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**Product Approval**  
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- ▶ COMMUNITY PLANNING
- ▶ HOUSING & COMMUNITY DEVELOPMENT
- ▶ EMERGENCY MANAGEMENT
- ▶ OFFICE OF THE SECRETARY

FL # FL13580  
 Application Type New  
 Code Version 2007  
 Application Status Approved  
 Comments  
 Archived

Product Manufacturer All American Shutters and Glass  
 Address/Phone/Email 1638 Donna Road  
 West Palm Beach, FL 33409  
 (561) 712-9882  
 Don@allamericanshutters.com

Authorized Signature Frank Bennardo  
 frank@engexp.com

Technical Representative  
 Address/Phone/Email

Quality Assurance Representative  
 Address/Phone/Email

Category Shutters  
 Subcategory Storm Panels

Compliance Method Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer  
 Evaluation Report - Hardcopy Received

Florida Engineer or Architect Name who developed the Evaluation Report Frank L. Bennardo, P.E.  
 Florida License PE-0046549  
 Quality Assurance Entity National Accreditation and Management Institute  
 Quality Assurance Contract Expiration Date 12/31/2010  
 Validated By Stephen R. Walsh P.E.  
 Validation Checklist - Hardcopy Received

Certificate of Independence [FL13580\\_R0\\_COI\\_Cert\\_Indep.pdf](#)

Referenced Standard and Year (of Standard)	<u>Standard</u>	<u>Year</u>
	TAS 201	1994
	TAS 202	1994
	TAS 203	1994

Equivalence of Product Standards Certified By

Sections from the Code



March 3, 2010

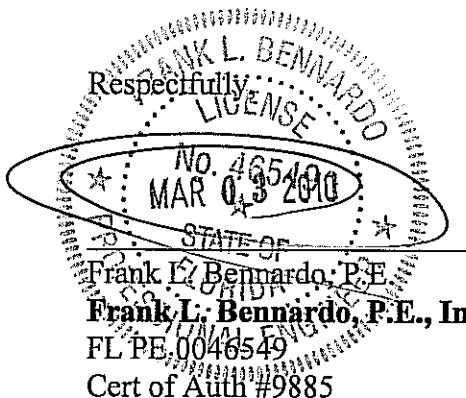
Florida Department of Community Affairs  
2555 Shumard Oak Boulevard  
Tallahassee, FL 32399

Regarding: All American Shutters and Glass  
22ga Glavanized Steel Storm Panels  
Project #10-AAS-0003

To Whom It May Concern:

Please be advised that the below-signed engineer does not have nor will acquire a financial interest in the company manufacturing or distributing the product(s) for which an evaluation report or validation certification has been prepared, as referenced above. This engineer is not owned, operated, nor controlled by the manufacturer or distributor noted above and does not have any financial interest in any other entity involved in the approval process of the above-noted product(s).

Respectfully,



Frank L. Bennardo, P.E.  
**Frank L. Bennardo, P.E., Inc.**  
FL PE.0046549  
Cert of Auth #9885

## Product Evaluation Report

March 3, 2010

Application Number: \_\_\_\_\_  
FLB Project Number: 10-AAS-0003

Product Manufacturer: All American Shutters and Glass  
Manufacturer Address: 1540 Donna Road  
West Palm Beach, FL

Product Name & Description: 22ga Galvanized Steel Storm Panels

### Scope of Evaluation:

This Product Evaluation Report is being issued in accordance with the requirements of the Florida Department of Community Affairs (Florida Building Commission) Rule Chapter 9B-72.070, F.A.C., for statewide acceptance per Method 1(d). All products listed above have been tested and/or evaluated as summarized herein to show compliance with the 2007 Florida Building Code and are, for the purpose intended, at least equivalent to that required by the Code. Re-evaluation of this product shall be required following pertinent Florida Building Code modifications or revisions.

### Substantiating Data:

- **PRODUCT EVALUATION DOCUMENTS**

FLB drawing #10-AAS-0003 titled "22ga Galvanized Steel Storm Panels", sheets 1-3, prepared by Engineering Express, signed & sealed by Frank L. Bennardo, P.E. is an integral part of this Evaluation Report.

- **TEST REPORTS**

Uniform static structural performance has been tested in accordance with TAS 202 test standards per test report(s) #02-002 by Construction Testing Corporation (CTC).

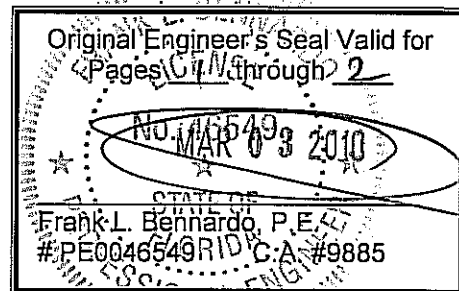
Large missile impact resistance and cyclic loading performance have been tested in accordance with TAS 201 & 203 test standards per test report(s) #02-002 by Construction Testing Corporation (CTC).

- **STRUCTURAL ENGINEERING CALCULATIONS**

Structural engineering calculations have been prepared which evaluate the product based on comparative and/or rational analysis to qualify the following design criteria:

1. Maximum Allowable Spans
2. Minimum Glass Separation
3. Anchor Spacing
4. Maximum Allowable Size/Pressure Combinations
5. Anchor Capacity

No 33% increase in allowable stress has been used in the design of each product.



***Impact Resistance:***

Large Missile Impact Resistance has been demonstrated as evidenced in previously listed test reports, and is accounted for in the engineering design of this product.

***Wind Load Resistance***

Each product has been designed to resist wind loads as indicated in the span schedule(s) on its respective Product Evaluation Document (i.e. engineering drawing).

***Installation***

Each product listed above shall be installed in strict compliance with its respective Product Evaluation Document (i.e. engineering drawing), along with all components noted therein.

Each product component shall be of the material specified in that product's respective Product Evaluation Document (i.e. engineering drawing).

