



MIAMI-DADE COUNTY
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

www.buildingcodeonline.com

NOTICE OF ACCEPTANCE (NOA)

R. B. S. Enterprises, Inc.
P. O. Box 661062
Miami Springs, Florida 33266

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: "HT-100" Aluminum Accordion Shutter

APPROVAL DOCUMENT: Drawing No. **05-570**, titled "R. B. S. HT100 Accordion Shutter", sheets 1 through 7 of 7, prepared by Thornton-Tomasetti Group, dated September 14, 2005, last revision #0 dated September 14, 2005, signed and sealed by V. J. Knezevich, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact

LABELING: Each unit 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 **revises & renews NOA # 00-1010.01** and consists of this page 1 and evidence submitted pages E-1& E-2 and approval document mentioned above.

The submitted documentation was reviewed by **Helmy A. Makar, P.E.**

Helmy A. Makar
 02/09/2006




NOA No 05-0906.02
 Expiration Date: 01/18/2011
 Approval Date: 02/09/2006
 Page 1

R. B. S. Enterprises, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

- 1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #00-1010.01**
 - A. DRAWINGS**
 1. *Drawing No. 00-880 prepared by Knezevich & Associates, Inc., titled "R.B.S. HT100 Accordion Shutter", dated July 23, 1996, revision #6 dated June 10, 1999, sheets 1 through 6 of 6, signed and sealed by V. J. Knezevich, P.E.*
 - B. TESTS**
 1. *See Association's generic approval under 99-0036.*
 - C. CALCULATIONS**
 1. *See Association's generic approval under 99-0036.*
 - D. MATERIAL CERTIFICATIONS**
 1. *See Association's generic approval under 99-0036.*
 - E. STATEMENTS**
 1. *Release letter issued by the Hi-Tech Shutter Group, Inc., dated October 4, 2000, certifying this product to meet the criteria of product tested and approved, and allowing R.B.S. Enterprises, Inc. to use the test results approved under Miami-Dade County Approval No. 99-0036, signed by Mr. Frank Cornelius.*
 2. *Acknowledgment letter by R.B.S. Enterprises, Inc., dated September 27, 2000, signed by Mr. Robert G. Shultz.*
 3. *Letter by Knezevich & Associates, Inc., dated October 3, 2000, certifying that the drawing (No. 00-880) prepared for R.B.S. Enterprises, Inc., signed and sealed by Mr. V. J. Knezevich, P.E., is engineering wise identical to Hi-Tech's generic drawing (No. 96-168).*
 4. *Acceptance Letter issued to Mr. Robert G. Shultz on December 27, 2000, and returned signed by Mr. Robert G. Shultz on December 28, 2000, indicating to please issue the proposed Notice of Acceptance as submitted and reviewed.*
- 2. NEW EVIDENCE SUBMITTED**
 - A. DRAWINGS**
 1. *Drawing No. 05-570, titled "R. B. S. HT100 Accordion Shutter", sheets 1 through 7 of 7, prepared by Thornton-Tomasetti Group, dated September 14, 2005, last revision #0 dated September 14, 2005, signed and sealed by V. J. Knezevich, P.E.*
 - B. TESTS**
 1. *See Association's generic approval under 05-0321.*



Helmy A. Makar, P. E.
Product Control Examiner
NOA No 05-0906.02
Expiration Date: 01/18/2011
Approval Date: 02/09/2006

R. B. S. Enterprises, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

C. CALCULATIONS

1. *See Association's generic approval under 05-0321.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

