

MULLION LENGTH

MULLION LOAD AREA CONSIDERED

"A"

"B"

LOAD WIDTH = A + B

CENTER OF TRANSOM

SEE MULLION END SUPPORT DETAILS ON SHEETS 3, 4 & 5

SINGLE WINDOW OR DOOR WITH FIXED TRANSOM

(SEE LOAD TABLE 1.0)

NOTE: WINDOW/DOOR MAY BE ANY FIXED OR OPERABLE UNIT

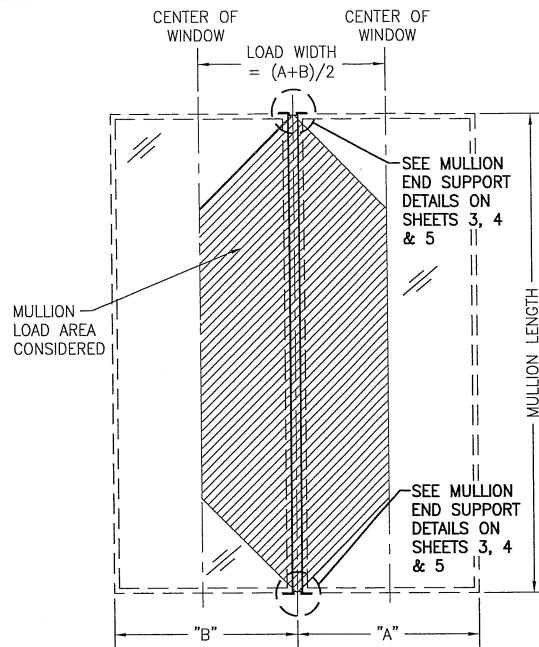
NOTE: MULLION MAY BE HORIZONTAL OR VERTICAL

GENERAL NOTES (ALL DRAWING SHEETS):

1. DOORS & WINDOWS SHALL BE UNDER SEPARATE CERTIFICATION. SEE THE PRODUCTS SPECIFIC CERTIFICATION FOR THEIR USE.
2. THESE MULLION SYSTEMS HAVE BEEN ANALYZED AND CERTIFIED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE LOAD TABLES.
3. OPENINGS, INCLUDING BUCKS (IF USED AS SUPPORT), MUST BE DESIGNED & CONSTRUCTED TO WITHSTAND WIND LOADS TRANSFERRED BY THE MULLIONS END REACTIONS & SUPPORTED WINDOWS/DOORS.
4. ALL MATERIALS & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & MAY NOT VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS.
5. THESE MULLION SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC) INCLUDING HIGH VELOCITY HURRICANE ZONES (HVHZ).
6. ANY CERTIFIED WINDOW/DOOR BY WEATHER SHIELD WINDOWS & DOORS MAY BE SUPPORTED BY THESE MULLIONS PROVIDING THEY ARE PROPERLY ANCHORED TO THE MULLION.
7. ALLOWABLE PRESSURE ON THE MULLION UNIT SHALL BE CONTROLLED BY THE LESSER ALLOWABLE PRESSURE OF THE MULLION, THE MULLION END CONNECTION OR THE INDIVIDUAL DOOR/WINDOW UNITS.
8. WINDOW/DOOR SIZES SHALL BE AS RESTRICTED BY THEIR OWN INDIVIDUAL APPROVALS/CERTIFICATIONS.
9. FOR WINDOW OR DOOR FRAME TO OPENING ATTACHMENT, SEE THE RESPECTIVE PRODUCT CERTIFIED DRAWINGS/SPECIFICATIONS FOR THE WINDOW/DOOR.
10. MULLION LENGTHS ARE RESTRICTED BY THOSE SHOWN IN THE TABLES.
11. THE LOADS IN THESE TABLES CONSIDER WORSE CASE OF MULLION STRESS, DEFLECTION AND END REACTION.
12. ANY CONDITIONS NOT COVERED IN THIS CERTIFICATION SHALL BE SUBJECT TO SEPARATE ENGINEERING REVIEW.

13. ALL TUBES SHALL BE 6063-T6 ALUMINUM. ALL CONNECTION ANGLES SHALL BE MIN. 6063-T5 ALUMINUM. ALL U-CLIPS & T-CLIPS SHALL BE MIN. 6063-T5 OR T6 ALUMINUM.
14. ALL EMBEDMENTS SPECIFIED ARE TO BE BEYOND WALL FINISH.
15. MULLION TUBES MUST BE CONTINUOUS FROM END TO END.
16. TO INSURE THAT THE DEAD WEIGHT OF THE ABOVE WINDOWS WILL NOT CAUSE UNDO STRESS ON THE BELOW WINDOWS/DOORS, WHEN VERTICALLY STACKED, THE MANUFACTURER/INSTALLER SHALL LIMIT THE SAG OF THE HORIZONTAL MULLION TO 1/8" BETWEEN ANY 2 VERTICAL SUPPORTS OF THAT MULLION.
17. THESE MULLIONS ARE ACCEPTABLE FOR USE WITH IMPACT & NON-IMPACTED RATED WINDOWS & DOORS.
18. ALL ANCHORS SPECIFIED HERE-IN THAT ARE TO PENETRATE PRESSURE TREATING (P.T.) LUMBER SHALL BE OF A MATERIAL CAPABLE OF RESISTING CORROSION CAUSED BY THE PRESSURE TREATING CHEMICALS IN THE WOOD.
19. MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE.

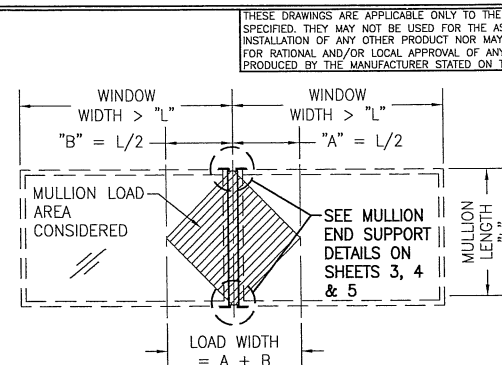
EVALUATION OF THIS PRODUCT IS BASED ON APPLICABLE STANDARDS AND/OR INFORMATION & RESULTS FROM APPLICABLE TEST REPORTS. THE FLORIDA BUILDING CODE VERSION CONSIDERED WITH THIS EVALUATION WAS THAT IN FORCE AT THE TIME OF THE EVALUATION. IN THE EVENT OF CODE VERSION CHANGES/UPDATES OR IN THE EVENT THAT NEW OR ADDITIONAL TESTING IS COMPLETED ON THIS PRODUCT, PRIOR TO STATING CODE COMPLIANCE WITH THE STATE, THE MANUFACTURER SHALL CONFIRM WITH THE EVALUATION ENGINEER OF RECORD THAT EVERYTHING SPECIFIED HEREIN IS CURRENT WITH ALL CURRENT TESTING, CODES AND APPLICABLE STANDARDS.



