



TYPICAL CLOSURE DETAILS (PLAN VIEWS)

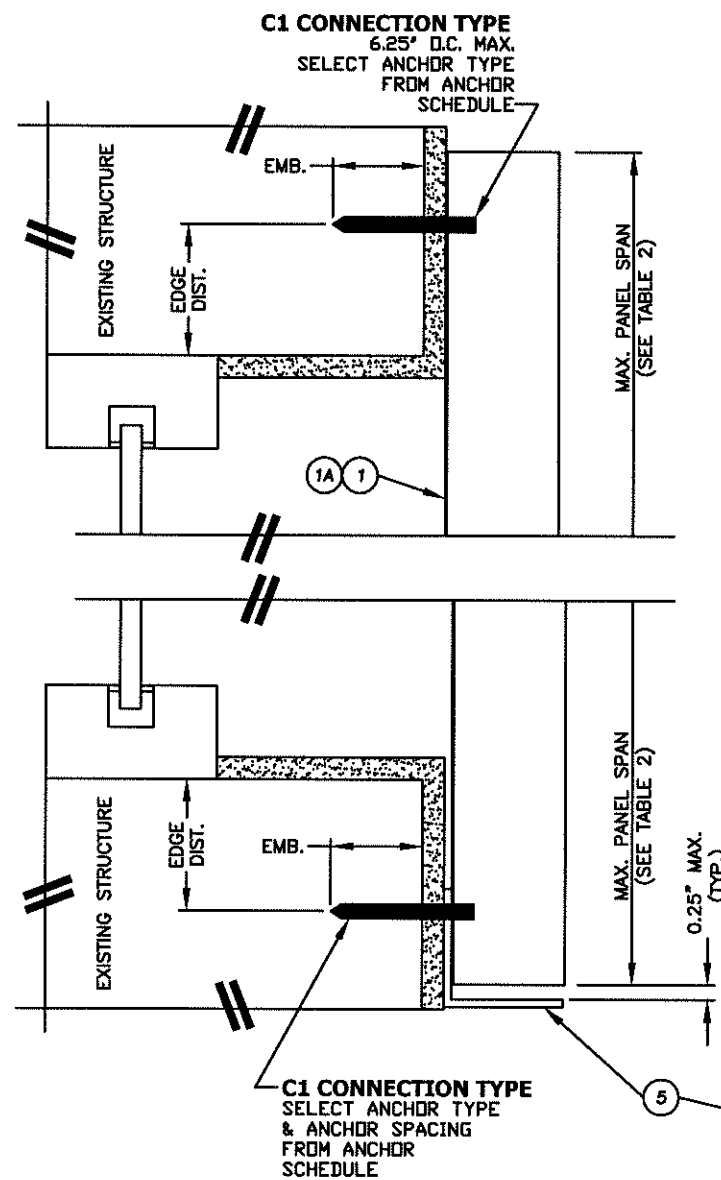


PRODUCT:		ELITE HURRICANE SHUTTERS 0.050" ALUMINUM STORM PANEL	
PART OR ASSEMBLY:		TYPICAL CLOSURE DETAILS	
1	05/22/12	UPDATE TO 2010 FBC	LFS
NO.	DATE		BY
REVISIONS			
DATE: 11/25/07			
SCALE: N.T.S.			
DWG. BY: EW			
CHK. BY: LFS			
DRAWING NO.: FL-10106.1			
SHEET 2 OF 10			