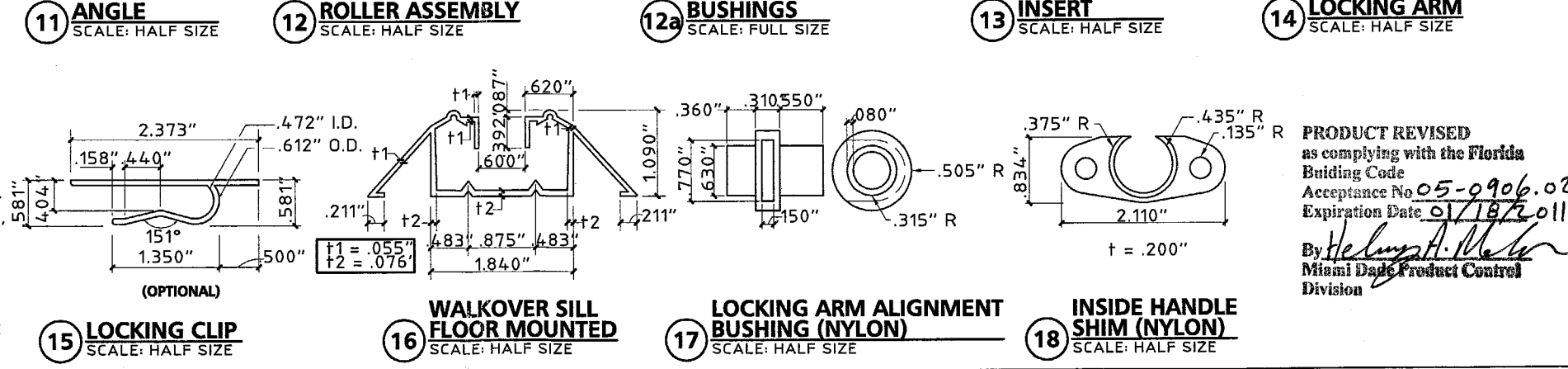
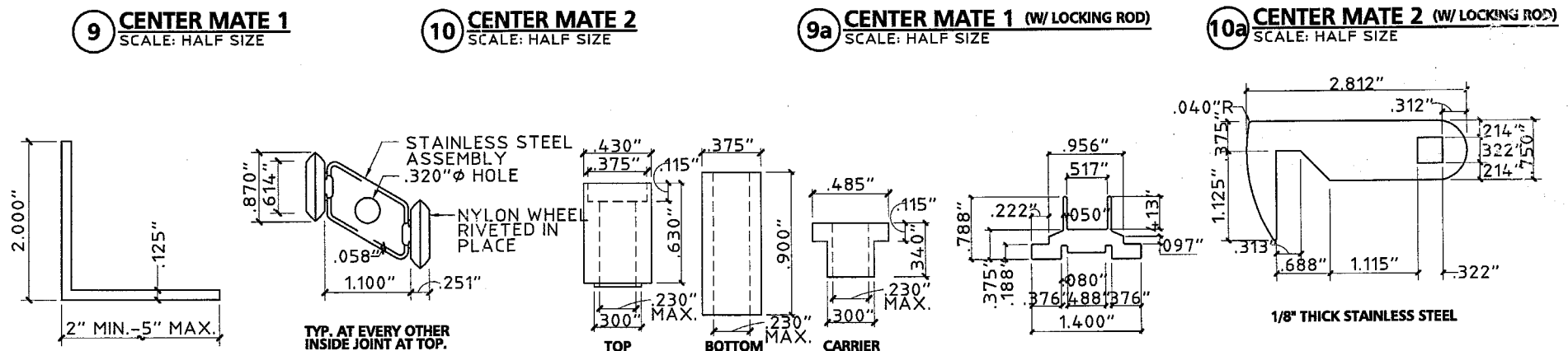
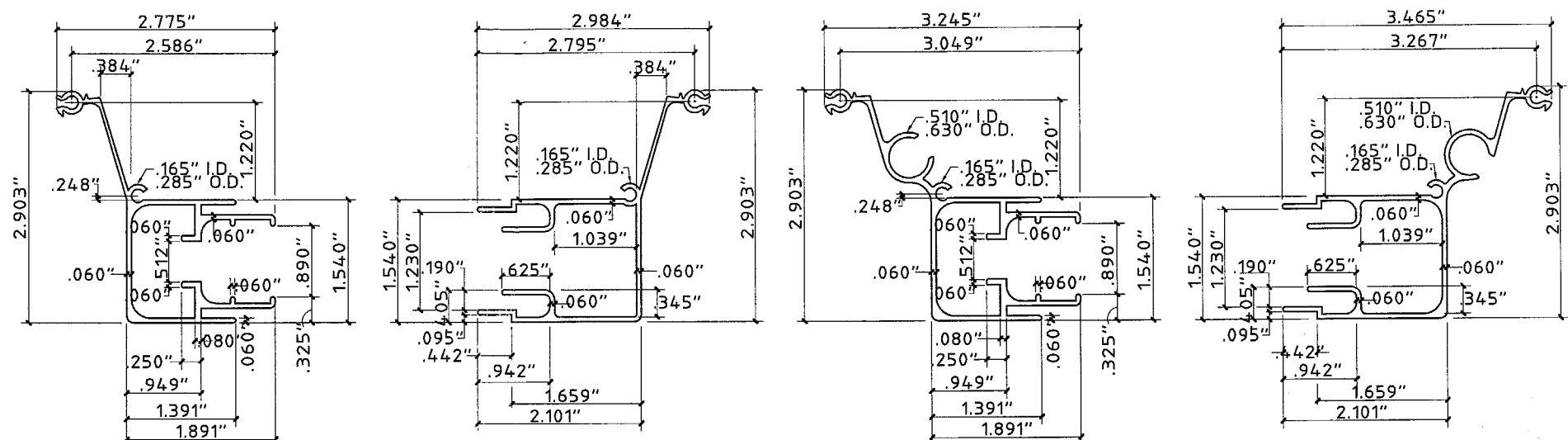
