



**BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION**

**MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908**

NOTICE OF ACCEPTANCE (NOA)

**Florida Storm Panels, Inc.
14475 N.W. 26th Avenue
Opa-Locka, Florida 33054**

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: 0.029" (min.) Galvanized Steel Storm Panels Shutter

APPROVAL DOCUMENT: Drawing No. 02-868-111, titled " 22 ga Galvanized Steel Storm Panels ", sheets 1 through 4 of 4, prepared by Frank L. Bennardo, P.E., dated November 18, 2002, last revision dated January 02, 2003 bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact

LABELING: Each panel shall bear a permanent label with the manufacturer's name or logo, city, state and the following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA consists of this page 1 as well as approval document mentioned above.
The submitted documentation was reviewed by **Helmy A. Makar, P.E.**



**NOA No 02-1120.02
Expiration Date: 01/23/2008
Approval Date: 01/23/2003
Page 1**

JAN 02 2003

FRANK L. BENNARDON, P.E.
PE0046549

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FLORIDA STORM PANELS, INC.
14475 N.W. 26th AVENUE
OPA-LOCKA, FL 33054
229a GALVANIZED
STEEL STORM PANELS

REVISIONS	
DESCRIPTION	DATE
COUNTY COMMENTS	12/03

SCALE: 3" = 1"
DRAWN BY: CL
CHECKED BY: FLB
PRINT DATE: 11/18/02
DWG #: 02-868-III

SHEET:
2 OF 4

MINIMUM SEPARATION FROM GLASS SCHEDULE

Positive Load (psf)	Span Less Than:	Separation (inches) at <= 30'	Separation (inches) at > 30'
30	6' - 0"	2.75"	1.22"
	8' - 8"	2.75"	1.94"
	10' - 5"	3.00"	3.00"
35	6' - 0"	2.75"	1.25"
	8' - 8"	2.75"	2.10"
	10' - 0"	3.00"	3.00"
40	6' - 0"	2.75"	1.29"
	8' - 8"	2.75"	2.26"
	9' - 8"	3.00"	3.00"
45	6' - 0"	2.75"	1.32"
	8' - 8"	2.75"	2.41"
	9' - 4"	2.92"	2.92"
50	6' - 0"	2.75"	1.36"
	8' - 10"	2.75"	2.73"
	9' - 8"	2.75"	2.73"
60	6' - 0"	2.75"	1.43"
	8' - 1"	2.75"	2.44"
	9' - 8"	2.75"	2.44"
70	6' - 0"	2.75"	1.51"
	7' - 6"	2.75"	2.24"

TABLE T2 NOTES:

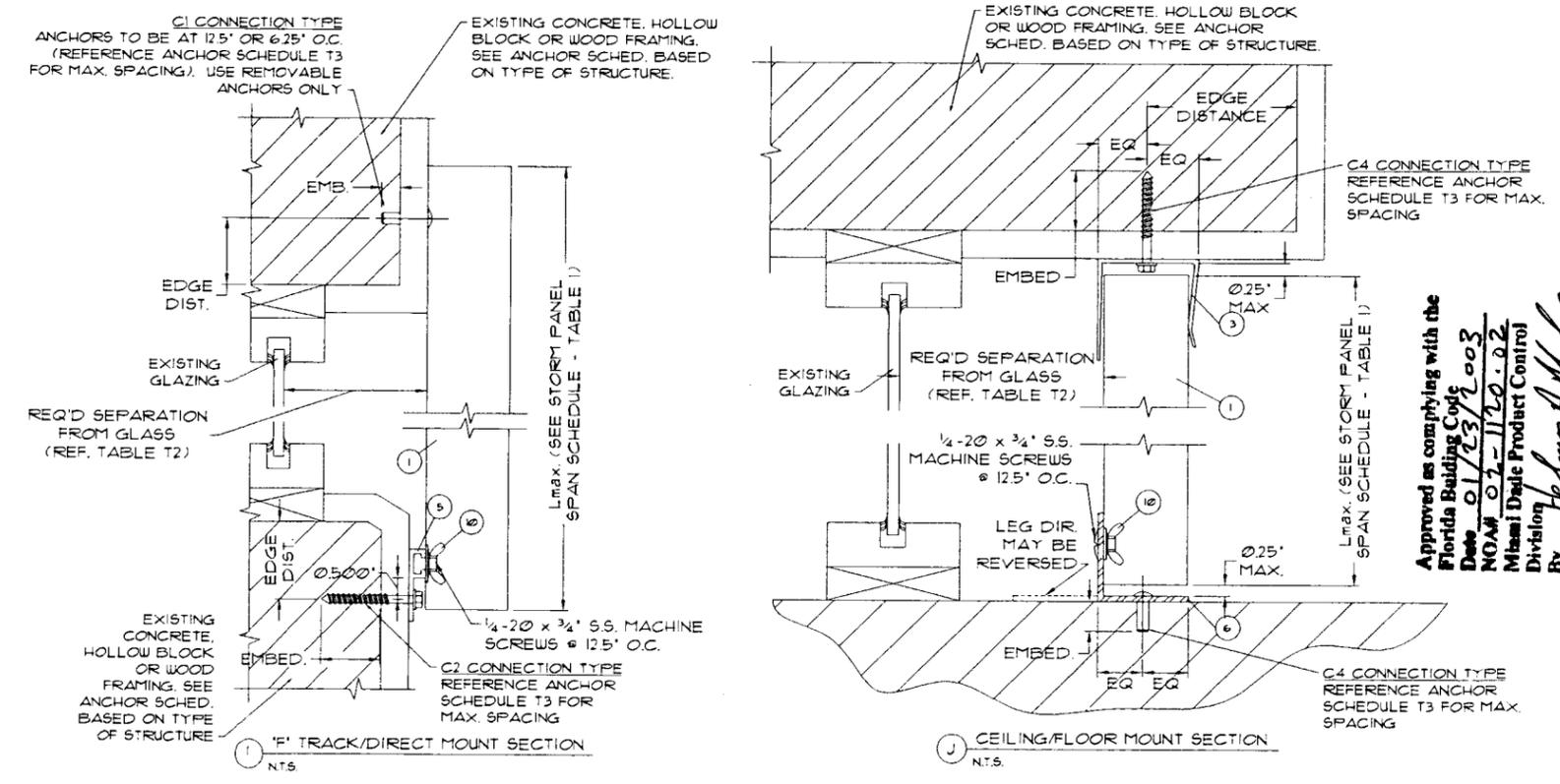
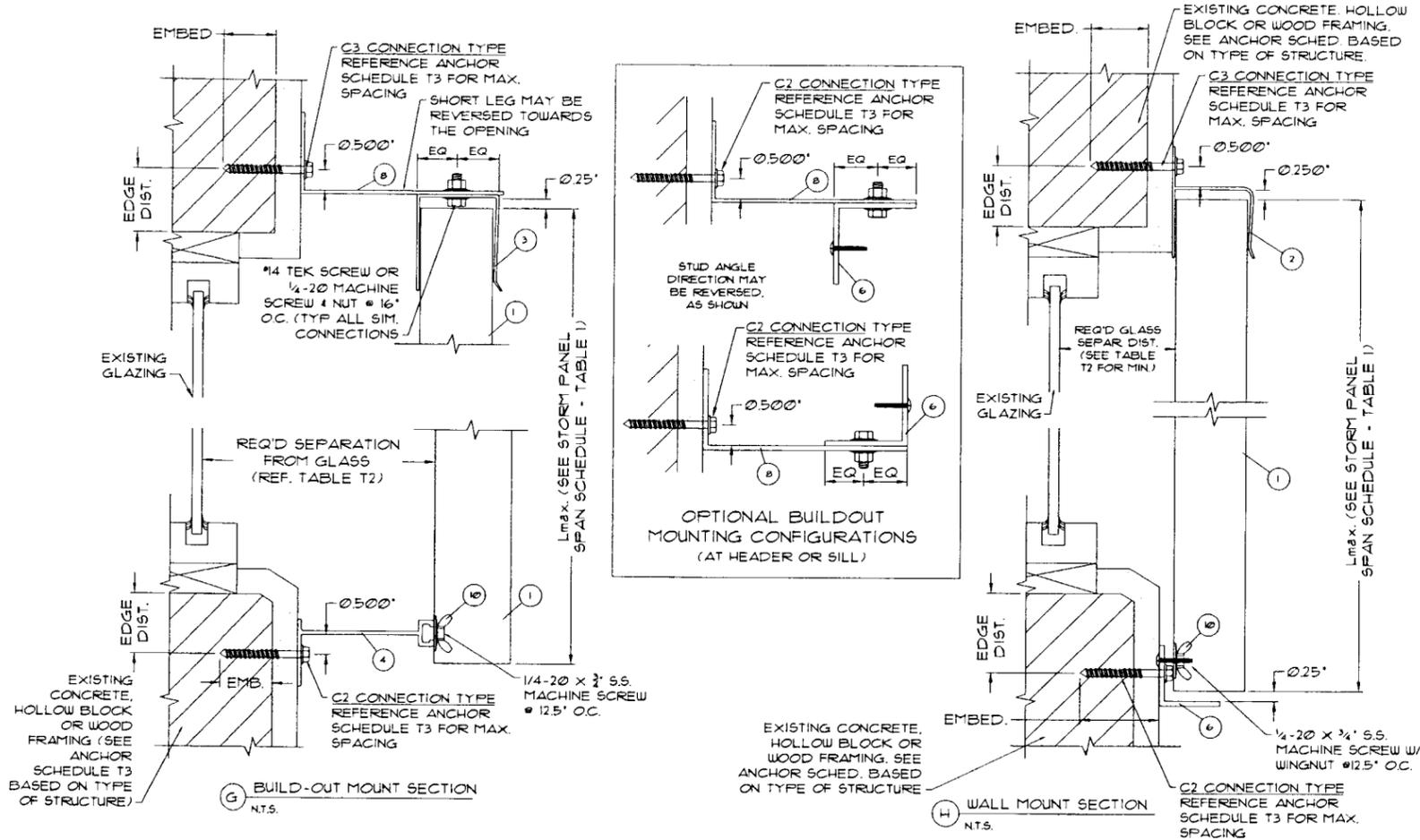
- ENTER SPAN SCHEDULE WITH POSITIVE DESIGN LOAD TO DETERMINE MINIMUM ALLOWABLE STORM PANEL SEPARATION FROM GLASS OR DOOR TO BE PROTECTED. SCHEDULE IS REQUIRED FOR USE WITH POSITIVE LOADS ONLY.
- INTERPOLATION BETWEEN LOADS IS ACCEPTABLE, OTHERWISE USE NEXT HIGHER LOAD.

