACITY OF COMPONENTS. THE ACTUAL CONNECTIONS TO SUBSTRUCTURE SHALL BE DESIGNED BY OTHERS.
- MOBILE & MANUFACTURED HOST STRUCTURES**
 - STRUCTURES TO BE PLACED ADJACENT TO MOBILE/MANUFACTURED HOMES SHALL USE "FOURTH WALL" CONSTRUCTION". THIS APPLIES TO UTILITY SHEDS, CARPORTS, AND/OR OTHER STRUCTURES TO BE ATTACHED.
 - "FOURTH WALL" CONSTRUCTION MEANS THE ADDITION SHALL BE SELF SUPPORTING WITH ONLY THE ROOF FLASHING OF THE TWO UNITS BEING ATTACHED. FOURTH WALL CONSTRUCTION IS CONSIDERED AN ATTACHED STRUCTURE. THE MOST COMMON "FOURTH WALL CONSTRUCTION" IS A POST & BEAM FRAME ADJACENT TO THE MOBILE/MANUFACTURED HOME. THE SAME SPAN TABLES CAN BE USED AS FOR THE FRONT WALL BEAM. POSTS AND BEAMS SHALL BE SIZED ACCORDING TO CHARTS LISTED HEREIN.
 - IF THE MOBILE/MANUFACTURED HOME MANUFACTURER CERTIFIES IN WRITING THAT THE MOBILE HOME MAY BE ATTACHED TO, THEN A "FOURTH WALL" IS NOT REQUIRED.
- STRUCTURAL STEEL**
 - ALL STRUCTURAL STEEL CONFORMS TO A36 OR ASTM A572 GRADE 50.
- ALUMINUM**
 - ALL STRUCTURAL ALUMINUM CONFORMS TO THE MINIMUM REQUIREMENTS OF 6005-T5 FOR ALLOY AND TEMPER.
 - ALL STRUCTURAL ALUMINUM WORK CONFORMS TO "PART 1-A SPECIFICATIONS FOR ALUMINUM STRUCTURES-ALLOWABLE STRESS DESIGN" OR "PART 1-B SPECIFICATIONS FOR ALUMINUM STRUCTURES-BUILDING LOAD RESISTANCE FACTOR DESIGN" OF THE ALUMINUM ASSOCIATION, INC., EIGHTH EDITION, EFFECTIVE 2010.
 - IN ALL INSTANCES WHERE ALUMINUM COMES INTO CONTACT WITH STEEL, PROVIDE DIELECTRIC SEPARATION.
 - INTERIOR ROOF PANEL FACING IS ALUMINUM CONFORMING TO REQUIREMENTS FOR 3105-H14 ALLOY AND TEMPER WITH A 0.024 IN. THICKNESS.
 - EXTERIOR ROOF PANEL FACING IS ALUMINUM CONFORMING TO REQUIREMENTS FOR 3105-H14 ALLOY AND TEMPER WITH A 0.024 IN. THICKNESS.
 - ALUMINUM ROOF PANEL SKIN TO BE PAINTED.
 - ALL EXPOSED ALUMINUM SHALL MEET STRENGTH REQUIREMENTS OF ASTM B 221 AFTER PAINTING.
 - ANY STRUCTURE WITHIN 1500 FT. OF A SALT WATER AREA (BAY OR OCEAN) OR COVERING A POOL WITH A SALT WATER CHLORINATION SYSTEM SHALL HAVE FASTENERS MADE OF NON-MAGNETIC STAINLESS STEEL GRADE 304 OR 316 SERIES.
- FASTENERS**
 - ALL LAG BOLTS SHALL CONFORM TO ASTM A36.
 - ALL LAG BOLTS SHALL HAVE A MINIMUM EMBEDMENT OF 8X BOLT DIAMETER INTO STRUCTURAL FRAMING (SG=0.42 MIN.).
 - LAG BOLTS AND SCREWS INTO WOOD FRAMING SHALL BE PROVIDED WITH PILOT HOLES HAVING A DIAMETER NOT GREATER THAN 70% OF THE THREAD DIAMETER OF THE BOLT OR SCREW. ALL LAG BOLTS AND SCREWS SHALL BE INSERTED IN PILOT HOLES BY TURNING AND UNDER NO CIRCUMSTANCES BY DRIVING WITH A HAMMER.
 - ALL EXPANSION ANCHORS SHALL BE DESIGNED (BY OTHERS) IN ACCORDANCE WITH THE SPECIFIC MANUFACTURER'S REQUIREMENTS AND ALLOWABLE LOADS AND SHALL ONLY BE APPLIED IN CONDITIONS ACCEPTABLE TO THE MANUFACTURER.
 - ALL MASONRY SHALL BE IN CONFORMANCE WITH ASTM C-90, GRADE N, TYPE 1 (OR GREATER).
 - ALL FASTENERS CONNECTING ALUMINUM COMPONENTS ARE STAINLESS STEEL TYPE 300 18-8 OR MUST HAVE A CORROSION-RESISTANT COATING.
- ROOF PANELS**
 - SEE GENERAL NOTES PART D "ALUMINUM" FOR PANEL SKIN INFORMATION.
 - PANEL CORE FOAM IS PREFORMED EXPANDED POLYSTYRENE BOARD (EPS) WITH A NOMINAL DENSITY OF 1 POUNDS PER CUBIC FOOT.
 - SEE SHEET -- FOR FURTHER ROOF PANEL DETAILS AND PERFORMANCE CHARTS.
 - ALL GUTTER SYSTEMS IN WHICH THE BACK OF THE GUTTER IS AT OR ABOVE THE PAN RIB OR ABOVE THE TOP SURFACE OF COMPOSITE PANEL ROOF SHALL HAVE A MINIMUM 2" DIAMETER HOLE IN ALL GUTTER END CAPS OR ALTERNATE WATER RELIEF PORTS IN GUTTER.
- ROOM SPECIFICS**
 - SCREEN WALLS BETWEEN EXISTING WALLS, FLOORS, AND CEILINGS ARE CONSIDERED IN FILLS AND SHALL BE ALLOWED & HEIGHTS SHALL BE SELECTED FROM THE SAME TABLES AS FOR OTHER SCREEN WALLS.
 - SPANS MAY BE INTERPOLATED BETWEEN VALUES BUT NOT EXTRAPOLATED OUTSIDE VALUES.
 - WHEN NOTES REFER TO SCREEN ROOMS, THEY SHALL APPLY TO ACRYLIC/VINYL ROOMS ALSO.
 - SCREEN, ACRYLIC, OR VINYL ROOMS ENGINEERING IS FOR ROOMS WITH SOLID WALL AREAS OF LESS THAN 40%. VINYL WINDOWS ARE NOT CONSIDERED SOLID AS PANELS SHOULD BE REMOVED WHEN WIND SPEEDS REACH 75 MPH.
- DEFLECTION CRITERIA**
 - ALL MEMBERS MEET OR EXCEED THE FOLLOWING MINIMUM DEFLECTION LIMITS:
 - STRUCTURAL ALUMINUM: DL + LL: L/120
 - PANELS: LL: L/120
- DESIGN LIVE LOADS**
 - STRUCTURAL MEMBERS HAVE BEEN DESIGNED FOR FULL DEAD LOADS AND THE FOLLOWING LIVE LOADS IN ACCORDANCE WITH THE CURRENT INTERNATIONAL BUILDING CODE.
 - LOADS AS PER 2009, 2012 AND 2015 INTERNATIONAL BUILDING CODE.
 - LATERAL DESIGN CONTROLLED BY WIND.
- COORDINATION**
 - METALS USA IS NOT RESPONSIBLE FOR VERIFYING AND COORDINATING THE INFORMATION BETWEEN THESE DRAWING AND ANY OTHER DRAWINGS USED IN CONJUNCTION WITH THESE DRAWINGS.
- ABBREVIATIONS**
 - THE FOLLOWING ABBREVIATIONS ARE NOT INTENDED TO REPRESENT ALL THOSE THAT MAY BE USED ON THESE DRAWINGS, BUT TO SUPPLEMENT THE MORE COMMON ABBREVIATIONS USED:
 - TYP.- TYPICAL
 - SIM.- SIMILAR
 - UNL.- UNLESS OTHERWISE NOTED
 - CONT.- CONTINUOUS
- CONSTRUCTION SAFETY**
 - THESE DRAWINGS DO NOT CONTAIN NECESSARY COMPONENTS FOR SAFETY DURING CONSTRUCTION.
 - THE INSTALLER SHALL PROVIDE ADEQUATE TEMPORARY BRACING, SHORING, OR OTHER SUPPORT OF FRAMING AGAINST WIND, CONSTRUCTION LOADS, AND OTHER TEMPORARY FORCES UNTIL NO LONGER REQUIRED FOR THE SUPPORT OF THE FRAMING.
- PATIO COVER**
 - REFERENCE APPENDIX I OF THE 2009, 2012 AND 2015 IBC/IRC FOR FURTHER PATIO ENCLOSURE REQUIREMENTS.
 - FRAMING SYSTEMS AND ROOM ADDITIONS USING THIS DOCUMENT COMPLY WITH REQUIREMENTS OF THE AMMA/NPEA/NSA 2100-10 FOR CATEGORY I, II, & III SUNROOMS, NON-HABITABLE AND UNCONDITIONED.

TABLE 1 DESIGN LOADS FOR SCREEN & VINYL ROOMS (EXPOSURE B)

WIND SPEED	SCREEN & VINYL ROOMS		ROOF OVERHANG
	ROOF	WALLS	
120 MPH	11	8	40
130 MPH	14	9	46
140 MPH	16	10	53
150 MPH	18	12	61
160 MPH	20	14	70
170 MPH	23	17	79
180 MPH	29	19	88

- NOTES:
- THE STRUCTURES DESIGNED HEREIN ARE SOLID ROOF, SCREEN OR VINYL WALLED AND ARE CONSIDERED TO BE ENCLOSED STRUCTURES DESIGNED TO BE MARRIED TO AN EXISTING STRUCTURE.
 - DESIGN WIND LOADS ABOVE ARE FROM THE 2012 & 2015 IBC AND IRC. THE LOADS ASSUME A MEAN ROOF HEIGHT OF LESS THAN 30 FT., ROOF SLOPE OF 0 TO 20 DEGREES, RISK CATEGOR I STRUCTURE. ALL LOADS BASED ON 20/20 SCREEN OR LARGER. ALL PRESSURES SHOWN IN THE ABOVE TABLE ARE IN POUNDS PER SQUARE FOOT (PSF). UTILIZE FIGURE 26.5-1C FOR APPLICABLE WIND SPEED.

TABLE 1A DESIGN LOAD CONVERSION FACTORS BASED ON MEAN ROOF HEIGHT FROM EXPOSURE "B" TO "C" OR "D"

MEAN ROOF HT. (FT)*	SPAN MULTIPLIERS	
	EXPOSURE B TO C	EXPOSURE B TO D
0-15	0.91	0.83
15-20	0.88	0.81
20-25	0.86	0.79
25-30	0.85	0.78
30-40	0.85	0.78

*NOTE: USE THE LARGER MEAN ROOF HEIGHT OF THE HOST STRUCTURE OR ENCLOSURE. VALUES ARE FROM ASCE7-05.

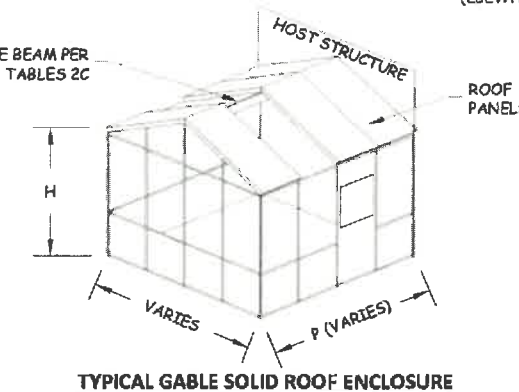
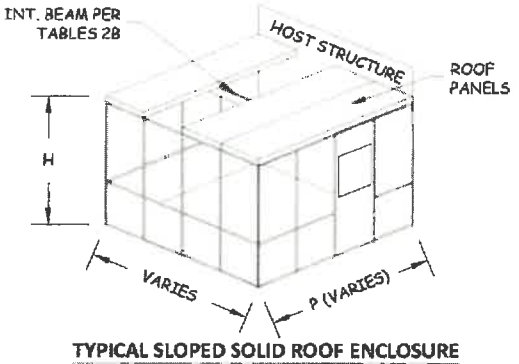
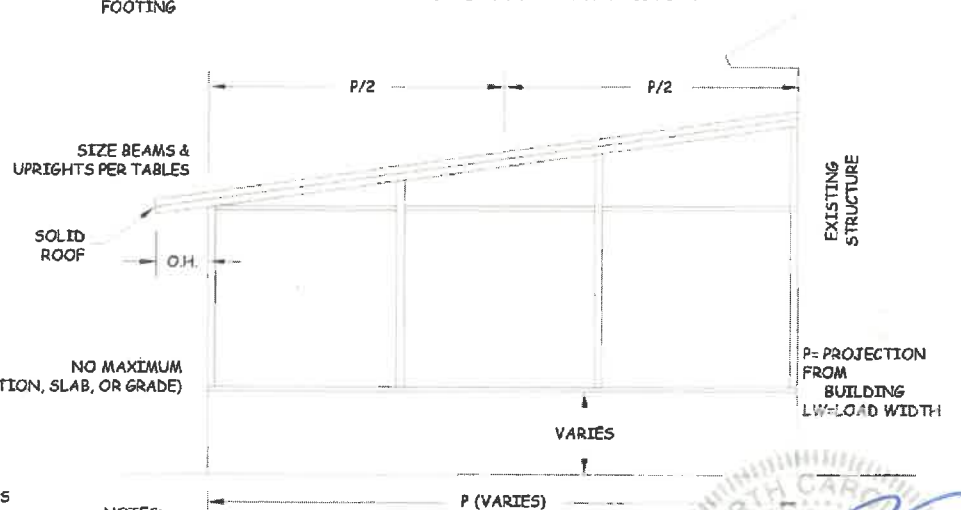
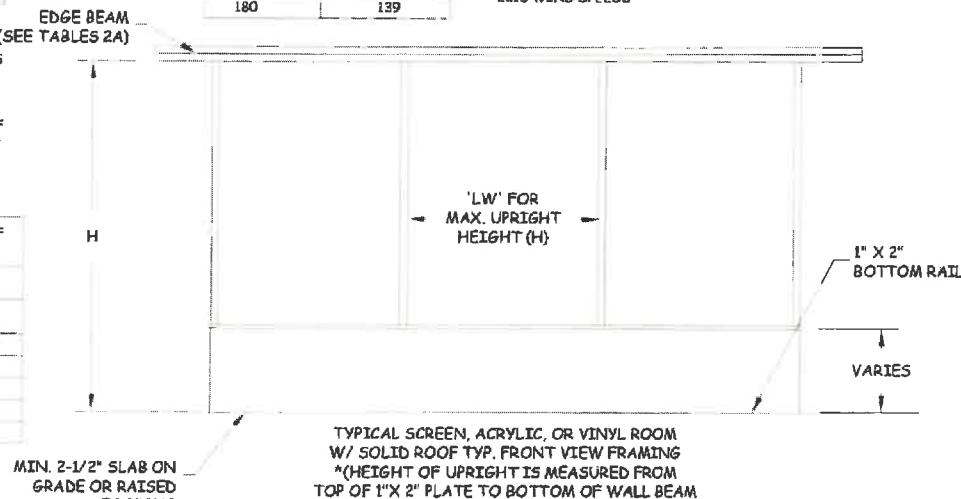


TABLE 1B WIND SPEED CONVERSION BASED ON 2012 IBC TABLE 1609.3.1

2012 WIND SPEED Vult (MPH)	2009 WIND SPEED Vcod (MPH)
100	78
110	85
120	93
130	101
140	108
150	116
160	124
170	132
180	139

- TO USE DRAWINGS WITH 2009 IBC/IRC:
- DETERMINE WIND SPEED FROM FIGURES IN 2009 IBC
 - CONVERT TO 2012 / 2015 WIND SPEED
 - UTILIZE REMAINING TABLES IN THIS SET USING 2012 / 2015 WIND SPEEDS



- NOTES:
- ANCHOR 1" X 2" OPEN BACK EXTRUSION W/ 1/4" X 2-1/4" CONCRETE FASTENER AT 24" O.C. MAX. 1-6" FROM EITHER SIDE OF EACH UPRIGHT. ANCHOR TO WOOD WALL W/ #10 X 2-1/2" W/ WASHER OR WASHER-HEAD AT 24" O.C. ANCHOR EDGE BEAM AND COLUMN INTERNALLY OR WITH ANCHOR CLIPS & (2) #8 SCREWS AT EACH CONNECTION.
 - SELECT FRONT WALL EDGE BEAM FROM TABLE USING LARGER LOAD WIDTH VALUE OF P/2 OR P/2 + O.H.
 - ANCHORS BASED ON 123 MPH WIND VELOCITY. FOR HIGHER WIND ZONES USE THE FOLLOWING CONVERSION.

ANCHOR SIZE CONVERSION BASED ON WIND SPEED	120-160 MPH	70 MPH	180 MPH
WIND SPEED	120-160 MPH	70 MPH	180 MPH
SIZE (DIAM.)	#8	#10	#12

TITLE: SCREEN, ACRYLIC, & VINYL ENCLOSURE
GENERAL NOTES & WALL ELEVATIONS

FOUR SEASONS BUILDING PRODUCTS

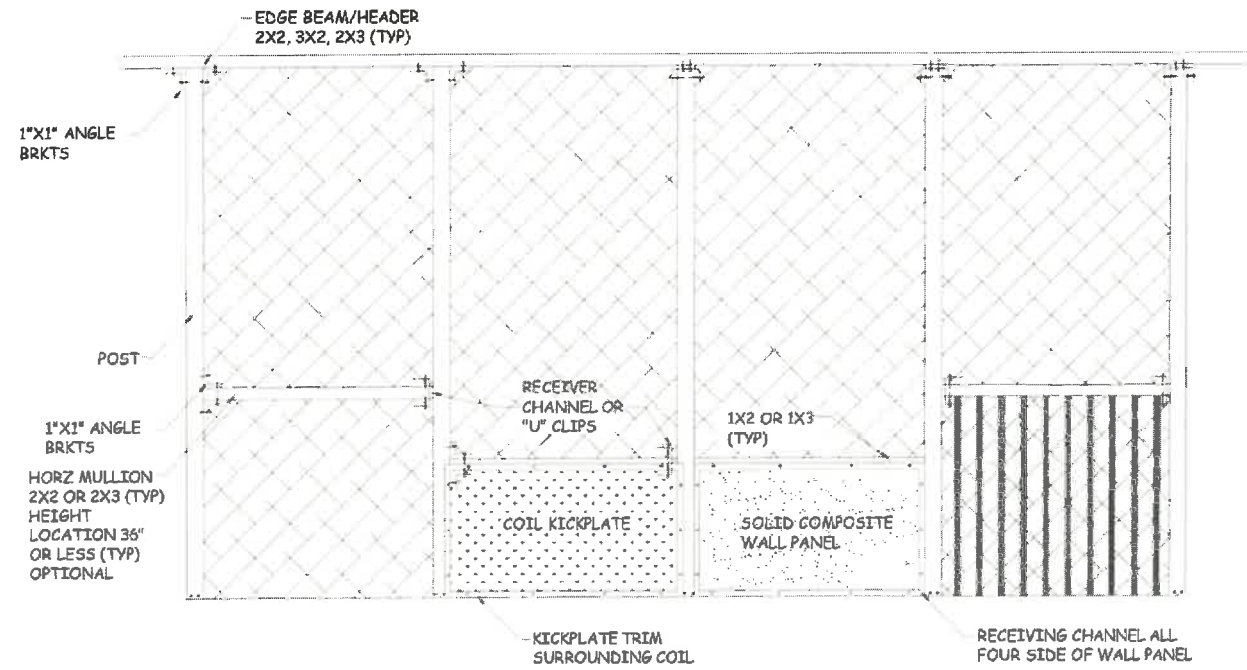
REVISIONS

NO.	DESCRIPTION	BY	DATE

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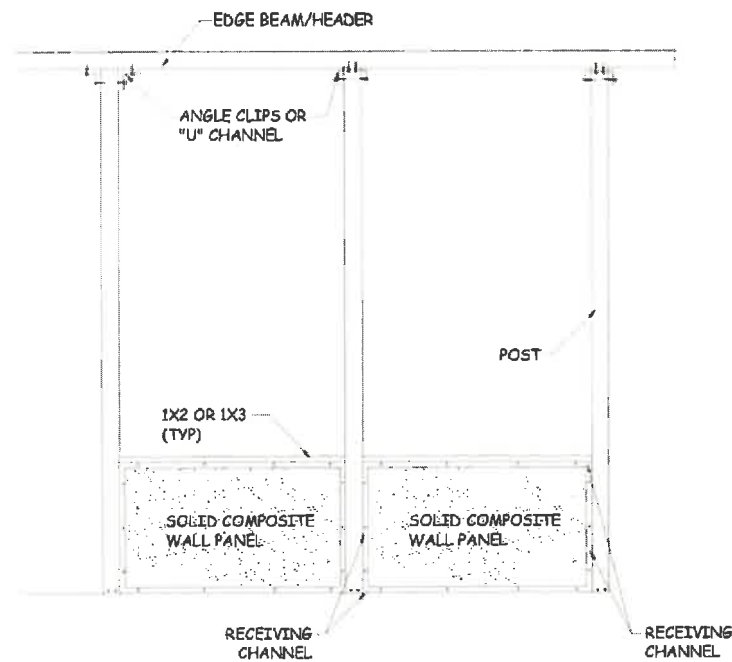
DATE: 07.29.14
DWN BY: JLA
CHK BY: HFN
SCALE: NTS

DWG #: MUS001
SHEET: 1 OF 22



- SCREEN WALLS CAN HAVE
1. SCREEN TO THE FLOOR OR
 2. COIL KICKPLATE, HEIGHT VARIES, (TYP) 36" OR LESS OR
 3. SOLID COMPOSITE WALL PANEL (LWP), HEIGHT VARIES, (TYP) 36" OR LESS OR
 4. SCREEN TO FLOOR WITH GUARDRAIL AND PICKET, SPACING 4" OR LESS

SCREEN ROOM WITH COMPOSITE WALL PANEL ELEVATION



COMPOSITE WALL PANEL ELEVATION

TITLE: SCREEN, ACRYLIC, & VINYL ENCLOSURE TYPICAL ELEVATIONS



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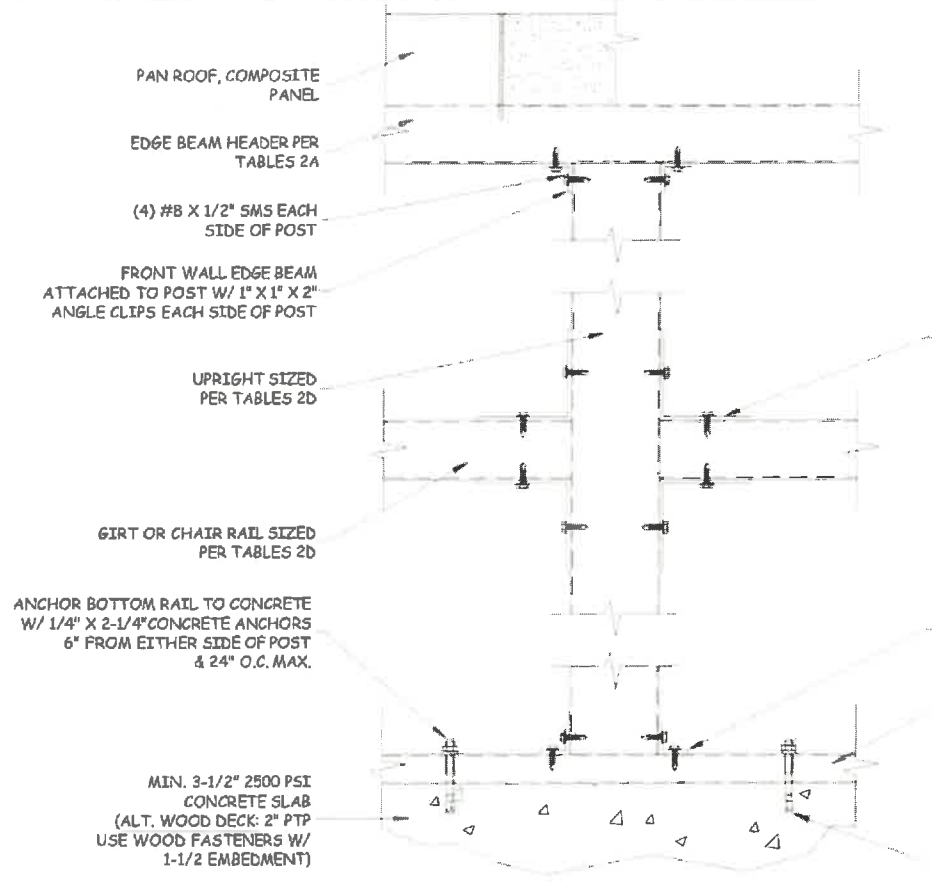
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SCALE: NTS

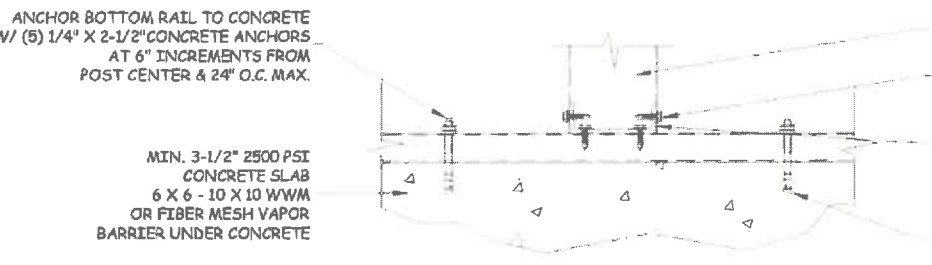
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SHEET: 2 OF 22

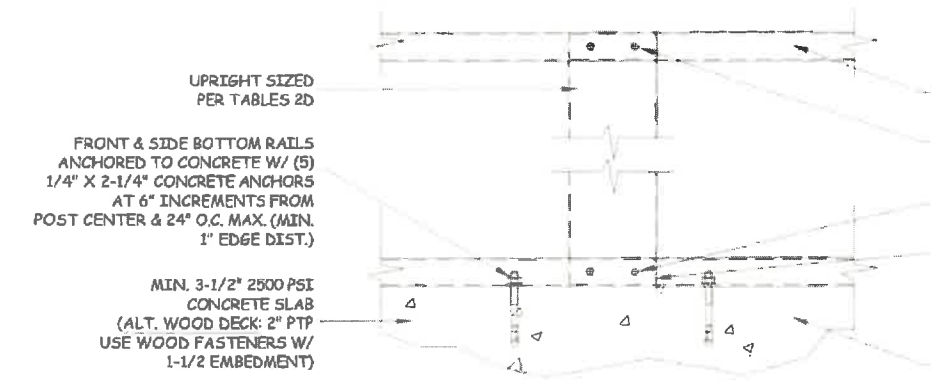




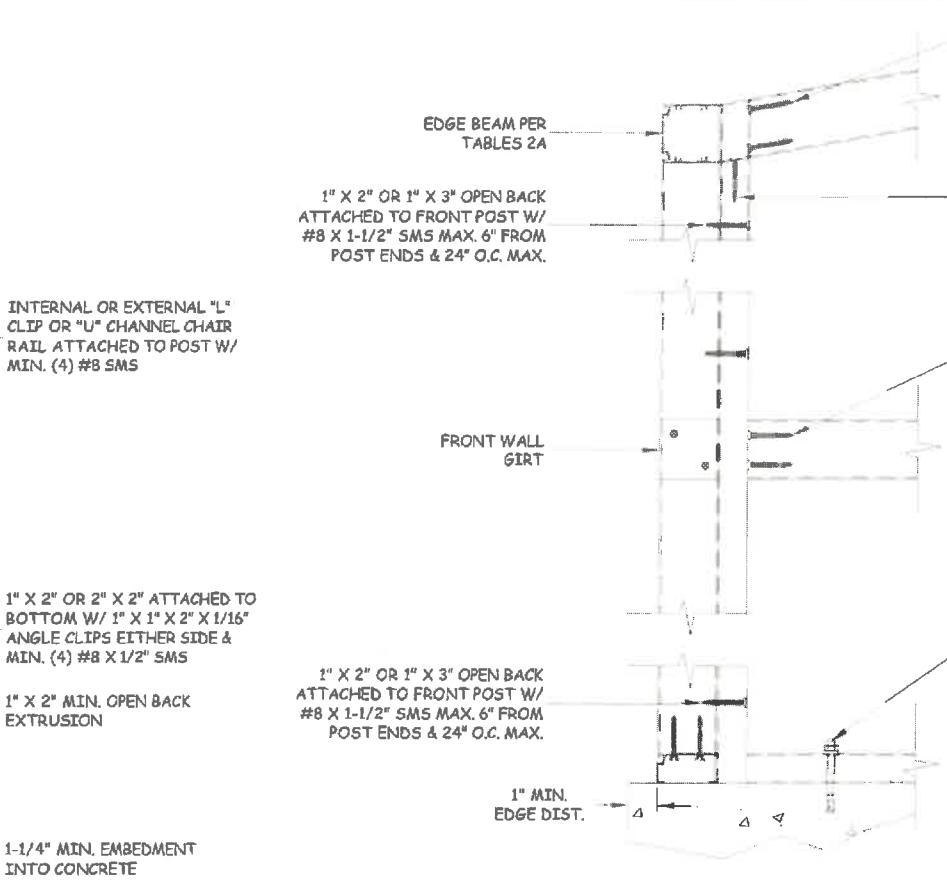
POST TO BASE, GIRT & POST TO BEAM DETAIL