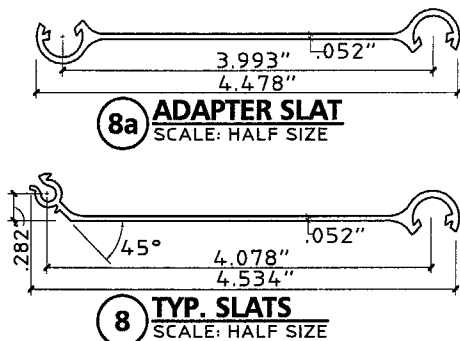
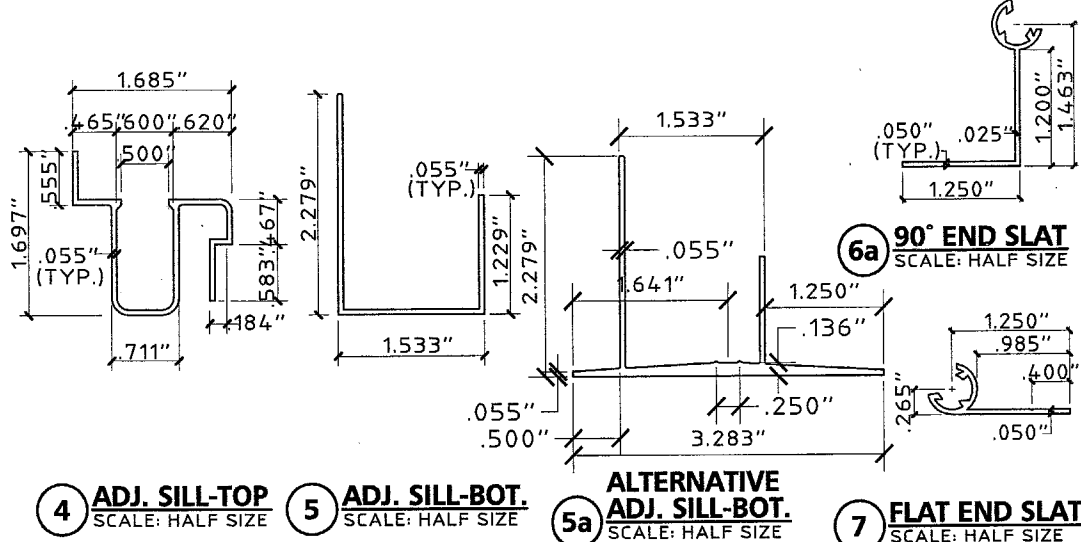
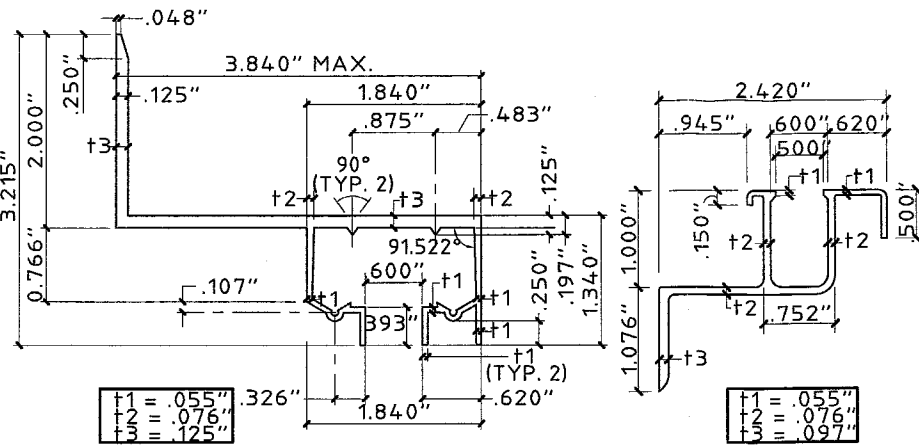
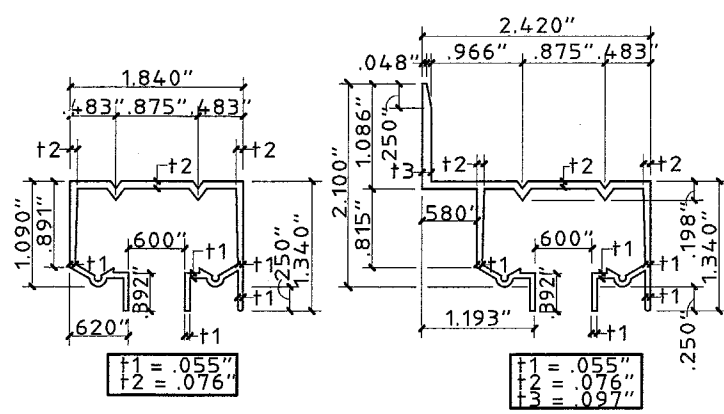
1. *See Association's generic approval under 05-0321.*