***Limitations & Conditions of Use:***

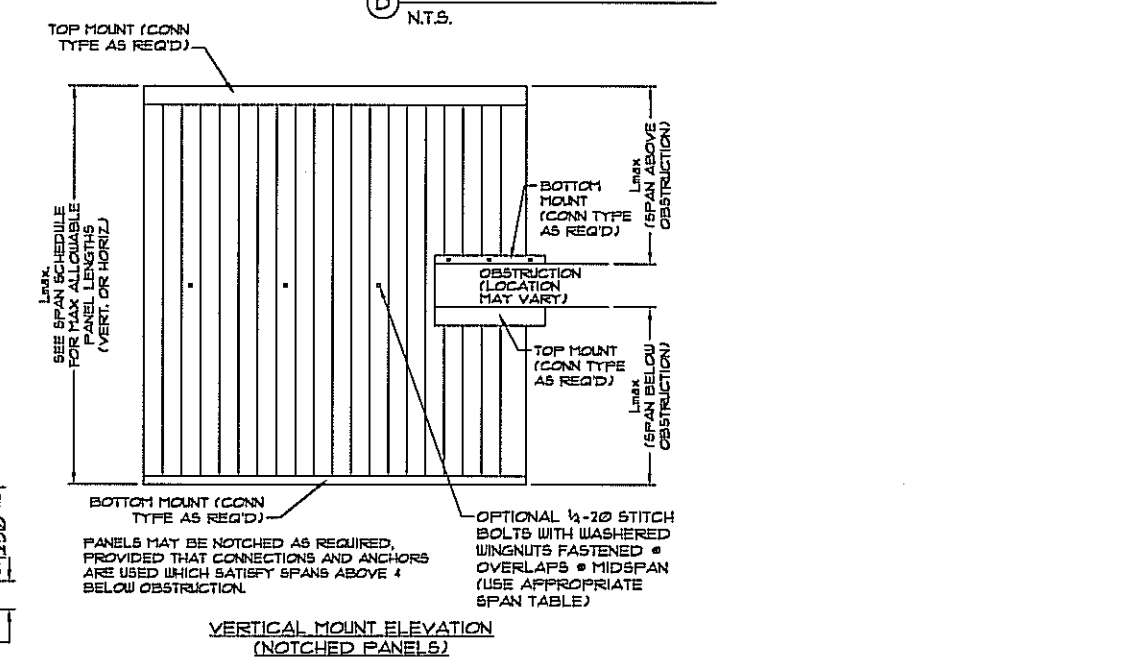
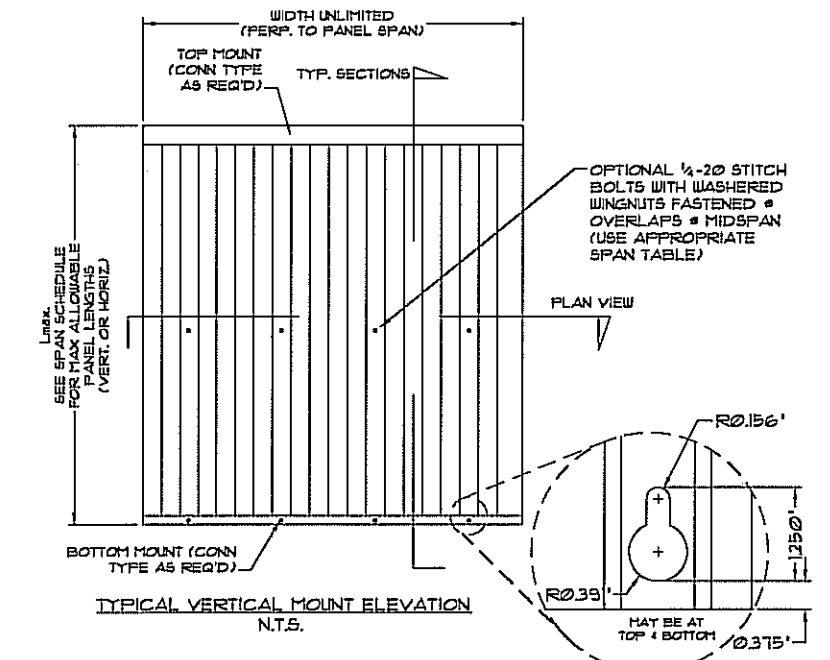
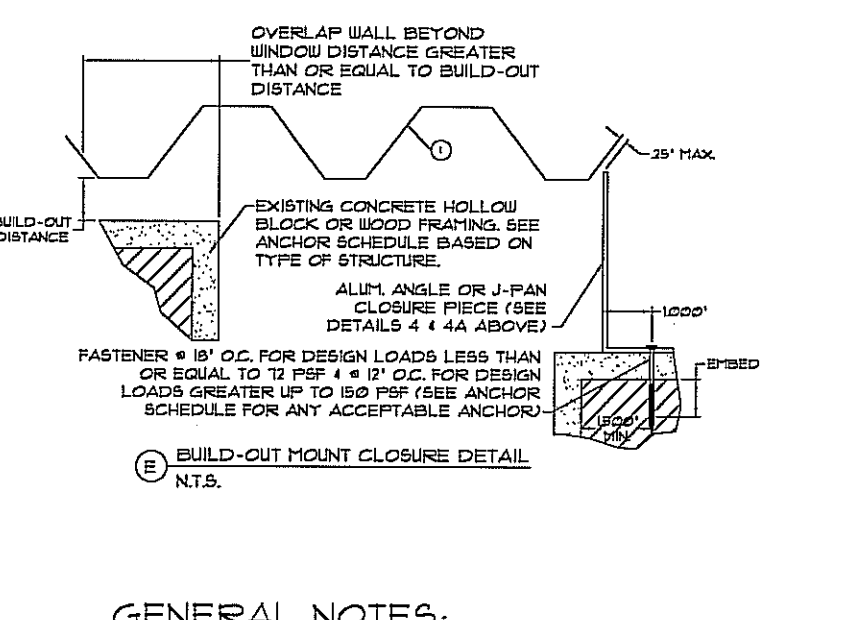
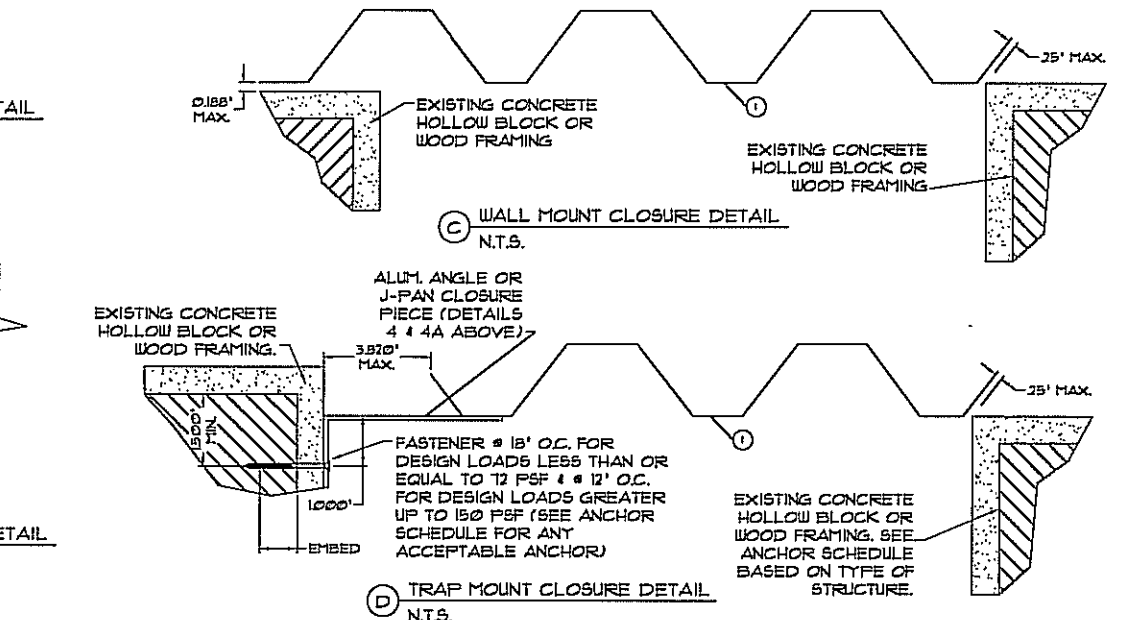
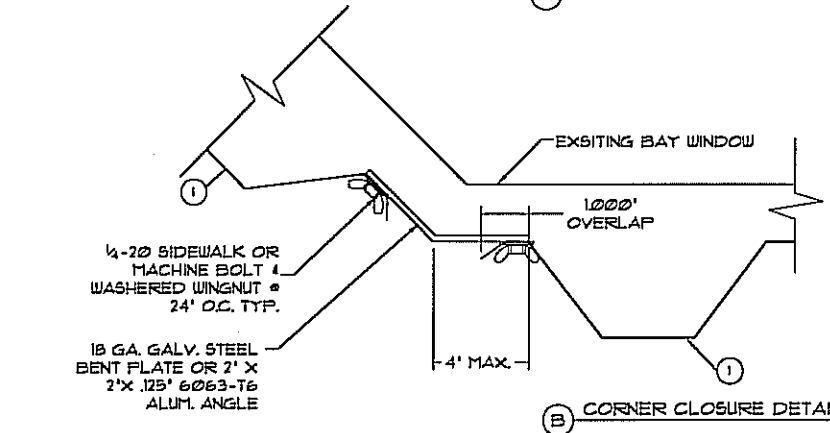
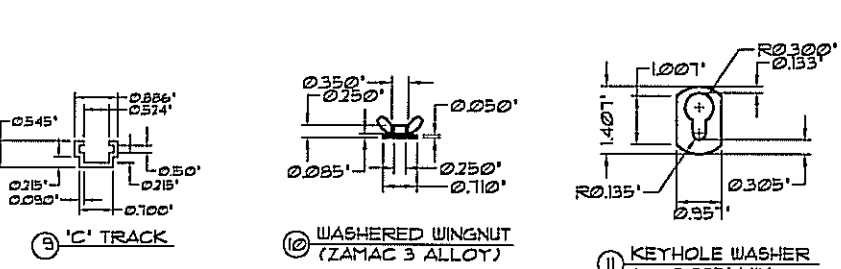
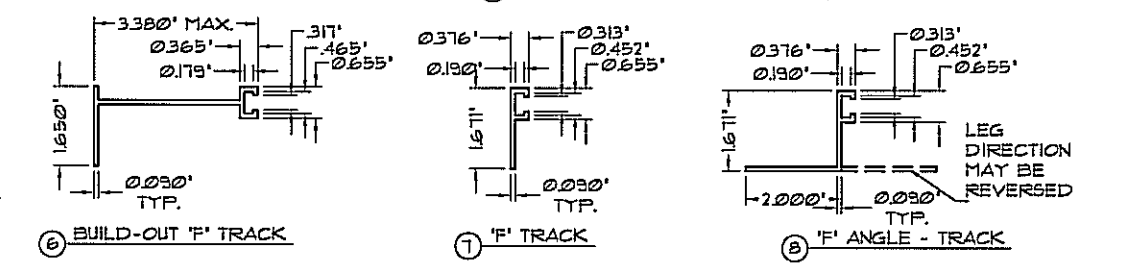