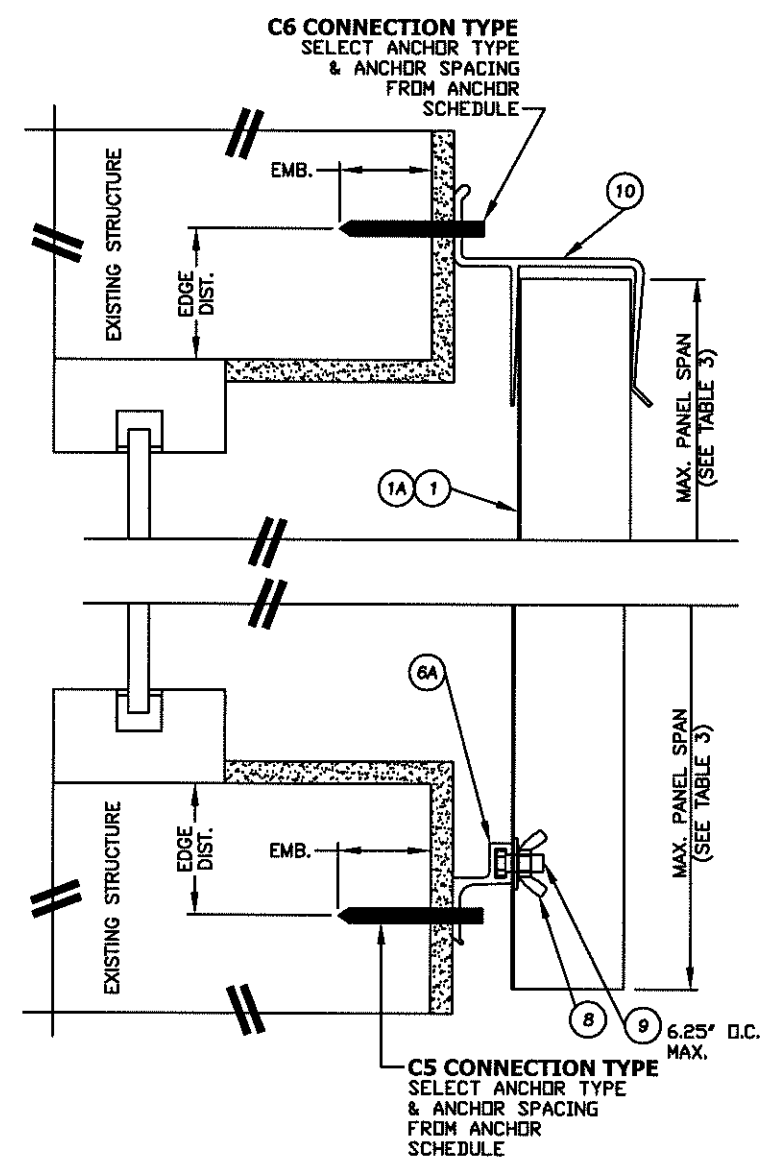
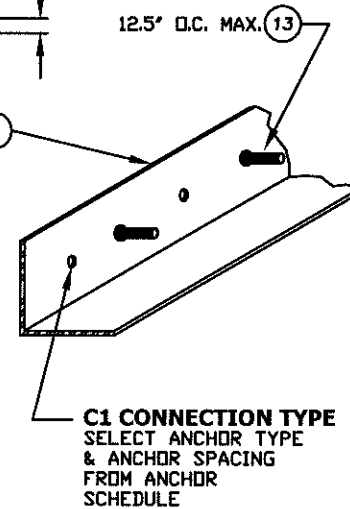
Documents Prepared By:

RW BUILDING CONSULTANTS, INC.
P.O. Box 230 Vairico FL 33595
Phone No.: 813.659.9197
Florida Board of Professional Engineers
Certificate Of Authorization No. 9813
67-DE 5.31.12
Lyndon F. Schmidt, P.E. NO. 43409

PANEL SPAN (in)	ALLOWABLE DESIGN PRESSURE	
	(+) PSF	(-) PSF
144.0	50.0	50.0
132.0	55.0	55.0
120.0	61.0	61.0
108.0	68.5	68.5
106.0	70.0	70.0
96.0	77.0	77.0
84.0	88.0	88.0
72.0	103.0	103.0
60.0	123.5	123.5
0-53.0	140.0	140.0

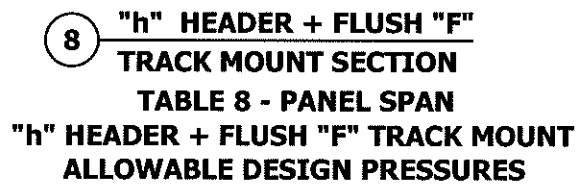


PANEL SPAN (in)	ALLOWABLE DESIGN PRESSURE	
	(+) PSF	(-) PSF
106.0	60.0	60.0
96.0	65.0	65.0
84.0	72.0	72.0
72.0	81.0	81.0
60.0	92.5	92.5
0-53.0	100.0	100.0

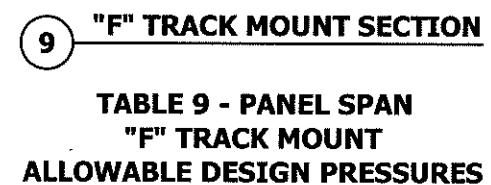


PANEL SPAN (in)	ALLOWABLE DESIGN PRESSURE	
	(+) PSF	(-) PSF
106.0	50.0	50.0
96.0	55.0	55.0
84.0	63.0	63.0
72.0	73.5	73.5
60.0	88.0	88.0
0-53.0	100.0	100.0