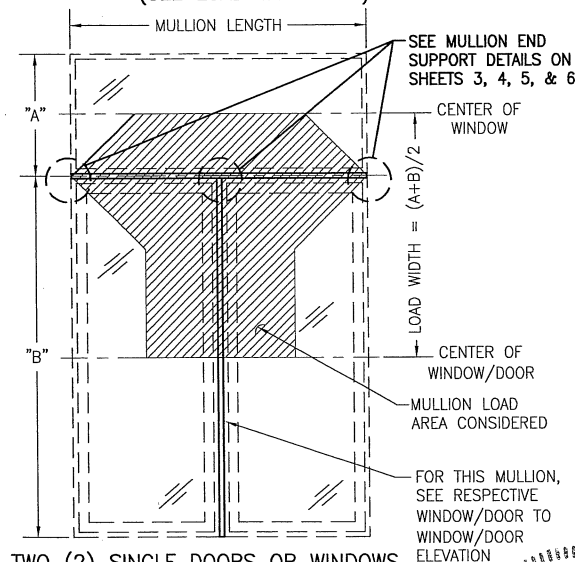
FIXED WINDOW TO FIXED WINDOW WHEN WINDOW WIDTHS
ARE LESS THAN OR EQUAL TO THE MULLION LENGTH

(SEE LOAD TABLE 1.0)

NOTE: MULLION MAY BE HORIZONTAL OR VERTICAL



FIXED WINDOW TO FIXED WINDOW
WHEN WINDOW WIDTHS ARE GREATER
THAN THE MULLION LENGTH
(SEE LOAD TABLE 1.0)



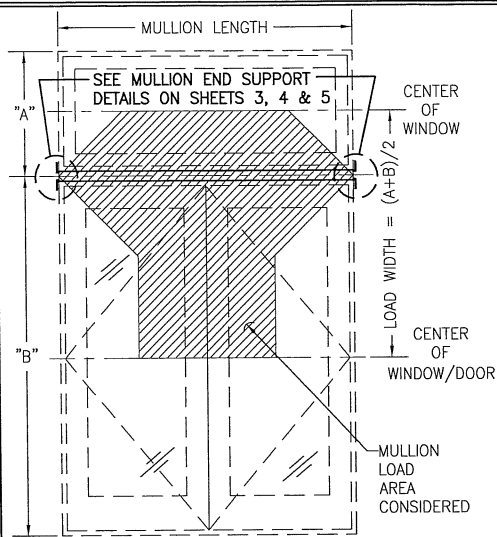
TWO (2) SINGLE DOORS OR WINDOWS
WITH A SINGLE FIXED TRANSOM
(SEE LOAD TABLE 2.0)

NOTE: DOORS/WINDOWS MAY BE OPERABLE OR FIXED.

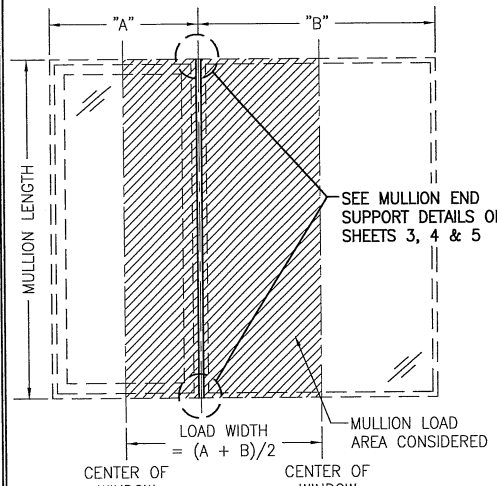
NOTE: ATTACHMENT OF WINDOW/DOOR FRAME TO MULLIONS SHALL BE AS REQUIRED BY THE INDIVIDUAL WINDOW/DOOR N.O.A. FOR ATTACHMENT TO BUCK/OPENING EXCEPT THAT SPECIFIED FRAME SCREWS MUST BE EQUIVALENT SIZE SMS SCREWS PREDILLED INTO TUBE OR SELF TAPPING/DRILLING SCREWS

THESE DRAWINGS ARE APPLICABLE ONLY TO THE PRODUCT SPECIFIED. THEY MAY NOT BE USED FOR THE ASSEMBLY AND/OR INSTALLATION OF ANY OTHER PRODUCT NOR MAY THEY BE USED FOR RATIONAL AND/OR LOCAL APPROVAL OF ANY PRODUCT NOT PRODUCED BY THE MANUFACTURER STATED ON THESE DRAWINGS

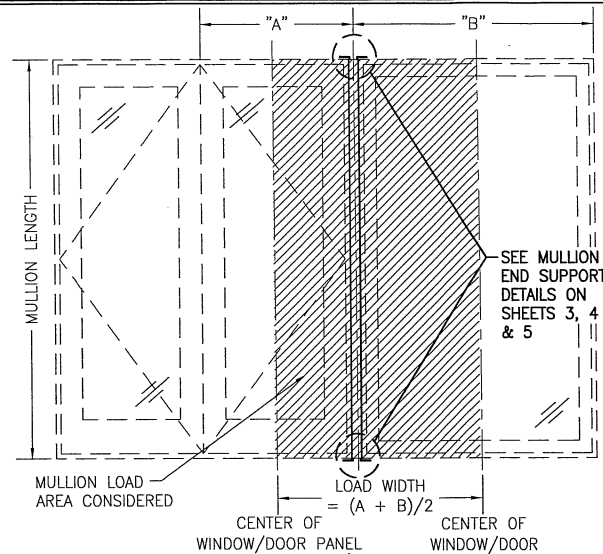
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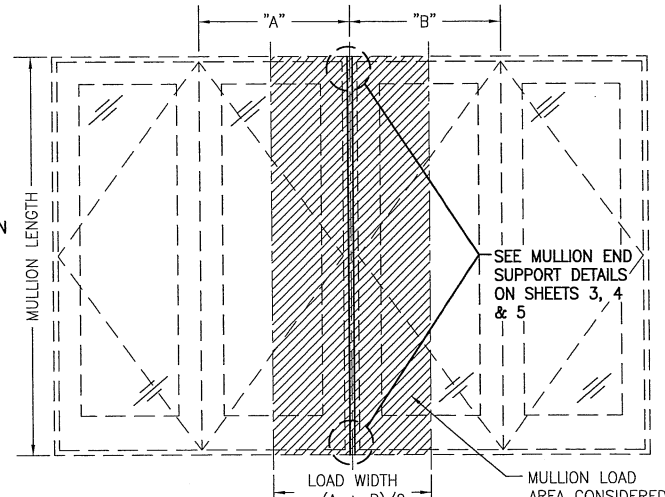
DOUBLE PANEL DOOR OR CASEMENT WINDOW WITH A SINGLE FIXED TRANSOM
(SEE LOAD TABLE 2.0)



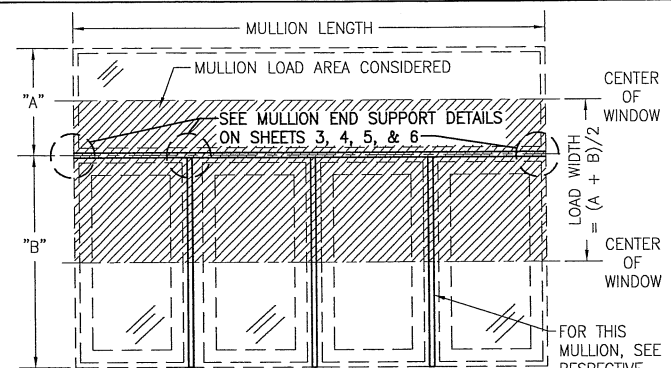
SINGLE OPERABLE DOOR/WINDOW TO A SINGLE OPERABLE OR FIXED DOOR/WINDOW
(SEE LOAD TABLE 3.0)



DOUBLE PANEL DOOR/WINDOW TO A SINGLE DOOR OR FIXED SIDELIGHT
(SEE LOAD TABLE 3.0)