MAXIMUM ALLOWABLE SPAN SCHEDULE

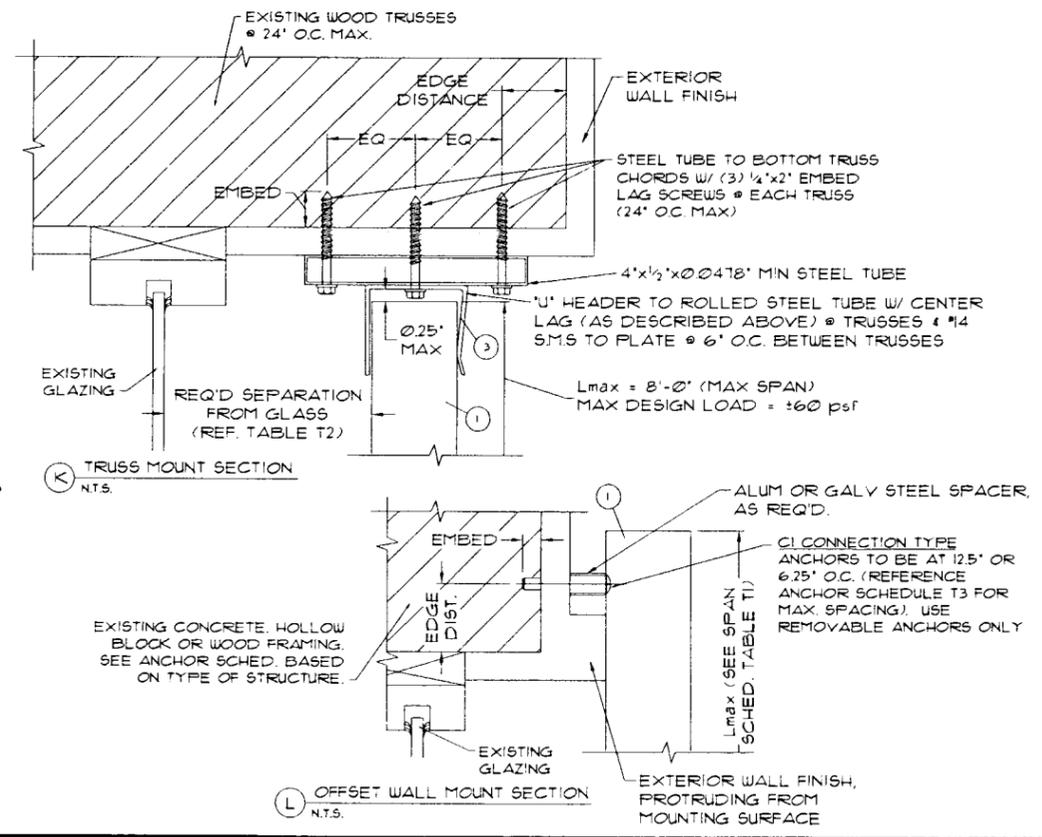
Load W (psf)	No Stitch Bolts L _{MAX} (ft)	Stitch Bolts At Midspan L _{MAX} (ft)
25	10' - 7"	10' - 7"
30	10' - 5"	10' - 5"
35	10' - 0"	10' - 0"
39	9' - 9"	9' - 9"
40	9' - 8"	9' - 8"
45	9' - 4"	9' - 5"
49	8' - 11"	9' - 3"
50	8' - 10"	9' - 2"
55	8' - 5"	8' - 11"
58	8' - 2"	8' - 10"
60	8' - 1"	8' - 9"
65	7' - 9"	8' - 3"
70	7' - 6"	7' - 8"
72	7' - 4"	7' - 6"
75	7' - 2"	7' - 2"
80	6' - 9"	6' - 9"
90	6' - 0"	6' - 0"
100	5' - 4"	5' - 4"
110	4' - 10"	4' - 10"
120	4' - 6"	4' - 6"
130	4' - 1"	4' - 1"

SPAN SCHEDULE NOTES:

- ENTER SPAN SCHEDULE WITH NEGATIVE DESIGN LOAD TO DETERMINE MAXIMUM ALLOWABLE STORM PANEL SPAN. SCHEDULE IS ACCEPTABLE FOR USE WITH POSITIVE LOADS LESS THAN OR EQUAL TO NEGATIVE DESIGN LOADS.
- INTERPOLATION BETWEEN LOADS IS ACCEPTABLE, OTHERWISE USE NEXT HIGHER LOAD.



Approved as complying with the Florida Building Code
Date: 01/23/2003
MOAM 02-1120-02
Miami Dade Product Control
Division
By: Helmut A. Weber