F. STATEMENTS

1. *Release letter issued by the Hi-Tech Shutter Group, Inc., dated December 01, 2005, certifying this product to meet the criteria of product tested and approved, and allowing R.B.S. Enterprises, Inc. to use the test results approved under Miami-Dade County Approval No.05-0321, signed by Mr. Frank Cornelius.*
2. *Acknowledgment letter by R.B.S. Enterprises, Inc., dated November 30, 2005, signed by Mr. Robert G. Shultz.*
3. *Letter by Thornton-Tomasetti Group, dated November 09, 2005, certifying that the drawing (No. 05-570) prepared for R.B.S. Enterprises, Inc., signed and sealed by Mr. V. J. Knezevich, P.E., is engineering wise identical to Hi-Tech's generic drawing (No.05-509).*



Helmy A. Makar, P. E.
Product Control Examiner
NOA No 05-0906.02
Expiration Date: 01/18/2011
Approval Date: 02/09/2006



- GENERAL NOTES:**
- THESE APPROVAL DOCUMENTS REPRESENT A SHUTTER SYSTEM ANALYZED WITH THE PROVISION SET FOR THE ISSUANCE OF A NOTICE OF ACCEPTANCE (NOA) BY MIAMI-DADE COUNTY PRODUCT CONTROL DIVISION FOR THE FLORIDA BUILDING CODE, 2004.
 - TO VERIFY THAT THE ANCHORS AS TESTED, ARE NOT OVERSTRESSED IN THESE APPROVAL DOCUMENTS, NO INCREASE IN ALLOWABLE STRESS WAS USED IN THE FASTENER ANALYSIS.
 - DETERMINE THE POSITIVE AND NEGATIVE DESIGN LOADS TO USE WHEN REFERENCING THESE DOCUMENTS IN ACCORDANCE WITH THE GOVERNING CODE AND GOVERNING WIND VELOCITY. FOR WIND LOAD CALCULATIONS IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2004 A DIRECTIONALITY FACTOR OF $K_d = 0.85$ SHALL BE USED.
 - THESE APPROVAL DOCUMENTS ARE GENERIC AND DO NOT INCLUDE INFORMATION FOR SITE-SPECIFIC APPLICATION OF THIS SHUTTER SYSTEM.
 - USE OF THESE APPROVAL DOCUMENTS SHALL COMPLY WITH CHAPTER 61G15-23 OF THE FLORIDA ADMINISTRATIVE CODE.
 - THESE APPROVAL DOCUMENTS ARE SUITABLE TO BE APPLIED BY THE CONTRACTOR PROVIDED THE CONTRACTOR DOES NOT DEVIATE FROM THE CONDITIONS DETAILED HEREIN AND THE CONTRACTOR VERIFIES THAT THE EXISTING STRUCTURE DOES NOT DEVIATE IN EITHER FORM OR MATERIAL FROM THE STRUCTURAL SUBSTRATES DETAILED HEREIN.
 - ANY MODIFICATIONS OR ADDITIONS TO THESE APPROVAL DOCUMENTS WILL VOID THE APPROVAL DOCUMENTS.
 - WHEN THE SITE CONDITIONS DEVIATE FROM THESE APPROVAL DOCUMENTS, THE BUILDING OFFICIAL MAY ELECT ONE OF THE FOLLOWING OPTIONS:
 - REQUIRE THAT SITE SPECIFIC DOCUMENTS BE PREPARED, SIGNED, DATED AND SEALED BY A LICENSED ENGINEER OR REGISTERED ARCHITECT, WHICH DETAIL AND JUSTIFY THE DEVIATION. SAID DOCUMENTS SHALL BE SUBMITTED TO THE PRODUCT ENGINEER FOR REVIEW AS A CONDITION TO THE BUILDING OFFICIAL GRANTING HIS/HER APPROVAL.
 - REQUIRE THAT A ONE-TIME SITE SPECIFIC APPROVAL BE APPLIED FOR AND SECURED FROM THE MIAMI-DADE COUNTY PRODUCT CONTROL DIVISION.
 - EACH SHUTTER ASSEMBLY SHALL BE PERMANENTLY LABELED AS FOLLOWS:
R.B.S. ENTERPRISES, INC.
MEDLEY, FLORIDA
MIAMI-DADE COUNTY PRODUCT APPROVED
 - ALL SHUTTERS SHALL HAVE A LOCKING MECHANISM AT CENTER OR SIDE CLOSURE WITHIN 18" OF CENTER (VERT.). LOCKING MECHANISM SHALL BE LOCKED TO PROVIDE HURRICANE PROTECTION.
 - STORM SHUTTER EXTRUSIONS SHOWN SHALL BE 6063-T6 ALUMINUM ALLOY, U.O.N.
 - ALL SCREWS AND BOLTS TO BE 2024-T4 ALUMINUM ALLOY, STAINLESS STEEL OR GALVANIZED STEEL WITH A MINIMUM TENSILE STRENGTH OF 60 K.S.I., U.O.N. POP RIVETS TO BE 3/16" ϕ , 5052 ALUM. ALLOY, U.O.N.
 - TOP AND BOTTOM DETAILS MAY BE INTERCHANGED AS FIELD CONDITIONS REQUIRE.
 - FLOOR TRACKS MAY BE REMOVABLE AT NON-STACKING LOCATIONS. USE REMOVABLE ANCHORS SUCH AS POWERS CALK-IN ANCHORS.
 - THIS SHUTTER SYSTEM IS PATENTED WITH THE U.S. PATENT AND TRADEMARK OFFICE, PATENT No. 5,755,270.

PRODUCT REVISED
 as complying with the Florida Building Code
 Acceptance No. 05-9906.02
 Expiration Date 01/18/2011

By *Helmut A. Weber*
 Miami Dade Product Control Division

Thornton-Tomasetti Group
 330 N. Andrews Ave., Suite 450 - Ft. Lauderdale, FL 33301
 Tel. (954) 522-3690 • Fax (954) 522-3691 • COA # 7519
 Website: www.TheTTGroup.com