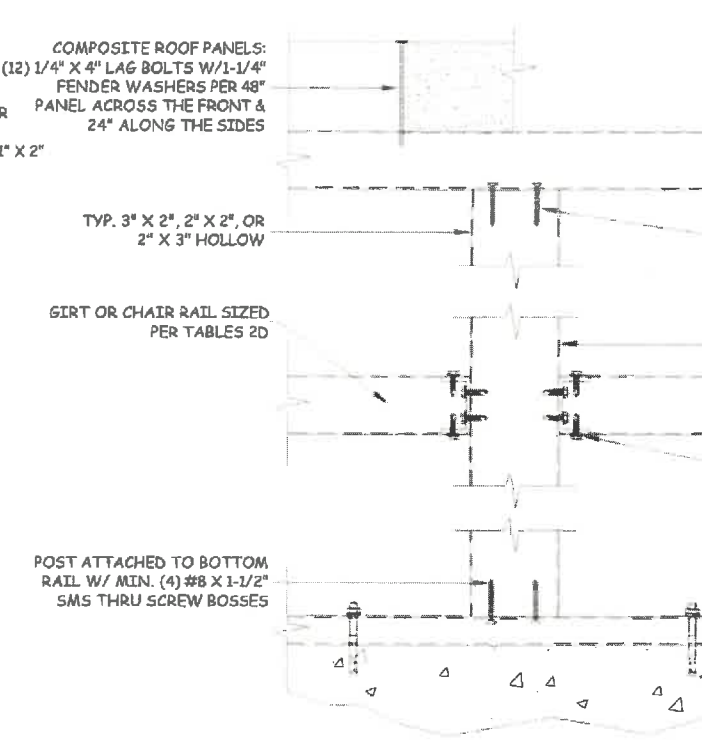
ALTERNATE POST TO BASE CONNECTION- DETAIL 1



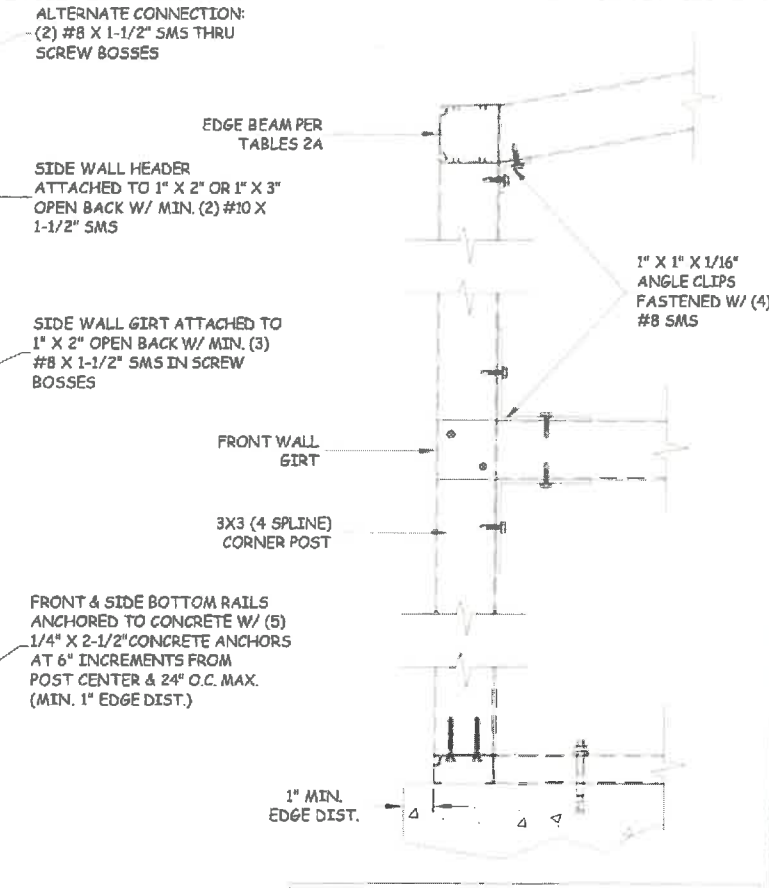
ALTERNATE POST TO BASE CONNECTION- DETAIL 2



TYPICAL & ALTERNATE CORNER DETAIL



TYPICAL UPRIGHT DETAIL



**ALTERNATE CONNECTION:
(2) #8 X 1-1/2" SMS THRU
SCREW BOSSES**

ANCHOR SIZE CONVERSION BASED ON WIND SPEED			
WIND SPEED (V _{ult})	120-160 MPH	170 MPH	180 MPH
SIZE (DIAM.)	#8	#10	#12

NOTE: ALL ANCHORS SHOWN IN DETAILS ARE BASED ON 160 MPH WIND SPEED. USE TABLE ABOVE FOR SITES IN HIGHER WIND SPEED AREAS.

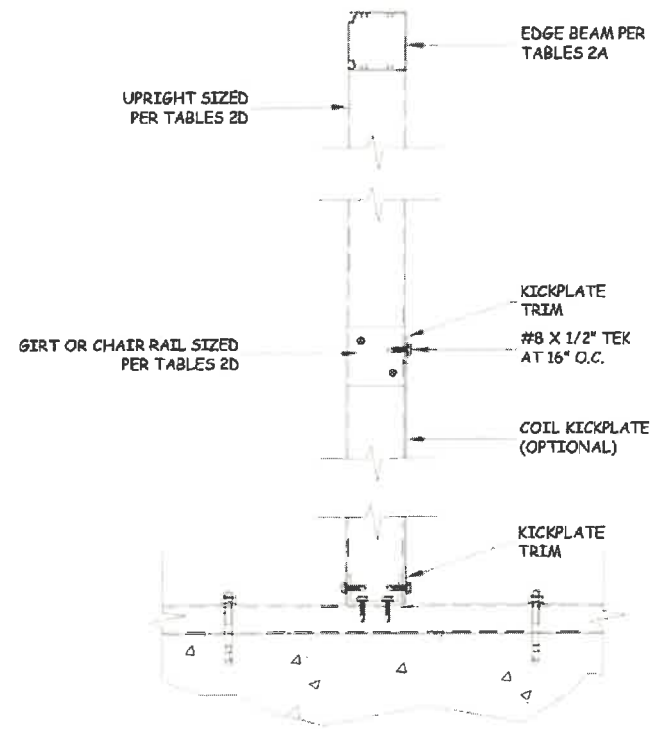
Seal Exp. DEC 17 2018 - DEC 31 2019

TITLE: SCREEN, ACRYLIC, & VINYL ENCLOSURE TYPICAL SECTION DETAILS

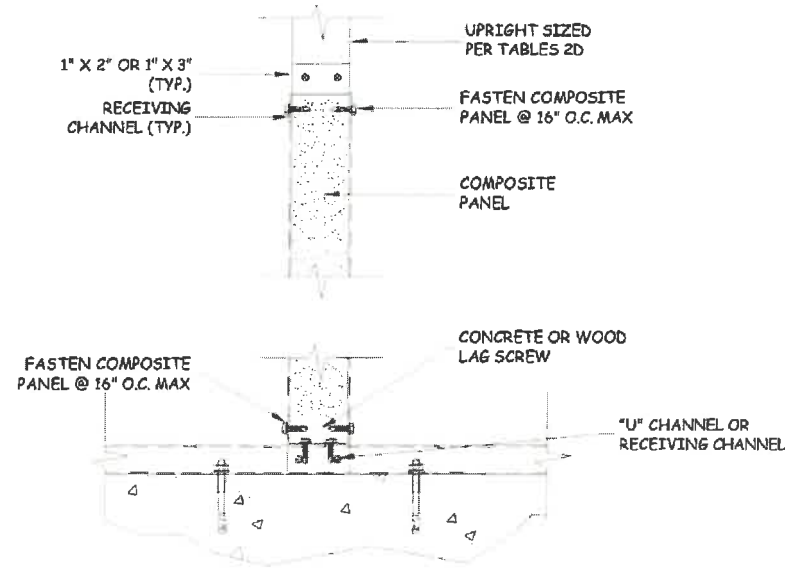
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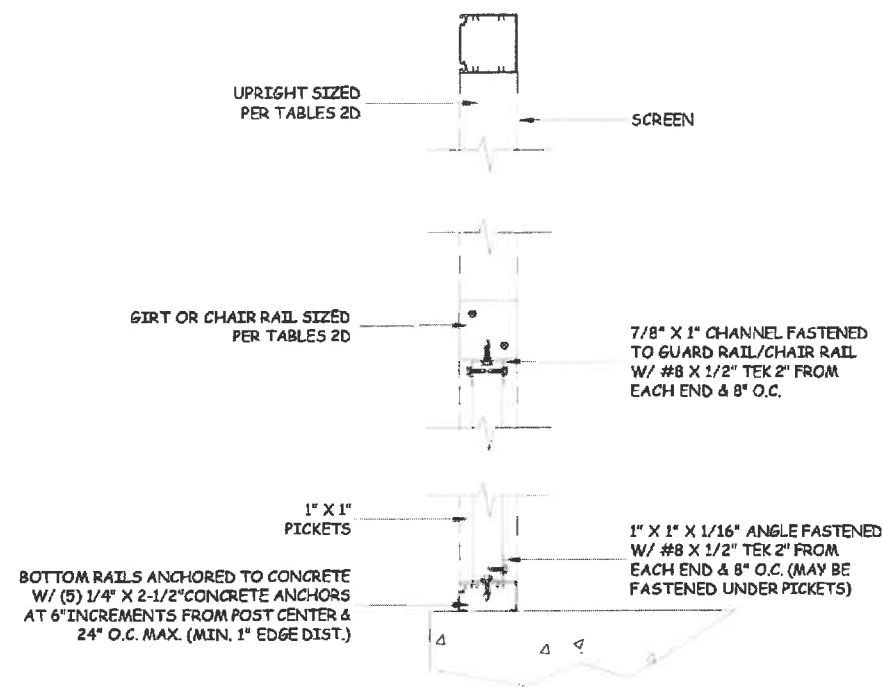
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CHK BY: HFN
SCALE: NTS
DWG #: MUS003
SHEET: 3 OF 22



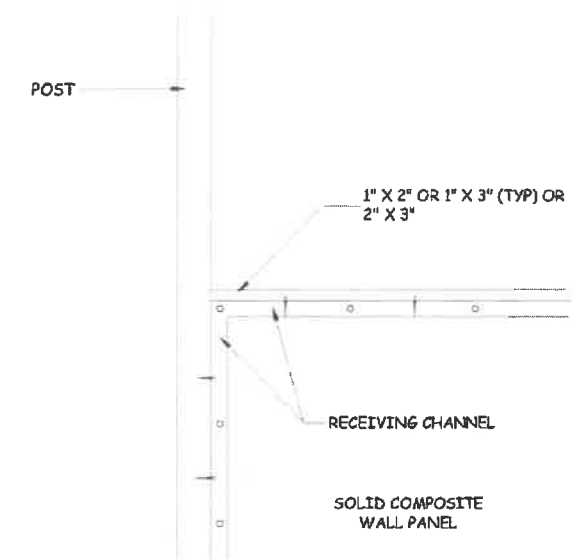
SCREEN WALL DETAIL W/ COIL KICKPLATE



COMPOSITE WALL PANEL DETAIL



SCREEN WALL DETAIL WITH GUARDRAIL W/ PICKETS



COMPOSITE WALL PANEL DETAIL


 Signed Seal Exp.
 DEC 17 2018 DEC 31 2019

TITLE: SCREEN, ACRYLIC, & VINYL ENCLOSURE
 TYPICAL SECTION DETAILS



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BY	DATE

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CHK BY:	HFN
SCALE:	NTS

DWG #: **MUS004**
 SHEET: **4 OF 22**

TABLE 2A.1 - ALLOWABLE EDGE BEAM SPANS (FT.)
(HOLLOW EXTRUSIONS FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
120 MPH WIND VELOCITY (Vult)
0 PSF SNOW LOAD & 20 PSF LIVE LOAD

LOAD WIDTH (FT.)	COMPONENT							
	2" X 2" X 0.044"		3" X 2" X 0.045"		2" X 3" X 0.045"		3" X 3" X 0.090"	
	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER
5	4'-0"	1'-5"	3'-10"	1'-5"	5'-6"	2'-0"	8'-9"	3'-4"
6	3'-6"	1'-4"	3'-6"	1'-3"	5'-0"	2'-1"	8'-3"	3'-1"
7	3'-4"	1'-3"	3'-3"	1'-2"	4'-8"	1'-11"	7'-10"	3'-0"
8	3'-2"	1'-2"	3'-1"	1'-1"	4'-4"	1'-10"	7'-5"	2'-10"
9	3'-0"	1'-1"	2'-11"	1'-0"	4'-1"	1'-9"	7'-3"	2'-9"
10	2'-10"	1'-0"	2'-9"	1'-0"	3'-11"	1'-8"	7'-0"	2'-8"
11	2'-8"	1'-0"	2'-7"	0'-11"	3'-8"	1'-8"	6'-9"	2'-6"
12	2'-7"	0'-11"	2'-6"	0'-11"	3'-6"	1'-4"	6'-7"	2'-5"

NOTES:
1. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS
2. SPAN MAY BE INTERPOLATED.

TABLE 2B.1 - ALLOWABLE BEAM SPANS FOR MISCELLANEOUS FRAMING BEAMS (FT.)
(SELF MATING BEAMS FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
120 MPH WIND VELOCITY (Vult)
0 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.)											
	2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"
2" X 4" X 0.046" X 0.100" SMB	11'-2"	9'-0"	7'-10"	7'-0"	6'-8"	5'-11"	5'-6"	4'-11"	4'-6"	4'-2"	3'-11"	3'-8"
2" X 5" X 0.050" X 0.120" SMB	14'-0"	12'-2"	10'-6"	9'-8"	8'-7"	7'-11"	7'-5"	6'-8"	6'-2"	5'-7"	5'-3"	5'-0"
2" X 6" X 0.050" X 0.120" SMB	16'-2"	13'-9"	11'-11"	10'-8"	9'-9"	9'-0"	8'-5"	7'-6"	6'-10"	6'-4"	5'-11"	5'-7"
2" X 7" X 0.050" X 0.120" SMB	18'-7"	16'-3"	14'-2"	12'-8"	11'-7"	10'-8"	10'-0"	9'-0"	8'-2"	7'-7"	7'-1"	6'-8"
2" X 8" X 0.072" X 0.224" SMB	22'-11"	20'-0"	18'-2"	16'-11"	15'-6"	14'-6"	13'-7"	12'-2"	11'-4"	10'-3"	9'-7"	9'-0"
2" X 9" X 0.072" X 0.224" SMB	29'-5"	24'-1"	20'-10"	20'-10"	18'-8"	17'-0"	15'-9"	14'-9"	13'-2"	12'-0"	11'-2"	10'-6"
2" X 10" X 0.092" X 0.369" SMB	40'-9"	33'-3"	28'-10"	25'-9"	23'-6"	21'-9"	20'-4"	18'-3"	16'-8"	15'-5"	14'-5"	13'-7"

NOTES:
1. IT IS RECOMMENDED THAT AN ENGINEER BE CONSULTED ON ANY MISCELLANEOUS FRAMING BEAM SPAN EXCEEDING 40 FT.
2. SPAN IS MEASURED FROM CENTER OF CONNECTION TO FASCIA OR WALL CONNECTION.
3. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS
4. ABOVE SPANS DO NOT INCLUDE LENGTH OF KNEE BRACE. ADD HORIZONTAL DISTANCE FROM UPRIGHT TO CENTER OF BRACE TO BEAM CONNECTION TO THE ABOVE SPANS FOR TOTAL BEAM SPANS.
5. SPAN MAY BE INTERPOLATED.

TABLE 2C.1 - ALLOWABLE SPANS FOR RIDGE BEAMS WITH SELF MATING BEAMS (FT.)
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
120 MPH WIND VELOCITY (Vult)
0 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.) * W = ROOF WIDTH/2					
	5'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"
2" X 4" X 0.046" X 0.100" SMB	7'-0"	6'-5"	5'-6"	4'-11"	4'-9"	4'-6"
2" X 5" X 0.050" X 0.120" SMB	9'-5"	8'-7"	7'-5"	6'-8"	6'-4"	6'-1"
2" X 6" X 0.050" X 0.120" SMB	10'-8"	9'-9"	8'-5"	7'-6"	7'-2"	6'-10"
2" X 7" X 0.050" X 0.120" SMB	12'-8"	11'-7"	10'-0"	9'-0"	8'-6"	8'-2"
2" X 8" X 0.072" X 0.224" SMB	15'-11"	14'-8"	13'-7"	12'-2"	11'-7"	11'-1"
2" X 9" X 0.072" X 0.224" SMB	18'-8"	17'-0"	14'-9"	13'-2"	12'-7"	12'-0"
2" X 10" X 0.092" X 0.369" SMB	25'-9"	23'-6"	20'-4"	18'-3"	17'-4"	16'-8"

NOTES:
1. TABLE ABOVE ASSUMES EXTRUSION IS ORIENTED WITH LONGER DIMENSION PARALLEL TO LOAD
2. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS
3. ABOVE SPANS DO NOT INCLUDE LENGTH OF KNEE BRACE. ADD HORIZONTAL DISTANCE FROM UPRIGHT TO CENTER OF BRACE TO BEAM CONNECTION TO THE ABOVE SPANS FOR TOTAL BEAM SPANS.
4. SPAN MAY BE INTERPOLATED.

TABLE 2D.1 - ALLOWABLE UPRIGHT HEIGHTS, CHAIR RAIL SPANS, OR HEADER SPANS (FT.)
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
120 MPH WIND VELOCITY (Vult)
0 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.) * W = MEMBER SPACING									
	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"
2" X 2" X 0.044" HOLLOW	7'-8"	6'-10"	6'-3"	5'-8"	5'-2"	4'-9"	4'-4"	4'-0"	3'-8"	3'-4"
3" X 2" X 0.045" HOLLOW	7'-8"	6'-2"	7'-10"	7'-6"	7'-3"	7'-0"	6'-10"	6'-7"	6'-1"	5'-7"
3" X 2" X 0.070" HOLLOW	9'-9"	9'-3"	8'-10"	8'-6"	8'-3"	8'-0"	7'-9"	7'-5"	7'-4"	7'-2"
2" X 3" X 0.045" HOLLOW	10'-11"	10'-5"	9'-11"	9'-7"	9'-3"	8'-11"	8'-8"	8'-3"	7'-9"	7'-3"
2" X 3" X 0.070" HOLLOW	12'-4"	11'-9"	11'-3"	10'-10"	10'-5"	10'-1"	9'-10"	9'-7"	9'-4"	9'-1"
3" X 3" X 0.090" SQUARE	14'-9"	13'-8"	13'-1"	12'-7"	12'-2"	11'-9"	11'-5"	11'-3"	10'-10"	10'-7"
3" X 3" X 0.125" SQUARE	15'-9"	15'-0"	14'-4"	13'-9"	13'-4"	13'-1"	12'-11"	12'-6"	11'-11"	11'-8"
4" X 4" X 0.125" SQUARE	21'-3"	20'-2"	19'-3"	18'-6"	17'-11"	17'-4"	16'-10"	16'-5"	16'-0"	15'-8"

NOTES:
1. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS
2. SPAN MAY BE INTERPOLATED.

TABLE 2E.1 - SCHEDULE OF POST TO BEAM SIZE
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5

BEAM SIZE	MINIMUM POST SIZE	THRU-BOLT QUANTITY		MINIMUM KNEE BRACE*	MIN. QTY. OF KNEE BRACES SCREWS	MIN. STITCH SCREW SIZE & SPACING
		1/4" Ø	3/8" Ø			
HOLLOW BEAMS						
2" X 4" X 0.050"	3" X 3" X 0.060"	2	--	2" X 3" X 0.045"	(3) #8	--
2" X 5" X 0.062"	2" X 3" HOLLOW OR SNAP	2	--	2" X 3" X 0.045"	(3) #8	--
SELF MATING BEAMS						
2" X 4" X 0.046" X 0.100" SMB	3" X 3" X 0.060"	2	--	2" X 3" X 0.045"	(3) #8	#8 @ 24" O.C.
2" X 5" X 0.050" X 0.120" SMB	3" X 3" X 0.060"	3	--	2" X 3" X 0.045"	(3) #8	#8 @ 24" O.C.
2" X 6" X 0.050" X 0.120" SMB	3" X 3" X 0.060"	3	--	2" X 3" X 0.045"	(3) #10	#10 @ 24" O.C.
2" X 7" X 0.050" X 0.120" SMB	3" X 3" X 0.093"	4	2	2" X 3" X 0.045"	(3) #10	#10 @ 24" O.C.
2" X 8" X 0.072" X 0.224" SMB	3" X 3" X 0.125"	4	3	2" X 4" X 0.045" X 0.100" SMB	(3) #12	#12 @ 24" O.C.
2" X 9" X 0.072" X 0.224" SMB	4" X 4" X 0.125"	5	3	2" X 6" X 0.050" X 0.120" SMB	(4) #14	#14 @ 16" O.C.
2" X 10" X 0.092" X 0.369" SMB	4" X 4" X 0.125"	6	4	2" X 7" X 0.050" X 0.120" SMB	(5) #14	#14 @ 16" O.C.

NOTES:
1. MINIMUM NUMBER OF THRU-BOLTS IS TWO (2).
2. MINIMUM POST/BEAM MAY BE USED AS MINIMUM KNEE BRACE.

KNEE BRACE	MIN. LENGTH	MAX. LENGTH
2" X 2"	1'-4"	2'-0"
2" X 3"	1'-6"	2'-6"
2" X 4"	1'-6"	3'-0"

TITLE: SCREEN, ACRYLIC, & VINYL ENCLOSURE
90 MPH, 0 PSF SNOW, 20 PSF LIVE LOAD TABLES

FOUR SEASONS
BUILDING PRODUCTS

REVISIONS

NO.	DESCRIPTION	BY DATE	
		BY	DATE

PREPARED BY:
A.S. ENGINEERING SERVICES P.C.
112 WILSON DRIVE
PORT JEFFERSON, NY 11777
PH: (631) 560-0259 FX: (631) 938-0784



DATE: 07.29.14
DWN BY: JLA
CHK BY: HFN
SCALE: NTS
DWG #: MUS005
SHEET: 5 OF 22

TABLE 2A.2 - ALLOWABLE EDGE BEAM SPANS (FT.)
(HOLLOW EXTRUSIONS FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
120 MPH WIND VELOCITY (Vult)
30 PSF SNOW LOAD & 20 PSF LIVE LOAD

LOAD WIDTH (FT.)	COMPONENT							
	2" X 2" X 0.044"		3" X 2" X 0.045"		2" X 3" X 0.045"		3" X 3" X 0.090"	
	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER
5	2'-4"	1'-2"	2'-5"	1'-2"	3'-11"	2'-3"	7'-0"	2'-11"
6	2'-2"	1'-1"	2'-6"	1'-0"	3'-7"	1'-10"	6'-7"	2'-9"
7	2'-0"	1'-0"	2'-4"	1'-0"	3'-4"	1'-9"	6'-3"	2'-7"
8	1'-10"	0'-11"	2'-2"	0'-11"	3'-1"	1'-7"	5'-10"	2'-5"
9	1'-9"	0'-10"	2'-1"	0'-10"	2'-11"	1'-6"	5'-6"	2'-3"
10	1'-8"	0'-10"	1'-11"	0'-10"	2'-9"	1'-5"	5'-3"	2'-2"
11	1'-7"	0'-9"	1'-10"	0'-9"	2'-8"	1'-5"	5'-0"	2'-1"
12	1'-6"	0'-9"	1'-9"	0'-9"	2'-6"	1'-4"	4'-9"	2'-0"

NOTES:
1. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS
2. SPAN MAY BE INTERPOLATED.

TABLE 2B.2 - ALLOWABLE BEAM SPANS FOR MISCELLANEOUS FRAMING BEAMS (FT.)
(SELF-MATING BEAMS FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
120 MPH WIND VELOCITY (Vult)
30 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.)												
	2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	
2" X 4" X 0.046" X 0.100" SMB	7'-11"	6'-3"	5'-7"	5'-0"	4'-7"	4'-8"	3'-11"	3'-5"	3'-3"	3'-0"	2'-9"	2'-8"	
2" X 5" X 0.050" X 0.120" SMB	10'-7"	8'-8"	7'-6"	6'-9"	6'-1"	5'-8"	5'-4"	4'-9"	4'-4"	4'-0"	3'-9"	3'-6"	
2" X 6" X 0.050" X 0.120" SMB	12'-0"	9'-9"	8'-6"	7'-7"	6'-11"	6'-5"	6'-0"	5'-4"	4'-11"	4'-6"	4'-3"	4'-0"	
2" X 7" X 0.055" X 0.120" SMB	14'-3"	11'-8"	10'-1"	9'-0"	8'-3"	7'-8"	7'-2"	6'-5"	5'-10"	5'-5"	5'-1"	4'-9"	
2" X 8" X 0.072" X 0.224" SMB	18'-4"	15'-9"	13'-8"	12'-3"	11'-2"	10'-4"	9'-8"	8'-8"	7'-11"	7'-4"	6'-10"	6'-5"	
2" X 9" X 0.072" X 0.224" SMB	20'-3"	17'-2"	14'-10"	13'-3"	12'-2"	11'-3"	10'-6"	9'-5"	8'-7"	7'-11"	7'-9"	7'-0"	
2" X 10" X 0.092" X 0.369" SMB	25'-3"	22'-1"	20'-1"	18'-4"	16'-5"	15'-6"	14'-6"	13'-0"	11'-10"	11'-0"	10'-3"	9'-8"	

NOTES:
1. IT IS RECOMMENDED THAT AN ENGINEER BE CONSULTED ON ANY MISCELLANEOUS FRAMING BEAM SPAN EXCEEDING 40 FT.
2. SPAN IS MEASURED FROM CENTER OF CONNECTION TO FASCIA OR WALL CONNECTION.
3. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS
4. ABOVE SPANS DO NOT INCLUDE LENGTH OF KNEE BRACE. ADD HORIZONTAL DISTANCE FROM UPRIGHT TO CENTER OF BRACE TO BEAM CONNECTION TO THE ABOVE SPANS FOR TOTAL BEAM SPANS.
5. SPAN MAY BE INTERPOLATED.

TABLE 2C.2 - ALLOWABLE SPANS FOR RIDGE BEAMS WITH SELF-MATING BEAMS (FT.)
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
120 MPH WIND VELOCITY (Vult)
30 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.) 'W'-ROOF WIDTH/2						
	2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"
2" X 4" X 0.046" X 0.100" SMB	6'-3"	5'-8"	4'-11"	4'-5"	4'-2"	4'-0"	4'-0"
2" X 5" X 0.050" X 0.120" SMB	8'-3"	7'-8"	6'-8"	5'-11"	5'-8"	5'-5"	5'-5"
2" X 6" X 0.050" X 0.120" SMB	9'-6"	8'-8"	7'-6"	6'-9"	6'-5"	6'-1"	6'-1"
2" X 7" X 0.055" X 0.120" SMB	10'-11"	10'-4"	8'-11"	8'-0"	7'-7"	7'-3"	7'-3"
2" X 8" X 0.072" X 0.224" SMB	13'-6"	14'-0"	12'-3"	10'-10"	10'-4"	9'-10"	9'-10"
2" X 9" X 0.072" X 0.224" SMB	14'-10"	15'-2"	13'-2"	11'-9"	11'-3"	10'-9"	10'-9"
2" X 10" X 0.092" X 0.369" SMB	18'-8"	20'-4"	18'-2"	16'-3"	15'-6"	14'-10"	14'-10"

NOTES:
1. TABLE ABOVE ASSUMES EXTRUSION IS ORIENTED WITH LONGER DIMENSION PARALLEL TO LOAD
2. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS
3. ABOVE SPANS DO NOT INCLUDE LENGTH OF KNEE BRACE. ADD HORIZONTAL DISTANCE FROM UPRIGHT TO CENTER OF BRACE TO BEAM CONNECTION TO THE ABOVE SPANS FOR TOTAL BEAM SPANS.
4. SPAN MAY BE INTERPOLATED.