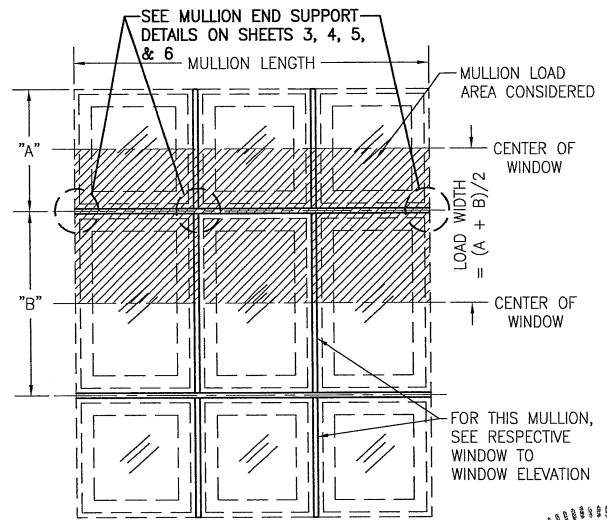


DOUBLE PANEL DOOR/WINDOW TO A DOUBLE PANEL DOOR/WINDOW
(SEE LOAD TABLE 3.0)



MULTIPLE WINDOWS/DOORS WITH TRANSOM
(SEE LOAD TABLE 3.0)

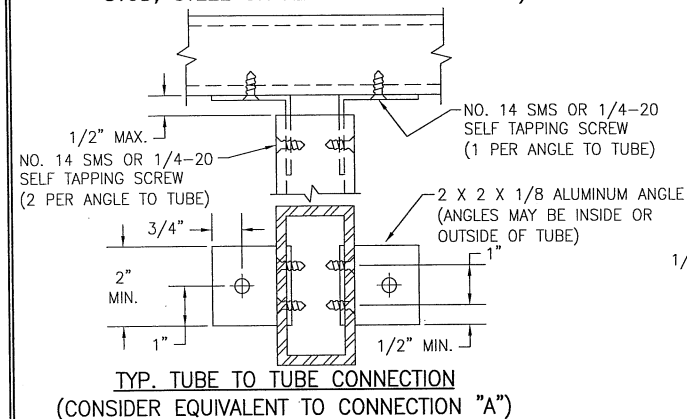
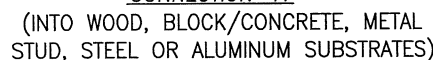
NOTES: 1. TRANSOM MAY BE SINGLE OR MULTIPLE WINDOWS.
2. CONTINUOUS MULLION MAY BE HORIZONTAL OR VERTICAL (HORIZONTAL SHOWN).



MULTIPLE WINDOWS (SEE LOAD TABLE 3.0)
(CONTINUOUS MULLION MAY BE HORIZONTAL OR VERTICAL (HORIZONTAL SHOWN))

NOTE: ATTACHMENT OF WINDOW/DOOR FRAME TO MULLIONS SHALL BE AS REQUIRED BY THE INDIVIDUAL WINDOW/DOOR N.O.A. FOR ATTACHMENT TO BUCK/OPENING EXCEPT THAT SPECIFIED FRAME SCREWS MUST BE EQUIVALENT SIZE SMS SCREWS PREDRILLED INTO TUBE OR SELF TAPPING/DRILLING SCREWS

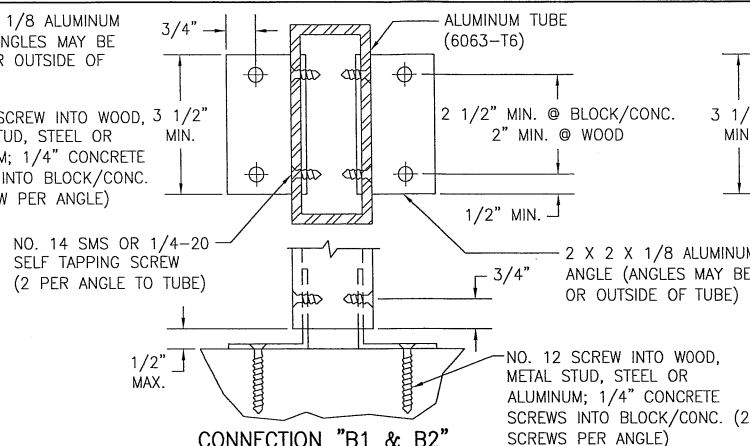
DRAWN BY: W.W.S.		CHECKED BY: W.W.S.	
PLOT: 1=24		DATE: 08/20/09	
DATE	BY	REVISION DESCRIPTION	NO.
ALUMINUM TUBE CLIPPED MULLIONS MANUFACTURER W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424			
DRAWING TITLE WEATHER SHIELD WINDOWS & DOORS ONE WEATHER SHIELD PLAZA MEDFORD, WI 54451 715-748-6555			
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424		P.E. NO. 44135 W. W. SCHAEFER P.E. NO. 44135	
DRAWING NO. 4580		REV. B	
SHEET NO. 2 OF 9			

CLIP SCREWS

OPENING TYPE (SUBSTRATE)	CLIP TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
MIN. 2X4 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 12 SMS OR WOOD SCREW	1 1/4"	3/4"
MIN. 18 GA. 33 KSI METAL STUD MIN. 1/8" THK A36 STEEL	NO. 12 GR. 5 SELF TAP/DRILL SCREW NO. 12 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 0.100" THK 6063-T5 ALUM. C-90 BLOCK (CMU)	NO. 12 GR. 5 SELF TAP/DRILL SCREW (1) 1/4" CONCRETE SCREW	FULL	1/2"
MIN. 2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 1/4"	2 1/4"
CONCRETE FILLED C-90 BLOCK OR MIN. 2500 PSI CONCRETE	(2) 3/8" WEDGE ANCHOR	1 1/2"	2 1/4"
		3"	3"

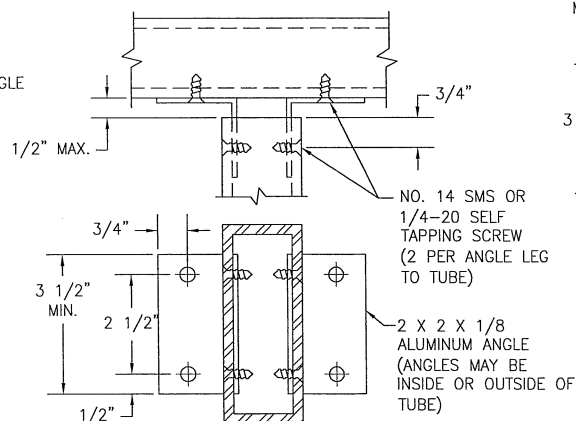
(1) CONCRETE SCREWS SHALL BE ELCO ULTRACONS (C.S.), ELCO CRETE-FLEX (S.S.) OR HILTI KWIK-CON II (C.S OR S.S.).