R.B.S. HT100 ACCORDION SHUTTER

7521 N.W. 77TH TERRACE
 MEDLEY, FL 33166
 TEL: (305) 888-8664
 FAX: (305) 885-0680

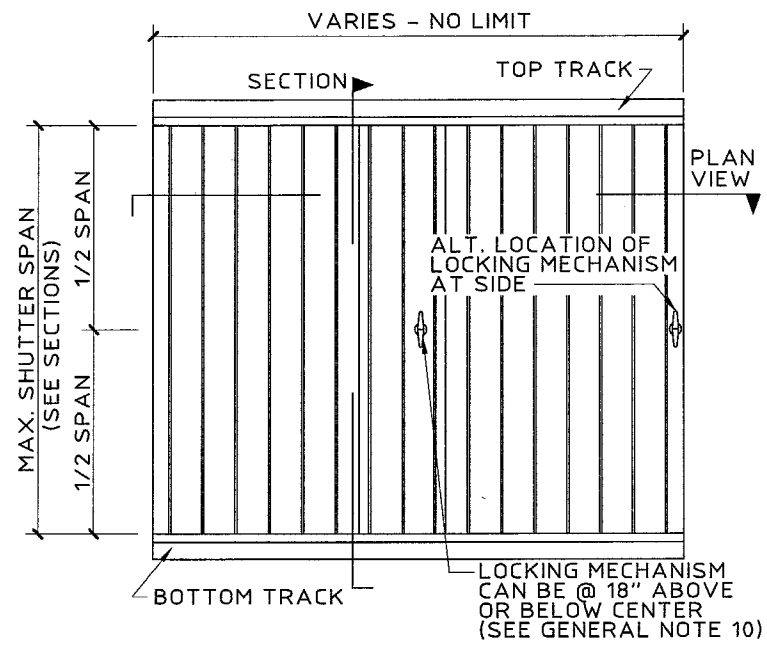
V.J. Knezevich
 Professional Engineer
 FL License No.: PE 0610983

NOV 08 2005

revisions
 no. date by description
 0 09/14/05 VJK PREVIOUSLY DRAWING NO. 02-458

date 09/14/2005
 scale AS NOTED
 design by VJK
 checked by VJK
 drawing no. 05-570
 sheet 1 of 7

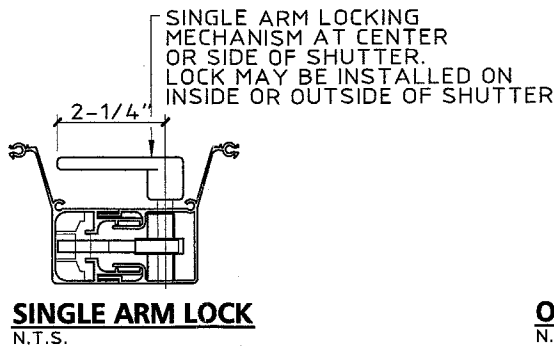
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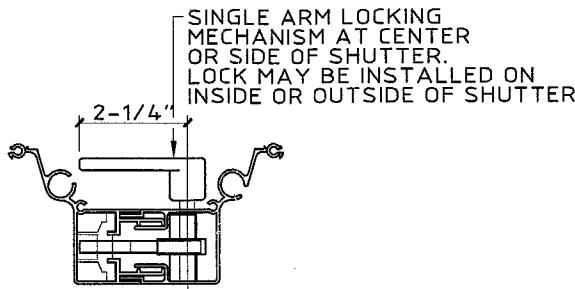
TYPICAL ELEVATION
N.T.S.

USED WITH PIECES (9a) AND (10a)

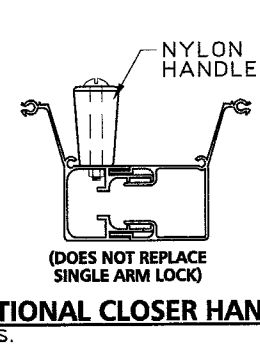
LOCKING PIN
SCALE: 1-1/2" = 1'-0"



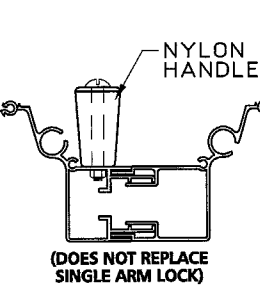
SINGLE ARM LOCK
N.T.S.