TABLE 2D.2 - ALLOWABLE UPRIGHT HEIGHTS, CHAIR RAIL SPANS, OR HEADER SPANS (FT.)
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
120 MPH WIND VELOCITY (Vult)
30 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.) 'W'-MEMBER SPACING										
	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"
2" X 2" X 0.044" HOLLOW	6'-3"	5'-4"	4'-6"	4'-6"	3'-0"	2'-2"	1'-1"	-	-	-	-
3" X 2" X 0.045" HOLLOW	6'-4"	5'-8"	4'-8"	4'-0"	3'-4"	2'-8"	1'-11"	0'-11"	-	-	-
3" X 2" X 0.070" HOLLOW	9'-3"	8'-10"	7'-9"	6'-10"	5'-11"	5'-1"	4'-3"	3'-5"	2'-6"	1'-2"	-
2" X 3" X 0.045" HOLLOW	9'-9"	8'-8"	7'-8"	6'-10"	6'-1"	5'-5"	4'-9"	4'-2"	3'-6"	2'-11"	-
2" X 3" X 0.070" HOLLOW	12'-3"	11'-8"	11'-2"	10'-7"	9'-7"	8'-9"	7'-11"	7'-2"	6'-6"	5'-9"	-
3" X 3" X 0.090" SQUARE	14'-3"	13'-6"	12'-11"	12'-5"	12'-0"	11'-8"	11'-4"	11'-0"	10'-4"	9'-7"	-
3" X 3" X 0.125" SQUARE	15'-6"	14'-10"	14'-3"	13'-8"	13'-2"	12'-9"	12'-5"	12'-1"	11'-10"	11'-0"	-
4" X 4" X 0.125" SQUARE	21'-0"	20'-0"	19'-1"	18'-5"	17'-9"	16'-0"	14'-4"	12'-8"	12'-4"	11'-5"	-

NOTES:
1. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS
2. SPAN MAY BE INTERPOLATED.

TABLE 2E.2 - SCHEDULE OF POST TO BEAM SIZE
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5

BEAM SIZE	MINIMUM POST SIZE	THRU-BOLT QUANTITY		MINIMUM KNEE BRACE*	MIN. QTY. OF KNEE BRACES/SCREWS	MIN. STITCH SCREW SIZE & SPACING
		1/4" Ø	3/8" Ø			
HOLLOW BEAMS						
2" X 4" X 0.050"	3" X 3" X 0.060"	2	-	2" X 3" X 0.045"	(3) #8	-
2" X 5" X 0.062"	2" X 3" HOLLOW OR SNAP	2	-	2" X 3" X 0.045"	(3) #8	-
SELF-MATING BEAMS						
2" X 4" X 0.046" X 0.100"	3" X 3" X 0.060"	3	-	2" X 3" X 0.045"	(3) #8	#8 @ 24" O.C.
2" X 5" X 0.050" X 0.120"	3" X 3" X 0.060"	3	-	2" X 3" X 0.045"	(3) #8	#8 @ 24" O.C.
2" X 6" X 0.050" X 0.120"	3" X 3" X 0.060"	4	-	2" X 3" X 0.045"	(3) #10	#10 @ 24" O.C.
2" X 7" X 0.055" X 0.120"	3" X 3" X 0.093"	4	3	2" X 3" X 0.045"	(3) #10	#10 @ 24" O.C.
2" X 8" X 0.072" X 0.224"	3" X 3" X 0.125"	5	3	2" X 4" X 0.046" X 0.100" SMB	(3) #12	#12 @ 24" O.C.
2" X 9" X 0.072" X 0.224"	4" X 4" X 0.125"	6	3	2" X 6" X 0.050" X 0.120" SMB	(4) #14	#14 @ 16" O.C.
2" X 10" X 0.092" X 0.369"	4" X 4" X 0.125"	7	4	2" X 7" X 0.055" X 0.120" SMB	(6) #14	#14 @ 16" O.C.

NOTES:
1. MINIMUM NUMBER OF THRU-BOLTS IS TWO (2).
2. MINIMUM POST/BEAM MAY BE USED AS MINIMUM KNEE BRACE.

KNEE BRACE	MIN. LENGTH	MAX. LENGTH
2" X 2"	1'-4"	2'-0"
2" X 3"	1'-6"	2'-6"
2" X 4"	1'-6"	3'-0"

TITLE: SCREEN, ACRYLIC, & VINYL ENCLOSURE
90 MPH, 30 PSF SNOW, 20 PSF LIVE LOAD TABLES

FOUR SEASONS
BUILDING PRODUCTS

REVISIONS

NO.	DESCRIPTION	BY DATE	
		BY	DATE

PREPARED BY:
A.S. ENGINEERING SERVICES P.C.
112 WILSON DRIVE
PORT JEFFERSON, NY 11777
PH: (631) 560-0259 FX: (631) 938-0784



Signed Seal Exp.
DEC 17 2018 - DEC 31 2019

DATE: 07.29.14
DWN BY: JLA
CHK BY: HFN
SCALE: NTS
DWG #: MUS006
SHEET: 6 OF 22

TABLE 2A.3 - ALLOWABLE EDGE BEAM SPANS (FT.)
(HOLLOW EXTRUSIONS FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
150 MPH WIND VELOCITY (Vult)
0 PSF SNOW LOAD & 20 PSF LIVE LOAD

LOAD WIDTH (FT.)	COMPONENT							
	2" X 2" X 0.044"		3" X 2" X 0.048"		2" X 3" X 0.048"		3" X 3" X 0.090"	
	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER
5	3'-7"	1'-3"	3'-6"	1'-2"	5'-0"	2'-2"	8'-2"	3'-0"
6	3'-3"	1'-1"	3'-2"	1'-1"	4'-6"	2'-0"	7'-9"	2'-10"
7	3'-0"	1'-0"	2'-11"	1'-0"	4'-2"	1'-10"	7'-4"	2'-8"
8	2'-10"	1'-0"	2'-9"	0'-11"	3'-11"	1'-9"	7'-0"	2'-6"
9	2'-8"	0'-11"	2'-7"	0'-11"	3'-8"	1'-7"	6'-9"	2'-5"
10	2'-6"	0'-10"	2'-6"	0'-10"	3'-6"	1'-6"	6'-6"	2'-3"
11	2'-5"	0'-10"	2'-4"	0'-10"	3'-4"	1'-5"	6'-4"	2'-2"
12	2'-4"	0'-9"	2'-3"	0'-9"	3'-2"	1'-5"	6'-1"	2'-3"

NOTES:
1. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS
2. SPAN MAY BE INTERPOLATED.

TABLE 2B.3 - ALLOWABLE BEAM SPANS FOR MISCELLANEOUS FRAMING BEAMS (FT.)
(SELF MATING BEAMS FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
150 MPH WIND VELOCITY (Vult)
0 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.)												
	2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	
2" X 4" X 0.046" X 0.100" SMB	10'-0"	8'-2"	7'-1"	6'-4"	5'-9"	5'-4"	5'-0"	4'-5"	4'-1"	3'-9"	3'-6"	3'-4"	
2" X 5" X 0.050" X 0.120" SMB	13'-1"	11'-0"	9'-6"	8'-6"	7'-9"	7'-2"	6'-9"	6'-0"	5'-6"	5'-1"	4'-9"	4'-6"	
2" X 6" X 0.050" X 0.120" SMB	15'-1"	12'-9"	10'-9"	9'-7"	8'-9"	8'-1"	7'-7"	6'-9"	6'-2"	5'-9"	5'-4"	5'-1"	
2" X 7" X 0.055" X 0.120" SMB	17'-4"	14'-9"	12'-9"	11'-9"	10'-9"	9'-8"	9'-0"	8'-1"	7'-9"	6'-10"	6'-5"	6'-0"	
2" X 8" X 0.072" X 0.224" SMB	21'-5"	18'-9"	17'-0"	15'-6"	14'-2"	13'-1"	12'-3"	10'-11"	10'-0"	9'-3"	8'-8"	8'-2"	
2" X 9" X 0.072" X 0.224" SMB	23'-7"	20'-7"	18'-9"	16'-10"	15'-5"	14'-3"	13'-4"	11'-11"	10'-11"	10'-1"	9'-11"	9'-1"	
2" X 10" X 0.092" X 0.369" SMB	29'-7"	25'-10"	23'-6"	21'-10"	20'-6"	19'-6"	18'-5"	16'-6"	15'-0"	13'-11"	13'-0"	12'-3"	

NOTES:
1. IT IS RECOMMENDED THAT AN ENGINEER BE CONSULTED ON ANY MISCELLANEOUS FRAMING BEAM SPAN EXCEEDING 40 FT.
2. SPAN IS MEASURED FROM CENTER OF CONNECTION TO FASCIA OR WALL CONNECTION.
3. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS
4. ABOVE SPANS DO NOT INCLUDE LENGTH OF KNEE BRACE. ADD HORIZONTAL DISTANCE FROM UPRIGHT TO CENTER OF BRACE TO BEAM CONNECTION TO THE ABOVE SPANS FOR TOTAL BEAM SPANS.
5. SPAN MAY BE INTERPOLATED.

TABLE 2C.3 - ALLOWABLE SPANS FOR RIDGE BEAMS WITH SELF MATING BEAMS (FT.)
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
150 MPH WIND VELOCITY (Vult)
0 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.) *W1=ROOF WIDTH/2						
	5'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"
2" X 4" X 0.046" X 0.100" SMB	6'-4"	5'-9"	5'-0"	4'-6"	4'-3"	4'-1"	4'-1"
2" X 5" X 0.050" X 0.120" SMB	8'-4"	7'-9"	6'-9"	6'-0"	5'-9"	5'-6"	5'-6"
2" X 6" X 0.050" X 0.120" SMB	9'-7"	8'-9"	7'-7"	6'-9"	6'-6"	6'-2"	6'-2"
2" X 7" X 0.055" X 0.120" SMB	11'-5"	10'-3"	9'-0"	8'-1"	7'-9"	7'-5"	7'-5"
2" X 8" X 0.072" X 0.224" SMB	15'-6"	14'-2"	12'-3"	10'-11"	10'-5"	10'-0"	10'-0"
2" X 9" X 0.072" X 0.224" SMB	16'-10"	15'-5"	13'-4"	11'-11"	11'-4"	10'-10"	10'-10"
2" X 10" X 0.092" X 0.369" SMB	21'-10"	20'-6"	18'-5"	16'-6"	15'-8"	15'-0"	15'-0"

NOTES:
1. TABLE ABOVE ASSUMES EXTRUSION IS ORIENTED WITH LONGER DIMENSION PARALLEL TO LOAD
2. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS
3. ABOVE SPANS DO NOT INCLUDE LENGTH OF KNEE BRACE. ADD HORIZONTAL DISTANCE FROM UPRIGHT TO CENTER OF BRACE TO BEAM CONNECTION TO THE ABOVE SPANS FOR TOTAL BEAM SPANS.
4. SPAN MAY BE INTERPOLATED.

TABLE 2D.3 - ALLOWABLE UPRIGHT HEIGHTS, CHAIR RAIL SPANS, OR HEADER SPANS (FT.)
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
150 MPH WIND VELOCITY (Vult)
0 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.) *W1=MEMBER SPACING										
	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	
2" X 2" X 0.044" HOLLOW	5'-11"	5'-3"	4'-9"	4'-3"	3'-10"	3'-6"	3'-2"	2'-10"	2'-6"	2'-2"	
3" X 2" X 0.048" HOLLOW	5'-11"	5'-3"	4'-9"	4'-3"	3'-11"	3'-7"	3'-3"	2'-11"	2'-8"	2'-4"	
3" X 2" X 0.070" HOLLOW	8'-5"	8'-0"	7'-6"	6'-10"	6'-3"	5'-9"	5'-4"	4'-11"	4'-6"	4'-2"	
2" X 3" X 0.048" HOLLOW	8'-5"	7'-11"	7'-2"	6'-7"	6'-1"	5'-8"	5'-3"	4'-10"	4'-6"	4'-3"	
2" X 5" X 0.070" HOLLOW	10'-5"	10'-2"	9'-9"	9'-4"	9'-0"	8'-6"	7'-11"	7'-9"	7'-0"	6'-7"	
3" X 3" X 0.060" SQUARE	12'-5"	11'-10"	11'-4"	10'-11"	10'-6"	10'-2"	9'-11"	9'-7"	9'-5"	9'-2"	
3" X 3" X 0.128" SQUARE	13'-8"	13'-0"	12'-5"	11'-11"	11'-6"	11'-2"	10'-10"	10'-7"	10'-4"	10'-1"	
4" X 4" X 0.128" SQUARE	18'-5"	17'-6"	16'-8"	16'-1"	15'-6"	15'-0"	14'-7"	14'-0"	13'-1"	12'-3"	

NOTES:
1. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS
2. SPAN MAY BE INTERPOLATED.

TABLE 2E.3 - SCHEDULE OF POST TO BEAM SIZE
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5

BEAM SIZE	MINIMUM POST SIZE	THRU-BOLT QUANTITY		MINIMUM KNEE BRACE*	MIN. QTY. OF KNEE BRACES/SCREWS	MIN. STITCH SCREW SIZE & SPACING
		1/4" Ø	3/8" Ø			
HOLLOW BEAMS						
2" X 4" X 0.050"	3" X 3" X 0.060"	2	—	2" X 3" X 0.045"	(3) #8	—
2" X 5" X 0.062"	2" X 3" HOLLOW OR SNAP	2	—	2" X 3" X 0.045"	(3) #8	—
SELF MATING BEAMS						
2" X 4" X 0.046" X 0.100"	3" X 3" X 0.060"	2	—	2" X 3" X 0.045"	(3) #8	#8 @ 24" O.C.
2" X 5" X 0.050" X 0.120"	3" X 3" X 0.060"	2	—	2" X 3" X 0.045"	(3) #8	#8 @ 24" O.C.
2" X 6" X 0.050" X 0.120"	3" X 3" X 0.060"	2	—	2" X 3" X 0.045"	(3) #10	#10 @ 24" O.C.
2" X 7" X 0.055" X 0.120"	3" X 3" X 0.093"	2	2	2" X 3" X 0.045"	(3) #10	#10 @ 24" O.C.
2" X 8" X 0.072" X 0.224"	3" X 3" X 0.125"	3	2	2" X 4" X 0.046" X 0.100" SMB	(3) #12	#12 @ 24" O.C.
2" X 9" X 0.072" X 0.224"	4" X 4" X 0.125"	3	2	2" X 6" X 0.050" X 0.120" SMB	(4) #14	#14 @ 16" O.C.
2" X 10" X 0.092" X 0.369"	4" X 4" X 0.125"	4	3	2" X 7" X 0.055" X 0.120" SMB	(6) #14	#14 @ 16" O.C.

NOTES:
1. MINIMUM NUMBER OF THRU-BOLTS IS TWO (2).
2. MINIMUM POST/BEAM MAY BE USED AS MINIMUM KNEE BRACE.

KNEE BRACE	MIN. LENGTH	MAX. LENGTH
2" X 2"	1'-4"	2'-0"
2" X 3"	1'-9"	2'-6"
2" X 4"	1'-6"	3'-0"

TITLE: SCREEN, ACRYLIC, & VINYL ENCLOSURE
110 MPH, 0 PSF SNOW, 20 PSF LIVE LOAD TABLES



REVISIONS

NO.	DESCRIPTION	BY	DATE

PREPARED BY:
A.S. ENGINEERING SERVICES P.C.
112 WILSON DRIVE
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Signed Seal Exp.
DEC 17 2018 - DEC 31 2019

DATE: 07.29.14
DWN BY: JLA
CHK BY: HFN
SCALE: NTS
DWG #: MUS007
SHEET: 7 OF 22

TABLE 2A.4 - ALLOWABLE EDGE BEAM SPANS (FT.)
(HOLLOW EXTRUSIONS FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
150 MPH WIND VELOCITY (Vult)
30 PSF SNOW LOAD & 20 PSF LIVE LOAD

LOAD WIDTH (FT.)	COMPONENT							
	2" X 2" X 0.044"		3" X 2" X 0.045"		2" X 3" X 0.045"		3" X 3" X 0.050"	
	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER
3	2'-8"	1'-1"	2'-7"	1'-0"	3'-9"	1'-10"	5'-7"	2'-3"
6	2'-9"	1'-0"	2'-5"	0'-11"	3'-5"	1'-8"	5'-3"	2'-1"
7	2'-9"	0'-11"	2'-3"	0'-10"	3'-2"	1'-7"	5'-0"	2'-0"
8	2'-1"	0'-10"	2'-1"	0'-10"	2'-11"	1'-6"	4'-9"	1'-11"
9	2'-0"	0'-9"	1'-11"	0'-9"	2'-9"	1'-4"	4'-7"	1'-10"
10	1'-11"	0'-9"	1'-10"	0'-9"	2'-7"	1'-4"	4'-5"	1'-9"
11	1'-10"	0'-9"	1'-9"	0'-8"	2'-6"	1'-3"	4'-3"	1'-9"
12	1'-9"	0'-8"	1'-8"	0'-8"	2'-5"	1'-2"	4'-2"	1'-8"

NOTES:
1. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS
2. SPAN MAY BE INTERPOLATED.

TABLE 2B.4 - ALLOWABLE BEAM SPANS FOR MISCELLANEOUS FRAMING BEAMS (FT.)
(SELF MATING BEAMS FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
150 MPH WIND VELOCITY (Vult)
30 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.)											
	2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"
2" X 4" X 0.044" X 0.100" SMB	7'-6"	6'-1"	5'-3"	4'-9"	4'-4"	4'-0"	3'-9"	3'-4"	3'-1"	2'-10"	2'-8"	2'-5"
2" X 5" X 0.050" X 0.120" SMB	10'-1"	8'-2"	7'-1"	6'-4"	5'-10"	5'-4"	5'-0"	4'-6"	4'-1"	3'-10"	3'-7"	3'-4"
2" X 6" X 0.050" X 0.120" SMB	11'-4"	9'-3"	8'-0"	7'-2"	6'-7"	6'-1"	5'-8"	5'-1"	4'-8"	4'-3"	4'-0"	3'-9"
2" X 7" X 0.050" X 0.120" SMB	13'-5"	11'-0"	9'-7"	8'-7"	7'-10"	7'-3"	6'-9"	6'-1"	5'-6"	5'-1"	4'-9"	4'-5"
2" X 8" X 0.072" X 0.224" SMB	17'-8"	14'-11"	12'-11"	11'-7"	10'-7"	9'-9"	9'-2"	8'-2"	7'-6"	6'-11"	6'-6"	6'-1"
2" X 9" X 0.072" X 0.224" SMB	19'-5"	16'-3"	14'-1"	12'-7"	11'-6"	10'-8"	9'-11"	8'-11"	8'-2"	7'-0"	6'-8"	6'-5"
2" X 10" X 0.092" X 0.369" SMB	24'-5"	21'-4"	19'-4"	17'-5"	15'-11"	14'-9"	13'-9"	12'-4"	11'-3"	10'-5"	9'-9"	9'-2"

NOTES:
1. IT IS RECOMMENDED THAT AN ENGINEER BE CONSULTED ON ANY MISCELLANEOUS FRAMING BEAM SPAN EXCEEDING 40 FT.
2. SPAN IS MEASURED FROM CENTER OF CONNECTION TO FASCIA OR WALL CONNECTION.
3. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS
4. ABOVE SPANS DO NOT INCLUDE LENGTH OF KNEE BRACE. ADD HORIZONTAL DISTANCE FROM UPRIGHT TO CENTER OF BRACE TO BEAM CONNECTION TO THE ABOVE SPANS FOR TOTAL BEAM SPANS.
5. SPAN MAY BE INTERPOLATED.

TABLE 2C.4 - ALLOWABLE SPANS FOR RIDGE BEAMS WITH SELF MATING BEAMS (FT.)
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
150 MPH WIND VELOCITY (Vult)
30 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.) *W*-ROOF WIDTH/2					
	5'-0"	6'-0"	8'-0"	10'-0"	11'-0"	12'-0"
2" X 4" X 0.044" X 0.100" SMB	4'-9"	4'-4"	3'-9"	3'-4"	3'-2"	3'-1"
2" X 5" X 0.050" X 0.120" SMB	6'-4"	5'-10"	5'-0"	4'-6"	4'-3"	4'-1"
2" X 6" X 0.050" X 0.120" SMB	7'-2"	6'-7"	5'-8"	5'-1"	4'-10"	4'-8"
2" X 7" X 0.050" X 0.120" SMB	8'-7"	7'-10"	6'-9"	6'-1"	5'-9"	5'-6"
2" X 8" X 0.072" X 0.224" SMB	11'-7"	10'-7"	9'-2"	8'-2"	7'-10"	7'-5"
2" X 9" X 0.072" X 0.224" SMB	12'-7"	11'-6"	9'-11"	8'-11"	8'-6"	8'-2"
2" X 10" X 0.092" X 0.369" SMB	18'-0"	16'-11"	15'-4"	14'-3"	13'-8"	13'-1"

NOTES:
1. TABLE ABOVE ASSUMES EXTRUSION IS ORIENTED WITH LONGER DIMENSION PARALLEL TO LOAD
2. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS
3. ABOVE SPANS DO NOT INCLUDE LENGTH OF KNEE BRACE. ADD HORIZONTAL DISTANCE FROM UPRIGHT TO CENTER OF BRACE TO BEAM CONNECTION TO THE ABOVE SPANS FOR TOTAL BEAM SPANS.
4. SPAN MAY BE INTERPOLATED.

TABLE 2D.4 - ALLOWABLE UPRIGHT HEIGHTS, CHAIR RAIL SPANS, OR HEADER SPANS (FT.)
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
150 MPH WIND VELOCITY (Vult)
30 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.) *W*-MEMBER SPACING									
	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"
2" X 2" X 0.044" HOLLOW	4'-10"	4'-0"	3'-3"	2'-7"	2'-2"	1'-9"	0'-7"	---	---	---
3" X 2" X 0.045" HOLLOW	4'-11"	4'-2"	3'-6"	2'-10"	2'-2"	1'-6"	0'-1"	---	---	---
3" X 2" X 0.070" HOLLOW	8'-0"	6'-11"	5'-11"	5'-1"	4'-3"	3'-6"	2'-8"	1'-8"	---	---
2" X 3" X 0.045" HOLLOW	7'-9"	6'-10"	6'-0"	5'-3"	4'-7"	4'-0"	3'-5"	2'-9"	2'-2"	1'-4"
2" X 3" X 0.070" HOLLOW	10'-9"	10'-2"	9'-3"	8'-3"	7'-5"	6'-8"	6'-0"	5'-3"	4'-8"	4'-0"
3" X 3" X 0.090" SQUARE	12'-5"	11'-10"	11'-4"	10'-11"	10'-6"	10'-2"	9'-4"	8'-7"	7'-11"	7'-3"
3" X 3" X 0.125" SQUARE	13'-8"	13'-0"	12'-5"	11'-11"	11'-6"	11'-2"	10'-9"	9'-10"	9'-1"	8'-4"
4" X 4" X 0.125" SQUARE	18'-5"	17'-6"	16'-3"	15'-4"	13'-7"	12'-7"	11'-7"	10'-8"	9'-9"	9'-0"

NOTES:
1. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS
2. SPAN MAY BE INTERPOLATED.

TABLE 2E.4 - SCHEDULE OF POST TO BEAM SIZE
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5

BEAM SIZE	MINIMUM POST SIZE	THRU-BOLT QUANTITY		MINIMUM KNEE BRACE	MIN. QTY. OF KNEE BRACES SCREWS	MIN. STITCH SCREW SIZE & SPACING
		1/4" Ø	3/8" Ø			
HOLLOW BEAMS						
2" X 4" X 0.050"	3" X 3" X 0.050"	2	---	2" X 3" X 0.045"	(3) #8	---
2" X 5" X 0.062"	2" X 3" HOLLOW OR SMB	2	---	2" X 3" X 0.045"	(3) #8	---
SELF MATING BEAMS						
2" X 4" X 0.046" X 0.100"	3" X 3" X 0.050"	2	---	2" X 3" X 0.045"	(3) #8	#8 @ 24" O.C.
2" X 5" X 0.050" X 0.120"	3" X 3" X 0.050"	2	---	2" X 3" X 0.045"	(3) #8	#8 @ 24" O.C.
2" X 6" X 0.050" X 0.120"	3" X 3" X 0.060"	2	---	2" X 3" X 0.045"	(3) #10	#10 @ 24" O.C.
2" X 7" X 0.050" X 0.120"	3" X 3" X 0.093"	2	2	2" X 3" X 0.045"	(3) #10	#10 @ 24" O.C.
2" X 8" X 0.072" X 0.224"	3" X 3" X 0.125"	3	2	2" X 4" X 0.046" X 0.100" SMB	(3) #12	#12 @ 24" O.C.
2" X 9" X 0.072" X 0.224"	4" X 4" X 0.125"	3	2	2" X 6" X 0.050" X 0.120" SMB	(4) #14	#14 @ 16" O.C.
2" X 10" X 0.092" X 0.369"	4" X 4" X 0.125"	4	3	2" X 7" X 0.050" X 0.120" SMB	(6) #14	#14 @ 16" O.C.

NOTES:
1. MINIMUM NUMBER OF THRU-BOLTS IS TWO (2).
2. MINIMUM POST/BEAM MAY BE USED AS MINIMUM KNEE BRACE.

KNEE BRACE	MIN. LENGTH	MAX. LENGTH
2" X 2"	1'-4"	2'-0"
2" X 3"	1'-6"	2'-6"
2" X 4"	1'-6"	3'-0"

TITLE: SCREEN, ACRYLIC, & VINYL ENCLOSURE
110 MPH, 30 PSF SNOW, 20 PSF LIVE LOAD TABLES

FOUR SEASONS
BUILDING PRODUCTS

REVISIONS

NO.	DESCRIPTION	BY	DATE

PREPARED BY:
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Signed Seal Exp.
DEC 17 2018 - DEC 31 2019

DATE: 07.29.14
DWN BY: JLA
CHK BY: HFN
SCALE: NTS
DWG #: MUS008
SHEET: 8 OF 22

TABLE 2A.5 - ALLOWABLE EDGE BEAM SPANS (FT.)
(HOLLOW EXTRUSIONS FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
170 MPH WIND VELOCITY (Vult)
0 PSF SNOW LOAD & 20 PSF LIVE LOAD

LOAD WIDTH (FT.)	COMPONENT							
	2" X 2" X 0.044"		3" X 2" X 0.048"		2" X 3" X 0.048"		3" X 3" X 0.050"	
	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER
5	3'-4"	1'-1"	3'-3"	1'-1"	4'-8"	1'-11"	7'-10"	2'-10"
7	3'-1"	1'-0"	3'-0"	1'-0"	4'-3"	1'-9"	7'-5"	2'-8"
8	2'-10"	0'-11"	2'-9"	0'-11"	3'-11"	1'-8"	7'-0"	2'-6"
9	2'-9"	0'-10"	2'-7"	0'-10"	3'-8"	1'-6"	6'-9"	2'-4"
10	2'-8"	0'-9"	2'-5"	0'-9"	3'-6"	1'-5"	6'-6"	2'-2"
11	2'-5"	0'-9"	2'-4"	0'-9"	3'-4"	1'-5"	6'-3"	2'-1"
12	2'-2"	0'-8"	2'-1"	0'-8"	3'-0"	1'-3"	5'-8"	1'-11"

NOTES:
1. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS.
2. SPAN MAY BE INTERPOLATED.

TABLE 2B.5 - ALLOWABLE BEAM SPANS FOR MISCELLANEOUS FRAMING BEAMS (FT.)
(SELF MATING BEAMS FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
170 MPH WIND VELOCITY (Vult)
0 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.)												
	2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"
2" X 4" X 0.044" X 0.100" SMB	9'-5"	7'-5"	6'-8"	5'-11"	5'-5"	5'-0"	4'-3"	4'-2"	3'-10"	3'-7"	3'-4"	3'-2"	3'-2"
2" X 5" X 0.050" X 0.120" SMB	12'-7"	10'-4"	8'-11"	8'-0"	7'-3"	6'-9"	6'-4"	5'-8"	5'-2"	4'-9"	4'-6"	4'-3"	4'-3"
2" X 6" X 0.050" X 0.120" SMB	14'-3"	11'-8"	10'-1"	9'-0"	8'-3"	7'-8"	7'-2"	6'-5"	5'-10"	5'-5"	5'-5"	4'-9"	4'-9"
2" X 7" X 0.055" X 0.120" SMB	16'-8"	13'-11"	12'-0"	10'-9"	9'-10"	9'-1"	8'-6"	7'-7"	6'-11"	6'-8"	6'-0"	5'-8"	5'-8"
2" X 8" X 0.072" X 0.224" SMB	20'-7"	18'-0"	16'-3"	14'-7"	13'-3"	12'-4"	11'-6"	10'-4"	9'-5"	8'-8"	8'-2"	7'-8"	7'-8"
2" X 9" X 0.072" X 0.224" SMB	22'-7"	19'-9"	17'-8"	15'-10"	14'-5"	13'-5"	12'-6"	11'-2"	10'-3"	9'-6"	8'-10"	8'-4"	8'-4"
2" X 10" X 0.092" X 0.369" SMB	28'-5"	24'-10"	22'-7"	20'-11"	19'-8"	18'-6"	17'-4"	15'-6"	14'-1"	13'-1"	12'-5"	11'-0"	11'-0"

NOTES:
1. IT IS RECOMMENDED THAT AN ENGINEER BE CONSULTED ON ANY MISCELLANEOUS FRAMING BEAM SPAN EXCEEDING 40 FT.
2. SPAN IS MEASURED FROM CENTER OF CONNECTION TO FACETA OR WALL CONNECTION.
3. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS.
4. ABOVE SPANS DO NOT INCLUDE LENGTH OF KNEE BRACE. ADD HORIZONTAL DISTANCE FROM UPRIGHT TO CENTER OF BRACE TO BEAM CONNECTION TO THE ABOVE SPANS FOR TOTAL BEAM SPANS.
5. SPAN MAY BE INTERPOLATED.