NOTE: ALL SCREWS JOINING CONNECTORS TO TUBES MUST HAVE FULL THREAD PENETRATION THROUGH ALL MATERIAL & SHALL BE CORROSION RESISTANT MIN. GR. 5 STEEL OR MIN. ALLOY GROUP 1, 2, & 3 CONDITION "A" STAINLESS STEEL



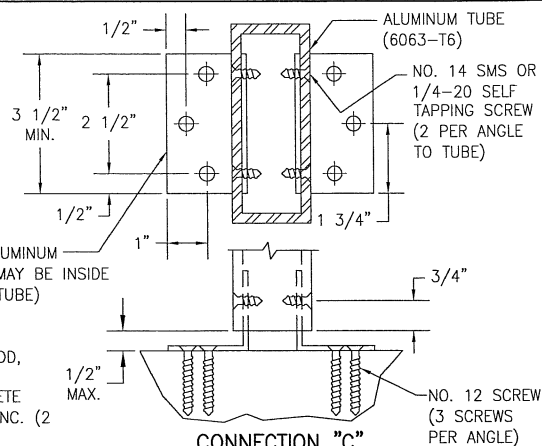
CONNECTION "B1 & B2"

"B1" = INTO WOOD OR BLOCK SUBSTRATES
"B2" = INTO CONCRETE, METAL STUD, STEEL
OR ALUMINUM SUBSTRATES



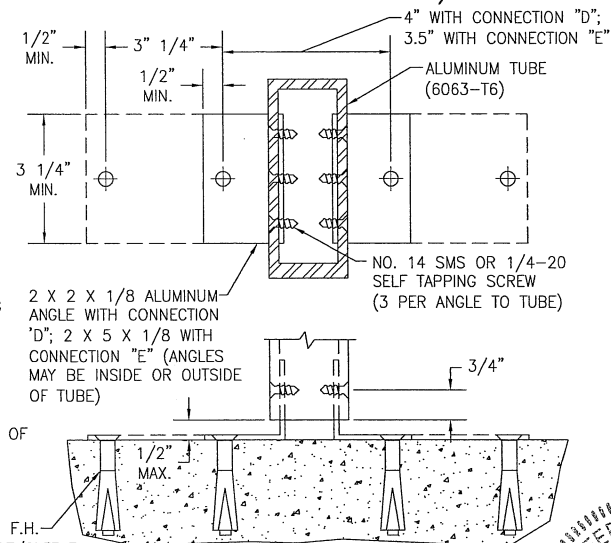
TYP. TUBE TO TUBE CONNECTION
(CONSIDER EQUIVALENT TO OR STRONGER
THAN ALL CONNECTIONS)

MULLION END CONNECTION DETAILS USING CLIP ANGLES



CONNECTION "C"

(INTO WOOD, METAL STUD, STEEL OR ALUMINUM SUBSTRATES)



CONNECTION "D" & "E"

(INTO CONCRETE OR CONCRETE
FILLED BLOCK SUBSTRATES)

"D" = 2 ANCHORS & 2 X 2 ANGLES
"E" = 4 ANCHORS & 2 X 5 ANGLES

DRAWING TITLE
ALUMINUM TUBE CLIPPED MULLIONS

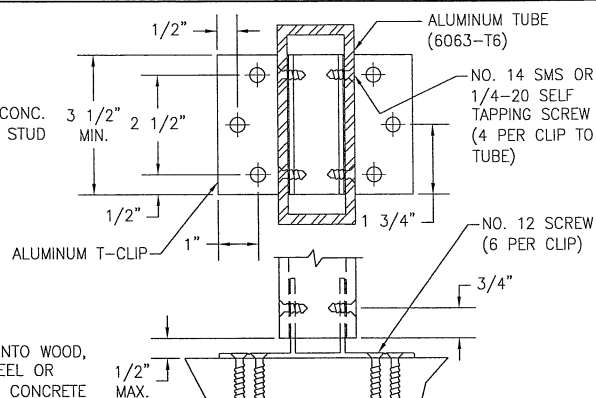
SHIELD WINDOWS & DOORS
WEATHER SHIELD PLAZA
MEDFORD, WI 54451
715-748-6555

CONSULTANTS
W. W. SCHAEFER ENGINEERING
& CONSULTING, P.A. (CA 6809)

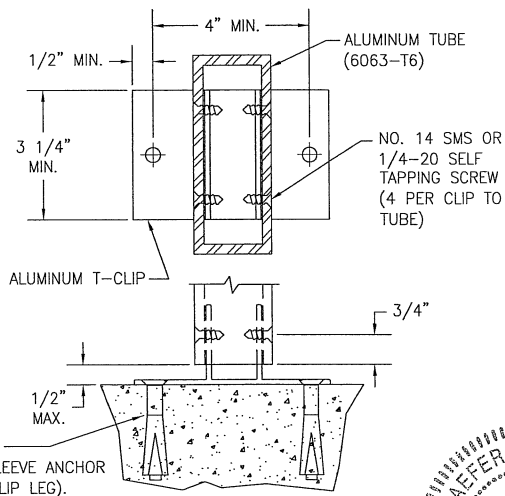
7480 150TH COURT NORTH
PALM BEACH GARDENS, FL 33418
PHONE: 561-744-3424

NO CERTIFICATION ★
★
OCT 16 2018
FLORENCE
BENJAMIN SCHMEER, P.E.

DRAWING NO.	REV.
1580	E
SHEET NO.	
3 OF 9	



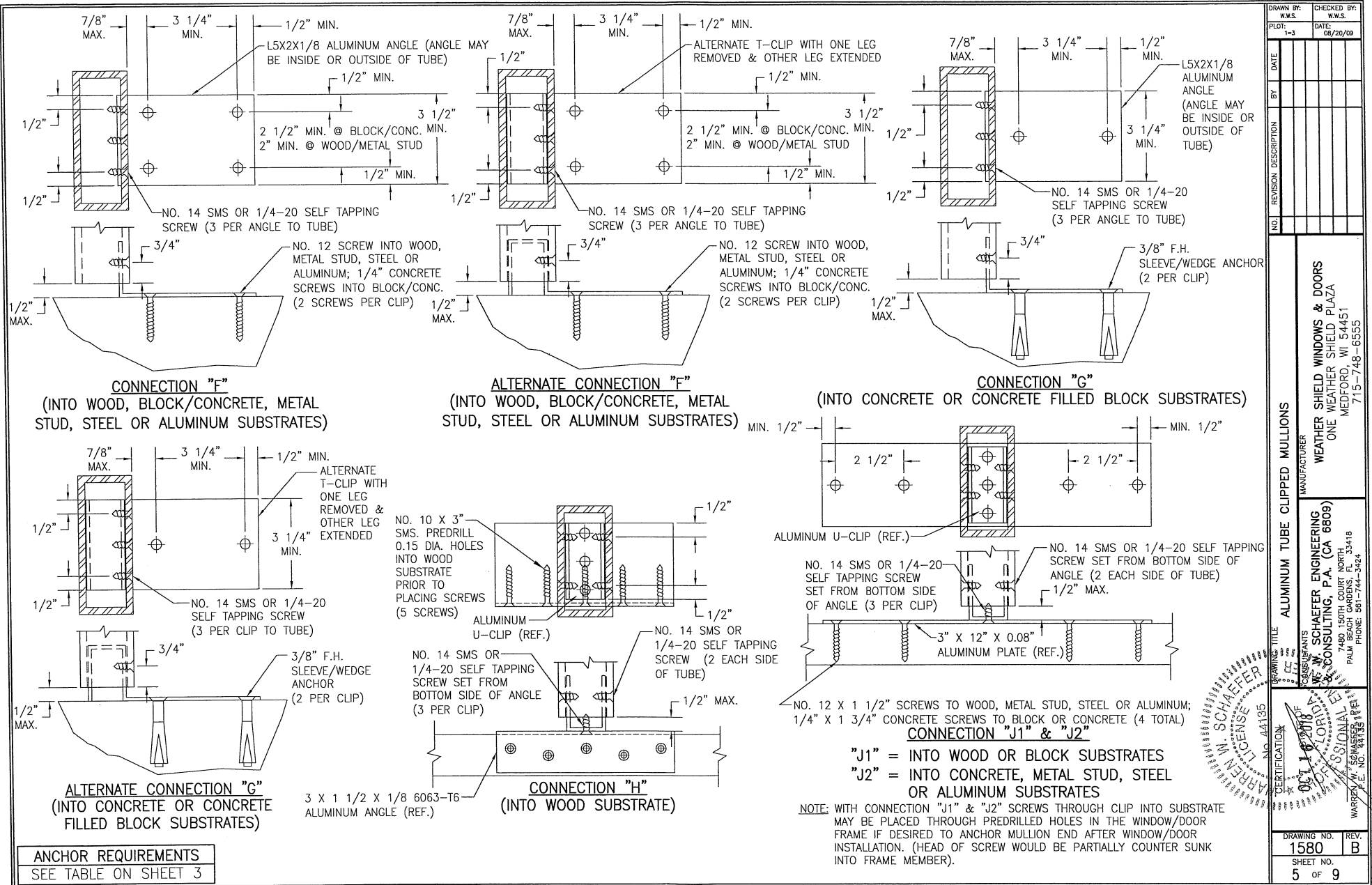
CONNECTION "C"
(INTO WOOD, METAL STUD, STEEL OR
ALUMINUM SUBSTRATES)



CONNECTION "D"
(INTO CONCRETE OR CONCRETE
FILLED BLOCK SUBSTRATES)

ALL CLIPS MAY BE EXTRUDED
SUCH THAT THE LEGS
CONNECTING TO THE TUBE ARE
INSIDE OR OUTSIDE THE TUBE.
SEE PARTS NOTE ON SHEET 6.