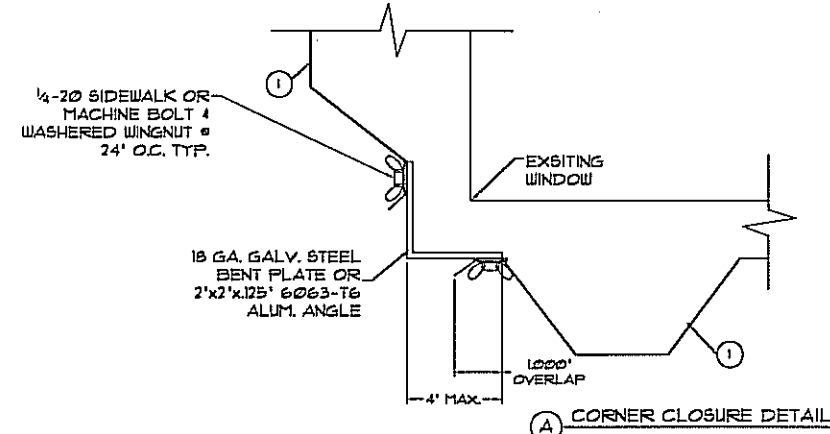
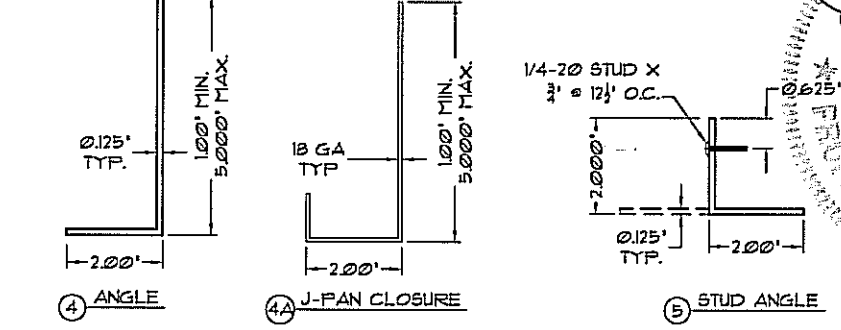
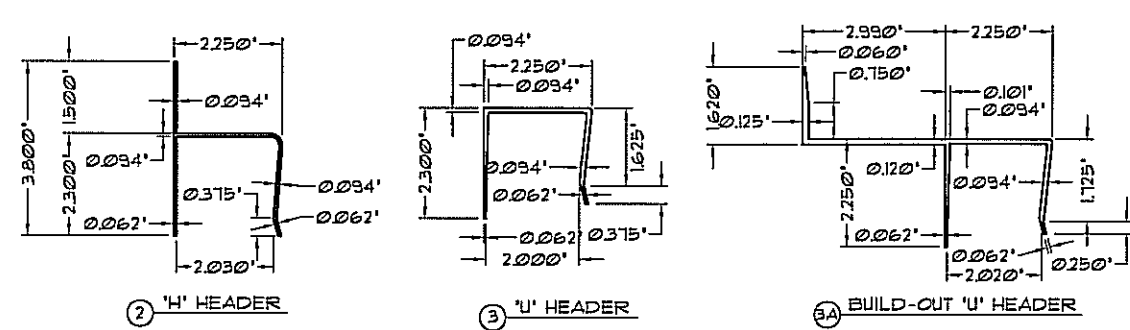
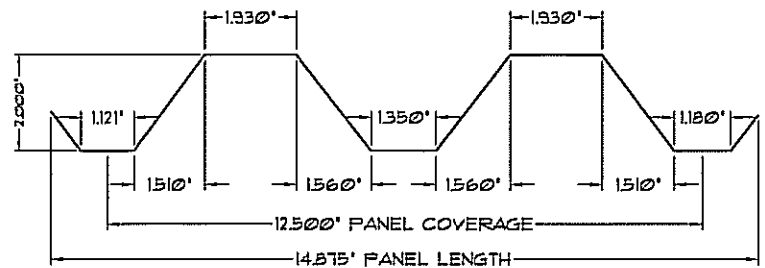
Use of each product shall be in strict accordance with its respective Product Evaluation Document (i.e. engineering drawing) as noted herein.