TABLE 2C.5 - ALLOWABLE SPANS FOR RIDGE BEAMS WITH SELF MATING BEAMS (FT.)
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
170 MPH WIND VELOCITY (Vult)
0 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.) *1/2 ROOF WIDTH/2					
	5'-0"	6'-0"	8'-0"	10'-0"	12'-0"	12'-0"
2" X 4" X 0.044" X 0.100" SMB	5'-11"	5'-5"	4'-8"	4'-2"	4'-0"	3'-10"
2" X 5" X 0.050" X 0.120" SMB	8'-0"	7'-3"	6'-4"	5'-8"	5'-5"	5'-2"
2" X 6" X 0.050" X 0.120" SMB	9'-0"	8'-3"	7'-2"	6'-5"	6'-1"	5'-10"
2" X 7" X 0.055" X 0.120" SMB	10'-9"	9'-10"	8'-6"	7'-7"	7'-3"	6'-11"
2" X 8" X 0.072" X 0.224" SMB	14'-7"	13'-3"	11'-6"	10'-4"	9'-10"	9'-5"
2" X 9" X 0.072" X 0.224" SMB	15'-10"	14'-5"	12'-5"	11'-2"	10'-8"	10'-3"
2" X 10" X 0.092" X 0.369" SMB	20'-11"	19'-8"	17'-4"	15'-6"	14'-9"	14'-1"

NOTES:
1. TABLE ABOVE ASSUMES EXTRUSION IS ORIENTED WITH LONGER DIMENSION PARALLEL TO LOAD.
2. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS.
3. ABOVE SPANS DO NOT INCLUDE LENGTH OF KNEE BRACE. ADD HORIZONTAL DISTANCE FROM UPRIGHT TO CENTER OF BRACE TO BEAM CONNECTION TO THE ABOVE SPANS FOR TOTAL BEAM SPANS.
4. SPAN MAY BE INTERPOLATED.

TABLE 2D.5 - ALLOWABLE UPRIGHT HEIGHTS, CHAIR RAIL SPANS, OR HEADER SPANS (FT.)
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
170 MPH WIND VELOCITY (Vult)
0 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.) *1/2 MEMBER SPACING									
	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"
2" X 2" X 0.044" HOLLOW	4'-11"	4'-4"	3'-10"	3'-5"	3'-1"	2'-9"	2'-5"	2'-1"	1'-9"	1'-5"
3" X 2" X 0.048" HOLLOW	4'-10"	4'-4"	3'-10"	3'-6"	3'-1"	2'-9"	2'-6"	2'-3"	1'-11"	1'-8"
3" X 2" X 0.070" HOLLOW	7'-7"	6'-10"	6'-2"	5'-7"	5'-1"	4'-8"	4'-3"	3'-10"	3'-6"	3'-1"
2" X 3" X 0.045" HOLLOW	7'-3"	6'-6"	5'-11"	5'-5"	5'-0"	4'-7"	4'-3"	3'-11"	3'-7"	3'-4"
2" X 3" X 0.070" HOLLOW	9'-7"	9'-1"	8'-8"	8'-1"	7'-6"	6'-11"	6'-6"	6'-0"	5'-7"	5'-3"
3" X 3" X 0.050" SQUARE	11'-2"	10'-7"	10'-1"	9'-9"	9'-5"	9'-1"	8'-10"	8'-7"	8'-3"	7'-9"
3" X 3" X 0.125" SQUARE	12'-3"	11'-7"	11'-1"	10'-8"	10'-4"	10'-0"	9'-8"	9'-5"	9'-3"	8'-10"
4" X 4" X 0.125" SQUARE	16'-5"	15'-7"	14'-11"	14'-4"	13'-10"	13'-4"	12'-2"	11'-3"	10'-9"	9'-8"

NOTES:
1. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS.
2. SPAN MAY BE INTERPOLATED.

TABLE 2E.5 - SCHEDULE OF POST TO BEAM SIZE
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5

BEAM SIZE	MINIMUM POST SIZE	THRU-BOLT QUANTITY		MINIMUM KNEE BRACE*	MIN. QTY. OF KNEE BRACES	MIN. STITCH SCREW SIZE & SPACING
		1/4" Ø	3/8" Ø			
HOLLOW BEAMS						
2" X 4" X 0.050"	3" X 3" X 0.040"	2	--	2" X 3" X 0.045"	(3) #8	--
2" X 5" X 0.062"	2" X 3" HOLLOW OR SNAP	2	--	2" X 3" X 0.045"	(3) #8	--
SELF MATING BEAMS						
2" X 4" X 0.046" X 0.100"	3" X 3" X 0.060"	2	--	2" X 3" X 0.045"	(3) #8	#8 @ 24" O.C.
2" X 5" X 0.050" X 0.120"	3" X 3" X 0.060"	2	--	2" X 3" X 0.045"	(3) #8	#8 @ 24" O.C.
2" X 6" X 0.050" X 0.120"	3" X 3" X 0.060"	3	--	2" X 3" X 0.045"	(3) #10	#10 @ 24" O.C.
2" X 7" X 0.055" X 0.120"	3" X 3" X 0.093"	3	2	2" X 3" X 0.045"	(3) #10	#10 @ 24" O.C.
2" X 8" X 0.072" X 0.224"	3" X 3" X 0.125"	4	2	2" X 4" X 0.046" X 0.100" SMB	(3) #12	#12 @ 24" O.C.
2" X 9" X 0.072" X 0.224"	4" X 4" X 0.125"	4	2	2" X 6" X 0.050" X 0.120" SMB	(4) #14	#14 @ 16" O.C.
2" X 10" X 0.092" X 0.369"	4" X 4" X 0.125"	5	3	2" X 7" X 0.055" X 0.120" SMB	(5) #14	#14 @ 16" O.C.

NOTES:
1. MINIMUM NUMBER OF THRU-BOLTS IS TWO (2).
2. MINIMUM POST/BEAM MAY BE USED AS MINIMUM KNEE BRACE.

KNEE BRACE	MIN. LENGTH	MAX. LENGTH
2" X 2"	1'-6"	2'-0"
2" X 3"	1'-6"	2'-6"
2" X 4"	1'-6"	3'-0"

TITLE: SCREEN, ACRYLIC, & VINYL ENCLOSURE
130 MPH, 0 PSF SNOW, 20 PSF LIVE LOAD TABLES

FOUR SEASONS
BUILDING PRODUCTS

REVISIONS

NO.	DESCRIPTION	BY	DATE

PREPARED BY:
A.S. ENGINEERING SERVICES P.C.
112 WILSON DRIVE
PORT JEFFERSON, NY 11777
PH: (631) 560-0259 FX: (631) 938-0784

Signed Seal Exp.
DEC 17 2018 - DEC 31 2019

DATE: 07.29.14
DWN BY: JLA
CHK BY: HFN
SCALE: NTS
DWG #: MUS009
SHEET: 9 OF 22

TABLE 2A.6 - ALLOWABLE EDGE BEAM SPANS (FT.)
(HOLLOW EXTRUSIONS FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
170 MPH WIND VELOCITY (Vult)
30 PSF SNOW LOAD & 20 PSF LIVE LOAD

LOAD WIDTH (FT.)	COMPONENT							
	2" X 2" X 0.044"		3" X 2" X 0.045"		2" X 3" X 0.045"		3" X 3" X 0.090"	
	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER
5	2'-7"	1'-0"	2'-6"	0'-11"	3'-7"	1'-9"	6'-7"	2'-7"
6	2'-4"	0'-11"	2'-4"	0'-10"	3'-3"	1'-7"	6'-2"	2'-4"
7	2'-2"	0'-10"	2'-2"	0'-10"	3'-0"	1'-5"	5'-9"	2'-2"
8	2'-0"	0'-9"	2'-0"	0'-9"	2'-10"	1'-4"	5'-4"	2'-0"
9	1'-11"	0'-9"	1'-11"	0'-9"	2'-8"	1'-3"	5'-1"	1'-11"
10	1'-10"	1'-0"	1'-9"	0'-8"	2'-6"	1'-3"	4'-9"	1'-10"
11	1'-9"	0'-8"	1'-8"	0'-8"	2'-5"	1'-2"	4'-7"	1'-9"
12	1'-8"	0'-8"	1'-8"	0'-7"	2'-4"	1'-1"	4'-4"	1'-8"

NOTES:
1. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS
2. SPAN MAY BE INTERPOLATED.

TABLE 2B.6 - ALLOWABLE BEAM SPANS FOR MISCELLANEOUS FRAMING BEAMS (FT.)
(SELF MATING BEAMS FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
170 MPH WIND VELOCITY (Vult)
30 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.)												
	2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	
2" X 4" X 0.045" X 0.100" SMB	7'-2"	5'-11"	5'-1"	4'-7"	4'-2"	3'-10"	3'-7"	3'-3"	2'-9"	2'-5"	2'-1"	2'-0"	
2" X 5" X 0.050" X 0.120" SMB	9'-8"	7'-11"	6'-10"	6'-2"	5'-7"	5'-2"	4'-10"	4'-6"	4'-0"	3'-8"	3'-5"	3'-3"	
2" X 6" X 0.050" X 0.120" SMB	11'-0"	8'-11"	7'-9"	6'-11"	6'-4"	5'-10"	5'-6"	4'-11"	4'-6"	4'-2"	3'-11"	3'-8"	
2" X 7" X 0.055" X 0.120" SMB	13'-1"	10'-8"	9'-3"	8'-3"	7'-4"	7'-0"	6'-6"	5'-10"	5'-4"	4'-11"	4'-7"	4'-4"	
2" X 8" X 0.072" X 0.224" SMB	17'-3"	14'-5"	12'-6"	11'-2"	10'-2"	9'-5"	8'-13"	7'-11"	7'-3"	6'-8"	6'-3"	6'-1"	
2" X 9" X 0.072" X 0.224" SMB	18'-11"	15'-8"	13'-7"	12'-2"	11'-1"	10'-3"	9'-7"	8'-7"	7'-10"	7'-3"	6'-9"	6'-5"	
2" X 10" X 0.092" X 0.369" SMB	23'-10"	20'-10"	18'-9"	16'-9"	15'-4"	14'-2"	13'-3"	11'-10"	10'-10"	10'-0"	9'-5"	8'-10"	

NOTES:
1. IT IS RECOMMENDED THAT AN ENGINEER BE CONSULTED ON ANY MISCELLANEOUS FRAMING BEAM SPAN EXCEEDING 40 FT.
2. SPAN IS MEASURED FROM CENTER OF CONNECTION TO FASCIA OR WALL CONNECTION.
3. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS
4. ABOVE SPANS DO NOT INCLUDE LENGTH OF KNEE BRACE, ADD HORIZONTAL DISTANCE FROM UPRIGHT TO CENTER OF BRACE TO BEAM CONNECTION TO THE ABOVE SPANS FOR TOTAL BEAM SPAN.
5. SPAN MAY BE INTERPOLATED.

TABLE 2C.6 - ALLOWABLE SPANS FOR RIDGE BEAMS WITH SELF MATING BEAMS (FT.)
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
170 MPH WIND VELOCITY (Vult)
30 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.) W/ROOF WIDTH/2									
	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"
2" X 4" X 0.045" X 0.100" SMB	4'-7"	4'-2"	3'-7"	3'-3"	3'-1"	2'-11"	2'-11"	2'-11"	2'-11"	2'-11"
2" X 5" X 0.050" X 0.120" SMB	6'-2"	5'-7"	4'-10"	4'-6"	4'-2"	4'-0"	4'-0"	4'-0"	4'-0"	4'-0"
2" X 6" X 0.050" X 0.120" SMB	8'-11"	8'-4"	6'-4"	5'-6"	4'-11"	4'-8"	4'-8"	4'-8"	4'-8"	4'-8"
2" X 7" X 0.055" X 0.120" SMB	11'-3"	9'-6"	6'-8"	5'-10"	5'-7"	5'-4"	5'-4"	5'-4"	5'-4"	5'-4"
2" X 8" X 0.072" X 0.224" SMB	14'-2"	11'-2"	8'-10"	7'-11"	7'-6"	7'-3"	7'-3"	7'-3"	7'-3"	7'-3"
2" X 9" X 0.072" X 0.224" SMB	16'-2"	13'-1"	9'-7"	8'-7"	8'-2"	7'-10"	7'-10"	7'-10"	7'-10"	7'-10"
2" X 10" X 0.092" X 0.369" SMB	20'-9"	16'-9"	13'-8"	11'-10"	11'-4"	10'-10"	10'-10"	10'-10"	10'-10"	10'-10"

NOTES:
1. TABLE ABOVE ASSUMES EXTRUSION IS ORIENTED WITH LONGER DIMENSION PARALLEL TO LOAD
2. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS
3. ABOVE SPANS DO NOT INCLUDE LENGTH OF KNEE BRACE, ADD HORIZONTAL DISTANCE FROM UPRIGHT TO CENTER OF BRACE TO BEAM CONNECTION TO THE ABOVE SPANS FOR TOTAL BEAM SPAN.
4. SPAN MAY BE INTERPOLATED.

TABLE 2D.6 - ALLOWABLE UPRIGHT HEIGHTS, CHAIR RAIL SPANS, OR HEADER SPANS (FT.)
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
170 MPH WIND VELOCITY (Vult)
30 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.) W/ MEMBER SPACING									
	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"
2" X 2" X 0.044" HOLLOW	3'-11"	3'-2"	2'-8"	2'-5"	2'-2"	1'-9"	1'-6"	1'-3"	1'-0"	0'-11"
3" X 2" X 0.045" HOLLOW	4'-0"	3'-4"	2'-8"	2'-4"	1'-8"	1'-6"	1'-3"	1'-0"	0'-11"	0'-11"
3" X 2" X 0.070" HOLLOW	5'-5"	5'-7"	4'-9"	4'-9"	3'-8"	3'-8"	2'-6"	2'-6"	1'-7"	1'-7"
2" X 3" X 0.045" HOLLOW	6'-4"	5'-7"	4'-10"	4'-3"	3'-7"	3'-1"	2'-6"	1'-11"	1'-2"	1'-2"
2" X 3" X 0.070" HOLLOW	9'-5"	8'-6"	7'-6"	6'-9"	6'-0"	5'-4"	4'-8"	4'-1"	3'-6"	2'-10"
3" X 3" X 0.090" SQUARE	11'-1"	10'-6"	10'-6"	9'-8"	9'-1"	8'-3"	7'-7"	6'-11"	6'-3"	5'-8"
3" X 3" X 0.125" SQUARE	12'-2"	11'-7"	11'-1"	10'-8"	10'-3"	9'-6"	8'-8"	7'-11"	7'-3"	6'-7"
4" X 4" X 0.125" SQUARE	16'-4"	15'-5"	14'-0"	12'-4"	10'-10"	10'-7"	9'-9"	8'-10"	8'-1"	7'-4"

NOTES:
1. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS
2. SPAN MAY BE INTERPOLATED.

TABLE 2E.6 - SCHEDULE OF POST TO BEAM SIZE
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5

BEAM SIZE	MINIMUM POST SIZE	THRU-BOLT QUANTITY		MINIMUM KNEE BRACE*	MIN. QTY. OF KNEE BRACES SCREWS	MIN. STITCH SCREW SIZE & SPACING
		1/4" Ø	3/8" Ø			
HOLLOW BEAMS						
2" X 4" X 0.050"	3" X 3" X 0.050"	2	--	2" X 3" X 0.045"	(3) #8	--
2" X 5" X 0.062"	2" X 3" X 0.050" OR SNAP	2	--	2" X 3" X 0.045"	(3) #8	--
SELF MATING BEAMS						
2" X 4" X 0.040" X 0.100"	3" X 3" X 0.060"	2	--	2" X 3" X 0.045"	(3) #8	#8 @ 24" O.C.
2" X 5" X 0.050" X 0.120"	3" X 3" X 0.060"	3	--	2" X 3" X 0.045"	(3) #8	#8 @ 24" O.C.
2" X 6" X 0.050" X 0.120"	3" X 3" X 0.060"	3	--	2" X 3" X 0.045"	(3) #10	#10 @ 24" O.C.
2" X 7" X 0.055" X 0.120"	3" X 3" X 0.093"	4	2	2" X 3" X 0.045"	(3) #10	#10 @ 24" O.C.
2" X 8" X 0.072" X 0.224"	3" X 3" X 0.125"	5	3	2" X 4" X 0.046" X 0.100" SMB	(3) #12	#12 @ 24" O.C.
2" X 9" X 0.072" X 0.224"	4" X 4" X 0.125"	5	3	2" X 6" X 0.050" X 0.120" SMB	(4) #14	#14 @ 16" O.C.
2" X 10" X 0.092" X 0.369"	4" X 4" X 0.125"	7	4	2" X 7" X 0.055" X 0.120" SMB	(6) #14	#14 @ 16" O.C.

NOTES:
1. MINIMUM NUMBER OF THRU-BOLTS IS TWO (2).
2. MINIMUM POST/BEAM MAY BE USED AS MINIMUM KNEE BRACE.

KNEE BRACE	MIN. LENGTH	MAX. LENGTH
2" X 2"	1'-4"	2'-0"
2" X 3"	1'-6"	2'-6"
2" X 4"	1'-6"	3'-0"

TITLE: SCREEN, ACRYLIC, & VINYL ENCLOSURE

130 MPH, 30 PSF SNOW, 20 PSF LIVE LOAD TABLES

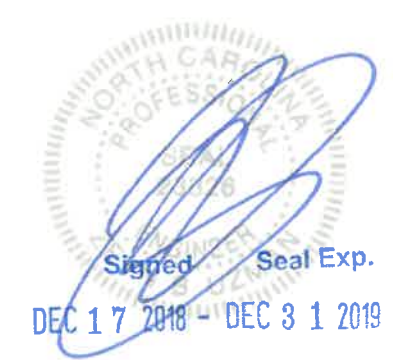
FOUR SEASONS
BUILDING PRODUCTS



REVISIONS

NO.	DESCRIPTION	BY	DATE

PREPARED BY:
A.S. ENGINEERING SERVICES P.C.
112 WILSON DRIVE
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DATE: 07.29.14
DWN BY: JLA
CHK BY: HFN
SCALE: NTS
DWG #: MUS010
SHEET: 10 OF 22

TABLE 2A.7 - ALLOWABLE EDGE BEAM SPANS (FT.)
(HOLLOW EXTRUSIONS FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
180 MPH WIND VELOCITY (V_W)
0 PSF SNOW LOAD & 20 PSF LIVE LOAD

LOAD WIDTH (FT.)	COMPONENT							
	2" X 2" X 0.044"		3" X 2" X 0.045"		2" X 3" X 0.045"		3" X 3" X 0.050"	
	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER
5	3'-2"	1'-1"	3'-1"	1'-0"	4'-4"	1'-0"	7'-6"	2'-5"
6	2'-11"	1'-0"	2'-10"	0'-11"	4'-0"	1'-9"	7'-1"	2'-6"
7	2'-8"	0'-11"	2'-7"	0'-11"	3'-8"	1'-7"	6'-9"	2'-4"
8	2'-6"	0'-10"	2'-5"	0'-10"	3'-5"	1'-6"	6'-5"	2'-2"
9	2'-4"	0'-9"	2'-3"	0'-9"	3'-3"	1'-5"	6'-2"	2'-1"
10	2'-3"	0'-9"	2'-2"	0'-9"	3'-1"	1'-4"	6'-0"	2'-0"
11	2'-2"	0'-9"	2'-1"	0'-8"	2'-11"	1'-3"	5'-9"	1'-11"
12	2'-0"	0'-8"	2'-0"	0'-8"	2'-10"	1'-3"	5'-7"	1'-10"

NOTES:
1. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS.
2. SPAN MAY BE INTERPOLATED.

TABLE 2B.7 - ALLOWABLE BEAM SPANS FOR MISCELLANEOUS FRAMING BEAMS (FT.)
(SELF-MATING BEAMS FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
180 MPH WIND VELOCITY (V_W)
0 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.)												
	2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	19'-0"
2" X 4" X 0.046" X 0.100" SMB	8'-5"	7'-2"	6'-3"	5'-7"	5'-1"	4'-8"	4'-9"	3'-11"	3'-7"	3'-4"	3'-1"	2'-11"	2'-11"
2" X 5" X 0.050" X 0.120" SMB	11'-10"	9'-8"	8'-4"	7'-6"	6'-10"	6'-4"	5'-11"	5'-3"	4'-10"	4'-5"	4'-2"	3'-11"	3'-11"
2" X 6" X 0.050" X 0.120" SMB	13'-5"	10'-11"	9'-6"	8'-6"	7'-9"	7'-2"	6'-8"	6'-0"	5'-6"	5'-1"	4'-9"	4'-6"	4'-6"
2" X 7" X 0.055" X 0.120" SMB	15'-11"	13'-0"	11'-3"	10'-1"	9'-2"	8'-6"	8'-0"	7'-1"	6'-6"	6'-0"	5'-8"	5'-4"	5'-4"
2" X 8" X 0.072" X 0.224" SMB	19'-8"	17'-2"	15'-3"	13'-8"	12'-5"	11'-6"	10'-9"	9'-8"	8'-10"	8'-2"	7'-7"	7'-2"	7'-2"
2" X 9" X 0.072" X 0.224" SMB	21'-8"	18'-11"	16'-7"	14'-10"	13'-6"	12'-6"	11'-9"	10'-6"	9'-7"	8'-10"	8'-3"	7'-10"	7'-10"
2" X 10" X 0.092" X 0.369" SMB	27'-2"	23'-9"	21'-7"	20'-0"	18'-9"	17'-4"	16'-2"	14'-6"	13'-3"	12'-3"	11'-6"	10'-10"	10'-10"

NOTES:
1. IT IS RECOMMENDED THAT AN ENGINEER BE CONSULTED ON ANY MISCELLANEOUS FRAMING BEAM SPAN EXCEEDING 40 FT.
2. SPAN IS MEASURED FROM CENTER OF CONNECTION TO FASCIA OR WALL CONNECTION.
3. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS.
4. ABOVE SPANS DO NOT INCLUDE LENGTH OF KNEE BRACE. ADD HORIZONTAL DISTANCE FROM UPRIGHT TO CENTER OF BRACE TO BEAM CONNECTION TO THE ABOVE SPANS FOR TOTAL BEAM SPAN.
5. SPAN MAY BE INTERPOLATED.

TABLE 2C.7 - ALLOWABLE SPANS FOR RIDGE BEAMS WITH SELF-MATING BEAMS (FT.)
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
180 MPH WIND VELOCITY (V_W)
0 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.) W/ ROOF WIDTH/2					
	5'-0"	6'-0"	8'-0"	10'-0"	11'-0"	12'-0"
2" X 4" X 0.046" X 0.100" SMB	5'-7"	5'-1"	4'-5"	3'-11"	3'-9"	3'-7"
2" X 5" X 0.050" X 0.120" SMB	7'-6"	6'-10"	5'-11"	5'-3"	5'-1"	4'-10"
2" X 6" X 0.050" X 0.120" SMB	9'-6"	7'-9"	6'-9"	6'-0"	5'-8"	5'-6"
2" X 7" X 0.055" X 0.120" SMB	10'-8"	9'-2"	8'-0"	7'-1"	6'-9"	6'-6"
2" X 8" X 0.072" X 0.224" SMB	13'-8"	12'-5"	10'-9"	9'-8"	9'-2"	8'-10"
2" X 9" X 0.072" X 0.224" SMB	14'-10"	13'-4"	11'-9"	10'-6"	10'-0"	9'-7"
2" X 10" X 0.092" X 0.369" SMB	20'-5"	18'-9"	16'-2"	14'-6"	13'-10"	13'-3"

NOTES:
1. TABLE ABOVE ASSUMES EXTRUSION IS ORIENTED WITH LONGER DIMENSION PARALLEL TO LOAD.
2. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS.
3. ABOVE SPANS DO NOT INCLUDE LENGTH OF KNEE BRACE. ADD HORIZONTAL DISTANCE FROM UPRIGHT TO CENTER OF BRACE TO BEAM CONNECTION TO THE ABOVE SPANS FOR TOTAL BEAM SPAN.
4. SPAN MAY BE INTERPOLATED.

TABLE 2D.7 - ALLOWABLE UPRIGHT HEIGHTS, CHAIR RAIL SPANS, OR HEADER SPANS (FT.)
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
180 MPH WIND VELOCITY (V_W)
0 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.) W/ MEMBER SPACING										
	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"
2" X 2" X 0.044" HOLLOW	4'-6"	3'-11"	3'-9"	3'-0"	2'-7"	2'-3"	1'-11"	1'-6"	1'-1"	0'-7"	0'-7"
3" X 2" X 0.045" HOLLOW	4'-4"	3'-11"	3'-6"	3'-4"	2'-9"	2'-5"	2'-1"	1'-9"	1'-5"	1'-1"	1'-1"
3" X 2" X 0.070" HOLLOW	7'-0"	6'-3"	5'-7"	5'-0"	4'-6"	4'-1"	3'-8"	3'-3"	2'-10"	2'-6"	2'-6"
2" X 3" X 0.045" HOLLOW	6'-9"	6'-0"	5'-6"	4'-11"	4'-6"	4'-1"	3'-9"	3'-5"	3'-1"	2'-9"	2'-9"
2" X 3" X 0.070" HOLLOW	9'-3"	8'-9"	8'-1"	7'-9"	6'-10"	6'-4"	5'-10"	5'-9"	5'-0"	4'-8"	4'-8"
3" X 3" X 0.090" SQUARE	10'-9"	9'-10"	8'-4"	8'-0"	7'-8"	6'-8"	6'-2"	5'-11"	5'-0"	4'-8"	4'-8"
3" X 3" X 0.125" SQUARE	11'-10"	11'-3"	10'-9"	10'-4"	10'-0"	9'-8"	9'-4"	8'-7"	8'-7"	8'-0"	8'-0"
4" X 4" X 0.125" SQUARE	15'-11"	15'-1"	14'-9"	13'-10"	12'-11"	11'-10"	10'-11"	10'-0"	9'-2"	8'-4"	8'-4"

NOTES:
1. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS.
2. SPAN MAY BE INTERPOLATED.

TABLE 2E.7 - SCHEDULE OF POST TO BEAM SIZE
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5

BEAM SIZE	MINIMUM POST SIZE	THRU-BOLT QUANTITY		MINIMUM KNEE BRACE*	MIN. QTY. OF KNEE BRACE SCREWS	MIN. SPACING SCREW SIZE & SPACING
		1/4" Ø	3/8" Ø			
HOLLOW BEAMS						
2" X 4" X 0.050"	3" X 3" X 0.060"	2	..	2" X 3" X 0.045"	(3) #8	
2" X 5" X 0.062"	2" X 3" HOLLOW OR SNAP	2	..	2" X 3" X 0.045"	(3) #8	
SELF-MATING BEAMS						
2" X 4" X 0.046" X 0.100"	3" X 3" X 0.060"	2	..	2" X 3" X 0.045"	(3) #8	#8 @ 24" O.C.
2" X 5" X 0.050" X 0.120"	3" X 3" X 0.060"	2	..	2" X 3" X 0.045"	(3) #8	#8 @ 24" O.C.
2" X 6" X 0.050" X 0.120"	3" X 3" X 0.060"	3	..	2" X 3" X 0.045"	(3) #10	#10 @ 24" O.C.
2" X 7" X 0.055" X 0.120"	3" X 3" X 0.093"	3	2	2" X 3" X 0.045"	(3) #10	#10 @ 24" O.C.
2" X 8" X 0.072" X 0.224"	3" X 3" X 0.125"	4	2	2" X 4" X 0.046" X 0.100" SMB	(3) #12	#12 @ 24" O.C.
2" X 9" X 0.072" X 0.224"	4" X 4" X 0.125"	4	2	2" X 6" X 0.050" X 0.120" SMB	(4) #14	#14 @ 16" O.C.
2" X 10" X 0.092" X 0.369"	4" X 4" X 0.125"	5	3	2" X 7" X 0.055" X 0.120" SMB	(6) #14	#14 @ 16" O.C.