T3 ANCHOR SPACING SCHEDULE

EXIST. STRUCT.	ANCHOR	LOAD (psf)	2.5" EDGE DISTANCE											
			SPANS UP TO 5.50 ft				SPANS UP TO 8.67 ft				SPANS UP TO 10.67 ft			
			CONN TYPE				CONN TYPE				CONN TYPE			
			C1	C2	C3	C4	C1	C2	C3	C4	C1	C2	C3	C4
CONCRETE	1/4" x 1-3/4" EMBED	39	12.5"	16.0"	16.0"	16.0"	12.5"	16.0"	16.0"	16.0"	12.5"	16.0"	11.9"	13.5"
	ELCO TAPCON	49	12.5"	16.0"	16.0"	16.0"	12.5"	16.0"	11.6"	13.3"	12.5"	16.0"	8.4"	10.7"
	(MIN 3320 PSI CONC)	58	12.5"	16.0"	16.0"	16.0"	12.5"	16.0"	8.9"	11.1"	12.5"	16.0"	8.0"	10.3"
	Tcap (lb) = 483.00	72	12.5"	16.0"	13.0"	14.3"	12.5"	16.0"	8.0"	10.3"	12.5"	16.0"	8.0"	10.3"
	Vcap (lb) = 475.00	130	12.5"	16.0"	8.0"	10.3"	12.5"	16.0"	8.0"	10.3"	12.5"	16.0"	8.0"	10.3"
	1/4"x7/8" EMBED	39	12.5"	16.0"	16.0"	16.0"	12.5"	16.0"	15.2"	15.0"	12.5"	16.0"	10.6"	12.1"
	ALL-POINTS SOLID-SET	49	12.5"	16.0"	16.0"	16.0"	12.5"	16.0"	10.2"	11.8"	12.5"	16.0"	7.5"	9.5"
	LEAD SHIELD ANCHOR *	58	12.5"	16.0"	16.0"	16.0"	12.5"	16.0"	7.9"	9.9"	12.5"	16.0"	7.1"	9.2"
	Tcap (lb) = 428	72	12.5"	16.0"	11.5"	12.7"	12.5"	16.0"	7.1"	9.2"	12.5"	16.0"	7.1"	9.2"
	Vcap (lb) = 429	130	12.5"	16.0"	7.1"	9.2"	12.5"	16.0"	7.1"	9.2"	12.5"	16.0"	7.1"	9.2"
	1/4" x 2" EMBED	39	12.5"	16.0"	16.0"	16.0"	12.5"	16.0"	13.3"	15.7"	12.5"	16.0"	9.2"	12.6"
	ELCO PANELMATE	49	12.5"	16.0"	16.0"	16.0"	12.5"	16.0"	8.9"	12.4"	12.5"	16.0"	6.5"	9.9"
(MIN 3350 PSI CONC) *	58	12.5"	16.0"	14.9"	16.0"	12.5"	16.0"	6.9"	10.4"	12.5"	16.0"	6.2"	9.6"	
Tcap (lb) = 372.00	72	12.5"	16.0"	10.0"	13.3"	12.5"	16.0"	6.2"	9.6"	12.5"	16.0"	6.2"	9.6"	
Vcap (lb) = 565.00	130	12.5"	16.0"	6.2"	9.6"	12.5"	16.0"	6.2"	9.6"	12.5"	16.0"	6.2"	9.6"	