All supporting host structures shall be designed to resist all superimposed loads and shall be of a material listed in each product's respective anchor schedule. Host structure conditions which are not accounted for in each product's respective anchor schedule shall be designed for on a site-specific basis by a registered professional engineer.

All components which are permanently installed shall be protected against corrosion, contamination, and other such damage at all times.

Each product has been designed for use within and outside the High Velocity Hurricane Zone (HVHZ).

03/03/2010 - 2:58pm kalih  
 F:\01 Project Files\All American Shutters (AAS)\2010\10-AAS-0003 #FLB916 FSA Name Change\01-AAS-0696\_04b 22ga Storm Panel (FSA).dwg



**GENERAL NOTES:**

1. THE SYSTEM DESCRIBED HEREIN HAS BEEN DESIGNED AND TESTED IN ACCORDANCE WITH THE 2001 FLORIDA BUILDING CODE, FOR USE WITHIN 4 OUTSIDE THE HIGH VELOCITY HURRICANE ZONE (HVHZ), PER TAS 201 / 202 / 203 STANDARDS.
2. NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM. WIND LOAD DURATION FACTOR Cd=1.6 HAS BEEN USED FOR WOOD ANCHOR DESIGN.
3. POSITIVE & NEGATIVE DESIGN PRESSURE CALCULATIONS SHALL BE PERFORMED FOR SPECIFIC JOBS IN ACCORDANCE WITH THE GOVERNING CODE.
4. STORM PANELS SHALL BE 22 GAUGE STEEL (t=0.0276") CONFORMING TO ASTM A653, STRUCTURAL QUALITY, G60 GALVANIZED COATING WITH A MINIMUM Fy=96.0 ksi. ALL EXTRUSIONS TO BE 6063 T-6 ALUMINUM ALLOY, UN.O.
5. PRODUCT MARKINGS SHALL BE PLACED ON OUTSIDE OF STORM PANEL WITH AT LEAST ONE MARKING EVERY THREE FEET AND SHALL BE PERMANENTLY LABELED WITH AT A MINIMUM THE FOLLOWING INFORMATION:  
 ALL AMERICAN SHUTTERS AND GLASS  
 WEST PALM BEACH, FL  
 TAS 201, 202 & 203  
 FLORIDA PRODUCT APPROVAL NUMBER
6. ALL BOLTS & WASHERS SHALL BE ZINC COATED, GALVANIZED, OR STAINLESS STEEL WITH A MINIMUM TENSILE STRENGTH OF 60 ksi.
7. TOP & BOTTOM DETAILS SHOWN MAY BE INTERCHANGED AS FIELD CONDITIONS DICTATE. PANELS MAY BE MOUNTED HORIZONTALLY WHERE APPLICABLE.
8. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS. EMBEDMENT LENGTHS SHALL BE AS NOTED & DO NOT INCLUDE STUCCO OR OTHER FINISHES.
9. ALTERATIONS, ADDITIONS, HIGHLIGHTING, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