DRAWN BY: W.W.S.		CHECKED BY: W.W.S.		
PLOT: 1=3		DATE: 08/20/09		
N.O.	REVISION	DESCRIPTION	BY	DATE
DRAWING TITLE ALUMINUM TUBE CLIPPED MULLIONS				
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418			MANUFACTURER WEATHER SHIELD WINDOWS & DOORS ONE WEATHER SHIELD PLAZA MEDFORD, WI 54451 715-248-6555	
DRAWING NO. 1580 REV E				
SHEET NO. 9 OF 9				



LOAD TABLE 1.0											
MAXIMUM MULLION LENGTH (IN.)	MAXIMUM LOAD WIDTH (IN.)	ALLOWABLE PRESSURE (PSF)									
		4X1X1/8 TUBE	4X2X1/8 TUBE	4X2X1/4 OR 5X2X1/8 TUBE	5X2X1/4 TUBE	6X2X1/4 TUBE	"A" "F" & "G"	"B1" & "J1"	"B2" "D" & "J2"	"C" & "H"	"E"
60	48	85.0	85.0	85.0	85.0	85.0	69.3	85.0	85.0	85.0	85.0
	54	85.0	85.0	85.0	85.0	85.0	67.2	85.0	85.0	85.0	85.0
	60	81.5	85.0	85.0	85.0	85.0	66.6	85.0	85.0	85.0	85.0
66	30	85.0	85.0	85.0	85.0	85.0	78.3	85.0	85.0	85.0	85.0
	36	85.0	85.0	85.0	85.0	85.0	69.3	85.0	85.0	85.0	85.0
	42	85.0	85.0	85.0	85.0	85.0	63.4	85.0	85.0	85.0	85.0
	48	84.2	85.0	85.0	85.0	85.0	59.4	85.0	85.0	85.0	85.0
	54	74.9	85.0	85.0	85.0	85.0	56.9	85.0	85.0	85.0	85.0
	60	67.4	85.0	85.0	85.0	85.0	55.5	85.0	85.0	85.0	85.0
72	66	61.2	85.0	85.0	85.0	85.0	55.0	85.0	85.0	85.0	85.0
	24	85.0	85.0	85.0	85.0	85.0	83.2	85.0	85.0	85.0	85.0
	30	85.0	85.0	85.0	85.0	85.0	70.1	85.0	85.0	85.0	85.0
	36	85.0	85.0	85.0	85.0	85.0	61.6	85.0	85.0	85.0	85.0
	42	80.6	85.0	85.0	85.0	85.0	55.9	85.0	85.0	85.0	85.0
	48	70.6	85.0	85.0	85.0	85.0	52.0	85.0	85.0	85.0	85.0
	54	62.7	85.0	85.0	85.0	85.0	49.3	85.0	85.0	85.0	85.0
	60	56.4	82.5	85.0	85.0	85.0	47.5	85.0	85.0	85.0	85.0
	66	51.3	75.0	85.0	85.0	85.0	46.5	85.0	85.0	85.0	85.0
	72	47.0	68.7	85.0	85.0	85.0	46.2	85.0	85.0	85.0	85.0
78	24	85.0	85.0	85.0	85.0	85.0	75.6	85.0	85.0	85.0	85.0
	30	85.0	85.0	85.0	85.0	85.0	63.4	85.0	85.0	85.0	85.0
	36	74.0	85.0	85.0	85.0	85.0	55.5	85.0	85.0	85.0	85.0
	42	63.4	85.0	85.0	85.0	85.0	50.0	85.0	85.0	85.0	85.0
	48	55.5	81.1	85.0	85.0	85.0	46.2	85.0	85.0	85.0	85.0
	54	49.3	72.1	85.0	85.0	85.0	43.5	85.0	85.0	85.0	85.0
	60	44.4	64.9	85.0	85.0	85.0	41.6	83.2	85.0	85.0	85.0
	66	40.4	59.0	85.0	85.0	85.0	40.3	80.7	85.0	85.0	85.0
	72	37.0	54.0	82.1	85.0	85.0	39.6	79.2	85.0	85.0	85.0
	78	33.0	50.0	80.0	85.0	85.0	38.0	76.0	85.0	85.0	85.0
84	24	85.0	85.0	85.0	85.0	85.0	69.3	85.0	85.0	85.0	85.0
	30	71.1	85.0	85.0	85.0	85.0	57.9	85.0	85.0	85.0	85.0
	36	59.2	85.0	85.0	85.0	85.0	50.4	85.0	85.0	85.0	85.0
	42	50.8	74.2	85.0	85.0	85.0	45.3	85.0	85.0	85.0	85.0
	48	44.4	64.9	85.0	85.0	85.0	41.6	83.2	85.0	85.0	85.0
	54	39.5	57.7	85.0	85.0	85.0	38.9	77.8	85.0	85.0	85.0
	60	35.5	51.9	85.0	85.0	85.0	37.0	74.0	85.0	85.0	85.0
	66	32.3	47.2	77.3	85.0	85.0	35.6	71.2	85.0	85.0	85.0
	72	29.6	43.3	70.8	85.0	85.0	34.7	69.3	85.0	85.0	85.0
	78	26.3	40.4	67.1	85.0	85.0	33.0	66.6	85.0	85.0	85.0
90	18	85.0	85.0	85.0	85.0	85.0	82.2	85.0	85.0	85.0	85.0
	24	72.2	85.0	85.0	85.0	85.0	64.0	85.0	85.0	85.0	85.0
	30	57.8	84.4	85.0	85.0	85.0	53.2	85.0	85.0	85.0	85.0
	36	48.2	70.4	85.0	85.0	85.0	46.2	85.0	85.0	85.0	85.0
	42	41.3	60.3	85.0	85.0	85.0	41.3	82.7	85.0	85.0	85.0
	48	36.1	52.8	85.0	85.0	85.0	37.8	75.6	85.0	85.0	85.0
	54	32.1	46.9	82.0	85.0	85.0	35.2	70.4	85.0	85.0	85.0
	60	28.9	42.2	73.8	85.0	85.0	33.3	66.6	82.6	85.0	85.0
	66	26.3	38.4	67.1	85.0	85.0	31.8	63.7	79.0	85.0	85.0
	72	-	35.2	61.5	85.0	85.0	30.8	61.6	76.4	85.0	85.0

INSTRUCTIONS FOR TABLE USE:

1. DETERMINE REQUIRED WIND PRESSURE FOR THE OPENING.
2. DETERMINE THE MULLION LENGTH & LOAD WIDTH USING THE APPLICABLE ELEVATION ON SHEETS 1 & 2.
3. CHOOSE A TUBE SIZE THAT MEETS OR EXCEEDS THE REQUIRED PRESSURE FOR THE APPLICABLE MULLION LENGTH & LOAD WIDTH CONDITIONS.
4. CHOOSE A CONNECTION TYPE THAT MEETS OR EXCEEDS THE REQUIRED PRESSURE FOR THE APPLICABLE MULLION LENGTH & LOAD WIDTH CONDITIONS.