EXIST. STRUCT.	ANCHOR	LOAD (psf)	2.5" EDGE DIST.											
			SPANS UP TO 5.50 ft				SPANS UP TO 8.67 ft				SPANS UP TO 10.67 ft			
			CONN TYPE				CONN TYPE				CONN TYPE			
			C5	C6	C5	C6	C5	C6	C5	C6	C5	C6		
CONCRETE	1/4" x 1-3/4" EMBED	39	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	14.8"	16.0"	16.0"	16.0"	14.8"	16.0"
	ELCO TAPCON	45	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	10.1"	16.0"	16.0"	16.0"	10.1"	16.0"
	(MIN 3320 PSI CONC)	55	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	6.6"	16.0"	16.0"	16.0"	6.6"	16.0"
	Tcap (lb) = 483.00	65	14.2"	16.0"	6.0"	16.0"	12.6"	16.0"	5.3"	16.0"	12.6"	16.0"	5.3"	16.0"
	Vcap (lb) = 475.00	72	11.0"	16.0"	6.0"	16.0"	9.8"	16.0"	5.3"	16.0"	9.8"	16.0"	5.3"	16.0"
	1/4"x7/8" EMBED	39	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	12.9"	16.0"	16.0"	16.0"	12.9"	16.0"
	ALL-POINTS SOLID-SET	45	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	8.8"	16.0"	16.0"	16.0"	8.8"	16.0"
	LEAD SHIELD ANCHOR *	55	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	5.8"	16.0"	16.0"	16.0"	5.8"	16.0"
	Tcap (lb) = 428	65	12.6"	16.0"	5.3"	16.0"	11.0"	16.0"	4.6"	16.0"	11.0"	16.0"	4.6"	16.0"
	Vcap (lb) = 429	72	9.8"	16.0"	5.3"	16.0"	8.5"	16.0"	4.6"	16.0"	8.5"	16.0"	4.6"	16.0"
	1/4" x 2" EMBED	39	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	12.9"	16.0"	16.0"	16.0"	12.9"	16.0"
	ELCO PANELMATE	45	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	8.8"	16.0"	16.0"	16.0"	8.8"	16.0"
(MIN 3350 PSI CONC) *	55	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	5.8"	16.0"	16.0"	16.0"	5.8"	16.0"	
Tcap (lb) = 372.00	65	11.0"	16.0"	4.6"	16.0"	11.0"	16.0"	4.6"	16.0"	11.0"	16.0"	4.6"	16.0"	
Vcap (lb) = 565.00	72	8.5"	16.0"	4.6"	16.0"	8.5"	16.0"	4.6"	16.0"	8.5"	16.0"	4.6"	16.0"	

T4 ANCHOR SPACING SCHEDULE (INSIDE MOUNT PANELS, WALL MOUNT)

EXIST. STRUCT.	ANCHOR	LOAD (psf)	2.5" EDGE DIST.							
			SPANS UP TO 5.50 ft				SPANS UP TO 8.67 ft			
			CONN TYPE				CONN TYPE			
			C7	C8	C7	C8	C7	C8		
CONCRETE	1/4" x 1-3/4" EMBED	39	16.0"	15.3"	13.6"	9.7"	16.0"	15.3"	13.6"	9.7"
	ELCO TAPCON	45	16.0"	13.2"	11.8"	8.4"	16.0"	13.2"	11.8"	8.4"
	(MIN 3320 PSI CONC)	55	15.2"	10.8"	9.6"	6.9"	15.2"	10.8"	9.6"	6.9"
	Tcap (lb) = 483.00	65	12.9"	9.2"	8.5"	6.0"	12.9"	9.2"	8.5"	6.0"
	Vcap (lb) = 475.00	72	11.6"	8.3"	8.5"	6.0"	11.6"	8.3"	8.5"	6.0"
	1/4"x7/8" EMBED	39	16.0"	16.0"	15.2"	10.8"	16.0"	16.0"	15.2"	10.8"
	ALL-POINTS SOLID-SET	45	16.0"	14.7"	13.2"	9.3"	16.0"	14.7"	13.2"	9.3"
	LEAD SHIELD ANCHOR *	55	16.0"	12.0"	10.8"	7.6"	16.0"	12.0"	10.8"	7.6"
	Tcap (lb) = 428	65	14.4"	10.2"	9.5"	6.7"	14.4"	10.2"	9.5"	6.7"
	Vcap (lb) = 429	72	13.0"	9.2"	9.5"	6.7"	13.0"	9.2"	9.5"	6.7"
	1/4" x 2" EMBED	39	16.0"	11.6"	10.3"	7.4"	16.0"	11.6"	10.3"	7.4"
	ELCO PANELMATE	45	14.1"	10.1"	8.9"	6.4"	14.1"	10.1"	8.9"	6.4"
(MIN 3350 PSI CONC) *	55	11.5"	8.2"	7.3"	5.2"	11.5"	8.2"	7.3"	5.2"	
Tcap (lb) = 297.60	65	9.7"	7.0"	6.4"	4.6"	9.7"	7.0"	6.4"	4.6"	
Vcap (lb) = 282.50	72	8.8"	6.3"	6.4"	4.6"	8.8"	6.3"	6.4"	4.6"	