NOTES:
1. MINIMUM NUMBER OF THRU-BOLTS IS TWO (2).
2. MINIMUM POST/BEAM MAY BE USED AS MINIMUM KNEE BRACE.

KNEE BRACE	MIN. LENGTH	MAX. LENGTH
2" X 2"	1'-4"	2'-0"
2" X 3"	1'-6"	2'-6"
2" X 4"	1'-6"	3'-0"

TITLE: SCREEN, ACRYLIC, & VINYL ENCLOSURE
140 MPH, 0 PSF SNOW, 20 PSF LIVE LOAD TABLES

FOUR SEASONS
BUILDING PRODUCTS

REVISIONS

NO.	DESCRIPTION	BY	DATE

PREPARED BY:
A.S. ENGINEERING SERVICES P.C.
112 WILSON DRIVE
PORT JEFFERSON, NY 11777
PH: (631) 560-0259 FX: (631) 938-0784

Signed Seal Exp.
DEC 17 2018 - DEC 31 2019

DATE: 07.29.14
DWN BY: JLA
CHK BY: HFN
SCALE: NTS
DWG #: MUS011
SHEET: 11 OF 22

TABLE 2A.8 - ALLOWABLE EDGE BEAM SPANS (FT.)
(HOLLOW EXTRUSIONS FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
120 MPH WIND VELOCITY (Vult)
40 PSF SNOW LOAD & 20 PSF LIVE LOAD

LOAD WIDTH (FT.)	COMPONENT							
	2" X 2" X 0.044"		3" X 2" X 0.045"		2" X 3" X 0.045"		3" X 3" X 0.050"	
	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER
5	2'-7"	1'-1"	2'-7"	1'-1"	3'-8"	1'-7"	4'-8"	2'-9"
6	2'-5"	1'-0"	2'-4"	1'-0"	3'-4"	1'-5"	4'-7"	2'-8"
7	2'-3"	0'-11"	2'-2"	0'-11"	3'-1"	1'-3"	4'-10"	2'-5"
8	2'-1"	0'-10"	2'-0"	0'-10"	2'-10"	1'-3"	5'-5"	2'-3"
9	2'-0"	0'-10"	1'-11"	0'-10"	2'-8"	1'-2"	5'-1"	2'-2"
10	1'-10"	0'-9"	1'-10"	0'-9"	2'-7"	1'-1"	4'-10"	2'-1"
11	1'-9"	0'-9"	1'-9"	0'-9"	2'-5"	1'-0"	4'-8"	1'-11"
12	1'-8"	0'-9"	1'-8"	0'-8"	2'-4"	1'-0"	4'-5"	1'-10"

NOTES:
1. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS
2. SPAN MAY BE INTERPOLATED.

TABLE 2B.8 - ALLOWABLE BEAM SPANS FOR MISCELLANEOUS FRAMING BEAMS (FT.)
(SELF MATING BEAMS FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
120 MPH WIND VELOCITY (Vult)
40 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.)												
	2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	
2" X 4" X 0.044" X 0.100" SMB	7'-4"	6'-0"	5'-2"	4'-7"	4'-3"	3'-11"	3'-8"	3'-3"	2'-9"	2'-5"	2'-1"	1'-8"	
2" X 5" X 0.050" X 0.120" SMB	9'-10"	8'-0"	6'-11"	6'-3"	5'-8"	5'-3"	4'-11"	4'-5"	4'-0"	3'-9"	3'-6"	3'-3"	
2" X 6" X 0.050" X 0.120" SMB	11'-1"	9'-1"	7'-10"	7'-0"	6'-5"	5'-11"	5'-7"	5'-0"	4'-6"	4'-2"	3'-11"	3'-8"	
2" X 7" X 0.050" X 0.120" SMB	13'-3"	10'-10"	9'-4"	8'-4"	7'-8"	7'-1"	6'-7"	6'-11"	5'-5"	5'-0"	4'-8"	4'-5"	
2" X 8" X 0.072" X 0.224" SMB	17'-5"	14'-8"	12'-8"	11'-4"	10'-4"	9'-7"	9'-0"	8'-0"	7'-4"	6'-9"	6'-4"	6'-0"	
2" X 9" X 0.072" X 0.224" SMB	19'-6"	15'-11"	13'-9"	12'-4"	11'-8"	10'-5"	9'-9"	8'-9"	7'-11"	7'-4"	6'-11"	6'-6"	
2" X 10" X 0.092" X 0.360" SMB	24'-0"	21'-0"	19'-0"	17'-0"	15'-5"	14'-5"	13'-4"	12'-0"	11'-0"	10'-2"	9'-6"	9'-0"	

NOTES:
1. IT IS RECOMMENDED THAT AN ENGINEER BE CONSULTED ON ANY MISCELLANEOUS FRAMING BEAM SPAN EXCEEDING 40 FT.
2. SPAN IS MEASURED FROM CENTER OF CONNECTION TO FACE OR WALL CONNECTION.
3. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS
4. ABOVE SPANS DO NOT INCLUDE LENGTH OF KNEE BRACE. ADD HORIZONTAL DISTANCE FROM UPRIGHT TO CENTER OF BRACE TO BEAM CONNECTION TO THE ABOVE SPANS FOR TOTAL BEAM SPANS.
5. SPAN MAY BE INTERPOLATED.

TABLE 2C.8 - ALLOWABLE SPANS FOR RIDGE BEAMS WITH SELF MATING BEAMS (FT.)
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
120 MPH WIND VELOCITY (Vult)
40 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.) W/ROOF WIDTH/2				
	5'-0"	6'-0"	8'-0"	10'-0"	12'-0"
2" X 4" X 0.044" X 0.100" SMB	5'-7"	5'-1"	4'-5"	3'-11"	3'-9"
2" X 5" X 0.050" X 0.120" SMB	7'-8"	6'-10"	5'-11"	5'-3"	5'-1"
2" X 6" X 0.050" X 0.120" SMB	8'-4"	7'-9"	6'-8"	6'-0"	5'-6"
2" X 7" X 0.050" X 0.120" SMB	10'-1"	9'-2"	8'-0"	7'-1"	6'-9"
2" X 8" X 0.072" X 0.224" SMB	12'-10"	12'-5"	10'-9"	9'-8"	9'-2"
2" X 9" X 0.072" X 0.224" SMB	14'-1"	13'-6"	11'-9"	10'-6"	9'-7"
2" X 10" X 0.092" X 0.360" SMB	17'-9"	16'-9"	15'-2"	14'-6"	13'-9"

NOTES:
1. TABLE ABOVE ASSUMES EXTRUSION IS ORIENTED WITH LONGER DIMENSION PARALLEL TO LOAD
2. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS
3. ABOVE SPANS DO NOT INCLUDE LENGTH OF KNEE BRACE. ADD HORIZONTAL DISTANCE FROM UPRIGHT TO CENTER OF BRACE TO BEAM CONNECTION TO THE ABOVE SPANS FOR TOTAL BEAM SPANS.
4. SPAN MAY BE INTERPOLATED.

TABLE 2D.8 - ALLOWABLE UPRIGHT HEIGHTS, CHAIR RAIL SPANS, OR HEADER SPANS (FT.)
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
120 MPH WIND VELOCITY (Vult)
40 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.) W/MEMBER SPACING									
	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"
2" X 2" X 0.044" HOLLOW	5'-10"	4'-9"	3'-10"	2'-10"	1'-8"	-	-	-	-	-
3" X 2" X 0.045" HOLLOW	5'-11"	4'-9"	3'-10"	2'-10"	1'-8"	-	-	-	-	-
3" X 2" X 0.070" HOLLOW	9'-8"	8'-3"	6'-10"	5'-3"	3'-10"	2'-0"	-	-	-	-
2" X 3" X 0.045" HOLLOW	9'-6"	10'-5"	9'-2"	8'-0"	6'-11"	5'-11"	4'-11"	3'-10"	2'-7"	-
2" X 3" X 0.070" HOLLOW	12'-4"	11'-9"	11'-3"	10'-9"	9'-7"	8'-7"	7'-7"	6'-8"	5'-9"	4'-9"
3" X 3" X 0.090" SQUARE	14'-5"	13'-8"	13'-1"	12'-7"	12'-2"	11'-9"	10'-9"	9'-10"	9'-0"	8'-2"
3" X 3" X 0.125" SQUARE	15'-9"	15'-0"	14'-4"	13'-9"	13'-4"	12'-11"	12'-6"	11'-8"	10'-6"	9'-6"
4" X 4" X 0.125" SQUARE	21'-3"	20'-2"	19'-3"	17'-9"	15'-8"	13'-6"	13'-1"	12'-0"	10'-6"	10'-0"

NOTES:
1. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS
2. SPAN MAY BE INTERPOLATED.

TABLE 2E.8 - SCHEDULE OF POST TO BEAM SIZE
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5

BEAM SIZE	MINIMUM POST SIZE	THRU-BOLT QUANTITY		MINIMUM KNEE BRACE*	MIN. QTY. OF KNEE BRACES/SCREWS	MIN. STITCH SCREW SIZE & SPACING
		1/4" Ø	3/8" Ø			
HOLLOW BEAMS						
2" X 4" X 0.050"	3" X 3" X 0.060"	4	-	2" X 3" X 0.045"	(3) #8	-
2" X 5" X 0.050"	2" X 3" HOLLOW OR SNAP	4	-	2" X 3" X 0.045"	(3) #8	-
SELF MATING BEAMS						
2" X 4" X 0.044" X 0.100"	3" X 3" X 0.060"	4	-	2" X 3" X 0.045"	(3) #8	#8 @ 24" O.C.
2" X 5" X 0.050" X 0.120"	3" X 3" X 0.060"	4	-	2" X 3" X 0.045"	(3) #8	#8 @ 24" O.C.
2" X 6" X 0.050" X 0.120"	3" X 3" X 0.060"	5	-	2" X 3" X 0.045"	(3) #10	#10 @ 24" O.C.
2" X 7" X 0.050" X 0.120"	3" X 3" X 0.060"	5	3	2" X 3" X 0.045"	(3) #10	#10 @ 24" O.C.
2" X 8" X 0.072" X 0.224"	3" X 3" X 0.125"	7	4	2" X 4" X 0.045" X 0.100" SMB	(3) #12	#12 @ 24" O.C.
2" X 9" X 0.072" X 0.224"	4" X 4" X 0.125"	7	4	2" X 4" X 0.050" X 0.120" SMB	(4) #14	#14 @ 16" O.C.
2" X 10" X 0.092" X 0.360"	4" X 4" X 0.125"	10	6	2" X 7" X 0.050" X 0.120" SMB	(4) #14	#14 @ 16" O.C.

NOTES:
1. MINIMUM NUMBER OF THRU-BOLTS IS TWO (2).
2. MINIMUM POST/BEAM MAY BE USED AS MINIMUM KNEE BRACE.

KNEE BRACE	MIN. LENGTH	MAX. LENGTH
2" X 2"	1'-4"	2'-0"
2" X 3"	1'-6"	2'-6"
2" X 4"	1'-6"	3'-0"

TITLE: SCREEN, ACRYLIC, & VINYL ENCLOSURE

140 MPH, 0 PSF SNOW, 20 PSF LIVE LOAD TABLES

FOUR SEASONS
BUILDING PRODUCTS

REVISIONS

NO.	DESCRIPTION	BY DATE	
		BY	DATE

PREPARED BY:
A.S. ENGINEERING SERVICES P.C.
112 WILSON DRIVE
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Signed Seal Exp.
DEC 17 2018 - DEC 31 2019

DATE: 07.29.14
DWN BY: JLA
CHK BY: HFN
SCALE: NTS
DWG #: MUS012
SHEET: 12 OF 22

TABLE 2A.9 - ALLOWABLE EDGE BEAM SPANS (FT.)
(HOLLOW EXTRUSIONS FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
120 MPH WIND VELOCITY (Vult)
50 PSF SNOW LOAD & 20 PSF LIVE LOAD

LOAD WIDTH (FT.)	COMPONENT							
	2" X 2" X 0.044"		3" X 2" X 0.045"		2" X 3" X 0.045"		3" X 3" X 0.050"	
	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER
5	2'-1"	1'-2"	2'-5"	1'-0"	3'-5"	1'-6"	6'-4"	2'-9"
6	1'-11"	1'-0"	2'-2"	0'-11"	3'-1"	1'-8"	5'-11"	2'-6"
7	1'-9"	0'-11"	2'-0"	0'-10"	2'-10"	1'-3"	5'-9"	2'-4"
8	1'-8"	0'-10"	1'-11"	0'-10"	2'-8"	1'-2"	5'-1"	2'-2"
9	1'-7"	0'-9"	1'-9"	0'-9"	2'-6"	1'-1"	4'-9"	2'-1"
10	1'-6"	0'-9"	1'-8"	0'-9"	2'-5"	1'-0"	4'-7"	1'-11"
11	1'-5"	0'-9"	1'-7"	0'-8"	2'-5"	1'-0"	4'-4"	1'-10"
12	1'-4"	0'-8"	1'-6"	0'-8"	2'-2"	0'-11"	4'-2"	1'-9"

TABLE 2B.9 - ALLOWABLE BEAM SPANS FOR MISCELLANEOUS FRAMING BEAMS (FT.)
(SELF MATING BEAMS FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
120 MPH WIND VELOCITY (Vult)
50 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.)											
	2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"
2" X 4" X 0.046" X 0.100" SMB	6'-10"	5'-7"	4'-10"	4'-4"	3'-11"	3'-8"	3'-5"	3'-1"	2'-9"	2'-7"	2'-5"	2'-3"
2" X 5" X 0.050" X 0.120" SMB	9'-2"	7'-4"	6'-6"	5'-10"	5'-4"	4'-11"	4'-7"	4'-1"	3'-9"	3'-6"	3'-3"	3'-1"
2" X 6" X 0.050" X 0.120" SMB	10'-5"	8'-6"	7'-4"	6'-7"	6'-0"	5'-7"	5'-2"	4'-8"	4'-3"	3'-11"	3'-8"	3'-6"
2" X 7" X 0.055" X 0.120" SMB	12'-5"	10'-1"	8'-9"	7'-10"	7'-2"	6'-7"	6'-2"	5'-6"	5'-1"	4'-8"	4'-5"	4'-2"
2" X 8" X 0.072" X 0.224" SMB	16'-8"	13'-8"	11'-10"	10'-7"	9'-8"	9'-0"	8'-5"	7'-8"	6'-10"	6'-4"	5'-11"	5'-7"
2" X 9" X 0.072" X 0.224" SMB	18'-3"	14'-11"	12'-11"	11'-6"	10'-6"	9'-9"	9'-3"	8'-2"	7'-5"	6'-11"	6'-5"	6'-1"
2" X 10" X 0.092" X 0.369" SMB	23'-0"	20'-1"	17'-10"	15'-11"	14'-7"	13'-6"	12'-7"	11'-3"	10'-3"	9'-6"	8'-11"	8'-5"

TABLE 2C.8 - ALLOWABLE SPANS FOR RIDGE BEAMS WITH SELF MATING BEAMS (FT.)
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
120 MPH WIND VELOCITY (Vult)
50 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.) W=ROOF WIDTH/2					
	5'-0"	6'-0"	8'-0"	10'-0"	12'-0"	12'-0"
2" X 4" X 0.044" X 0.100" SMB	5'-1"	4'-8"	4'-0"	3'-7"	3'-5"	3'-3"
2" X 5" X 0.050" X 0.120" SMB	6'-10"	6'-3"	5'-5"	4'-10"	4'-7"	4'-5"
2" X 6" X 0.050" X 0.120" SMB	7'-9"	7'-0"	6'-1"	5'-5"	5'-2"	5'-0"
2" X 7" X 0.055" X 0.120" SMB	9'-2"	8'-5"	7'-3"	6'-5"	6'-2"	5'-11"
2" X 8" X 0.072" X 0.224" SMB	12'-3"	11'-4"	9'-10"	8'-3"	8'-5"	8'-0"
2" X 9" X 0.072" X 0.224" SMB	13'-6"	12'-4"	10'-8"	9'-7"	9'-1"	8'-9"
2" X 10" X 0.092" X 0.369" SMB	16'-11"	17'-1"	14'-9"	13'-3"	12'-7"	12'-1"

- NOTES:
1. TABLE ABOVE ASSUMES EXTRUSION IS ORIENTED WITH LONGER DIMENSION PARALLEL TO LOAD.
2. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS.
3. ABOVE SPANS DO NOT INCLUDE LENGTH OF KNEE BRACE, ADD HORIZONTAL DISTANCE FROM UPRIGHT TO CENTER OF BRACE TO BEAM CONNECTION TO THE ABOVE SPANS FOR TOTAL BEAM SPANS.
4. SPAN MAY BE INTERPOLATED.

TABLE 2D.9 - ALLOWABLE UPRIGHT HEIGHTS, CHAIR RAIL SPANS, OR HEADER SPANS (FT.)
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
120 MPH WIND VELOCITY (Vult)
50 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.) W=MEMBER SPACING									
	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"
2" X 2" X 0.044" HOLLOW	5'-3"	4'-2"	3'-11"	1'-5"	-	-	-	-	-	-
3" X 2" X 0.045" HOLLOW	5'-5"	4'-4"	3'-4"	2'-4"	0'-9"	-	-	-	-	-
3" X 2" X 0.070" HOLLOW	9'-0"	7'-7"	6'-3"	5'-0"	3'-9"	2'-2"	-	-	-	-
2" X 3" X 0.045" HOLLOW	8'-11"	7'-8"	6'-7"	5'-7"	4'-8"	3'-8"	2'-8"	1'-2"	-	-
2" X 3" X 0.070" HOLLOW	12'-3"	11'-8"	10'-6"	9'-3"	8'-1"	7'-0"	6'-0"	4'-11"	3'-10"	2'-8"
3" X 3" X 0.090" SQUARE	14'-3"	13'-6"	12'-11"	12'-5"	12'-0"	10'-10"	9'-10"	8'-10"	7'-11"	7'-0"
3" X 3" X 0.125" SQUARE	15'-8"	14'-10"	14'-3"	13'-8"	13'-2"	12'-6"	11'-9"	10'-3"	9'-3"	8'-2"
4" X 4" X 0.125" SQUARE	21'-0"	20'-0"	18'-7"	16'-0"	13'-8"	12'-1"	11'-10"	10'-8"	9'-7"	8'-6"

- NOTES:
1. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS.
2. SPAN MAY BE INTERPOLATED.

TABLE 2E.9 - SCHEDULE OF POST TO BEAM SIZE
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5

BEAM SIZE	MINIMUM POST SIZE	THRU-BOLT QUANTITY		MINIMUM KNEE BRACE*	MIN. QTY. OF KNEE BRACES	MIN. STITCH SCREW SIZE & SPACING
		1/4" Ø	3/8" Ø			
HOLLOW BEAMS						
2" X 4" X 0.050"	3" X 3" X 0.060"	3	-	2" X 3" X 0.045"	(3) #8	-
2" X 5" X 0.062"	2" X 3" HOLLOW OR SNAP	3	-	2" X 3" X 0.045"	(3) #8	-
SELF MATING BEAMS						
2" X 4" X 0.046" X 0.100"	3" X 3" X 0.060"	3	-	2" X 3" X 0.045"	(3) #8	#8 @ 24" O.C.
2" X 5" X 0.050" X 0.120"	3" X 3" X 0.060"	4	-	2" X 3" X 0.045"	(3) #8	#8 @ 24" O.C.
2" X 6" X 0.050" X 0.120"	3" X 3" X 0.060"	4	-	2" X 3" X 0.045"	(3) #10	#10 @ 24" O.C.
2" X 7" X 0.055" X 0.120"	3" X 3" X 0.093"	5	3	2" X 3" X 0.045"	(3) #10	#10 @ 24" O.C.
2" X 8" X 0.072" X 0.224"	3" X 3" X 0.125"	5	3	2" X 4" X 0.045" X 0.100" SMB	(3) #12	#12 @ 24" O.C.
2" X 9" X 0.072" X 0.224"	4" X 4" X 0.125"	6	4	2" X 5" X 0.050" X 0.120" SMB	(4) #14	#14 @ 16" O.C.
2" X 10" X 0.092" X 0.369"	4" X 4" X 0.125"	8	5	2" X 7" X 0.055" X 0.120" SMB	(8) #14	#14 @ 16" O.C.

- NOTES:
1. MINIMUM NUMBER OF THRU-BOLTS IS TWO (2).
2. MINIMUM POST/BEAM MAY BE USED AS MINIMUM KNEE BRACE.

KNEE BRACE	MIN. LENGTH	MAX. LENGTH
2" X 2"	1'-4"	2'-0"
2" X 3"	1'-5"	2'-6"
2" X 4"	1'-5"	3'-0"

TITLE: SCREEN, ACRYLIC, & VINYL ENCLOSURE
140 MPH, 0 PSF SNOW, 20 PSF LIVE LOAD TABLES



REVISIONS

NO.	DESCRIPTION	BY	DATE

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PH: (631) 560-0259 FX: (631) 938-0784



Signed: JLA Seal Exp. DEC 31 2019

DATE: 07.29.14
DWN BY: JLA
CHK BY: HFN
SCALE: NTS
DWG #: MUS013
SHEET: 13 OF 22

TABLE 2A.10 - ALLOWABLE EDGE BEAM SPANS (FT.)
(HOLLOW EXTRUSIONS FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
150 MPH WIND VELOCITY (Vult)
40 PSF SNOW LOAD & 20 PSF LIVE LOAD

LOAD WIDTH (FT.)	COMPONENT							
	2" X 2" X 0.044"		3" X 2" X 0.049"		2" X 3" X 0.045"		3" X 3" X 0.050"	
	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER
5	2'-6"	1'-0"	2'-5"	1'-0"	3'-6"	1'-5"	6'-5"	2'-7"
6	2'-3"	0'-11"	2'-3"	0'-11"	3'-2"	1'-3"	6'-0"	2'-5"
7	2'-1"	0'-10"	2'-1"	0'-10"	2'-11"	1'-2"	5'-6"	2'-3"
8	2'-0"	0'-9"	1'-11"	0'-9"	2'-9"	1'-1"	5'-2"	2'-1"
9	1'-10"	0'-9"	1'-10"	0'-9"	2'-7"	1'-0"	4'-11"	2'-0"
10	1'-9"	0'-9"	1'-9"	0'-9"	2'-5"	1'-0"	4'-8"	1'-10"
11	1'-8"	0'-8"	1'-8"	0'-8"	2'-4"	0'-11"	4'-5"	1'-9"
12	1'-7"	0'-8"	1'-7"	0'-8"	2'-3"	0'-11"	4'-3"	1'-8"

TABLE 2B.10 - ALLOWABLE BEAM SPANS FOR MISCELLANEOUS FRAMING BEAMS (FT.)
(SELF MATING BEAMS FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
150 MPH WIND VELOCITY (Vult)
40 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.)											
	2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"
2" X 4" X 0.044" X 0.100" SMB	7'-0"	5'-8"	4'-11"	4'-5"	4'-0"	3'-9"	3'-4"	3'-1"	2'-10"	2'-8"	2'-6"	2'-4"
2" X 5" X 0.050" X 0.120" SMB	9'-5"	7'-8"	6'-8"	5'-11"	5'-5"	5'-0"	4'-8"	4'-2"	3'-10"	3'-7"	3'-4"	3'-2"
2" X 6" X 0.050" X 0.120" SMB	10'-7"	8'-8"	7'-6"	6'-9"	6'-3"	5'-8"	5'-4"	4'-9"	4'-4"	4'-0"	3'-9"	3'-6"
2" X 7" X 0.055" X 0.120" SMB	12'-8"	10'-4"	8'-11"	8'-0"	7'-3"	6'-9"	6'-4"	5'-8"	5'-2"	4'-9"	4'-6"	4'-3"
2" X 8" X 0.072" X 0.224" SMB	16'-10"	14'-0"	12'-1"	10'-10"	9'-10"	9'-2"	8'-7"	7'-8"	7'-0"	6'-6"	6'-0"	5'-8"
2" X 9" X 0.072" X 0.224" SMB	18'-5"	15'-2"	13'-2"	11'-9"	10'-9"	9'-11"	9'-3"	8'-4"	7'-9"	7'-0"	6'-7"	6'-2"
2" X 10" X 0.092" X 0.369" SMB	23'-4"	20'-4"	18'-2"	16'-3"	14'-10"	13'-9"	12'-10"	11'-6"	10'-5"	9'-9"	9'-2"	8'-7"

TABLE 2C.10 - ALLOWABLE SPANS FOR RIDGE BEAMS WITH SELF MATING BEAMS (FT.)
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
150 MPH WIND VELOCITY (Vult)
40 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.) W-ROOF WIDTH/2						
	5'-0"	6'-0"	8'-0"	10'-0"	11'-0"	12'-0"	12'-0"
2" X 4" X 0.044" X 0.100" SMB	4'-5"	4'-0"	3'-6"	3'-1"	3'-0"	2'-10"	2'-10"
2" X 5" X 0.050" X 0.120" SMB	5'-11"	5'-5"	4'-8"	4'-2"	4'-0"	3'-10"	3'-10"
2" X 6" X 0.050" X 0.120" SMB	6'-9"	6'-1"	5'-4"	4'-9"	4'-6"	4'-4"	4'-4"
2" X 7" X 0.055" X 0.120" SMB	8'-0"	7'-3"	6'-4"	5'-8"	5'-5"	5'-2"	5'-2"
2" X 8" X 0.072" X 0.224" SMB	10'-10"	9'-10"	8'-7"	7'-8"	7'-3"	7'-0"	7'-0"
2" X 9" X 0.072" X 0.224" SMB	11'-9"	10'-9"	9'-3"	8'-4"	7'-11"	7'-7"	7'-7"
2" X 10" X 0.092" X 0.369" SMB	16'-3"	14'-10"	12'-10"	11'-4"	10'-11"	10'-6"	10'-6"

TABLE 2D.10 - ALLOWABLE UPRIGHT HEIGHTS, CHAIR RAIL SPANS, OR HEADER SPANS (FT.)
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5
150 MPH WIND VELOCITY (Vult)
40 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.) W-MEMBER SPACING									
	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"
2" X 2" X 0.044" HOLLOW	4'-5"	3'-6"	2'-7"	1'-7"	-	-	-	-	-	-
3" X 2" X 0.045" HOLLOW	4'-7"	3'-9"	2'-11"	2'-2"	-	-	-	-	-	-
3" X 2" X 0.070" HOLLOW	7'-6"	6'-4"	5'-4"	4'-4"	3'-5"	2'-4"	0'-9"	-	-	-
2" X 3" X 0.045" HOLLOW	7'-9"	6'-5"	5'-6"	4'-9"	4'-0"	3'-3"	2'-6"	1'-7"	-	-
2" X 3" X 0.070" HOLLOW	10'-9"	9'-10"	8'-9"	7'-9"	6'-10"	6'-0"	5'-2"	4'-4"	3'-6"	2'-7"
3" X 3" X 0.090" SQUARE	12'-5"	11'-10"	11'-4"	10'-11"	10'-0"	9'-1"	8'-3"	7'-9"	6'-8"	6'-0"
3" X 3" X 0.125" SQUARE	13'-8"	13'-0"	12'-9"	11'-11"	11'-6"	10'-6"	9'-7"	8'-8"	7'-10"	7'-0"
4" X 4" X 0.125" SQUARE	18'-5"	17'-6"	15'-6"	13'-6"	11'-8"	10'-8"	9'-9"	8'-9"	7'-11"	7'-1"

NOTES:
1. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS
2. SPAN MAY BE INTERPOLATED.

TABLE 2E.10 - SCHEDULE OF POST TO BEAM SIZE
(FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
ALUMINUM ALLOY 6005-T5

BEAM SIZE	MINIMUM POST SIZE	THRU-BOLT QUANTITY		MINIMUM KNEE BRACE*	MIN. QTY. OF KNEE BRACES/SCREWS	MIN. STITCH SCREW SIZE & SPACING
		1/4" Ø	3/8" Ø			
HOLLOW BEAMS						
2" X 4" X 0.050"	3" X 3" X 0.060"	3	-	2" X 3" X 0.045"	(3) #8	-
2" X 5" X 0.062"	2" X 3" HOLLOW OR S.M.B.	3	-	2" X 3" X 0.045"	(3) #8	-
SELF MATING BEAMS						
2" X 4" X 0.046" X 0.100"	3" X 3" X 0.060"	3	-	2" X 3" X 0.045"	(3) #8	#8 @ 24" O.C.
2" X 5" X 0.050" X 0.120"	3" X 3" X 0.060"	4	-	2" X 3" X 0.045"	(3) #8	#8 @ 24" O.C.
2" X 6" X 0.050" X 0.120"	3" X 3" X 0.060"	4	-	2" X 3" X 0.045"	(3) #10	#10 @ 24" O.C.
2" X 7" X 0.055" X 0.120"	3" X 3" X 0.093"	5	3	2" X 3" X 0.045"	(3) #10	#10 @ 24" O.C.
2" X 8" X 0.072" X 0.224"	3" X 3" X 0.125"	6	4	2" X 4" X 0.046" X 0.100" S.M.B.	(3) #12	#12 @ 24" O.C.
2" X 9" X 0.072" X 0.224"	4" X 4" X 0.125"	6	4	2" X 4" X 0.050" X 0.120" S.M.B.	(4) #14	#14 @ 16" O.C.
2" X 10" X 0.092" X 0.369"	4" X 4" X 0.125"	7	5	2" X 7" X 0.055" X 0.120" S.M.B.	(4) #14	#14 @ 16" O.C.