LOAD TABLE 1.0 (CONT.)											
MAXIMUM MULLION LENGTH (IN.)	MAXIMUM LOAD WIDTH (IN.)	ALLOWABLE PRESSURE (PSF)									
		4X1X1/8 TUBE	4X2X1/8 TUBE	4X2X1/4 OR 5X2X1/8 TUBE	5X2X1/4 TUBE	6X2X1/4 TUBE	"A" "F" & "G"	"B1" & "J1"	"B2" "D" & "J2"	"C" & "H"	"E"
96	18	79.4	85.0	85.0	85.0	85.0	76.5	85.0	85.0	85.0	85.0
	24	59.5	85.0	85.0	85.0	85.0	59.4	85.0	85.0	85.0	85.0
	30	47.6	69.6	85.0	85.0	85.0	49.3	85.0	85.0	85.0	85.0
	36	39.7	58.0	85.0	85.0	85.0	42.7	85.0	85.0	85.0	85.0
	42	34.0	49.7	85.0	85.0	85.0	38.0	76.1	85.0	85.0	85.0
	48	29.8	43.5	76.0	85.0	85.0	34.7	69.3	85.0	85.0	85.0
	54	26.5	38.7	67.6	85.0	85.0	32.2	64.3	79.8	85.0	85.0
	60	-	34.8	60.8	85.0	85.0	30.3	60.5	75.1	85.0	85.0
	66	-	31.6	55.3	85.0	85.0	28.8	57.6	71.5	85.0	85.0
	72	-	29.0	50.7	85.0	85.0	27.7	55.5	68.8	85.0	85.0
102	18	66.2	85.0	85.0	85.0	85.0	71.6	85.0	85.0	85.0	85.0
	24	49.6	72.5	85.0	85.0	85.0	55.5	85.0	85.0	85.0	85.0
	30	39.7	58.0	85.0	85.0	85.0	45.9	85.0	85.0	85.0	85.0
	36	33.1	48.3	84.5	85.0	85.0	39.6	79.2	85.0	85.0	85.0
	42	28.4	41.4	72.5	85.0	85.0	35.2	70.4	85.0	85.0	85.0
	48	24.8	36.3	63.4	85.0	85.0	32.0	64.0	79.4	85.0	85.0
	54	-	32.2	56.4	85.0	85.0	29.6	59.2	73.4	85.0	85.0
	60	-	29.0	50.7	85.0	85.0	27.7	55.5	68.8	85.0	85.0
	66	-	26.4	46.1	83.7	85.0	26.3	52.6	65.3	85.0	85.0
	72	-	-	42.3	76.7	85.0	25.2	50.4	62.5	82.1	85.0
108	18	55.7	81.4	85.0	85.0	85.0	67.2	85.0	85.0	85.0	85.0
	24	41.8	61.1	85.0	85.0	85.0	52.0	85.0	85.0	85.0	85.0
	30	33.4	48.9	85.0	85.0	85.0	42.9	85.0	85.0	85.0	85.0
	36	27.9	40.7	71.2	85.0	85.0	37.0	74.0	85.0	85.0	85.0
	42	-	34.9	61.0	85.0	85.0	32.8	65.6	81.3	85.0	85.0
	48	-	30.5	53.4	85.0	85.0	29.7	59.4	73.7	85.0	85.0
	54	-	27.1	47.5	85.0	85.0	27.4	54.8	68.0	85.0	85.0
	60	-	-	42.7	77.5	85.0	25.6	51.2	63.5	83.3	85.0
	66	-	-	38.8	70.5	85.0	24.2	48.4	60.0	78.8	85.0
	72	-	-	35.6	64.6	85.0	-	46.2	57.3	75.2	85.0
120	18	40.6	59.4	85.0	85.0	85.0	60.0	85.0	85.0	85.0	85.0
	24	30.5	44.5	77.9	85.0	85.0	46.2	85.0	85.0	85.0	85.0
	30	24.4	35.6	62.3	85.0	85.0	38.0	76.1	85.0	85.0	85.0
	36	-	29.7	51.9	85.0	85.0	32.6	65.3	80.9	85.0	85.0
	42	-	25.4	44.5	80.7	85.0	28.8	57.6	71.5	85.0	85.0
	48	-	-	38.9	70.6	85.0	26.0	52.0	54.5	84.6	85.0
	54	-	-	34.6	62.8	85.0	-	47.7	59.2	77.6	85.0
	60	-	-	31.1	56.5	85.0	-	44.4	55.0	72.2	85.0
	66	-	-	28.3	51.4	85.0	-	41.7	51.8	67.9	85.0
	72	-	-	26.0	47.1	75.8	-	39.6	49.1	64.5	85.0
126	18	-	51.3	85.0	85.0	85.0	56.9	85.0	85.0	85.0	85.0
	24	-	38.5	67.3	85.0	85.0	43.8	85.0	85.0	85.0	85.0
	30	-	30.8	53.8	85.0	85.0	36.0	72.0	85.0	85.0	85.0
	36	-	25.6	44.8	81.4	85.0	30.8	61.6	76.4	85.0	85.0
	42	-	-	38.4	69.7	85.0	27.2	54.3	67.4	85.0	85.0
	48	-	-	33.6	61.0	85.0	24.5	48.9	60.7	79.6	85.0
	54	-	-	29.9	54.2	85.0	-	44.8	55.6	72.9	85.0
	60	-	-	26.9	48.8	78.6	-	41.6	51.6	67.7	85.0
	66	-	-	24.5	44.4	71.4	-	39.0	48.4	63.5	85.0

1. ALL TUBES SHALL BE MIN. 6063-T6 ALUMINUM.
 2. FOR ALL CONNECTION TYPES, SEE SHEETS 3, 4, 5 & 6 FOR DETAIL.
 3. INDIVIDUAL UNIT SIZES & SHUTTER REQUIREMENTS ARE LIMITED BY THEIR OWN INDIVIDUAL "CERTIFICATION".
 4. IN ORDER TO SIMPLIFY TABLES, TABLE PRESSURES ARE LIMITED TO 85 PSF. USE OF THESE MULLIONS FOR PRESSURES HIGHER THAN 85 PSF SHALL BE REVIEWED UNDER SEPARATE APPROVAL.
- THESE LOAD TABLES ARE CERTIFIED AS CORRECT IN CONTENT. HOWEVER, CHOOSING OF THE CORRECT MULLION & CONNECTION FROM THESE TABLES FOR ITS SPECIFIC USE IS THE RESPONSIBILITY OF THOSE USING THE TABLES AND SHOULD BE VERIFIED BY THE BUILDING OFFICIAL OR A FLORIDA CERTIFIED ENGINEER.