EXIST. STRUCT.	ANCHOR	LOAD (psf)	2.5" EDGE DIST.							
			SPANS UP TO 5.50 ft				SPANS UP TO 8.67 ft			
			CONN TYPE				CONN TYPE			
			C5	C6	C5	C6	C5	C6		
CONCRETE	1/4" x 1-1/4" EMBED	39	12.6"	8.2"	8.0"	5.2"	12.6"	8.2"	8.0"	5.2"
	ELCO TAPCON	45	10.9"	7.1"	6.9"	4.5"	10.9"	7.1"	6.9"	4.5"
	(MIN 3320 PSI CONC)	55	8.9"	5.8"	5.7"	3.7"	8.9"	5.8"	5.7"	3.7"
	Tcap (lb) = 218.00	65	6.4"	4.9"	5.0"	3.3"	6.4"	4.9"	5.0"	3.3"
	Vcap (lb) = 398.00	72	5.0"	4.5"	5.0"	3.3"	5.0"	4.5"	5.0"	3.3"
	1/4"x7/8" EMBED	39	16.0"	12.3"	10.4"	7.8"	16.0"	12.3"	10.4"	7.8"
	ALL-POINTS SOLID-SET	45	14.2"	10.7"	9.0"	6.8"	14.2"	10.7"	9.0"	6.8"
	LEAD SHIELD ANCHOR *	55	11.7"	8.7"	7.4"	5.5"	11.7"	8.7"	7.4"	5.5"
	Tcap (lb) = 358	65	9.9"	7.4"	6.5"	4.9"	9.9"	7.4"	6.5"	4.9"
	Vcap (lb) = 249	72	8.9"	6.7"	6.5"	4.9"	8.9"	6.7"	6.5"	4.9"
	1/4" x 1-1/4" EMBED	39	11.2"	8.0"	7.1"	5.1"	11.2"	8.0"	7.1"	5.1"
	ELCO PANELMATE	45	9.7"	6.9"	6.2"	4.4"	9.7"	6.9"	6.2"	4.4"
(MIN 3350 PSI CONC) *	55	7.9"	5.6"	5.0"	3.6"	7.9"	5.6"	5.0"	3.6"	
Tcap (lb) = 201.50	65	6.7"	4.8"	4.4"	3.2"	6.7"	4.8"	4.4"	3.2"	
Vcap (lb) = 198.50	72	6.1"	4.3"	4.4"	3.2"	6.1"	4.3"	4.4"	3.2"	

EXIST. STRUCT.	ANCHOR	LOAD (psf)	0.75" EDGE DISTANCE							
			SPANS UP TO 5.50 ft				SPANS UP TO 8.67 ft			
			CONN TYPE				CONN TYPE			
			C7	C8	C7	C8	C7	C8		
WOOD	1/4" x 2" EMBED	39	12.5"	16.0"	16.0"	7.5"	12.5"	16.0"	12.8"	4.8"
	PENETR. LAG SCREW	49	12.5"	16.0"	16.0"	6.0"	12.5"	16.0"	8.6"	3.8"
	(MIN 3320 PSI CONC)	58	12.5"	16.0"	14.4"	5.1"	12.5"	16.0"	6.6"	3.2"
	Tcap (lb) = 359.53	72	12.5"	16.0"	9.6"	4.1"	12.5"	16.0"	6.0"	3.2"
	Vcap (lb) = 82.97	130	12.5"	16.0"	6.0"	4.1"	12.5"	16.0"	6.0"	3.2"
	#14 x 1-1/2" EMBED	39	12.5"	16.0"	16.0"	7.7"	12.5"	16.0"	8.3"	4.8"
	ALL-POINTS SOLID-SET	49	12.5"	16.0"	13.6"	6.1"	12.5"	13.2"	5.6"	3.8"
	LEAD SHIELD ANCHOR *	58	12.5"	16.0"	9.3"	5.1"	12.5"	16.0"	4.3"	3.2"
	Tcap (lb) = 358	65	12.5"	16.0"	9.6"	8.8"	12.5"	16.0"	5.9"	6.4"
	Vcap (lb) = 249	72	12.5"	16.0"	9.6"	8.8"	12.5"	16.0"	5.9"	6.4"
	1/4" x 1-1/4" EMBED	39	12.5"	16.0"	11.9"	9.7"	12.5"	14.5"	7.3"	7.7"
	ELCO PANELMATE	49	12.5"	16.0"	11.9"	9.7"	12.5"	14.5"	7.3"	7.7"
(MIN 3350 PSI CONC) *	58	12.5"	16.0"	11.9"	9.7"	12.5"	14.5"	7.3"	7.7"	
Tcap (lb) = 204.75	65	6.25"	12.4"	5.5"	6.5"	6.25"	9.1"	3.4"	4.7"	
Vcap (lb) = 233.50	130	6.25"	9.1"	3.4"	4.7"	6.25"	9.1"	3.4"	4.7"	