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1752
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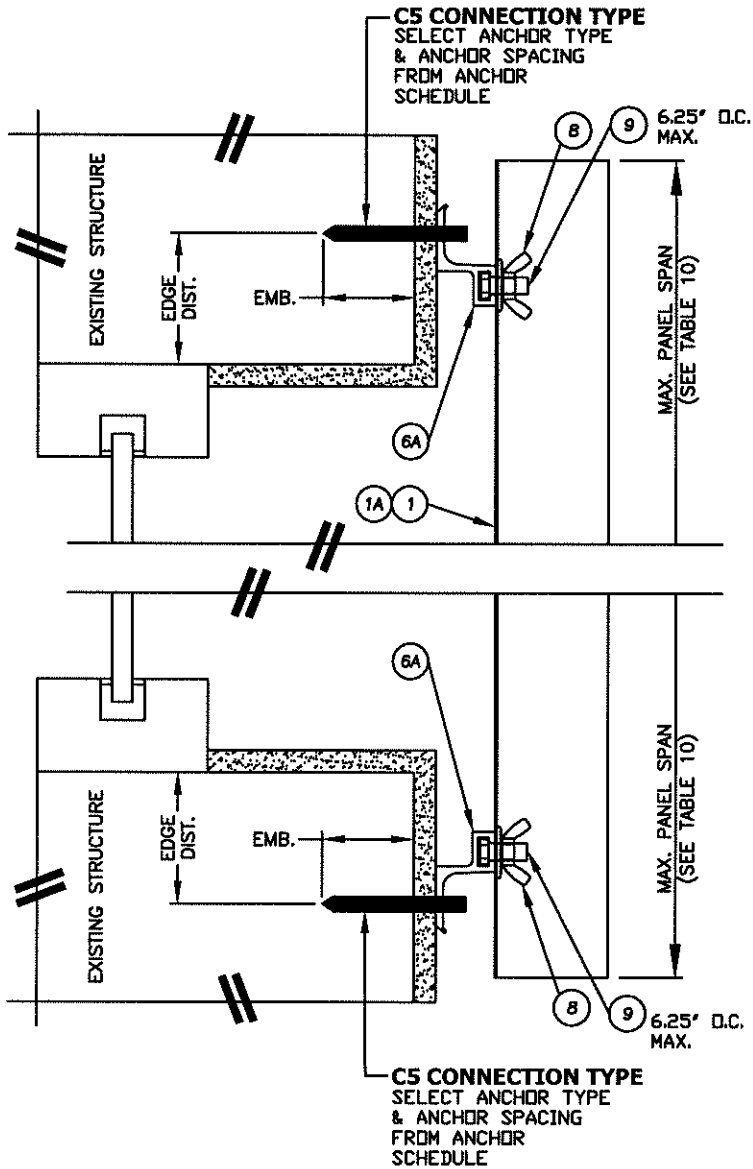
PANEL SPAN (in)	ALLOWABLE DESIGN PRESSURE	
	(+) PSF	(-) PSF
106.0	50.0	50.0
96.0	55.0	55.0
84.0	63.0	63.0
72.0	73.5	73.5
60.0	88.0	88.0
0-53.0	100.0	100.0



PANEL SPAN (in)	ALLOWABLE DESIGN PRESSURE	
	(+) PSF	(-) PSF
106.0	50.0	50.0
96.0	55.0	55.0
84.0	63.0	63.0
72.0	73.5	73.5
60.0	88.0	88.0
0-53.0	100.0	100.0

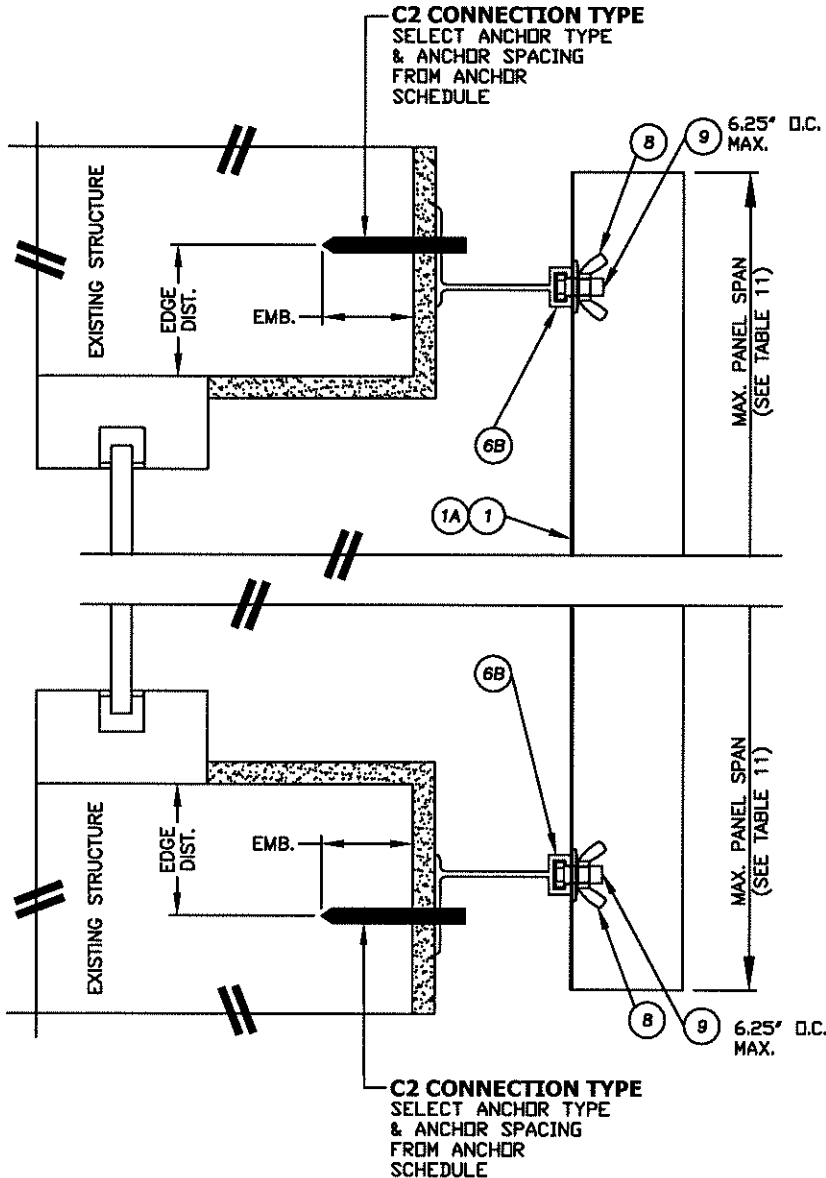
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10 1" OFFSET "F" TRACK MOUNT
TABLE 10 - PANEL SPAN
1" OFFSET "F" TRACK MOUNT
ALLOWABLE DESIGN PRESSURES