DRAWN BY: W.W.S.		CHECKED BY: W.W.S.	
PLOT: 1=1		DATE: 08/20/09	
NO.	REVISION DESCRIPTION	DATE	BY

LOAD TABLE 3.0											
MAXIMUM MULLION LENGTH (IN.)	MAXIMUM LOAD WIDTH (IN.)	ALLOWABLE PRESSURE (PSF)									
		4X1X1/8 TUBE	4X2X1/8 TUBE	4X2X1/4 OR 5X2X1/8 TUBE	5X2X1/4 TUBE	6X2X1/4 TUBE	CONNECTION TYPES				
							"A" "F" & "G"	"B1" & "J1"	"B2" "D" & "J2"	"C" & "H"	"E"
36	60	85.0	85.0	85.0	85.0	85.0	55.5	85.0	85.0	85.0	85.0
	66	85.0	85.0	85.0	85.0	85.0	50.4	85.0	85.0	85.0	85.0
	72	85.0	85.0	85.0	85.0	85.0	46.2	85.0	85.0	85.0	85.0
	48	85.0	85.0	85.0	85.0	85.0	59.4	85.0	85.0	85.0	85.0
	54	85.0	85.0	85.0	85.0	85.0	52.8	85.0	85.0	85.0	85.0
	60	85.0	85.0	85.0	85.0	85.0	47.5	85.0	85.0	85.0	85.0
42	66	85.0	85.0	85.0	85.0	85.0	43.2	85.0	85.0	85.0	85.0
	72	85.0	85.0	85.0	85.0	85.0	39.6	79.2	85.0	85.0	85.0
	48	85.0	85.0	85.0	85.0	85.0	59.4	85.0	85.0	85.0	85.0
	54	85.0	85.0	85.0	85.0	85.0	52.0	85.0	85.0	85.0	85.0
	60	85.0	85.0	85.0	85.0	85.0	46.2	85.0	85.0	85.0	85.0
	66	85.0	85.0	85.0	85.0	85.0	41.6	83.2	85.0	85.0	85.0
48	72	85.0	85.0	85.0	85.0	85.0	37.8	75.6	85.0	85.0	85.0
	36	85.0	85.0	85.0	85.0	85.0	34.7	69.3	85.0	85.0	85.0
	42	85.0	85.0	85.0	85.0	85.0	61.6	85.0	85.0	85.0	85.0
	48	85.0	85.0	85.0	85.0	85.0	52.8	85.0	85.0	85.0	85.0
	54	85.0	85.0	85.0	85.0	85.0	46.2	85.0	85.0	85.0	85.0
	60	85.0	85.0	85.0	85.0	85.0	41.1	82.2	85.0	85.0	85.0
54	66	85.0	85.0	85.0	85.0	85.0	41.6	83.2	85.0	85.0	85.0
	72	83.9	85.0	85.0	85.0	85.0	33.6	67.2	83.4	85.0	85.0
	36	85.0	85.0	85.0	85.0	85.0	30.8	61.6	76.4	85.0	85.0
	42	85.0	85.0	85.0	85.0	85.0	55.5	85.0	85.0	85.0	85.0
	48	85.0	85.0	85.0	85.0	85.0	47.5	85.0	85.0	85.0	85.0
	54	85.0	85.0	85.0	85.0	85.0	41.6	83.2	85.0	85.0	85.0
60	60	81.5	85.0	85.0	85.0	85.0	33.3	66.6	82.6	85.0	85.0
	66	74.1	85.0	85.0	85.0	85.0	30.3	60.5	75.1	85.0	85.0
	72	67.9	85.0	85.0	85.0	85.0	27.7	55.5	68.8	85.0	85.0
	78	62.7	85.0	85.0	85.0	85.0	25.6	51.2	63.5	83.3	85.0
	84	58.2	85.0	85.0	85.0	85.0	—	47.5	59.0	77.4	85.0
	90	54.0	85.0	85.0	85.0	85.0	—	46.2	57.3	75.2	85.0
66	30	85.0	85.0	85.0	85.0	85.0	60.5	85.0	85.0	85.0	85.0
	36	85.0	85.0	85.0	85.0	85.0	50.4	85.0	85.0	85.0	85.0
	42	85.0	85.0	85.0	85.0	85.0	43.2	46.4	85.0	85.0	85.0
	48	84.2	85.0	85.0	85.0	85.0	37.8	75.6	85.0	85.0	85.0
	54	74.9	85.0	85.0	85.0	85.0	33.6	67.2	83.4	85.0	85.0
	60	67.4	85.0	85.0	85.0	85.0	30.3	60.5	75.1	85.0	85.0
72	66	61.2	85.0	85.0	85.0	85.0	27.5	55.0	68.2	85.0	85.0
	72	56.1	82.0	85.0	85.0	85.0	25.2	50.4	62.5	82.1	85.0
	78	51.8	75.7	85.0	85.0	85.0	—	46.5	57.7	75.7	85.0
	84	48.1	70.3	85.0	85.0	85.0	—	43.2	53.6	70.3	85.0
	90	44.0	65.0	85.0	85.0	85.0	—	41.6	51.2	68.8	85.0
	30	85.0	85.0	85.0	85.0	85.0	55.5	85.0	85.0	85.0	85.0
78	36	85.0	85.0	85.0	85.0	85.0	46.2	85.0	85.0	85.0	85.0
	42	80.6	85.0	85.0	85.0	85.0	39.6	79.2	78.3	85.0	85.0
	48	70.6	85.0	85.0	85.0	85.0	34.7	69.3	85.0	85.0	85.0
	54	62.7	85.0	85.0	85.0	85.0	30.8	61.6	76.4	85.0	85.0
	60	56.4	82.5	85.0	85.0	85.0	27.7	55.5	68.8	85.0	85.0
	66	51.3	75.0	85.0	85.0	85.0	25.2	50.4	62.5	82.1	85.0
84	72	47.0	68.7	85.0	85.0	85.0	—	46.2	57.3	75.2	85.0
	78	43.4	63.4	85.0	85.0	85.0	—	42.7	52.9	69.4	85.0
	84	40.3	58.9	82.6	85.0	85.0	—	39.6	49.1	64.5	85.0
	90	37.6	55.0	77.1	85.0	85.0	—	37.0	45.9	60.2	85.0
	30	85.0	85.0	85.0	85.0	85.0	51.2	85.0	85.0	85.0	85.0
	36	74.0	85.0	85.0	85.0	85.0	42.7	85.0	85.0	85.0	85.0
80	42	63.4	85.0	85.0	85.0	85.0	36.6	73.1	85.0	85.0	85.0
	48	55.5	81.1	85.0	85.0	85.0	32.0	64.0	79.4	85.0	85.0
	54	49.3	72.1	85.0	85.0	85.0	28.4	56.9	70.6	85.0	85.0
	60	44.4	64.9	85.0	85.0	85.0	25.6	51.2	63.5	83.3	85.0
	66	40.4	59.0	85.0	85.0	85.0	—	46.5	57.7	75.7	85.0
	72	37.0	54.0	82.1	85.0	85.0	—	42.7	52.9	69.4	85.0
86	78	34.1	49.9	75.8	85.0	85.0	—	39.4	48.9	64.1	85.0
	84	31.7	46.3	70.4	85.0	85.0	—	36.6	45.4	59.5	85.0
	90	29.6	43.2	65.7	85.0	85.0	—	34.1	42.3	55.5	82.1
	30	71.1	85.0	85.0	85.0	85.0	47.5	85.0	85.0	85.0	85.0
	36	59.2	85.0	85.0	85.0	85.0	39.6	79.2	85.0	85.0	85.0
	42	50.8	74.2	85.0	85.0	85.0	34.0	67.9	84.2	85.0	85.0
88	48	44.4	64.9	85.0	85.0	85.0	29.7	59.4	73.7	85.0	85.0
	54	39.5	57.7	85.0	85.0	85.0	26.4	52.8	65.5	85.0	85.0
	60	35.5	51.9	85.0	85.0	85.0	—	47.5	59.0	77.4	85.0
	66	32.3	47.2	77.3	85.0	85.0	—	43.2	53.6	70.3	85.0
	72	29.6	43.3	70.8	85.0	85.0	—	39.6	49.1	64.5	85.0
	78	27.3	39.9	65.4	85.0	85.0	—	36.6	45.4	59.5	85.0
90	84	—	37.1	60.7	85.0	85.0	—	34.0	42.1	55.3	81.6
	90	—	34.6	56.7	85.0	85.0	—	31.7	39.3	51.6	76.2