NOTES:
1. MINIMUM NUMBER OF THRU-BOLTS IS TWO (2).
2. MINIMUM POST/BEAM MAY BE USED AS MINIMUM KNEE BRACE.

KNEE BRACE	MIN. LENGTH	MAX. LENGTH
2" X 2"	1'-4"	2'-0"
2" X 3"	1'-6"	2'-5"
2" X 4"	1'-6"	3'-0"

TITLE: SCREEN, ACRYLIC, & VINYL ENCLOSURE
140 MPH O PSF SNOW,
20 PSF LIVE LOAD TABLES

FOUR SEASONS
BUILDING PRODUCTS

REVISIONS

NO.	DESCRIPTION	BY	DATE

PREPARED BY:
A.S. ENGINEERING SERVICES P.C.
112 WILSON DRIVE
PORT JEFFERSON, NY 11777
PH: (631) 560-0259 FX: (631) 936-0784

Signed Seal Exp.
DEC 17 2018 - DEC 31 2019

DATE: 07.29.14
DWN BY: JLA
CHK BY: HFN
SCALE: NTS
DWG #: MUS014
SHEET: 14 OF 22

TABLE 2A.11 - ALLOWABLE EDGE BEAM SPANS (FT.)
 (HOLLOW EXTRUSIONS FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
 ALUMINUM ALLOY 6005-T5
 150 MPH WIND VELOCITY (Vult)
 50 PSF SNOW LOAD & 20 PSF LIVE LOAD

LOAD WIDTH (FT.)	COMPONENT							
	2" X 2" X 0.044"		3" X 2" X 0.048"		2" X 3" X 0.045"		3" X 3" X 0.090"	
	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER	MAX. SPAN	MAX. CANTILEVER
5	2'-4"	1'-0"	2'-4"	0'-11"	3'-3"	1'-4"	6'-2"	2'-0"
6	2'-2"	0'-10"	2'-1"	0'-10"	3'-0"	1'-3"	5'-8"	2'-0"
7	2'-0"	0'-10"	1'-11"	0'-9"	2'-9"	1'-2"	5'-3"	2'-2"
8	1'-10"	0'-9"	1'-10"	0'-9"	2'-7"	1'-1"	4'-11"	2'-0"
9	1'-9"	0'-9"	1'-9"	0'-8"	2'-5"	1'-0"	4'-7"	1'-11"
10	1'-8"	0'-8"	1'-7"	0'-8"	2'-4"	0'-11"	4'-4"	1'-9"
11	1'-7"	0'-8"	1'-7"	0'-8"	2'-2"	0'-11"	4'-2"	1'-8"
12	1'-6"	0'-7"	1'-6"	0'-7"	2'-1"	0'-10"	4'-0"	1'-8"

TABLE 2B.11 - ALLOWABLE BEAM SPANS FOR MISCELLANEOUS FRAMING BEAMS (FT.)
 (SELF MATING BEAMS FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
 ALUMINUM ALLOY 6005-T5
 150 MPH WIND VELOCITY (Vult)
 50 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.)											
	2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"
2" X 4" X 0.044" X 0.100" SMB	6'-7"	5'-4"	4'-8"	4'-2"	3'-5"	3'-0"	3'-3"	2'-11"	2'-8"	2'-6"	2'-4"	2'-2"
2" X 5" X 0.050" X 0.120" SMB	8'-10"	7'-3"	6'-3"	5'-7"	5'-1"	4'-9"	4'-5"	3'-11"	3'-7"	3'-4"	3'-1"	2'-11"
2" X 6" X 0.050" X 0.120" SMB	10'-0"	8'-2"	7'-1"	6'-4"	5'-9"	5'-4"	5'-0"	4'-6"	4'-1"	3'-9"	3'-6"	3'-4"
2" X 7" X 0.050" X 0.120" SMB	11'-11"	9'-8"	8'-9"	7'-5"	6'-10"	6'-4"	5'-10"	5'-4"	4'-10"	4'-6"	4'-2"	4'-0"
2" X 8" X 0.072" X 0.224" SMB	16'-1"	13'-2"	11'-9"	10'-2"	9'-3"	8'-7"	8'-1"	7'-2"	6'-7"	6'-1"	5'-8"	5'-4"
2" X 9" X 0.072" X 0.224" SMB	17'-6"	14'-3"	12'-5"	11'-1"	10'-1"	9'-4"	8'-9"	7'-10"	7'-2"	6'-7"	6'-2"	5'-10"
2" X 10" X 0.092" X 0.369" SMB	22'-5"	19'-7"	17'-1"	15'-4"	14'-0"	12'-11"	12'-1"	10'-10"	9'-10"	9'-2"	8'-7"	8'-1"

TABLE 2C.11 - ALLOWABLE SPANS FOR RIDGE BEAMS WITH SELF MATING BEAMS (FT.)
 (FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
 ALUMINUM ALLOY 6005-T5
 150 MPH WIND VELOCITY (Vult)
 50 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.) *W = ROOF WIDTH/2					
	5'-0"	6'-0"	8'-0"	10'-0"	11'-0"	12'-0"
2" X 4" X 0.044" X 0.100" SMB	4'-2"	3'-9"	3'-3"	2'-11"	2'-10"	2'-8"
2" X 5" X 0.050" X 0.120" SMB	5'-7"	5'-1"	4'-5"	3'-11"	3'-9"	3'-7"
2" X 6" X 0.050" X 0.120" SMB	6'-4"	5'-9"	5'-0"	4'-6"	4'-3"	4'-1"
2" X 7" X 0.050" X 0.120" SMB	7'-6"	6'-10"	5'-11"	5'-4"	5'-1"	4'-10"
2" X 8" X 0.072" X 0.224" SMB	10'-2"	9'-3"	8'-1"	7'-2"	6'-10"	6'-7"
2" X 9" X 0.072" X 0.224" SMB	11'-1"	10'-2"	8'-9"	7'-10"	7'-6"	7'-2"
2" X 10" X 0.092" X 0.369" SMB	16'-6"	15'-6"	13'-7"	12'-2"	11'-7"	11'-4"

TABLE 2D.11 - ALLOWABLE UPRIGHT HEIGHTS, CHAIR RAIL SPANS, OR HEADER SPANS (FT.)
 (FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
 ALUMINUM ALLOY 6005-T5
 150 MPH WIND VELOCITY (Vult)
 50 PSF SNOW LOAD & 20 PSF LIVE LOAD

COMPONENT	TRIBUTARY WIDTH (FT.) *W = MEMBER SPACING							
	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	7'-0"
2" X 2" X 0.044" HOLLOW	3'-11"	2'-11"	1'-8"	-	-	-	-	-
3" X 2" X 0.048" HOLLOW	4'-2"	3'-3"	2'-3"	1'-1"	-	-	-	-
3" X 2" X 0.070" HOLLOW	7'-0"	5'-9"	4'-7"	3'-5"	2'-1"	-	-	-
2" X 3" X 0.048" HOLLOW	7'-0"	6'-0"	5'-0"	4'-2"	3'-3"	2'-4"	0'-11"	-
2" X 3" X 0.070" HOLLOW	10'-9"	9'-5"	8'-2"	7'-1"	6'-1"	5'-2"	4'-2"	3'-2"
3" X 3" X 0.090" SQUARE	12'-9"	11'-10"	11'-4"	10'-6"	9'-5"	8'-9"	7'-5"	6'-8"
3" X 3" X 0.125" SQUARE	13'-8"	13'-0"	12'-9"	11'-11"	10'-11"	9'-9"	8'-9"	7'-9"
4" X 4" X 0.125" SQUARE	18'-5"	16'-9"	14'-9"	12'-1"	11'-1"	9'-11"	8'-10"	7'-10"

NOTES:
 1. ABOVE SPANS ARE BASED ON ALLOWABLE MATERIAL BENDING STRESS AND DEFLECTION, WHICHEVER LIMITS
 2. SPAN MAY BE INTERPOLATED.

TABLE 2E.11 - SCHEDULE OF POST TO BEAM SIZE
 (FOR SCREEN, ACRYLIC, OR VINYL ROOMS)
 ALUMINUM ALLOY 6005-T5

BEAM SIZE	MINIMUM POST SIZE	THRU-BOLT QUANTITY		MINIMUM KNEE BRACE*	MIN. QTY. OF KNEE BRACES SCREWS	MIN. STITCH SCREW SIZE & SPACING
		1/4" Ø	3/8" Ø			
HOLLOW BEAMS						
2" X 4" X 0.050"	3" X 3" X 0.060"	3	--	2" X 3" X 0.045"	(3) #6	--
2" X 5" X 0.062"	2" X 3" HOLLOW OR SMB	3	--	2" X 3" X 0.045"	(3) #6	--
SELF MATING BEAMS						
2" X 4" X 0.046" X 0.100"	3" X 3" X 0.060"	3	--	2" X 3" X 0.045"	(3) #6	#8 @ 24" O.C.
2" X 5" X 0.050" X 0.120"	3" X 3" X 0.060"	4	--	2" X 3" X 0.045"	(3) #6	#8 @ 24" O.C.
2" X 6" X 0.050" X 0.120"	3" X 3" X 0.060"	4	--	2" X 3" X 0.045"	(3) #10	#10 @ 24" O.C.
2" X 7" X 0.050" X 0.120"	3" X 3" X 0.093"	5	3	2" X 3" X 0.045"	(3) #10	#10 @ 24" O.C.
2" X 8" X 0.072" X 0.224"	3" X 3" X 0.125"	6	4	2" X 4" X 0.046" X 0.100" SMB	(3) #12	#12 @ 24" O.C.
2" X 9" X 0.072" X 0.224"	4" X 4" X 0.125"	6	4	2" X 4" X 0.050" X 0.120" SMB	(4) #14	#14 @ 16" O.C.
2" X 10" X 0.092" X 0.369"	4" X 4" X 0.125"	8	5	2" X 7" X 0.058" X 0.120" SMB	(6) #14	#14 @ 16" O.C.

NOTES:
 1. MINIMUM NUMBER OF THRU-BOLTS IS TWO (2)
 2. MINIMUM POST/BEAM MAY BE USED AS MINIMUM KNEE BRACE

KNEE BRACE	MIN. LENGTH	MAX. LENGTH
2" X 2"	1'-4"	2'-0"
2" X 3"	1'-6"	2'-6"
2" X 4"	1'-5"	3'-0"

TITLE: SCREEN, ACRYLIC, & VINYL ENCLOSURE
 140 MPH, 0 PSF SNOW,
 20 PSF LIVE LOAD TABLES



REVISIONS

NO.	DESCRIPTION	BY DATE	
		BY	DATE

PREPARED BY:
 A.S. ENGINEERING SERVICES P.C.
 112 WILSON DRIVE
 PORT JEFFERSON, NY 11777
 PH: (631) 560-0259 FX: (631) 938-0784

Signed Seal Exp.
 DEC 17 2018 - DEC 31 2019

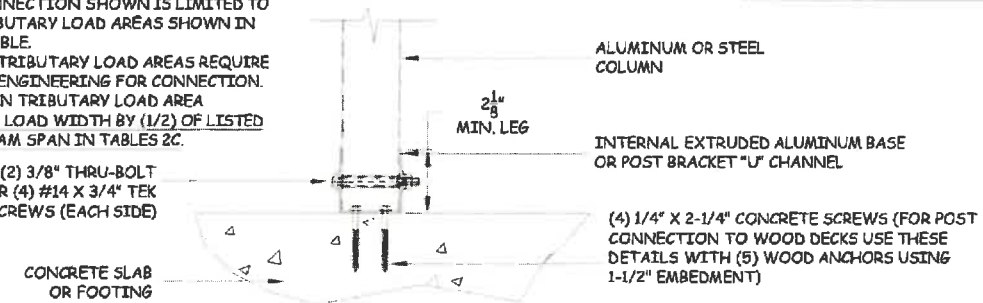
DATE: 07.29.14
 DWN BY: JLA
 CHK BY: HFN
 SCALE: NTS
 DWG #: MUS015
 SHEET: 15 OF 22

WIND SPEED - Vult (MPH)	MAX. TRIBUTARY AREA (SQ. FT.)		
	EXP. B	EXP. C	EXP. D
120	94.17	66.57	55.91
130	79.84	56.53	47.51
150	60.43	42.88	36.07
160	52.39	37.21	31.31
170	46.24	32.86	27.66
180	41.38	29.42	24.77

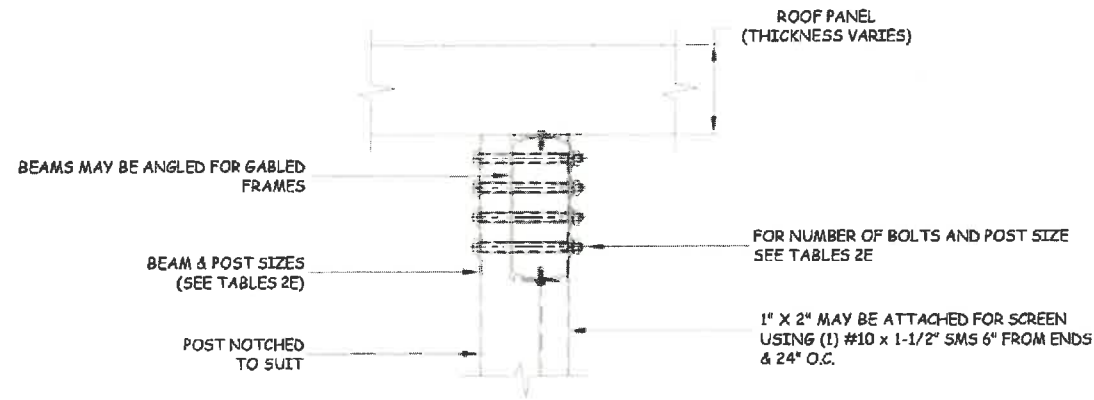
NOTES:

1. BASE CONNECTION SHOWN IS LIMITED TO MAX. TRIBUTARY LOAD AREAS SHOWN IN ABOVE TABLE.
2. GREATER TRIBUTARY LOAD AREAS REQUIRE FURTHER ENGINEERING FOR CONNECTION. TO OBTAIN TRIBUTARY LOAD AREA MULTIPLY LOAD WIDTH BY (1/2) OF LISTED RIDGE BEAM SPAN IN TABLES 2C.

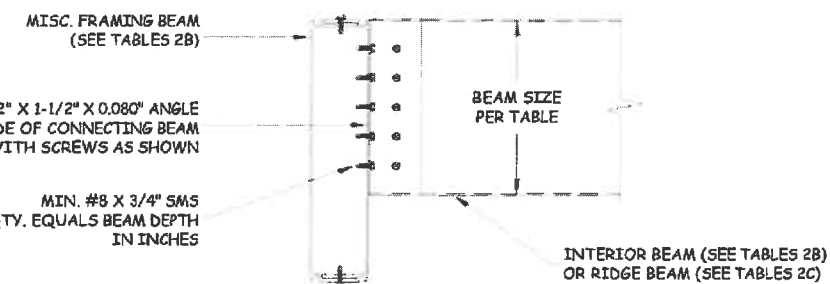
ATTACHMENT DETAILS SHOWN REQUIRE DIAGONAL BRACING FOR FREE-STANDING STRUCTURES



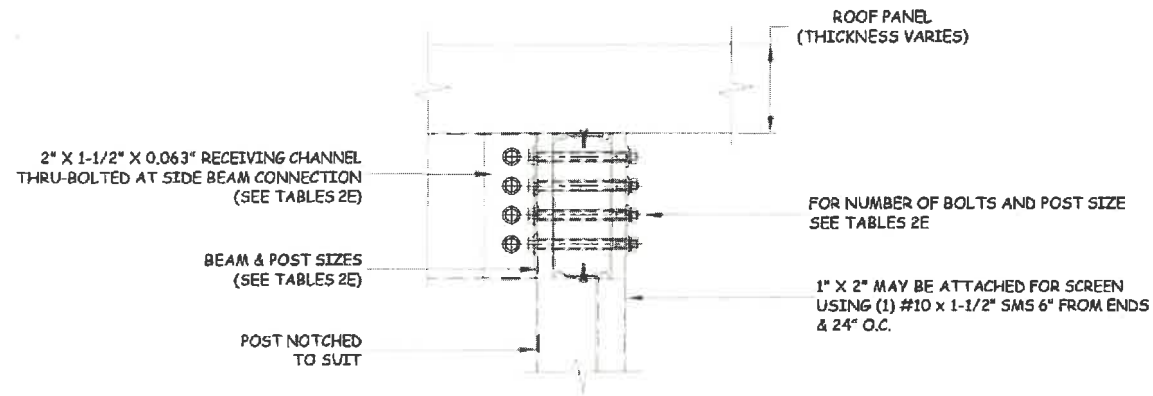
**TYPE 1 POST TO CONCRETE CONNECTION
TUBE COLUMN BASE SCHEMATIC INTERNAL BASE**



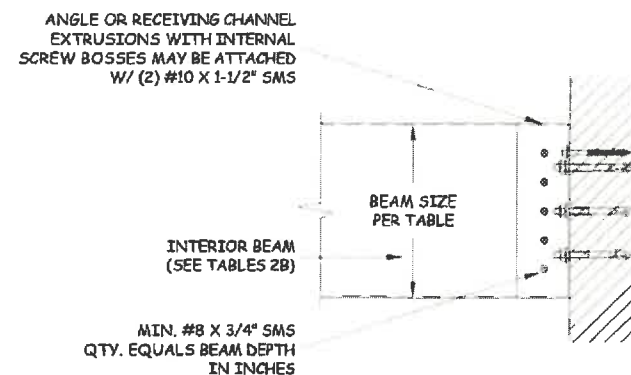
SIDE NOTCH POST TO CARRIER BEAM CONNECTION



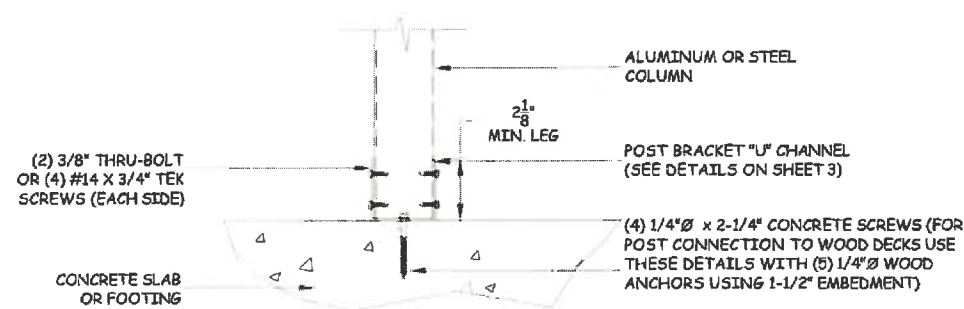
BEAM TO BEAM CONNECTION DETAIL



CENTER NOTCH POST TO CARRIER BEAM CONNECTION



BEAM TO WALL CONNECTION DETAIL



**POST TO CONCRETE CONNECTION
INTERNAL OR EXTERNAL RECEIVING CHANNEL**

BEAM TO WALL CONNECTION:
(2) 2" X 2" X 0.060" EXTERNALLY MOUNTED ANGLES ATTACHED TO WOOD FRAME W/ MIN. (2) 3/8" X 2" LAG SCREWS PER SIDE OR TO CONCRETE W/ (2) 1/4" X 2-1/4" ANCHORS OR MASONRY WALL ADD (1) ANCHOR PER SIDE FOR EACH INCH OF BEAM DEPTH LARGER THAN 3"

ALTERNATE CONNECTION:
(1) 1-3/4" X 1-3/4" X 1-3/4" X 1/8" INTERNAL "U" CHANNEL ATTACHED TO WOOD FRAME WALL W/ (3) 3/8" X 2" LAG SCREWS OR TO CONCRETE OR MASONRY WALL W/ (3) 1/4" X 2-1/4" ANCHORS OR ADD (1) ANCHOR PER SIDE FOR EACH INCH OF BEAM DEPTH LARGER THAN 3"

Signed Seal Exp.
DEC 17 2018 - DEC 31 2019

TITLE: SCREEN, ACRYLIC, & VINYL ENCLOSURE
TYPICAL BEAM CONNECTION DETAILS



REVISIONS

NO.	DESCRIPTION	BY	DATE

PREPARED BY:
A.S. ENGINEERING SERVICES P.C.
112 WILSON DRIVE
PORT JEFFERSON, NY 11777
PH: (631) 560-0259 FX: (631) 938-0784

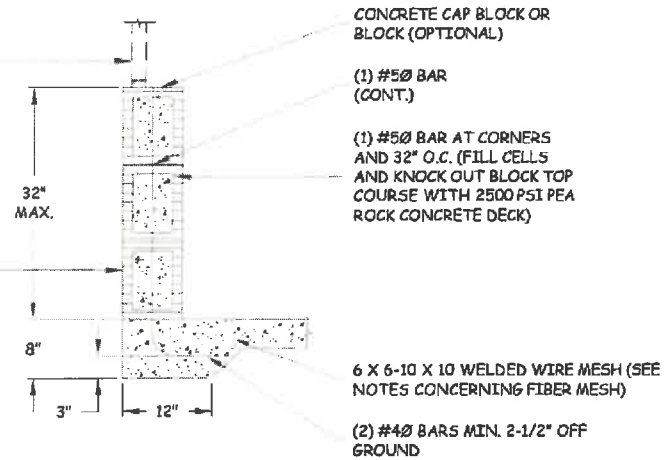
DATE: 07.29.14
DWN BY: JLA
CHK BY: HFN
SCALE: NTS

DWG #: MUS016
SHEET: 16 OF 22

ANCHOR ALUMINUM FRAME TO WALL OR SLAB WITH 1/4" X 2-1/4" CONCRETE ANCHORS 6" FROM EITHER SIDE OF POST & 24" O.C. MAX.

RIBBON OR MONOLITHIC FOOTING (IF MONOLITHIC SLAB IS USED SEE NOTES OF APPROPRIATE DETAILS)

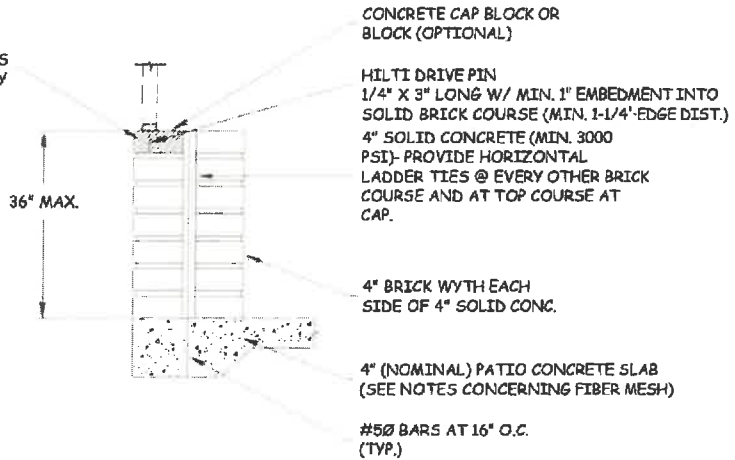
8" x 8" x 16" BLOCK WALL (32" MAX.)



KNEE-WALL FOR SCREENED ROOMS

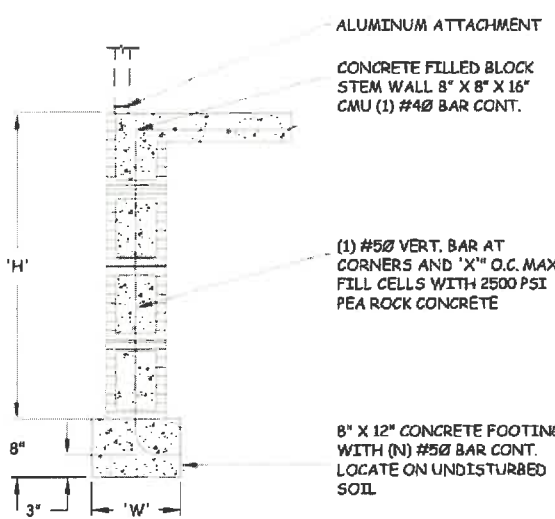
SOLID BRICK THIS COURSE ONLY

ALTERNATE CONNECTION OF SCREENED ENCLOSURE FOR BRICK OR OTHER NON-STRUCTURAL KNEE WALL



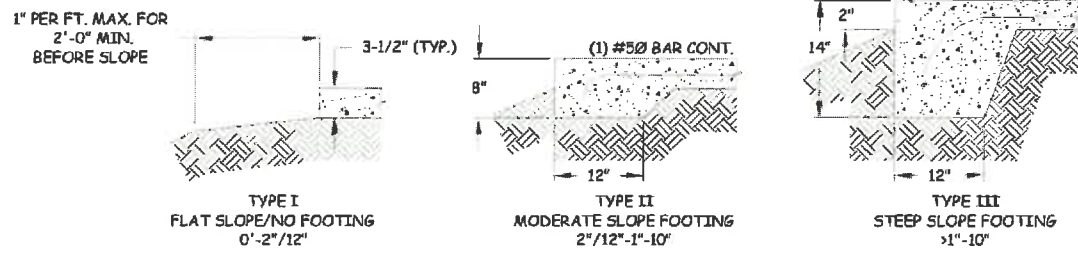
BRICK KNEE-WALL & FOUNDATION FOR SCREEN WALLS

'H'	'W'	N	'X'
32"	12"	2	9'-4"
40"	12"	3	8'-0"
48"	18"	3	6'-8"
56"	18"	3	4'-0"
60"	24"	3	2'-8"
72"	30"	4	1'-4"

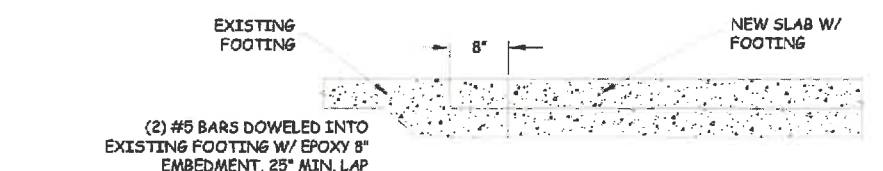


- ALL MASONRY KNEE WALLS SHALL HAVE A FILLED CELL AND VERTICAL BAR AT ALL CORNERS
- NOTES:
1. CONCRETE SLAB MUST BE MINIMUM 3000 PSI ALLOWABLE COMPRESSIVE STRESS.
 2. 3-1/2" CONCRETE SLAB WITH 6 X 6-10 X 10 WELDED WIRE MESH OR CRACK CONTROL FIBER MESH: FIBERMESH MESH, INFORCE E3 PER MANUF. SPECIFICATION MAY BE USED IN LIEU OF WIRE MESH. VISQUEEN VAPOR BARRIER UNDER SLABS HAVING STRUCTURES ABOVE COMPACTED CLEAN FILL OVER (SCARIFIED) NATURAL SOIL 90% DENSITY.
 3. LOCAL CODE FOOTING REQUIREMENTS SHALL BE USED IN AND OF MINIMUM FOOTINGS SHOWN.