PANEL SPAN (in)	ALLOWABLE DESIGN PRESSURE	
	(+) PSF	(-) PSF
106.0	50.0	50.0
96.0	55.0	55.0
84.0	63.0	63.0
72.0	73.5	73.5
60.0	88.0	88.0
0-53.0	100.0	100.0



11 2" OFFSET "F" TRACK MOUNT
TABLE 11 - PANEL SPAN
2" OFFSET "F" TRACK MOUNT
ALLOWABLE DESIGN PRESSURES

PANEL SPAN (in)	ALLOWABLE DESIGN PRESSURE	
	(+) PSF	(-) PSF
106.0	50.0	50.0
96.0	55.0	55.0
84.0	63.0	63.0
72.0	73.5	73.5
60.0	88.0	88.0
0-53.0	100.0	100.0

Documents Prepared By:
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FL 53112
Lyndon F. Schmidt, P.E. No. 43409

PRODUCT:
ELITE HURICANE SHUTTERS
0.050" ALUMINUM STORM PANEL
PART OR ASSEMBLY:
VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS	
		BY	LFS
1	05/22/12	UPDATE TO 2010 FBC	

DATE: 11/25/07
SCALE: N.T.S.
DWG. BY: EW
CHK. BY: LFS
DRAWING NO.: FL-10106.1
SHEET 6 OF 10

ANCHOR SCHEDULE																												
FASTENER MAX. SPACING (IN.) REQ'D FOR VARIOUS DESIGN LOADS AND SPANS																												
EXISTING STRUCTURE	ANCHOR TYPE	EDGE DISTANCE	LOAD PSF MAX. (SEE NOTE 1)	INSTALLATION DETAILS																								
				SPANS UP TO 53" (SEE NOTE 1)						SPANS UP TO 84" (SEE NOTE 1)						SPANS UP TO 106" (SEE NOTE 1)						SPANS UP TO 144" (SEE NOTE 1)						
				CONNECTION TYPE						CONNECTION TYPE						CONNECTION TYPE						CONNECTION TYPE						
				C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	
HOLLOW CONCRETE BLOCK		ED = 2.5"	50	16.0	15.6	11.8	12.1	9.2	7.2	13.3	9.8	7.4	7.6	5.8	4.5	10.5	7.8	5.9	6.0	4.6	3.6	7.8						
			60	16.0	13.0	9.8	10.1	7.6	6.0	11.1	8.2	6.2	6.4	4.8	3.8	8.8	6.5	4.9	5.0	3.8	3.0	6.5						
			70	15.1	11.1	8.4	8.7	6.5	5.1	9.5	7.0	5.3	5.4	4.1	3.2	7.5	5.5	4.2	4.3	3.2								
			85	12.4	9.1	6.9	7.1	5.4	4.2	7.8	5.7	4.3	4.5	3.4		6.2	4.5	3.4	3.5									
			100	10.5	7.8	5.9	6.0	4.6	3.6	6.6	4.9	3.7	3.8			5.2	3.9		3.0									
			120	8.8	6.5	4.9	5.0	3.8	3.0	5.5	4.1	3.1	3.2			4.4	3.2											
			140	7.5	5.5	4.2	4.3	3.2		4.7	3.5					3.7												
		ED = 2.5"	50	15.2	11.2	8.5	11.9	6.6	5.2	9.6	7.0	5.3	7.5	4.1	3.2	7.6	5.6	4.2	5.9	3.3								
			60	12.6	9.3	7.0	8.9	5.5	4.3	8.0	5.8	4.4	5.6	3.4		6.3	4.6	3.5	4.4									
			70	10.8	8.0	6.0	8.3	4.7	3.7	6.8	5.0	3.8	5.2			5.4	4.0	3.0	4.1									