LOAD TABLE 3.0 (CONT.)											
MAXIMUM MULLION LENGTH (IN.)	MAXIMUM LOAD WIDTH (IN.) A+B	ALLOWABLE PRESSURE (PSF)									
		4X1X1/8 TUBE	4X2X1/8 TUBE	4X2X1/4 OR 5X2X1/8 TUBE	5X2X1/4 TUBE	6X2X1/4 TUBE	CONNECTION TYPES				
							"A" "F" & "G"	"B1" "D" & "J1"	"B2" "D" & "J2"	"C" & "H"	"E"
90	30	57.8	84.4	85.0	85.0	85.0	44.4	85.0	85.0	85.0	
	36	48.2	70.4	85.0	85.0	85.0	37.0	74.0	85.0	85.0	
	42	41.3	60.3	85.0	85.0	85.0	31.7	63.4	78.6	85.0	
	48	36.1	52.8	85.0	85.0	85.0	27.7	55.5	68.8	85.0	
	54	32.1	46.9	82.0	85.0	85.0	24.7	49.3	61.2	80.2	
	60	28.9	42.2	73.8	85.0	85.0	—	44.4	55.0	72.2	
	66	26.3	38.4	67.1	85.0	85.0	—	40.3	50.0	65.6	
	72	—	35.2	61.5	85.0	85.0	—	37.0	45.9	60.2	
	78	—	32.5	56.8	85.0	85.0	—	34.1	42.3	55.5	
	84	—	30.2	52.7	85.0	85.0	—	31.7	39.3	51.6	
96	90	—	28.1	49.2	85.0	85.0	—	29.6	36.7	48.1	
	30	47.6	69.6	85.0	85.0	85.0	41.6	83.2	85.0	85.0	
	36	39.7	58.0	85.0	85.0	85.0	34.7	69.3	85.0	85.0	
	42	34.0	49.7	85.0	85.0	85.0	29.7	59.4	73.7	85.0	
	48	29.8	43.5	76.0	85.0	85.0	26.0	52.0	64.5	84.6	
	54	26.5	38.7	67.6	85.0	85.0	—	46.2	57.3	75.2	
	60	—	34.8	60.8	85.0	85.0	—	41.6	51.6	67.7	
	66	—	31.6	55.3	85.0	85.0	—	37.8	46.9	61.5	
	72	—	29.0	50.7	85.0	85.0	—	34.7	43.0	56.4	
	78	—	—	46.8	84.9	85.0	—	32.0	39.7	52.1	
108	84	—	—	43.5	78.8	85.0	—	29.7	36.9	48.4	
	90	—	—	40.6	73.6	85.0	—	27.7	34.4	45.1	
	30	33.4	48.9	85.0	85.0	85.0	37.0	74.0	85.0	85.0	
	36	27.9	40.7	71.2	85.0	85.0	30.8	61.6	76.4	85.0	
	42	—	34.9	61.0	85.0	85.0	26.4	52.8	65.5	85.0	
	48	—	30.5	53.4	85.0	85.0	—	46.2	57.3	75.2	
	54	—	27.1	47.5	85.0	85.0	—	41.1	51.0	66.9	
	60	—	—	42.7	77.5	85.0	—	37.0	45.9	60.2	
	66	—	—	38.8	70.5	85.0	—	33.6	41.7	54.7	
	72	—	—	35.6	64.6	85.0	—	30.8	38.2	50.1	
120	78	—	—	32.9	59.6	85.0	—	28.4	35.3	46.3	
	84	—	—	30.5	55.4	85.0	—	26.4	32.8	43.0	
	90	—	—	28.5	51.7	85.0	—	24.7	30.6	40.1	
	30	—	35.6	62.3	85.0	85.0	33.3	66.6	82.6	85.0	
	36	—	29.7	51.9	85.0	85.0	27.7	55.5	68.8	85.0	
	42	—	25.4	44.5	80.7	85.0	—	47.5	59.0	77.4	
	48	—	—	38.9	70.6	85.0	—	41.6	51.6	67.7	
	54	—	—	34.6	62.8	85.0	—	37.0	45.9	60.2	
	60	—	—	31.1	56.5	85.0	—	33.3	41.3	54.2	
	66	—	—	28.3	51.4	82.7	—	30.3	37.5	49.2	
132	72	—	—	—	47.1	75.8	—	27.7	34.4	45.7	
	78	—	—	—	43.5	70.0	—	25.6	31.8	41.7	
	84	—	—	—	40.4	65.0	—	—	29.5	38.7	
	90	—	—	—	37.7	60.6	—	—	27.5	36.1	
	30	—	—	46.8	70.8	85.0	30.3	60.5	75.1	85.0	
	36	—	—	39.0	84.9	85.0	25.2	50.4	62.5	82.1	
	42	—	—	33.4	60.7	85.0	—	43.2	53.6	70.3	
	48	—	—	29.3	53.1	85.0	—	37.8	46.9	61.5	
	54	—	—	—	47.2	75.9	—	33.6	41.7	54.7	
	60	—	—	—	42.5	68.4	—	30.3	37.5	49.2	
144	66	—	—	—	38.6	62.1	—	27.5	34.1	44.8	
	72	—	—	—	35.4	57.0	—	25.2	31.3	41.0	
	78	—	—	—	32.7	52.6	—	—	28.9	37.9	
	84	—	—	—	30.3	48.6	—	—	26.8	35.2	
	90	—	—	—	28.3	45.8	—	—	25.0	32.8	
	30	—	36.0	65.4	85.0	85.0	27.7	55.5	68.8	85.0	
	36	—	30.0	54.5	85.0	85.0	—	46.2	57.3	75.2	
	42	—	25.7	46.7	75.2	—	—	39.6	49.1	64.5	
	48	—	—	—	40.9	65.8	—	34.7	43.0	56.4	
	54	—	—	—	36.3	58.5	—	30.8	38.2	50.1	
152	60	—	—	—	32.7	52.6	—	27.7	34.4	45.1	
	66	—	—	—	29.7	47.9	—	25.2	31.3	41.0	
	72	—	—	—	—	43.9	—	—	28.7	37.6	
	78	—	—	—	—	40.5	—	—	26.5	34.7	
	84	—	—	—	55.6	85.0	26.3	52.5	65.2	85.0	
	90	—	—	—	46.3	74.6	—	43.8	54.3	71.3	
	42	—	—	—	39.7	63.9	—	37.5	46.6	61.1	
	48	—	—	—	34.8	56.0	—	32.8	40.7	53.4	
	54	—	—	—	30.9	48.8	—	26.3	32.6	42.8	
	60	—	—	—	—	37.3	—	—	27.2	35.6	
164	30	—	—	—	44.3	71.3	—	48.7	60.4	78.0	
	36	—	—	—	36.9	59.4	—	40.6	50.3	66.0	
	42	—	—	—	31.6	50.9	—	34.8	43.1	56.6	
	48	—	—	—	27.7	44.5	—	30.4	37.8	49.5	
	54	—	—	—	—	35.6	—	—	30.2	39.6	
	60	—	—	—	—	—	—	—	—	—	