FRANK L. BENNARDO, P.E.  
 # PED046549  
 03/03/2010  
 NO. 78549  
**ENGINEERING EXPRESS**  
 160 SW 12th AVENUE # 1066  
 DEERFIELD BEACH, FL 33442  
 PH: (954) 354-0660 FAX: (954) 354-0443  
 WWW.ENGP.COM  
 CERT OF AUTH #0885  
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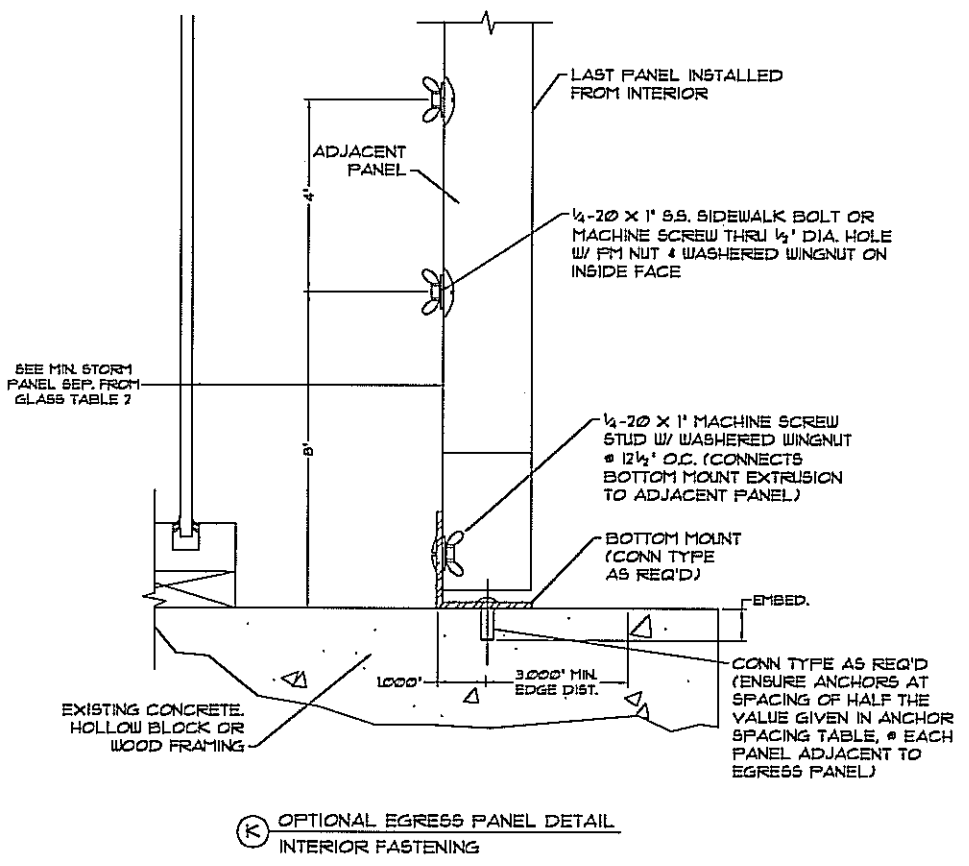
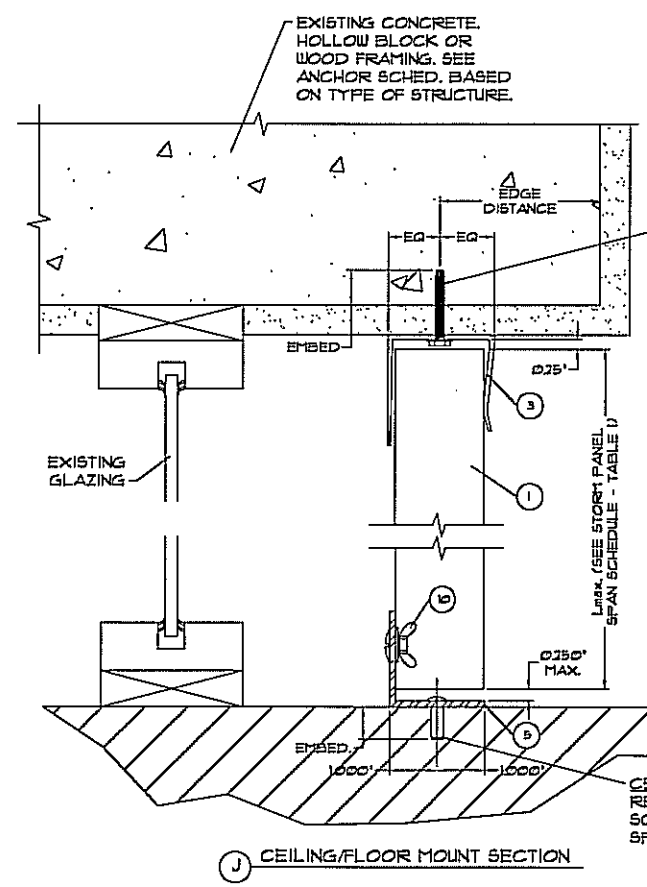
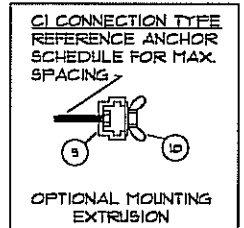