T5 ANCHOR SPACING SCHEDULE (INSIDE MOUNT PANELS, TRAP MOUNT)

EXIST. STRUCT.	ANCHOR	LOAD (psf)	2.0" EDGE DISTANCE							
			SPANS UP TO 5.50 ft				SPANS UP TO 8.67 ft			
			CONN TYPE				CONN TYPE			
			C7	C8	C7	C8	C7	C8		
CONCRETE	1/4" x 1-3/4" EMBED	39	16.0"	15.3"	13.6"	9.7"	16.0"	15.3"	13.6"	9.7"
	ELCO TAPCON	45	16.0"	13.2"	11.8"	8.4"	16.0"	13.2"	11.8"	8.4"
	(MIN 3320 PSI CONC)	55	15.2"	10.8"	9.6"	6.9"	15.2"	10.8"	9.6"	6.9"
	Tcap (lb) = 483.00	65	12.9"	9.2"	8.5"	6.0"	12.9"	9.2"	8.5"	6.0"
	Vcap (lb) = 475.00	72	11.6"	8.3"	8.5"	6.0"	11.6"	8.3"	8.5"	6.0"
	1/4"x7/8" EMBED	39	16.0"	16.0"	15.2"	10.8"	16.0"	16.0"	15.2"	10.8"
	ALL-POINTS SOLID-SET	45	16.0"	14.7"	13.2"	9.3"	16.0"	14.7"	13.2"	9.3"
	LEAD SHIELD ANCHOR *	55	16.0"	12.0"	10.8"	7.6"	16.0"	12.0"	10.8"	7.6"
	Tcap (lb) = 428	65	14.4"	10.2"	9.5"	6.7"	14.4"	10.2"	9.5"	6.7"
	Vcap (lb) = 429	72	13.0"	9.2"	9.5"	6.7"	13.0"	9.2"	9.5"	6.7"
	1/4" x 2" EMBED	39	16.0"	11.6"	10.3"	7.4"	16.0"	11.6"	10.3"	7.4"
	ELCO PANELMATE	45	14.1"	10.1"	8.9"	6.4"	14.1"	10.1"	8.9"	6.4"
(MIN 3350 PSI CONC) *	55	11.5"	8.2"	7.3"	5.2"	11.5"	8.2"	7.3"	5.2"	
Tcap (lb) = 297.60	65	9.7"	7.0"	6.4"	4.6"	9.7"	7.0"	6.4"	4.6"	
Vcap (lb) = 282.50	72	8.8"	6.3"	6.4"	4.6"	8.8"	6.3"	6.4"	4.6"	

EXIST. STRUCT.	ANCHOR	LOAD (psf)	0.75" EDGE DISTANCE							
			SPANS UP TO 5.50 ft				SPANS UP TO 8.67 ft			
			CONN TYPE				CONN TYPE			
			C7	C8	C7	C8	C7	C8		
WOOD	1/4" x 2" EMBED	39	12.5"	16.0"	16.0"	7.5"	12.5"	16.0"		