			85	8.9	6.5	5.0	6.1	3.8	3.0	5.6	4.1	3.1	3.8			4.4	3.2		3.0									
			100	7.6	5.6	4.2	4.9	3.3		4.8	3.5		3.1			3.8												
			120	6.3	4.6	3.5	3.7			4.0						3.1												
			140	5.4	4.0	3.0	3.2			3.4																		
		ED = 2.0"	50	16.0	16.0	16.0	16.0	12.8	10.1	16.0	13.7	10.4	13.9	8.1	6.3	14.7	10.8	8.2	11.0	6.4	5.0	10.4						
			60	16.0	16.0	13.7	16.0	10.7	8.4	15.5	11.4	8.6	10.4	6.7	5.3	12.3	9.0	6.8	8.2	5.3	4.2	8.7						
			70	16.0	15.5	11.8	15.4	9.1	7.2	13.3	9.8	7.4	9.7	5.7	4.5	10.5	7.7	5.9	7.7	4.5	3.6	7.4						
			85	16.0	12.8	9.7	11.3	7.5	5.9	10.9	8.0	6.1	7.1	4.7	3.7	8.6	6.4	4.8	5.6	3.7								
			100	14.7	10.8	8.2	9.1	6.4	5.0	9.3	6.8	5.2	5.7	4.0	3.1	7.3	5.4	4.1	4.5	3.2								
			120	12.3	9.0	6.8	6.9	5.3	4.2	7.7	5.7	4.3	4.3	3.3		6.1	4.5	3.4	3.4									
			140	10.5	7.7	5.9	6.0	4.5	3.6	6.6	4.9	3.7	3.8			5.2	3.8		3.0									
		ED = 1.5"	50	16.0	16.0	16.0	16.0	13.2	10.4	16.0	14.1	10.7	15.9	8.3	6.5	15.2	11.2	8.5	12.6	6.6	5.2	11.2						
			60	16.0	16.0	16.0	14.1	11.0	8.6	16.0	11.7	8.9	11.9	6.9	5.4	12.6	9.3	7.0	9.4	5.5	4.3	9.3						
			70	16.0	16.0	16.0	12.1	9.4	7.4	13.7	10.0	7.6	11.1	5.9	4.6	10.8	8.0	6.0	8.8	4.7	3.7	8.0						
			85	16.0	13.1	13.1	10.0	7.7	6.1	11.2	8.3	6.3	8.2	4.9	3.8	8.9	6.5	5.0	6.5	3.8	3.0	6.5						
			100	15.2	11.2	11.2	8.5	6.6	5.2	9.6	7.0	5.3	6.5	4.1	3.2	7.6	5.6	4.2	5.2	3.3								
			120	12.6	9.3	9.3	7.0	5.5	4.3	8.0	5.8	4.4	5.0	3.4		6.3	4.6	3.5	3.9									
			140	10.8	8.0	8.0	6.0	4.7	3.7	6.8	5.0	3.8	4.3			5.4	4.0	3.0	3.4									
	ED = 2.0"	50	16.0	16.0	16.0	16.0	13.5	10.6	16.0	14.4	10.9	12.1	8.5	6.7	15.5	11.4	8.6	9.6	6.7	5.3	11.4							
		60	16.0	16.0	14.4	14.4	11.2	8.8	16.0	12.0	9.1	9.1	7.0	5.6	12.9	9.5	7.2	7.2	5.6	4.4	9.5							
		70	16.0	16.0	12.4	13.5	9.6	7.6	14.0	10.3	7.8	8.5	6.0	4.8	11.1	8.1	6.2	6.7	4.8	3.8	8.1							
		85	16.0	13.4	10.2	9.9	7.9	6.2	11.5	8.4	6.4	6.2	5.0	3.9	9.1	6.7	5.1	4.9	3.9	3.1	6.7							
		100	15.5	11.4	8.6	7.9	6.7	5.3	9.8	7.2	5.4	5.0	4.2	3.3	7.7	5.7	4.3	3.9	3.3									
		120	12.9	9.5	7.2	6.0	5.6	4.4	8.1	6.0	4.5	3.8	3.5		6.4	4.7	3.6	3.0										
		140	11.1	8.1	6.2	5.3	4.8	3.8	7.0	5.1	3.9	3.3	3.0		5.5	4.0	3.1											

MASONRY ANCHOR SCHEDULE NOTES:

1. SPANS AND LOADS SHOWN HERE ARE FOR DETERMINING ANCHOR SPACING ONLY. ALLOWABLE STORM PANEL SPANS FOR SPECIFIC LOADS MUST BE LIMITED TO THOSE SHOWN IN THE SPAN TABLES.
2. SEE MOUNTING SECTION DETAILS FOR IDENTIFICATION OF CONNECTION TYPE.
3. TO USE THE ANCHOR SCHEDULE, FIRST DETERMINE THE DESIGN PRESSURE, SPAN AND CONNECTION TYPE FOR THE SPECIFIC OPENING BEING PROTECTED. ENTER ANCHOR SCHEDULE AT A LOAD EQUAL TO OR GREATER THAN THE REQUIREMENT AND A SPAN EQUAL TO OR GREATER THAN THE REQUIREMENT; USE THE ANCHOR SPACING LISTED FOR THE SPECIFIC CONNECTION TYPE AND ANCHOR SELECTED.
4. LINEAR INTERPOLATION IS ALLOWED FOR INTERMEDIATE FASTENER SPACING AND LOADS.
5. EXISTING STRUCTURE MAY BE CONCRETE, HOLLOW BLOCK OR WOOD FRAMING. REFER TO ANCHOR SCHEDULE FOR PROPER ANCHOR TYPE BASED ON TYPE OF EXISTING STRUCTURE.
6. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE ANCHOR MANUFACTURER'S RECOMMENDATIONS.
7. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES WALL FINISH, WALL COVERINGS, STUCCO AND SIMILAR MATERIALS.
8. WASHERED WINGNUTS AND LOCKNUTS SHALL BE INSTALLED SUCH THAT THE NUT IS FLUSH WITH THE THREADED STUD OR BOLT, MINIMUM. SIDEWALK SCREWS (WAFFER HEAD SCREWS) SHALL HAVE MINIMUM OF 1/2" ENGAGEMENT OF THREADS IN BASE ANCHOR U.O.N.
9.  DESIGNATES ANCHOR CONDITIONS WHICH ARE NOT ACCEPTABLE USES.
10. SEE THE COMPONENT DETAILS SHEET FOR LOCATION OF ANCHOR POINTS ON EACH TYPE OF MOUNTING HARDWARE.

Documents Prepared By:

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Florida Board of Professional Engineers
Certificate Of Authorization No. 9813

Lyndon F. Schmidt, P.E. No. 43409

PRODUCT:
ELITE HURRICANE SHUTTERS
.050" ALUMINUM STORM PANEL
PART OR ASSEMBLY:
ANCHOR SCHEDULE -
HOLLOW BLOCK

DATE: 11/20/07

SCALE: N.T.S.

DWG. BY: EW

CHK. BY: LFS

DRAWING NO.: FL-10106.1

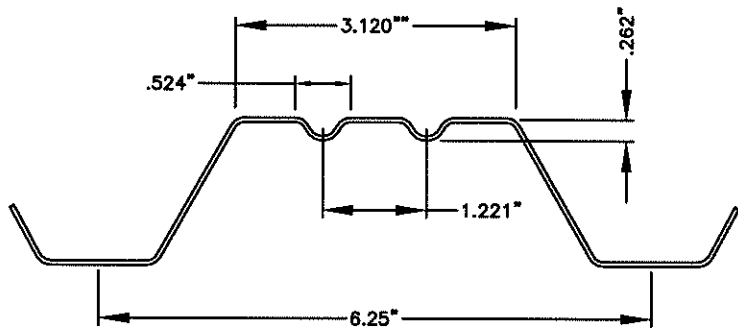
SHEET 8 OF 10

1. SPANS AND LOADS SHOWN HERE ARE FOR DETERMINING ANCHOR SCHEDULE ONLY. ALLOWABLE STORM PANEL SPANS FOR SPECIFIC LOADS MUST BE LIMITED TO THOSE SHOWN IN THE SPAN TABLES.
2. SEE MOUNTING SECTION DETAILS FOR IDENTIFICATION OF CONNECTION TYPE.
3. TO USE THE ANCHOR SCHEDULE, FIRST DETERMINE THE DESIGN PRESSURE, SPAN AND CONNECTION TYPE FOR THE SPECIFIC OPENING BEING PROTECTED. ENTER ANCHOR SCHEDULE AT A LOAD EQUAL TO OR GREATER THAN THE REQUIREMENT AND A SPAN EQUAL TO OR GREATER THAN THE REQUIREMENT; USE THE ANCHOR SPACING LISTED FOR THE SPECIFIC CONNECTION TYPE AND ANCHOR SELECTED.
4. LINEAR INTERPOLATION IS ALLOWED FOR INTERMEDIATE FASTENER SPACING AND LOADS.
5. EXISTING STRUCTURE MAY BE CONCRETE, HOLLOW BLOCK OR WOOD FRAMING. REFER TO ANCHOR SCHEDULE FOR PROPER ANCHOR TYPE BASED ON TYPE OF EXISTING STRUCTURE.
6. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE ANCHOR MANUFACTURER'S RECOMMENDATIONS.
7. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES WALL FINISH, WALL COVERINGS, STUCCO AND SIMILAR MATERIALS.
8. WASHERED WINGNUTS AND LOCKNUTS SHALL BE INSTALLED SUCH THAT THE NUT IS FLUSH WITH THE THREADED STUD OR BOLT, MINIMUM. SIDEWALK SCREWS (WAFFER HEAD SCREWS) SHALL HAVE MINIMUM OF 1/2" ENGAGEMENT OF THREADS IN BASE ANCHOR U.O.N.
9. DESIGNATES ANCHOR CONDITIONS WHICH ARE NOT ACCEPTABLE USES.
10. SEE THE COMPONENT DETAILS SHEET FOR LOCATION OF ANCHOR POINTS ON EACH TYPE OF MOUNTING HARDWARE.
10. ANCHORS INSTALLED INTO THE 1.5" FACE OF 2X FRAMING SHALL BE IN THE CENTER OF THE 1.5" FACE (.75" EDGE DISTANCE). ANCHORS SHALL BE A MINIMUM OF 2" FROM ENDS OF 2X FRAMING.
11. FOR CONNECTION TYPE "C4", ANCHORS SHALL BE INSTALLED A MINIMUM OF 1" FROM THE LOADED EDGE OF 2X FRAMING AND A MINIMUM OF 2" FROM THE ENDS OF 2X FRAMING.
12. FIELD VERIFY THAT ANCHORS ARE INTO ADEQUATE STRUCTURAL WOOD FRAMING MEMBERS AND NOT INTO PLYWOOD, OSB OR OTHER SIMILAR MATERIALS.
13. SPECIFIC GRAVITY (G = 0.55) IS FOR SOUTHERN YELLOW PINE.