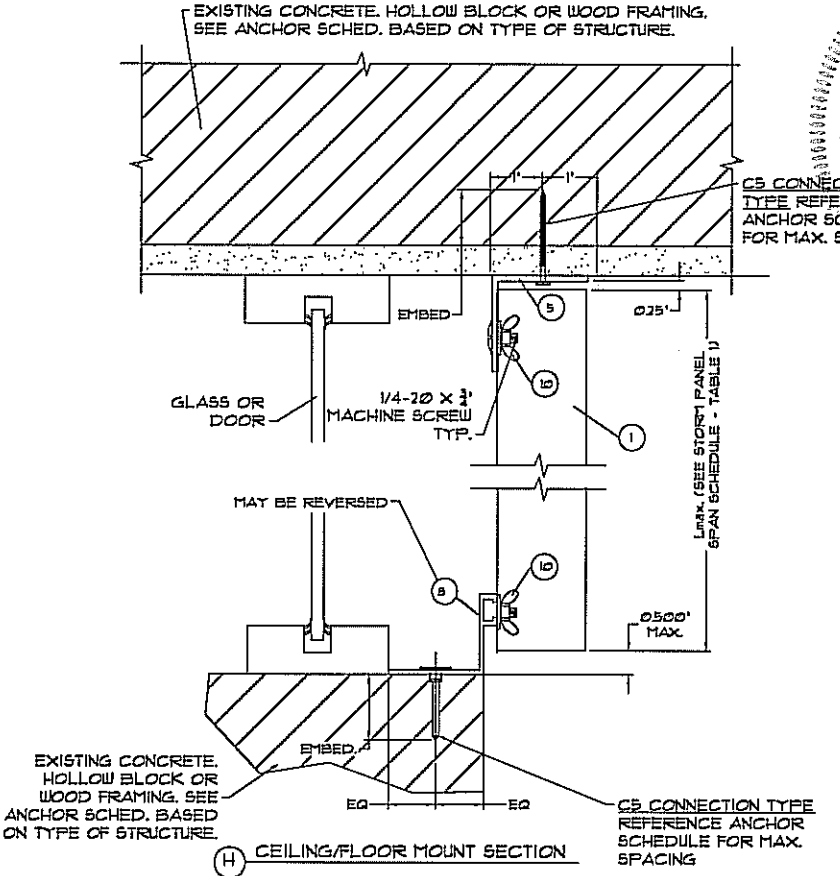
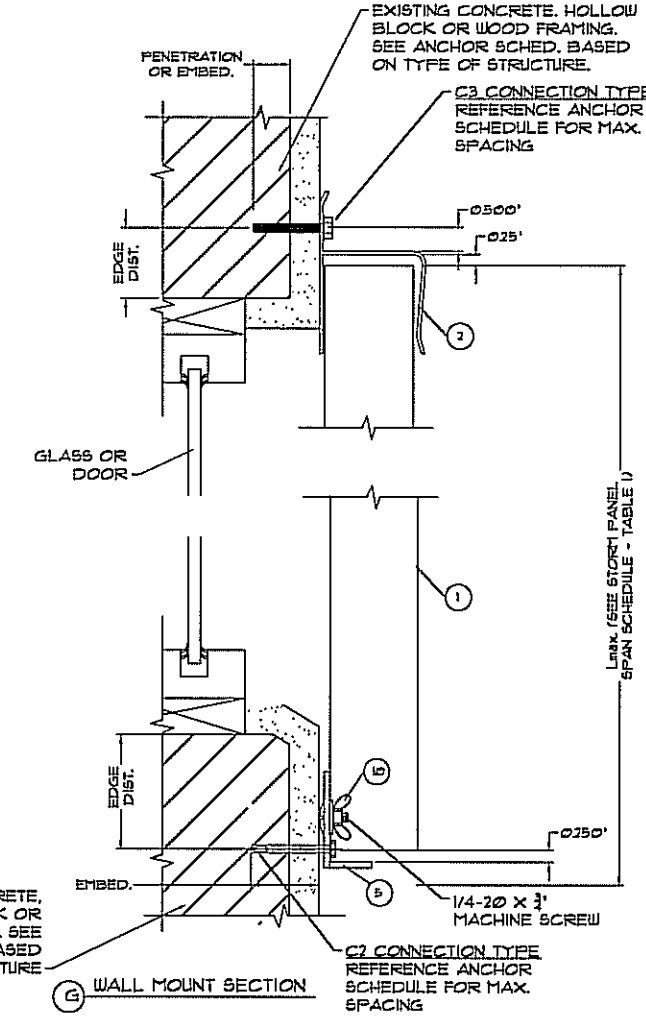
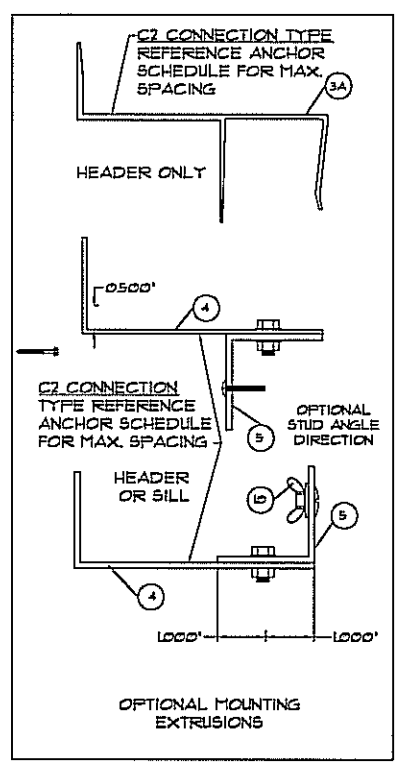
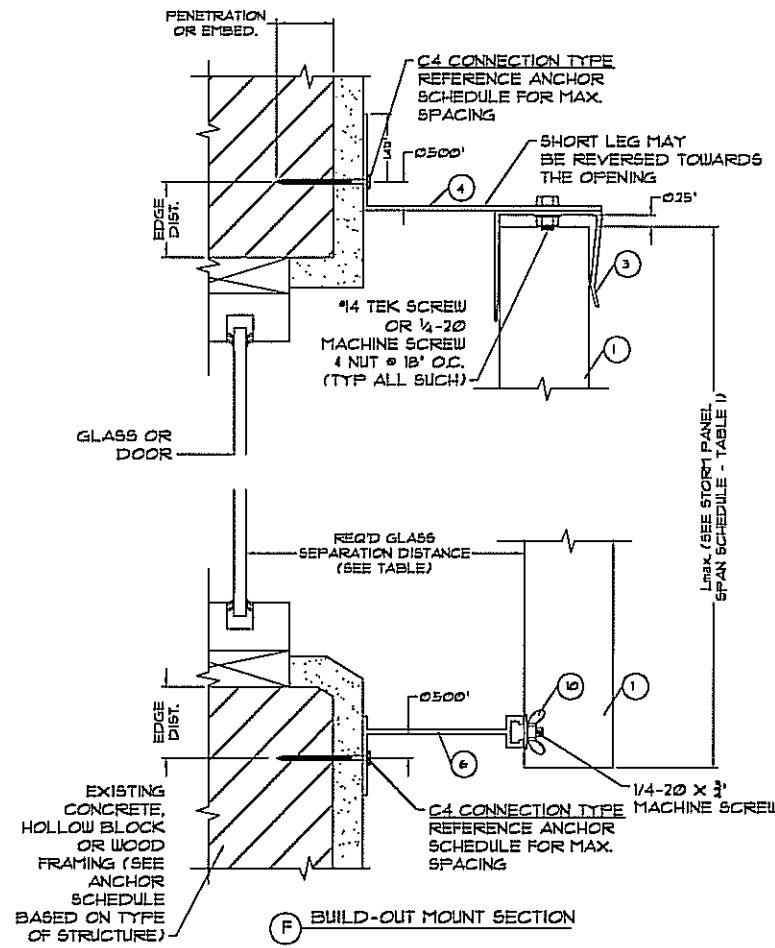
**ALL AMERICAN SHUTTERS AND GLASS**  
 1540 DONNA ROAD  
 WEST PALM BEACH, FL 33409  
 (561) 712-9882  
 22ga (0.0276") GALVANIZED STEEL STORM PANELS  
 LARGE MISSILE IMPACT RESISTANT  
 FLORIDA STATEWIDE APPROVAL