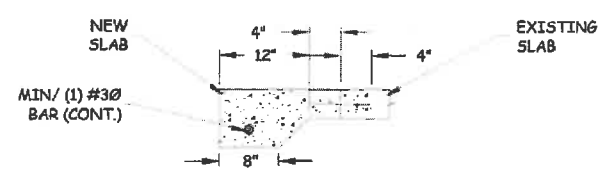
RAISED PATIO FOOTING KNEE-WALL FOR SCREENED ROOMS



- NOTES:
1. THE FOUNDATIONS SHOWN ARE BASED ON A MINIMUM SOIL BEARING OF 1500 PSF BEARING CAPACITY OF SOIL SHALL BE VERIFIED, PRIOR TO PLACING SLAB, BY FIELD SOIL TEST OR SOIL TESTING LAB.
 2. THE SLAB/FOUNDATION SHALL BE CLEARED OF DEBRIS, ROOTS, AND COMPACTED PRIOR TO PLACEMENT OF CONCRETE.
 3. NO FOOTING OTHER THAN A 3-1/2" (4" NOMINAL) SLAB IS REQUIRED EXCEPT WHEN ADDRESSING EROSION UNTIL THE PROJECTION FROM THE HOST STRUCTURE OF THE SCREEN ENCLOSURE EXCEEDS 16'-0". THEN A MINIMUM OF A TYPE II FOOTING IS REQUIRED.
 4. MONOLITHIC SLABS AND FOOTINGS SHALL BE A MINIMUM 3000 PSI CONCRETE WITH 6 X 6-10 X 10 WELDED WIRE MESH OR CRACK CONTROL FIBER MESH: FIBERMESH MESH, INFORCE E3 PER MANUF. SPECIFICATION MAY BE USED IN LIEU OF WIRE MESH. ALL SLABS SHALL BE ALLOWED TO CURE FOR 7 DAYS BEFORE INSTALLING ANCHORS.
 5. IF LOCAL BUILDING CODE REQUIRES A MINIMUM FOOTING USE FOOTING REQUIRED BY LOCAL CODE AUTHORITY.
 6. STRUCTURES EXCEEDING 20'-0" REQUIRE SITE-SPECIFIC ENGINEERING.



TYP. CONNECTION OF PROPOSED FOOTING TO EXISTING FOOTING



DOWEL DETAIL FOR EXTENDING EXISTING

Signed [Signature] Seal Exp. DEC 31 2019

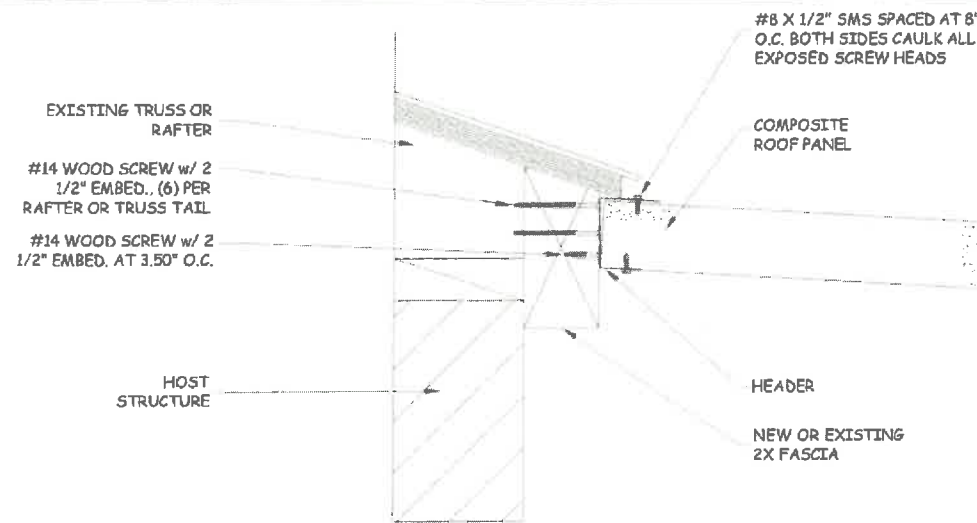
TITLE: SCREEN, ACRYLIC, & VINYL ENCLOSURE FOUNDATION & FOOTER DETAILS



NO.	DESCRIPTION	BY	DATE

PREPARED BY: A.S. ENGINEERING SERVICES P.C.
112 WILSON DRIVE
PORT JEFFERSON, NY 11777
PH: (631) 560-0259 FX: (631) 938-0784

DATE: 07.29.14	DWN BY: JLA	CHK BY: HFN	SCALE: NTS
DWG #: MUS017			
SHEET: 17 OF 22			



ROOF PANEL TO FASCIA DETAIL

WOOD STRUCTURES SHOULD CONNECT TO TRUSS BUTTS OR THE SUB-FASCIA FRAMING WHERE POSSIBLE ONLY. ALL SCREWS INTO THE HOST STRUCTURE SHALL HAVE MINIMUM 1-1/4" WASHERS OR SHALL BE WASHER HEAD SCREWS.

HEADER INSIDE DIMENSION SHALL BE EQUAL TO PANEL'S DEPTH. THE WALL THICKNESS SHALL BE THE THICKNESS OF THE COMPOSITE PANEL WALL THICKNESS. HEADERS SHALL BE ANCHORED TO THE HOST STRUCTURE WITH ANCHORS APPROPRIATE FOR THE MATERIAL CONNECTED TO.

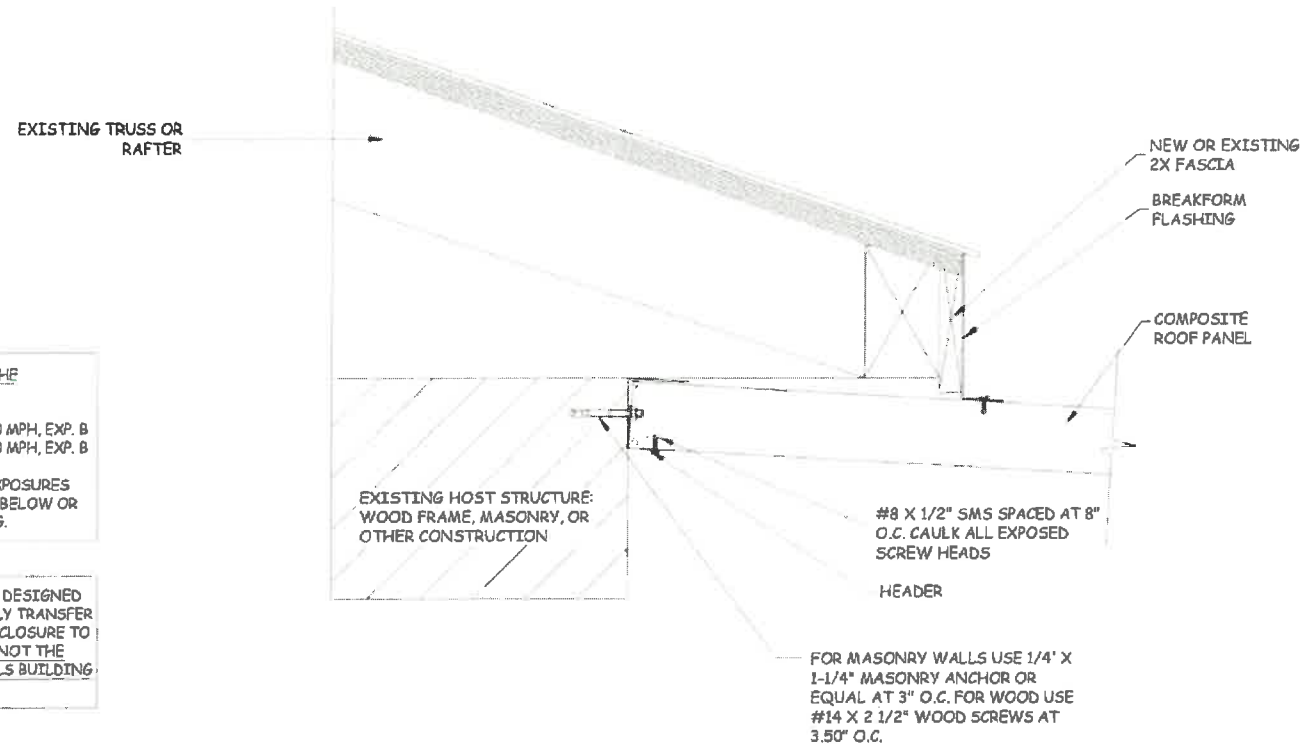
THIS CONNECTION LIMITED TO THE FOLLOWING:

- (2) LAGS PER TRUSS END, 150 MPH, EXP. B
- (3) LAGS PER TRUSS END, 170 MPH, EXP. B OR 150 MPH, EXP. C
- HIGHER WIND SPEEDS OR EXPOSURES REQUIRE ALT. CONNECTION BELOW OR SITE SPECIFIC ENGINEERING.

NOTE: HOST STRUCTURE MUST BE DESIGNED TO BE ABLE TO ADEQUATELY TRANSFER ALL LOADS IMPOSED BY ENCLOSURE TO THE FOUNDATION AND IS NOT THE RESPONSIBILITY OF METALS BUILDING PRODUCTS.

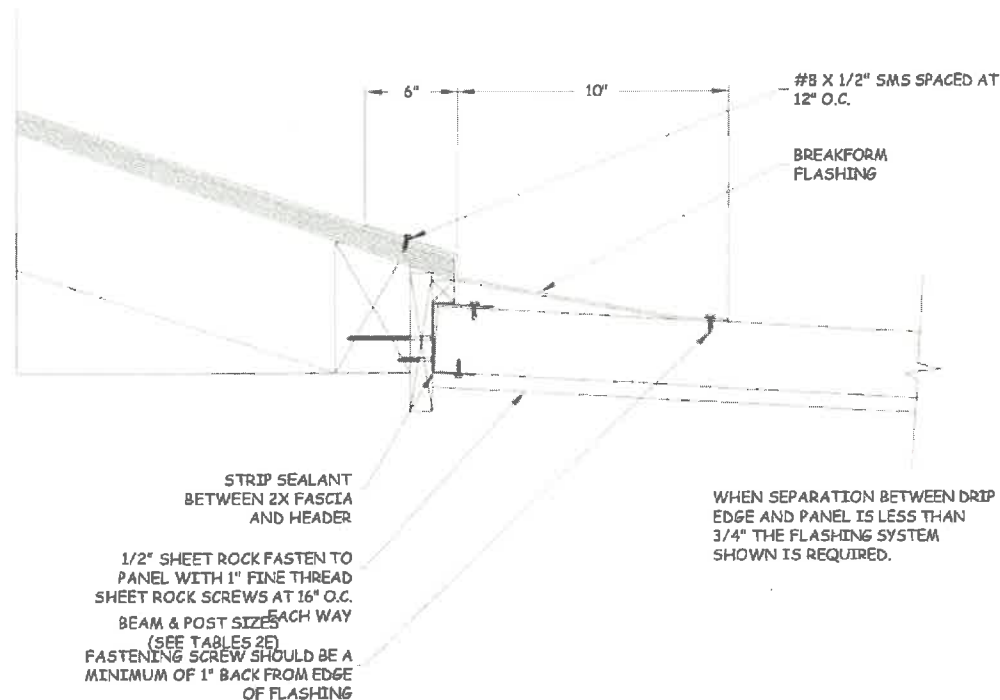
ANCHOR SIZE CONVERSION BASED ON WIND SPEED			
WIND SPEED	120-160 MPH	170 MPH	180 MPH
SIZE (DIAM.)	#8	#10	#12

NOTE: ALL ANCHORS SHOWN IN DETAILS ARE BASED ON 160 MPH WIND SPEED. USE TABLE ABOVE FOR SITES IN HIGHER WIND SPEED AREAS.

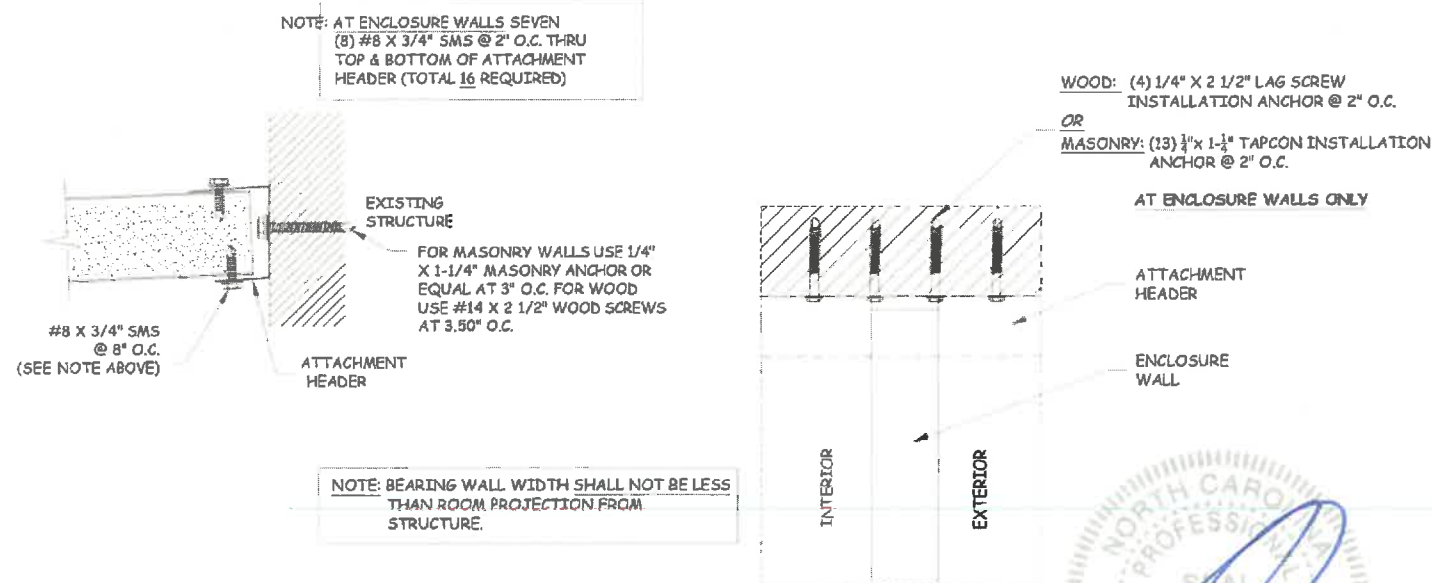


ALTERNATE ROOF PANEL TO WALL DETAIL

COMPOSITE ROOF PANELS SHALL BE ATTACHED TO ROOF HEADER WITH #8 X 1/2" CORROSION RESISTANT SMS AT 8" O.C. BOTH SIDES



ALTERNATE DETAIL FOR FLASHING ON SHINGLE ROOFS



ATTACHMENT HEADER AT WALL-PLAN VIEW

NOTE: THIS CONNECTION LIMITED TO:

- 20' ROOM PROJECTION AT 170 MPH WIND SPEED.
- 18' ROOM PROJECTION AT 180 MPH WIND SPEED.

LARGE PROJECTIONS OR WIND SPEEDS REQUIRE SITE SPECIFIC ENGINEERING.



TITLE: SCREEN, ACRYLIC, & VINYL ENCLOSURE ROOF PANEL ATTACHMENT DETAILS

FOUR SEASONS
BUILDING PRODUCTS

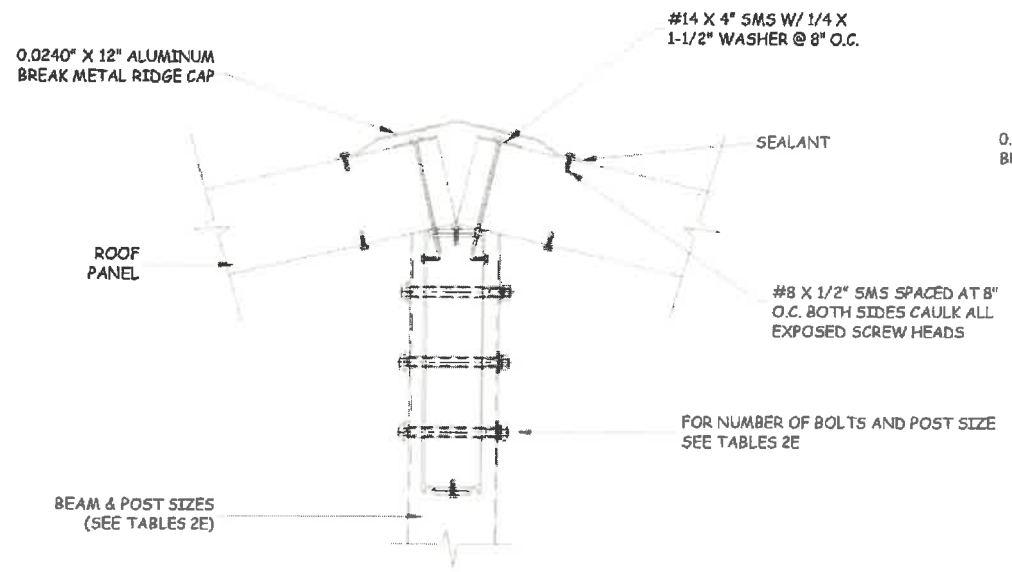
REVISIONS

NO.	DESCRIPTION	BY	DATE

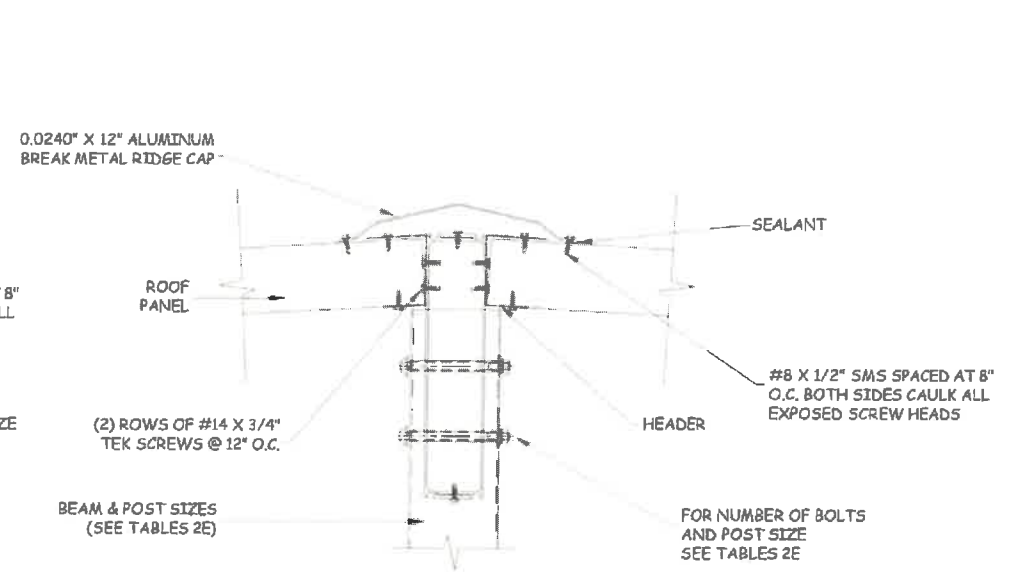
PREPARED BY:
A.S. ENGINEERING SERVICES P.C.
112 WILSON DRIVE
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DATE: 07.29.14
DWN BY: JLA
CHK BY: HFN
SCALE: NTS
DWG #: **MUS018**
SHEET: **18 OF 22**

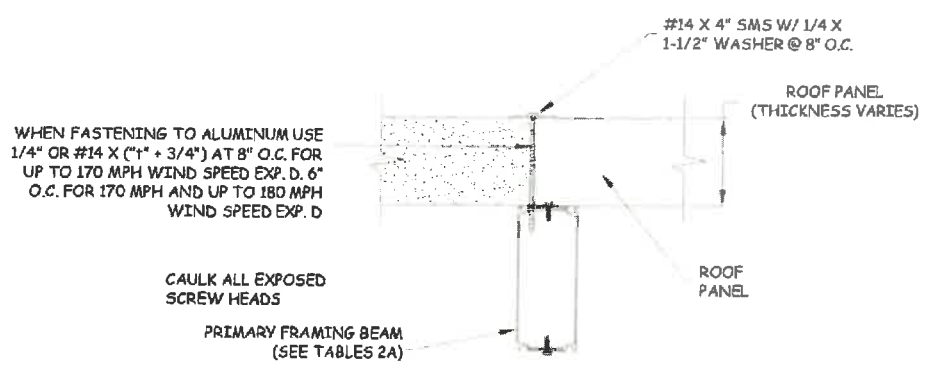
DEC 17 2018 - DEC 31 2019



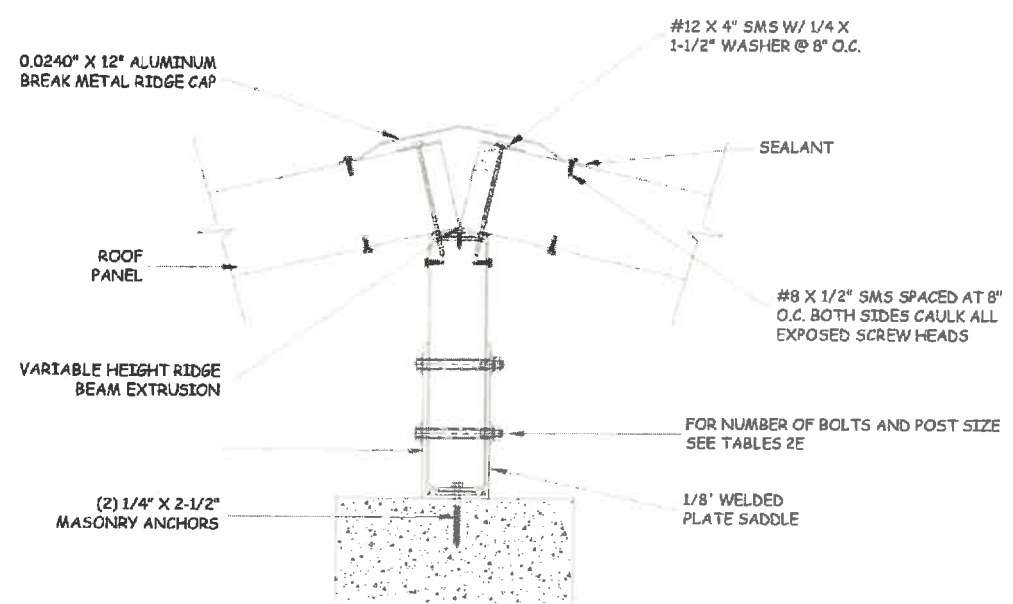
PANEL ROOF TO RIDGE BEAM AT POST DETAIL



ALT. RIDGE BEAM AT POST DETAIL



ROOF PANEL TO BEAM DETAIL



PANEL ROOF TO RIDGE BEAM AT CONCRETE POST DETAIL

DESIGN LOADS FOR ROOF PANELS (PSF)- EXPOSURE B
DESIGN WIND LOADS USED ARE FROM ASCE7-10

WIND SPEED (MPH)	WIND LOADS FOR EXPOSURE B (ASCE7-10) (PSF)								
	ZONE 1 (ROOF PANEL SPAN)			ZONE 2 (ROOF PANEL SPAN)			ZONE 3 (OVERHANG)		
	EFFECTIVE AREA (FT ²)			EFFECTIVE AREA (FT ²)			EFFECTIVE AREA (FT ²)		
	50	25	10	50	25	10	50	25	10
100	10.2	10.5	10.8	18.8	15.6	16.0	16.8	21.0	27.6
110	12.3	12.6	13.2	16.8	19.2	22.2	19.8	25.8	33.0
120	14.4	15.0	15.6	19.8	22.2	25.8	24.0	30.6	39.6
130	17.4	18.0	18.3	23.4	26.4	30.6	27.6	36.0	46.2
140	19.8	20.4	21.0	27.0	30.6	36.0	32.4	41.4	53.4
150	22.8	23.4	24.0	30.6	34.8	40.8	36.6	47.4	61.2
160	26.4	27.0	27.6	34.8	39.6	46.2	42.0	54.0	69.6
170	29.4	30.6	31.2	39.6	45.0	52.2	47.4	60.6	78.6
180	33.0	33.6	34.8	44.4	50.4	58.8	53.4	67.8	88.2

NOTES:
1. TABLE ABOVE ACCOUNTS FOR SITES IN EXPOSURE CATEGORY B.
2. LOADS ABOVE ARE GENERALIZED AND SITE IN QUESTION MUST BE ANALYZED FOR SPECIFIC WIND LOADS.

DESIGN LOADS FOR ROOF PANELS (PSF)- EXPOSURE D
DESIGN WIND LOADS USED ARE FROM ASCE7-10

WIND SPEED (MPH)	WIND LOADS FOR EXPOSURE D (ASCE7-10) (PSF)								
	ZONE 1 (ROOF PANEL SPAN)			ZONE 2 (ROOF PANEL SPAN)			ZONE 3 (OVERHANG)		
	EFFECTIVE AREA (FT ²)			EFFECTIVE AREA (FT ²)			EFFECTIVE AREA (FT ²)		
	50	25	10	50	25	10	50	25	10
100	16.9	17.4	17.9	22.9	25.9	29.9	27.9	34.9	45.8
110	20.4	20.9	21.9	27.9	31.9	36.9	32.9	42.8	54.8
120	23.9	24.9	25.9	32.9	36.9	42.8	39.8	50.8	65.7
130	28.9	29.9	30.4	38.8	43.8	50.8	45.8	59.8	76.7
140	32.9	33.9	34.9	44.8	50.8	59.8	53.8	68.7	88.6
150	37.8	38.8	39.8	50.8	57.8	67.7	60.8	78.7	101.6
160	43.8	44.8	45.8	57.8	65.7	76.7	69.7	89.6	115.5
170	48.8	50.8	51.8	65.7	74.7	86.7	78.7	100.6	130.5
180	54.8	55.8	57.8	73.7	83.7	97.6	88.6	112.5	146.4

NOTES:
1. TABLE ABOVE ACCOUNTS FOR SITES IN EXPOSURE CATEGORY D.
2. LOADS ABOVE ARE GENERALIZED AND SITE IN QUESTION MUST BE ANALYZED FOR SPECIFIC WIND LOADS.

DESIGN LOADS FOR ROOF PANELS (PSF)- EXPOSURE C
DESIGN WIND LOADS USED ARE FROM ASCE7-10

WIND SPEED (MPH)	WIND LOADS FOR EXPOSURE C (ASCE7-10) (PSF)								
	ZONE 1 (ROOF PANEL SPAN)			ZONE 2 (ROOF PANEL SPAN)			ZONE 3 (OVERHANG)		
	EFFECTIVE AREA (FT ²)			EFFECTIVE AREA (FT ²)			EFFECTIVE AREA (FT ²)		
	50	25	10	50	25	10	50	25	10
100	14.3	14.7	15.1	19.8	21.8	25.2	23.5	29.4	38.6
110	17.2	17.6	18.5	23.5	25.9	31.1	27.7	36.1	46.2
120	20.2	21.0	21.8	27.7	31.1	36.1	36.6	42.8	55.4
130	24.4	25.2	25.6	32.8	37.0	42.8	38.6	50.4	64.7
140	27.7	28.6	29.4	37.8	42.8	50.4	45.5	58.0	74.8
150	31.9	32.8	33.6	42.8	48.7	57.1	51.2	66.4	85.7
160	37.0	37.8	38.6	48.7	55.4	64.7	58.8	75.6	97.4
170	41.2	42.8	43.7	55.4	63.0	73.1	66.4	84.8	110.0
180	46.2	47.0	48.7	62.2	72.6	82.3	74.8	94.9	123.9

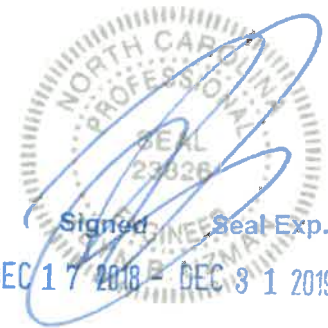
NOTES:
1. TABLE ABOVE ACCOUNTS FOR SITES IN EXPOSURE CATEGORY C.
2. LOADS ABOVE ARE GENERALIZED AND SITE IN QUESTION MUST BE ANALYZED FOR SPECIFIC WIND LOADS.