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67-PL 57112

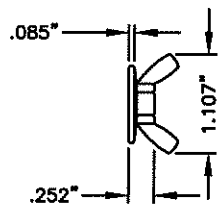
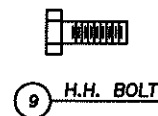
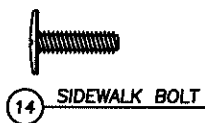
[illegible]

DATE:	11/25/07
SCALE:	N.T.S.
DWG. BY:	EW
CHK. BY:	LFS
DRAWING NO.:	FL-10106.1
SHEET	9 OF 10

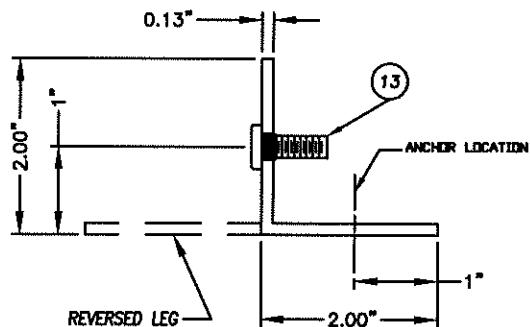


1A ALUMINUM STORM 1/2 PANEL PROFILE

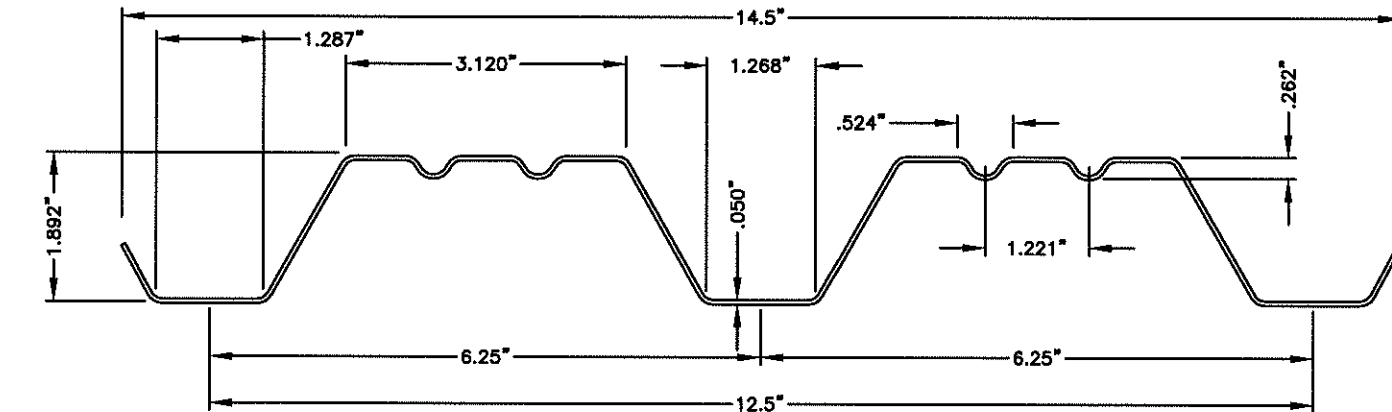
ITEM	DESCRIPTION	MATERIAL
1	ALUM. STORM PANEL (0.050" THK)	ALUMINUM
1A	ALUM. STORM 1/2 PANEL (0.050" THK)	ALUMINUM
2	"h" HEADER	ALUMINUM
3	EXPANDED "U" HEADER	ALUMINUM
5	2" x 2" ANGLE	ALUMINUM
6	"F" TRACK	ALUMINUM
6A	1" BUILD-OUT "F" TRACK	ALUMINUM
6B	2" BUILD-OUT "F" TRACK	ALUMINUM
8	WASHERED WINGNUT	STEEL
9	1/4-20 x 3/4" H.H. BOLT	S.S.
10	1" BUILD OUT "F" HEADER	ALUMINUM
10A	2" BUILD OUT "F" HEADER	ALUMINUM
13	1/4"-20 x 3/4" KNURLED STUD	S.S.
14	1/4"-20 SIDEWALK BOLT	S.S.