REMARKS	DATE	DRWN	CHKD	INT	ISSUE
	03/03/10	KL	FLB		

THIS DOCUMENT IS THE PROPERTY OF FRANK L. BENNARDO, P.E. AND SHALL NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM. WITHOUT THE WRITTEN PERMISSION OF FRANK L. BENNARDO, P.E. ANY ALTERATIONS, ADDITIONS, HIGHLIGHTING, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

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**10-AAS-0003**  
 SCALE: 1/8" = 1'-0"  
 PAGE DESCRIPTION: 01

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03/03/2010

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**ALL AMERICAN SHUTTERS AND GLASS**  
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REMARKS	DRWN	CHKD	DATE
INIT ISSUE	KL	FLB	03/03/10

10-AAS-0003

SCALE: N.T.S. 01

PAGE DESCRIPTION:

2

### GLASS SEPARATION TABLE

Load (psf)	Span Less Than:	Separation @ < 30' Above Grade (in)	Separation @ > 30' Above Grade (in)
30	6'-0"	2.75	1.12
	8'-8"	2.75	1.52
	12'-0"	2.91	2.91
40	6'-0"	2.75	1.16
	8'-8"	2.75	1.69
	11'-2"	2.91	2.91
50	6'-0"	2.75	1.20
	8'-8"	2.75	1.86
	10'-8"	2.98	2.98
60	6'-0"	2.75	1.24
	8'-8"	2.75	2.04
	10'-2"	2.97	2.97
70	6'-0"	2.75	1.28
	8'-8"	2.75	2.21
	9'-8"	2.87	2.87
150	2'-0"	2.75	1.01
	4'-9"	2.75	1.07

### ALLOWABLE SPAN TABLE

Load W (psf)	No Stitch Bolts	With Stitch Bolts
	LMAX (ft)	LMAX (ft)
30	11' - 2"	12' - 0"
35	10' - 4"	11' - 6"
40	9' - 8"	11' - 2"
45	9' - 1"	10' - 10"
49	8' - 9"	10' - 7"
50	8' - 8"	10' - 6"
55	7' - 11"	10' - 3"
60	7' - 3"	10' - 1"
62	7' - 0"	9' - 11"
65	6' - 9"	9' - 9"
70	6' - 3"	9' - 4"
72	6' - 1"	9' - 3"
75	5' - 10"	9' - 0"
80	5' - 5"	8' - 9"
90	4' - 10"	7' - 11"
92	4' - 9"	7' - 9"
100	4' - 4"	7' - 1"
110	3' - 11"	6' - 5"
120	3' - 7"	5' - 11"
130	3' - 4"	5' - 5"
140	3' - 1"	5' - 1"
150	2' - 11"	4' - 9"

### ANCHOR SPACING TABLE

EXIST STRUCT	ANCHOR	LOAD	SPAN < 6 FT					SPAN < 8.67 FT					SPAN < 12 FT				
			CONN TYPE					CONN TYPE					CONN TYPE				
			C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5
CONCRETE	1/4" x 1 3/4" EMBED ELCO TAPCON (MIN 3320 PSI CONC)	49	12.5	12.5	12.5	12.5	12.5	12.5	11.5	12.5	11.6	12.5	12.4	11.4	12.5	11.4	
		62	12.5	12.5	12.5	12.5	12.5	12.5	12.2	11.1	12.5	11.2	12.5	12.2	11.1	12.5	11.2
		72	12.5	12.4	11.3	12.5	11.4	12.5	12.2	11.1	12.5	11.2	12.5	12.2	11.1	12.5	11.2
		92	12.5	12.2	11.1	12.5	11.2	12.5	12.2	11.1	12.5	11.2	12.5	12.2	11.1	12.5	11.2
		150	12.5	12.2	11.1	12.5	11.2	12.5	12.2	11.1	12.5	11.2	12.5	12.2	11.1	12.5	11.2
	1/4" x 7/8" EMBED POWERS CALK-IN (MIN 2000 PSI CONC)	49	12.5	12.5	12.5	12.5	12.5	12.5	12.2	11.1	12.5	10.9	12.5	12.0	11.0	12.5	10.8
		62	12.5	12.5	12.5	12.5	12.4	12.5	11.8	10.8	12.5	10.5	12.5	11.8	10.8	12.5	10.5
		72	12.5	12.0	11.0	12.5	10.7	12.5	11.8	10.8	12.5	10.5	12.5	11.8	10.8	12.5	10.5
		92	12.5	11.8	10.8	12.5	10.5	12.5	11.8	10.8	12.5	10.5	12.5	11.8	10.8	12.5	10.5
		150	12.5	11.8	10.8	12.5	10.5	12.5	11.8	10.8	12.5	10.5	12.5	11.8	10.8	12.5	10.5
	1/4"x7/8" EMBED ALL-POINTS SOLID-SET MACH. SCREW ANCHOR	49	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
		62	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
72		12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	
92		12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	
150		12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	
1/4" x 2" EMBED ELCO PANELMATE (MIN 3350 PSI CONC)	49	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.0	12.5	12.5	12.5	12.5	12.5	11.8	
	62	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	11.6	12.5	12.5	12.5	12.5	11.6	
	72	12.5	12.5	12.5	12.5	11.8	12.5	12.5	12.5	12.5	11.6	12.5	12.5	12.5	12.5	11.6	
	92	12.5	12.5	12.5	12.5	11.6	12.5	12.5	12.5	12.5	11.6	12.5	12.5	12.5	12.5	11.6	
	150	12.5	12.5	12.5	12.5	11.6	12.5	12.5	12.5	12.5	11.6	12.5	12.5	12.5	12.5	11.6	

EXIST STRUCT	ANCHOR	LOAD	SPAN < 6 FT					SPAN < 8.67 FT					SPAN < 12 FT				
			CONN TYPE					CONN TYPE					CONN TYPE				
			C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5
HOLLOW CONC BLOCK (MIN 1596 psi)	1/4" x 1 1/4" EMBED ELCO TAPCON	49	12.5	8.2	7.5	10.2	9.4	12.3	5.7	5.2	7.1	6.5	12.2	5.6	5.1	7.0	5.2
		62	12.5	6.5	5.9	8.1	7.4	11.9	5.5	5.0	6.8	6.3	11.9	5.5	5.0	6.8	5.1
		72	12.1	5.6	5.1	6.9	6.4	11.9	5.5	5.0	6.8	6.3	11.9	5.5	5.0	6.8	5.1
		92	11.9	5.5	5.0	6.8	6.3	11.9	5.5	5.0	6.8	6.3	11.9	5.5	5.0	6.8	5.1
		150	11.9	5.5	5.0	6.8	6.3	11.9	5.5	5.0	6.8	6.3	11.9	5.5	5.0	6.8	5.1
	1/4" x 7/8" EMBED POWERS CALK-IN	49	12.5	8.3	7.6	10.3	9.0	12.4	5.7	5.2	7.1	6.2	12.3	5.7	5.2	7.0	6.1
		62	12.5	6.5	6.0	8.1	7.1	12.0	5.5	5.1	6.9	6.0	12.0	5.5	5.1	6.9	6.0
		72	12.2	5.6	5.2	7.0	6.1	12.0	5.5	5.1	6.9	6.0	12.0	5.5	5.1	6.9	6.0
		92	12.0	5.5	5.1	6.9	6.0	12.0	5.5	5.1	6.9	6.0	12.0	5.5	5.1	6.9	6.0
		150	12.0	5.5	5.1	6.9	6.0	12.0	5.5	5.1	6.9	6.0	12.0	5.5	5.1	6.9	6.0
	1/4" x 7/8" EMBED ALL-POINTS SOLID-SET MACH. SCREW ANCHOR	49	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
		62	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
72		12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	
92		12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	
150		12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	
1/4" x 1 1/4" EMBED ELCO PANELMATE	49	12.5	10.0	9.1	12.4	8.8	12.5	6.9	6.3	8.6	6.1	12.5	6.8	6.2	8.5	6.0	
	62	12.5	7.9	7.2	9.8	6.9	12.5	6.7	6.1	8.3	5.9	12.5	6.7	6.1	8.3	5.9	
	72	12.5	6.8	6.2	8.4	6.0	12.5	6.7	6.1	8.3	5.9	12.5	6.7	6.1	8.3	5.9	
	92	12.5	6.7	6.1	8.3	5.9	12.5	6.7	6.1	8.3	5.9	12.5	6.7	6.1	8.3	5.9	
	150	12.5	6.7	6.1	8.3	5.9	12.5	6.7	6.1	8.3	5.9	12.5	6.7	6.1	8.3	5.9	