TITLE: SCREEN, ACRYLIC, & VINYL ENCLOSURE ROOF PANEL ATTACHMENT DETAILS

FOUR SEASONS
BUILDING PRODUCTS

NO.	REVISIONS DESCRIPTION	BY	DATE

PREPARED BY:
A.S. ENGINEERING SERVICES P.C.
112 WILSON DRIVE
PORT JEFFERSON, NY 11777
PH: (631) 560-0259 FX: (631) 938-0784



DATE: 07.29.14	DWN BY: JLA	CHK BY: HFN	SCALE: NTS
DWG #: MUS019			
SHEET: 19 OF 22			

TABLE 3A.1 - ALLOWABLE SPANS FOR 3" X 48" COMPOSITE ROOF PANELS
 0.0240" PRO-FAB COMPOSITE PANELS WITH EZ-LOCK FOR VARIOUS LOADS
 ALUMINUM ALLOY 3105H-14 WITH 1 LB. EPS FOAM CORE

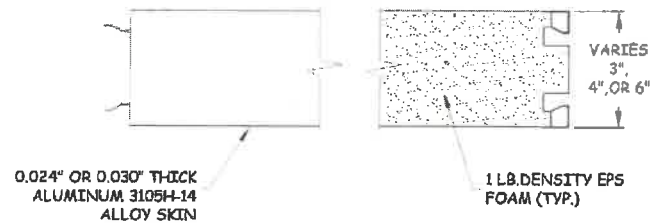
LIVE LOAD (PSF)	SNOW LOAD (PSF)	ALLOWABLE PANEL SPANS FOR 3" X 48" COMPOSITE ROOF PANELS (0.0240" SKIN)																	
		EXPOSURE B						EXPOSURE C						OVERHANG (FT.)					
		WIND SPEED (MPH)						WIND SPEED (MPH)						WIND SPEED (MPH)					
10	0	16'-8"	14'-7"	13'-3"	12'-9"	15'-0"	12'-1"	11'-5"	10'-10"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"
	5	15'-4"	13'-7"	12'-6"	11'-11"	14'-0"	12'-3"	11'-2"	10'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	10	14'-3"	12'-10"	11'-11"	11'-11"	13'-2"	11'-8"	10'-9"	10'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	20	12'-7"	11'-7"	10'-11"	10'-11"	11'-10"	10'-9"	10'-0"	10'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	30	11'-6"	10'-8"	10'-2"	10'-2"	10'-10"	10'-0"	9'-4"	9'-4"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	40	10'-7"	10'-0"	9'-6"	9'-6"	10'-1"	9'-5"	8'-10"	8'-10"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
20	0	14'-3"	12'-10"	11'-11"	11'-6"	13'-2"	11'-8"	10'-9"	10'-4"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	5	13'-4"	12'-2"	11'-5"	11'-5"	12'-6"	11'-2"	10'-4"	10'-4"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	10	12'-7"	11'-7"	10'-11"	10'-11"	11'-10"	10'-9"	10'-0"	10'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	20	11'-4"	10'-8"	10'-2"	10'-2"	10'-10"	10'-0"	9'-4"	9'-4"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	30	10'-7"	10'-0"	9'-6"	9'-6"	10'-1"	9'-5"	8'-10"	8'-10"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	40	9'-10"	9'-4"	9'-0"	9'-0"	9'-6"	8'-10"	8'-5"	8'-5"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	

NOTES:
 1. ROOF MAXIMUM SPAN IS FROM HOST STRUCTURE TO FRONT WALL BEAM OR FROM SUPPORT TO SUPPORT FOR MULTIPLE SPANS.
 2. ALLOWABLE SPANS BASED ON MAXIMUM TESTED "E" AND MOMENT. SEE TERRAPIN TESTING TEST REPORT TT 5041-A

TABLE 3A.2 - ALLOWABLE SPANS FOR 4" X 48" COMPOSITE ROOF PANELS
 0.0240" PRO-FAB COMPOSITE PANELS WITH EZ-LOCK FOR VARIOUS LOADS
 ALUMINUM ALLOY 3105H-14 WITH 1 LB. EPS FOAM CORE

LIVE LOAD (PSF)	SNOW LOAD (PSF)	ALLOWABLE PANEL SPANS FOR 4" X 48" COMPOSITE ROOF PANELS (0.0240" SKIN)																	
		EXPOSURE B						EXPOSURE C						OVERHANG (FT.)					
		WIND SPEED (MPH)						WIND SPEED (MPH)						WIND SPEED (MPH)					
10	0	20'-3"	17'-9"	16'-2"	15'-0"	18'-3"	15'-9"	14'-0"	13'-3"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	5	18'-8"	16'-7"	15'-3"	15.5'	17'-1"	14'-11"	13'-7"	13'-7"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	10	17'-4"	15'-8"	14'-6"	14'-6"	16'-0"	14'-3"	13'-1"	13'-1"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	20	15'-9"	14'-2"	13'-4"	13'-4"	14'-5"	13'-1"	12'-2"	12'-2"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	30	14'-0"	13'-0"	12'-4"	12'-4"	13'-3"	12'-2"	11'-5"	11'-5"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	40	12'-11"	12'-2"	11'-7"	11'-7"	12'-4"	11'-5"	10'-10"	10'-10"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
20	0	17'-4"	15'-8"	14'-6"	14'-3"	16'-0"	14'-3"	13'-1"	12'-7"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	5	16'-3"	14'-10"	13'-11"	13'-11"	15'-2"	13'-7"	12'-7"	12'-7"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	10	15'-5"	14'-2"	13'-4"	13'-4"	14'-3"	13'-1"	12'-2"	12'-2"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	20	14'-0"	13'-0"	12'-4"	12'-4"	13'-3"	12'-2"	11'-5"	11'-5"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	30	12'-11"	12'-2"	11'-7"	11'-7"	12'-4"	11'-5"	10'-10"	10'-10"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	40	12'-0"	11'-5"	11'-0"	11'-0"	11'-7"	10'-20"	10'-3"	10'-3"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	

NOTES:
 1. ROOF MAXIMUM SPAN IS FROM HOST STRUCTURE TO FRONT WALL BEAM OR FROM SUPPORT TO SUPPORT FOR MULTIPLE SPANS.
 2. ALLOWABLE SPANS BASED ON MAXIMUM TESTED "E" AND MOMENT. SEE TERRAPIN TESTING TEST REPORT TT 5041-B



**METALS BP
 PRO-FAB COMPOSITE PANEL
 W/ EZ-LOCK**

- NOTES:
 1. TOTAL ROOF PANEL WIDTH = ROOM WIDTH+WALL WIDTH +OVERHANG
 2. SPANS MAY BE INTERPOLATED BETWEEN VALUES BUT NOT EXTRAPOLATED BEYOND VALUES.

TABLE 3B.1 - ALLOWABLE SPANS FOR 3" X 48" COMPOSITE ROOF PANELS
 0.030" PRO-FAB COMPOSITE PANELS WITH EZ-LOCK FOR VARIOUS LOADS
 ALUMINUM ALLOY 3105H-14 WITH 1 LB. EPS FOAM CORE

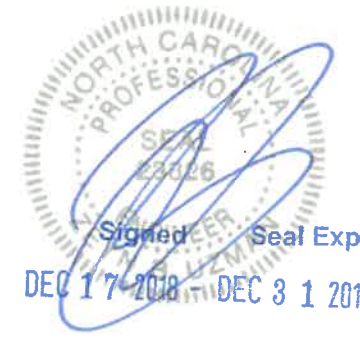
LIVE LOAD (PSF)	SNOW LOAD (PSF)	ALLOWABLE PANEL SPANS FOR 3" X 48" COMPOSITE ROOF PANELS (0.030" SKIN)																	
		EXPOSURE B						EXPOSURE C						OVERHANG (FT.)					
		WIND SPEED (MPH)						WIND SPEED (MPH)						WIND SPEED (MPH)					
10	0	19'-9"	17'-3"	15'-8"	15'-1"	17'-9"	15'-3"	13'-7"	12'-10"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	5	18'-1"	16'-1"	14'-10"	14'-10"	16'-7"	14'-6"	13'-2"	13'-2"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	10	16'-10"	15'-3"	14'-2"	14'-2"	15'-7"	13'-10"	12'-8"	12'-8"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	20	14'-11"	13'-9"	12'-11"	12'-11"	14'-1"	12'-9"	11'-10"	11'-10"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	30	13'-7"	12'-8"	12'-0"	12'-0"	12'-11"	11'-10"	11'-4"	11'-4"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	40	12'-6"	11'-10"	11'-3"	11'-3"	12'-0"	11'-1"	10'-6"	10'-6"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
20	0	16'-10"	15'-3"	14'-2"	13'-3"	15'-7"	13'-10"	12'-8"	11'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	5	15'-10"	14'-9"	13'-6"	13'-6"	14'-3"	13'-3"	12'-3"	12'-3"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	10	14'-10"	13'-9"	12'-11"	12'-11"	14'-1"	12'-9"	11'-10"	11'-10"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	20	13'-7"	12'-8"	12'-0"	12'-0"	12'-11"	11'-10"	11'-4"	11'-4"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	30	12'-6"	11'-10"	11'-3"	11'-3"	12'-0"	11'-1"	10'-6"	10'-6"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	40	11'-8"	11'-1"	10'-8"	10'-8"	11'-3"	10'-6"	10'-0"	10'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	

NOTES:
 1. ROOF MAXIMUM SPAN IS FROM HOST STRUCTURE TO FRONT WALL BEAM OR FROM SUPPORT TO SUPPORT FOR MULTIPLE SPANS.
 2. ALLOWABLE SPANS BASED ON MAXIMUM TESTED "E" AND MOMENT. SEE TERRAPIN TESTING TEST REPORT TT 5041-D

TABLE 3B.2 - ALLOWABLE SPANS FOR 4" X 48" COMPOSITE ROOF PANELS
 0.030" PRO-FAB COMPOSITE PANELS WITH EZ-LOCK FOR VARIOUS LOADS
 ALUMINUM ALLOY 3105H-14 WITH 1 LB. EPS FOAM CORE

LIVE LOAD (PSF)	SNOW LOAD (PSF)	ALLOWABLE PANEL SPANS FOR 4" X 48" COMPOSITE ROOF PANELS (0.030" SKIN)																	
		EXPOSURE B						EXPOSURE C						OVERHANG (FT.)					
		WIND SPEED (MPH)						WIND SPEED (MPH)						WIND SPEED (MPH)					
10	0	22'-0"	19'-2"	17'-6"	16'-10"	19'-10"	17'-0"	15'-2"	14'-5"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	5	20'-2"	18'-0"	16'-7"	16'-7"	18'-6"	16'-2"	14'-9"	14'-9"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	10	18'-9"	16'-11"	15'-9"	15'-9"	17'-4"	15'-5"	14'-2"	14'-2"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	20	16'-8"	15'-4"	14'-5"	14'-5"	15'-8"	14'-2"	13'-2"	13'-2"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	30	15'-2"	14'-2"	13'-5"	13'-5"	14'-4"	13'-2"	12'-5"	12'-5"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	40	14'-0"	13'-2"	12'-7"	12'-7"	13'-4"	12'-5"	11'-9"	11'-9"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
20	0	18'-9"	16'-11"	15'-9"	15'-9"	17'-4"	15'-9"	14'-8"	13'-8"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	5	17'-8"	16'-1"	15.06	15.06	16'-5"	14'-9"	13'-8"	13'-8"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	10	16'-8"	15'-4"	14'-5"	14'-5"	15'-8"	14'-2"	13'-2"	13'-2"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	20	15'-2"	14'-2"	13'-5"	13'-5"	14'-4"	13'-2"	12'-5"	12'-5"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	30	14'-0"	13'-2"	12'-7"	12'-7"	13'-4"	12'-5"	11'-9"	11'-9"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	40	13'-0"	12'-4"	11'-11"	11'-11"	12'-6"	11'-9"	11'-2"	11'-2"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	

NOTES:
 1. ROOF MAXIMUM SPAN IS FROM HOST STRUCTURE TO FRONT WALL BEAM OR FROM SUPPORT TO SUPPORT FOR MULTIPLE SPANS.
 2. ALLOWABLE SPANS BASED ON MAXIMUM TESTED "E" AND MOMENT. SEE TERRAPIN TESTING TEST REPORT TT 5041-E



REVISIONS

NO.	DESCRIPTION	BY	DATE

PREPARED BY:
 A.S. ENGINEERING SERVICES P.C.
 112 WILSON DRIVE
 PORT JEFFERSON, NY 11777
 PH: (631) 560-0259 FX: (631) 938-0784

DATE: 07.29.14
 DWN BY: JLA
 CHK BY: HFN
 SCALE: NTS

DWG #: **MUS020**
 SHEET: **20** OF **22**

TITLE: SCREEN, ACRYLIC, & VINYL ENCLOSURE
 COMPOSITE ROOF PANEL ALLOWABLE SPAN TABLES



TABLE 3A.3 - ALLOWABLE SPANS FOR 6" X 48" COMPOSITE ROOF PANELS
0.0240" PRO-FAB COMPOSITE PANELS WITH EZ-LOCK FOR VARIOUS LOADS
ALUMINUM ALLOY 3105H-14 WITH 1 LB. EPS FOAM CORE

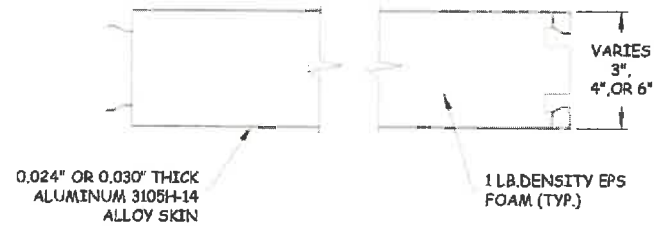
LIVE LOAD (PSF)	SNOW LOAD (PSF)	ALLOWABLE PANEL SPANS FOR 6" X 48" COMPOSITE ROOF PANELS (0.0240" SKIN)														
		PANEL SPAN (FT.)						OVERHANG (FT.)								
		WIND SPEED (MPH)		EXPOSURE C		EXPOSURE B		EXPOSURE C		EXPOSURE B		EXPOSURE C				
10	0	26'-8"	24'-4"	22'-10"	21'-11"	24'-10"	22'-3"	19'-10"	18'-9"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"
	5	25'-2"	23'-4"	21'-7"	—	23'-9"	21'-3"	19'-3"	—	2'-0"	2'-0"	2'-0"	—	2'-0"	2'-0"	2'-0"
	10	24'-0"	22'-2"	20'-7"	—	22'-8"	20'-1"	18'-6"	—	2'-0"	2'-0"	2'-0"	—	2'-0"	2'-0"	2'-0"
	20	21'-9"	20'-1"	18'-10"	—	20'-9"	18'-6"	17'-3"	—	2'-0"	2'-0"	2'-0"	—	2'-0"	2'-0"	2'-0"
	30	19'-9"	18'-6"	17'-6"	—	18'-9"	17'-3"	16'-2"	—	2'-0"	2'-0"	2'-0"	—	2'-0"	2'-0"	2'-0"
	40	18'-3"	17'-2"	16'-9"	—	17'-9"	15'-2"	15'-4"	—	2'-0"	2'-0"	2'-0"	—	2'-0"	2'-0"	2'-0"
50	17'-0"	16'-2"	15'-6"	—	16'-4"	15'-4"	14'-7"	—	2'-0"	2'-0"	2'-0"	—	2'-0"	2'-0"	2'-0"	
20	0	24'-0"	22'-2"	20'-7"	19'-11"	22'-8"	20'-1"	18'-6"	17'-10"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"
	5	23'-0"	21'-0"	19'-8"	—	21'-6"	19'-3"	17'-10"	—	2'-0"	2'-0"	2'-0"	—	2'-0"	2'-0"	2'-0"
	10	21'-6"	20'-1"	18'-10"	—	20'-5"	18'-6"	17'-3"	—	2'-0"	2'-0"	2'-0"	—	2'-0"	2'-0"	2'-0"
	20	19'-9"	18'-5"	17'-6"	—	18'-9"	17'-3"	16'-2"	—	2'-0"	2'-0"	2'-0"	—	2'-0"	2'-0"	2'-0"
	30	18'-3"	17'-2"	16'-9"	—	17'-9"	16'-2"	15'-4"	—	2'-0"	2'-0"	2'-0"	—	2'-0"	2'-0"	2'-0"
	40	17'-0"	16'-2"	15'-6"	—	16'-4"	15'-4"	14'-7"	—	2'-0"	2'-0"	2'-0"	—	2'-0"	2'-0"	2'-0"
50	16'-0"	15'-3"	14'-9"	—	15'-6"	14'-7"	13'-11"	—	2'-0"	2'-0"	2'-0"	—	2'-0"	2'-0"	2'-0"	

NOTES:
 1. ROOF MAXIMUM SPAN IS FROM HOST STRUCTURE TO FRONT WALL BEAM OR FROM SUPPORT TO SUPPORT FOR MULTIPLE SPANS.
 2. ALLOWABLE SPANS BASED ON MAXIMUM TESTED "EL" AND MOMENT. SEE TERRAPIN TESTING TEST REPORT TT 5041-C

TABLE 3B.3 - ALLOWABLE SPANS FOR 6" X 48" COMPOSITE ROOF PANELS
0.030" PRO-FAB COMPOSITE PANELS WITH EZ-LOCK FOR VARIOUS LOADS
ALUMINUM ALLOY 3105H-14 WITH 1 LB. EPS FOAM CORE

LIVE LOAD (PSF)	SNOW LOAD (PSF)	ALLOWABLE PANEL SPANS FOR 6" X 48" COMPOSITE ROOF PANELS (0.030" SKIN)														
		PANEL SPAN (FT.)						OVERHANG (FT.)								
		WIND SPEED (MPH)		EXPOSURE C		EXPOSURE B		EXPOSURE C		EXPOSURE B		EXPOSURE C				
10	0	28'-2"	25'-9"	24'-3"	23'-7"	26'-3"	23'-9"	21'-8"	20'-6"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"
	5	26'-7"	24'-8"	23'-4"	—	25'-1"	22'-11"	20'-11"	—	2'-0"	2'-0"	2'-0"	—	2'-0"	2'-0"	2'-0"
	10	25'-4"	23'-9"	22'-8"	—	24'-1"	21'-11"	20'-2"	—	2'-0"	2'-0"	2'-0"	—	2'-0"	2'-0"	2'-0"
	20	23'-5"	21'-10"	20'-6"	—	22'-3"	20'-2"	18'-9"	—	2'-0"	2'-0"	2'-0"	—	2'-0"	2'-0"	2'-0"
	30	21'-6"	20'-1"	19'-1"	—	20'-9"	18'-9"	17'-7"	—	2'-0"	2'-0"	2'-0"	—	2'-0"	2'-0"	2'-0"
	40	19'-10"	18'-9"	17'-11"	—	19'-0"	17'-9"	16'-8"	—	2'-0"	2'-0"	2'-0"	—	2'-0"	2'-0"	2'-0"
50	18'-6"	17'-7"	16'-11"	—	17'-10"	16'-8"	15'-10"	—	2'-0"	2'-0"	2'-0"	—	2'-0"	2'-0"	2'-0"	
20	0	25'-4"	23'-9"	22'-5"	21'-8"	24'-1"	21'-11"	20'-2"	19'-5"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"
	5	24'-4"	22'-10"	21'-5"	—	23'-4"	21'-0"	19'-5"	—	2'-0"	2'-0"	2'-0"	—	2'-0"	2'-0"	2'-0"
	10	23'-9"	21'-10"	20'-6"	—	22'-3"	20'-2"	18'-9"	—	2'-0"	2'-0"	2'-0"	—	2'-0"	2'-0"	2'-0"
	20	21'-6"	20'-1"	19'-1"	—	20'-9"	18'-9"	17'-7"	—	2'-0"	2'-0"	2'-0"	—	2'-0"	2'-0"	2'-0"
	30	19'-10"	18'-9"	17'-11"	—	19'-0"	17'-9"	16'-8"	—	2'-0"	2'-0"	2'-0"	—	2'-0"	2'-0"	2'-0"
	40	18'-6"	17'-7"	16'-11"	—	17'-10"	16'-8"	15'-10"	—	2'-0"	2'-0"	2'-0"	—	2'-0"	2'-0"	2'-0"
50	17'-9"	16'-8"	16'-1"	—	16'-10"	15'-10"	15'-2"	—	2'-0"	2'-0"	2'-0"	—	2'-0"	2'-0"	2'-0"	

NOTES:
 1. ROOF MAXIMUM SPAN IS FROM HOST STRUCTURE TO FRONT WALL BEAM OR FROM SUPPORT TO SUPPORT FOR MULTIPLE SPANS.
 2. ALLOWABLE SPANS BASED ON MAXIMUM TESTED "EL" AND MOMENT. SEE TERRAPIN TESTING TEST REPORT TT 5041-F



METALS BP
PRO-FAB COMPOSITE PANEL
W/ EZ-LOCK

NOTES:
 1. TOTAL ROOF PANEL WIDTH = ROOM WIDTH+WALL WIDTH +OVERHANG
 2. SPANS MAY BE INTERPOLATED BETWEEN VALUES BUT NOT EXTRAPOLATED BEYOND VALUES.

Signed Seal Exp.
 DEC 17 2018 - DEC 31 2019

TITLE: SCREEN, ACRYLIC, & VINYL ENCLOSURE
 COMPOSITE ROOF PANEL ALLOWABLE SPAN TABLES

FOUR SEASONS
 BUILDING PRODUCTS



REVISIONS

NO.	DESCRIPTION	BY	DATE

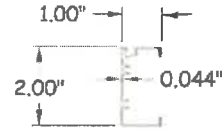
PREPARED BY:
 A.S. ENGINEERING SERVICES P.C.
 112 WILSON DRIVE
 FORT JEFFERSON, NY 11777
 PH: (631) 560-0259 FX: (631) 938-0784

DATE: 07.29.14
 DWN BY: JLA
 CHK BY: HFN
 SCALE: NTS
 DWG #: **MUS021**
 SHEET: **21 OF 22**



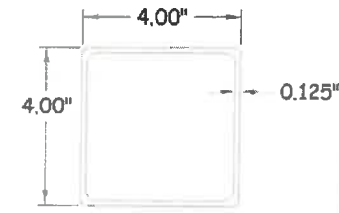
A= 0.423 in²
 Ix= 0.237 in⁴
 Sx= 0.228 in³
 ALUMINUM 6005-T5

2" X 2" X 0.044" PATIO SECTION



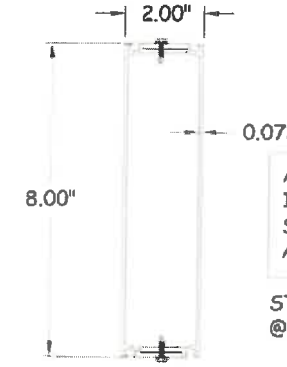
A= 0.237 in²
 Ix= 0.136 in⁴
 Sx= 0.131 in³
 ALUMINUM 6005-T5

1" X 2" X 0.045" OPEN BACK



A= 1.978 in²
 Ix= 4.979 in⁴
 Sx= 2.486 in³
 ALUMINUM 6005-T5

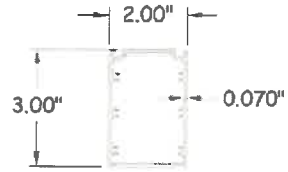
4" X 4" X 0.125" PATIO SECTION



A= 1.285 in²
 Ix= 8.833 in⁴
 Sx= 2.515 in³
 ALUMINUM 6005-T5

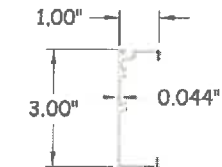
STITCH W/ (1) #12 SMS
 @ 24" TOP & BOTTOM

2" X 8" X 0.072" X 0.224" SELF-MATING BEAM



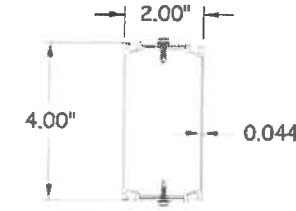
A= 0.840 in²
 Ix= 0.986 in⁴
 Sx= 0.650 in³
 ALUMINUM 6005-T5

2" X 3" X 0.070" PATIO SECTION



A= 0.285 in²
 Ix= 0.347 in⁴
 Sx= 0.215 in³
 ALUMINUM 6005-T5

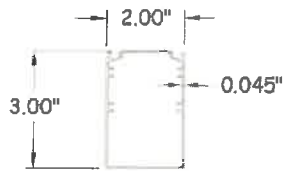
1" X 3" X 0.045" OPEN BACK



A= 0.755 in²
 Ix= 1.919 in⁴
 Sx= 0.951 in³
 ALUMINUM 6005-T5

STITCH W/ (1) #8 SMS
 @ 24" TOP & BOTTOM

2" X 4" X 0.044" X 0.100" SELF-MATING BEAM



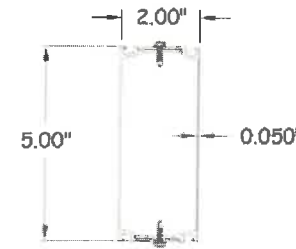
A= 0.576 in²
 Ix= 0.682 in⁴
 Sx= 0.428 in³
 ALUMINUM 6005-T5

2" X 3" X 0.045" PATIO SECTION



A= 1.314 in²
 Ix= 1.748 in⁴
 Sx= 1.157 in³
 ALUMINUM 6005-T5

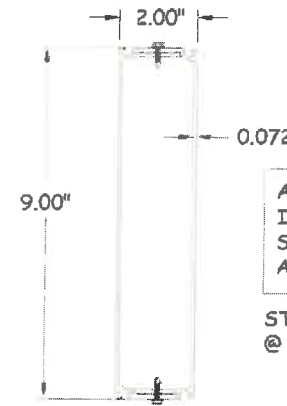
3" X 3" X 0.090" CORNER POST



A= 0.987 in²
 Ix= 3.810 in⁴
 Sx= 1.516 in³
 ALUMINUM 6005-T5

STITCH W/ (1) #8 SMS
 @ 24" TOP & BOTTOM

2" X 5" X 0.050" X 0.120" SELF-MATING BEAM



A= 2.005 in²
 Ix= 22.148 in⁴
 Sx= 4.916 in³
 ALUMINUM 6005-T5

STITCH W/ (1) #14 SMS
 @ 16" TOP & BOTTOM

2" X 9" X 0.072" X 0.224" SELF-MATING BEAM



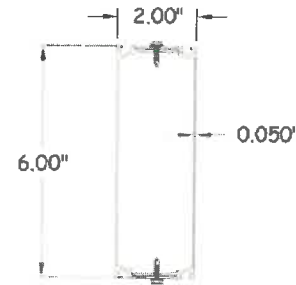
A= 0.542 in²
 Ix= 0.333 in⁴
 Sx= 0.325 in³
 ALUMINUM 6005-T5

3" X 2" X 0.045" PATIO SECTION



A= 1.478 in²
 Ix= 2.048 in⁴
 Sx= 1.365 in³
 ALUMINUM 6005-T5

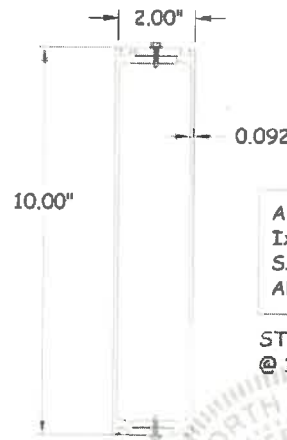
3" X 3" X 0.125" PATIO SECTION



A= 1.086 in²
 Ix= 5.839 in⁴
 Sx= 1.938 in³
 ALUMINUM 6005-T5

STITCH W/ (1) #10 SMS
 @ 24" TOP & BOTTOM

2" X 6" X 0.050" X 0.120" SELF-MATING BEAM



A= 3.091 in²
 Ix= 43.9347 in⁴
 Sx= 8.785 in³
 ALUMINUM 6005-T5

STITCH W/ (1) #14 SMS
 @ 16" TOP & BOTTOM

2" X 10" X 0.072" X 0.224" SELF-MATING BEAM



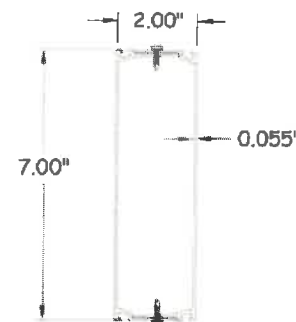
A= 0.781 in²
 Ix= 0.483 in⁴
 Sx= 0.478 in³
 ALUMINUM 6005-T5

3" X 2" X 0.070" PATIO SECTION



A= 1.088 in²
 Ix= 1.549 in⁴
 Sx= 1.033 in³
 ALUMINUM 6005-T5

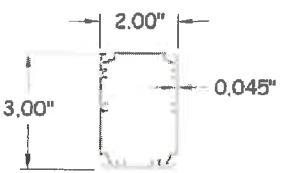
3" X 3" X 0.090" PATIO SECTION



A= 1.857 in²
 Ix= 16.648 in⁴
 Sx= 4.157 in³
 ALUMINUM 6005-T5

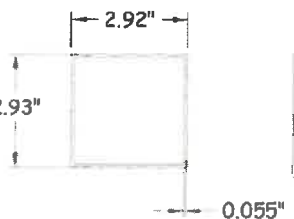
STITCH W/ (1) #10 SMS
 @ 24" TOP & BOTTOM

2" X 7" X 0.055" X 0.120" SELF-MATING BEAM



A= 0.594 in²
 Ix= 0.734 in⁴
 Sx= 0.475 in³
 ALUMINUM 6005-T5

2" X 3" X 0.045" SPECIAL SECTION



A= 0.631 in²
 Ix= 0.845 in⁴
 Sx= 0.576 in³
 ALUMINUM 6005-T5

3" X 3" FLUTED PATIO SECTION

TITLE: SCREEN, ACRYLIC, & VINYL
 ENCLOSURE
 TYPICAL SCREEN ENCLOSURE
 COMPONENT DETAILS

FOUR SEASONS
 BUILDING PRODUCTS

REVISIONS

NO.	DESCRIPTION	BY	DATE

PREPARED BY:
 A.S. ENGINEERING SERVICES P.C.
 112 WILSON DRIVE
 PORT JEFFERSON, NY 11777
 PH: (631) 560-0259 FX: (631) 938-0784

DATE: 07.29.14
 DWN BY: JLA
 CHK BY: HFN
 SCALE: NTS

DWG #: **MUS022**
 SHEET: **22 OF 22**

Signed Seal Exp.
 DEC 17 2018 - DEC 31 2019