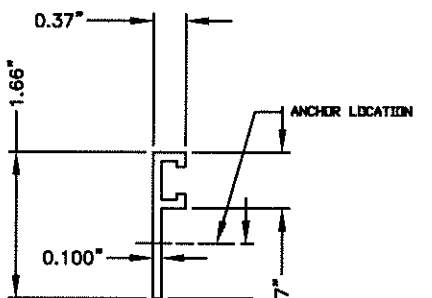
8 WING NUT



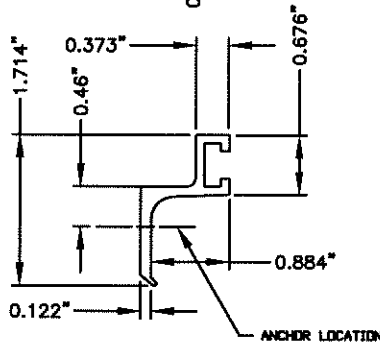
5 ANGLE



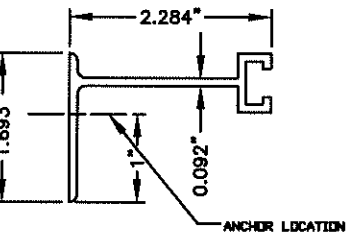
1 ALUMINUM STORM PANEL PROFILE



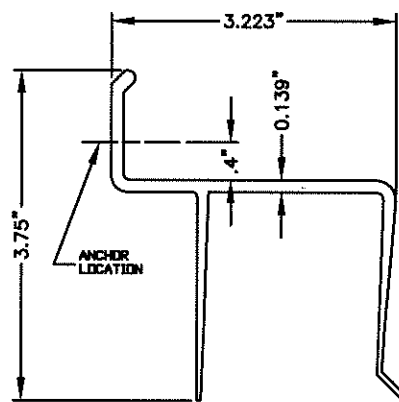
6 "F" TRACK



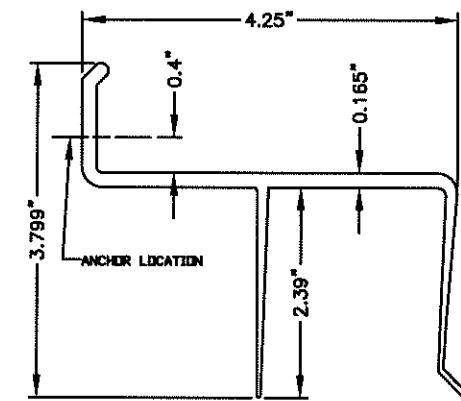
6A 1" BUILD OUT "F" TRACK



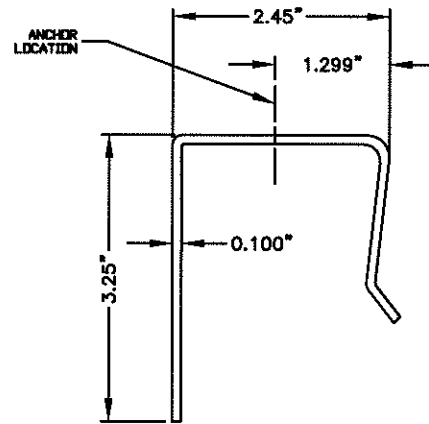
6B 2" BUILD OUT "F" TRACK



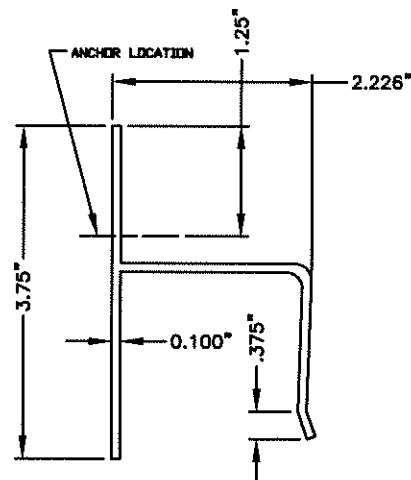
10 1" BUILD OUT "F" HEADER



10A 2" BUILD OUT "F" HEADER



3 EXPANDED "U" HEADER



2 "h" HEADER

Documents Prepared By:
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PRODUCT:
ELITE HURRICANE SHUTTERS
0.050" ALUMINUM STORM PANEL
PART OR ASSEMBLY:
BILL OF MATERIALS
& COMPONENTS

NO.	DATE	REVISIONS
1	05/22/12	UPDATE TO 2010 FBC
LFS	BY	

DATE: 11/25/07

SCALE: N.T.S.

DWG. BY: EW

CHK. BY: LFS

DRAWING NO.: FL-10106.1

SHEET 10 OF 10