EXIST STRUCT	ANCHOR	LOAD	SPAN < 6 FT					SPAN < 8.67 FT					SPAN < 12 FT				
			CONN TYPE					CONN TYPE					CONN TYPE				
			C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5
WOOD	1/4" x 1 3/4" EMBED LAG SCREW	49	12.5	12.5	12.5	12.5	8.1	12.5	12.5	12.5	12.5	5.6	12.5	12.5	12.5	12.5	5.5
		62	12.5	12.5	12.5	12.5	6.4	12.5	12.5	12.5	12.5	5.4	12.5	12.5	12.5	12.5	5.4
		72	12.5	12.5	12.5	12.5	5.5	12.5	12.5	12.5	12.5	5.4	12.5	12.5	12.5	12.5	5.4
		92	12.5	12.5	12.5	12.5	5.4	12.5	12.5	12.5	12.5	5.4	12.5	12.5	12.5	12.5	5.4
		150	12.5	12.5	12.5	12.5	5.4	12.5	12.5	12.5	12.5	5.4	12.5	12.5	12.5	12.5	5.4
	7/16" x 5/8" EMBED BRASS BUSHING & 1/4-20 SCREW	49	12.5	6.5	6.0	8.2	5.8	9.8	4.5	4.2	5.6	4.0	9.7	4.5	4.1	5.6	4.0
		62	11.2	5.2	4.7	6.4	4.6	9.5	4.4	4.0	5.5	3.9	9.5	4.4	4.0	5.5	3.9
		72	9.7	4.5	4.1	5.5	4.0	9.5	4.4	4.0	5.5	3.9	9.5	4.4	4.0	5.5	3.9
		92	9.5	4.4	4.0	5.5	3.9	9.5	4.4	4.0	5.5	3.9	9.5	4.4	4.0	5.5	3.9
		150	9.5	4.4	4.0	5.5	3.9	9.5	4.4	4.0	5.5	3.9	9.5	4.4	4.0	5.5	3.9
	1/4" x 1 3/4" EMBED ELCO TAPCON	49	12.5	10.0	9.2	12.5	7.9	12.5	6.9	6.4	8.6	5.5	12.5	6.9	6.3	8.5	5.4
		62	12.5	7.9	7.3	9.9	6.2	12.5	6.7	6.2	8.4	5.3	12.5	6.7	6.2	8.4	5.3
72		12.5	6.8	6.3	8.5	5.4	12.5	6.7	6.2	8.4	5.3	12.5	6.7	6.2	8.4	5.3	
92		12.5	6.7	6.2	8.4	5.3	12.5	6.7	6.2	8.4	5.3	12.5	6.7	6.2	8.4	5.3	
150		12.5	6.7	6.2	8.4	5.3	12.5	6.7	6.2	8.4	5.3	12.5	6.7	6.2	8.4	5.3	
1/4" x 1 3/4" EMBED ELCO PANELMATE	49	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	
	62	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	
	72	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	
	92	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	
	150	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	

### ANCHOR NOTES:

- 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 ANCHOR TABLE ABOVE.
- ENTER ANCHOR SCHEDULE BASED ON THE EXISTING STRUCTURE MATERIAL, ANCHOR TYPE AND EDGE DISTANCE. SELECT DESIGN LOAD GREATER THAN OR EQUAL TO NEGATIVE DESIGN LOAD ON SHUTTER AND SELECT SPAN GREATER THAN OR EQUAL TO SHUTTER SPAN.
- SEE MOUNTING SECTION DETAILS FOR IDENTIFICATION OF CONNECTION TYPE.
- EXISTING STRUCTURE MAY BE CONCRETE, HOLLOW BLOCK OR WOOD FRAMING. REFERENCE ANCHOR SCHEDULE FOR PROPER ANCHOR TYPE BASED ON TYPE OF EXISTING STRUCTURE.
- ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
- WHERE EXISTING STRUCTURE IS CONCRETE OR HOLLOW CONCRETE BLOCK, MINIMUM EDGE DISTANCE SHALL BE 2 1/2" FOR ALL ANCHORS.
- WHERE EXISTING STRUCTURE IS WOOD FRAMING, EXISTING CONDITIONS MAY VARY. FIELD VERIFY THAT FASTENERS ARE INTO ADEQUATE WOOD FRAMING MEMBERS, NOT FLYWOOD. FASTENING TO FLYWOOD IS ACCEPTABLE ONLY FOR SIDE CLOSURE PIECES.
- WHERE LAG SCREWS FASTEN TO NARROW FACE OF STUD FRAMING, FASTENER SHALL BE LOCATED IN CENTER OF NOMINAL 2' x 4' (MIN) WOOD STUD (3/4" EDGE DISTANCE IS ACCEPTABLE FOR WOOD FRAMING). WOOD STUD SHALL BE 'SOUTHERN PINE' G=0.55 OR GREATER DENSITY. LAG SCREW SHALL HAVE PHILLIPS PAN HEAD OR HEX HEAD.
- MACHINE SCREWS SHALL HAVE MINIMUM OF 1/2" ENGAGEMENT OF THREADS IN BASE ANCHOR AND MAY HAVE EITHER A PAN HEAD, TRUSS HEAD, OR WAFER HEAD (SIDEWALK BOLT) U.N.O.
- MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES STUCCO OR OTHER WALL FINISHES.
- ☒ DESIGNATES AN