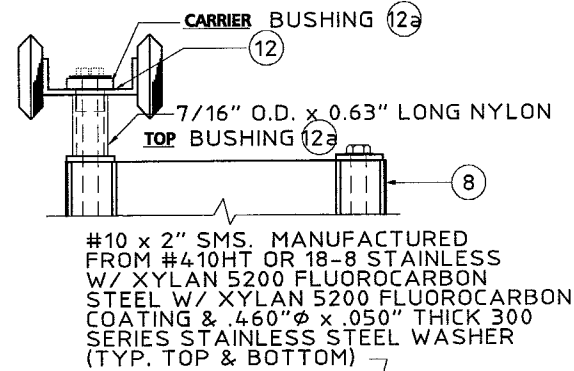
SINGLE ARM LOCK
N.T.S.



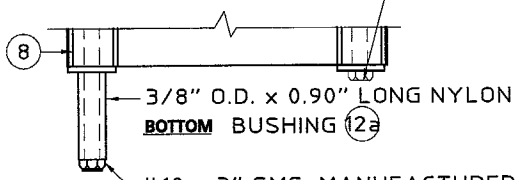
OPTIONAL CLOSER HANDLE
N.T.S.



OPTIONAL CLOSER HANDLE
N.T.S.

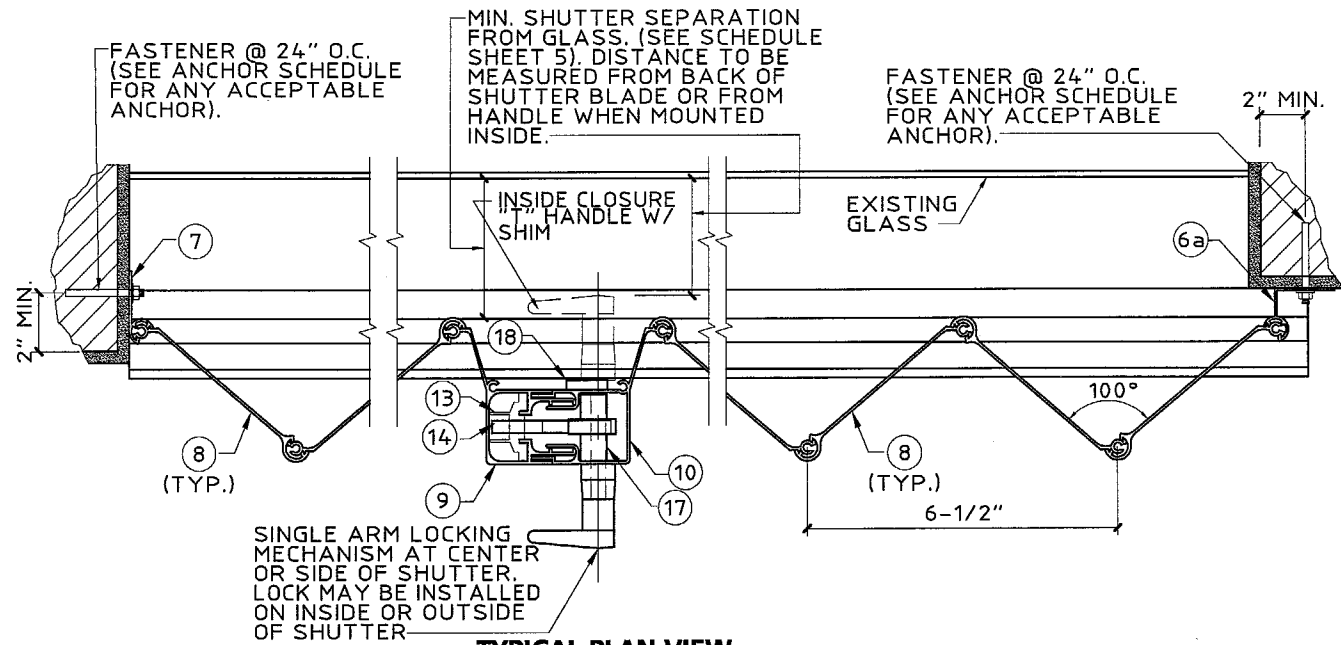


#10 x 2" SMS. MANUFACTURED FROM #410HT OR 18-8 STAINLESS STEEL W/ Xylan 5200 FLUOROCARBON COATING & .460" ϕ x .050" THICK 300 SERIES STAINLESS STEEL WASHER (TYP. TOP & BOTTOM)

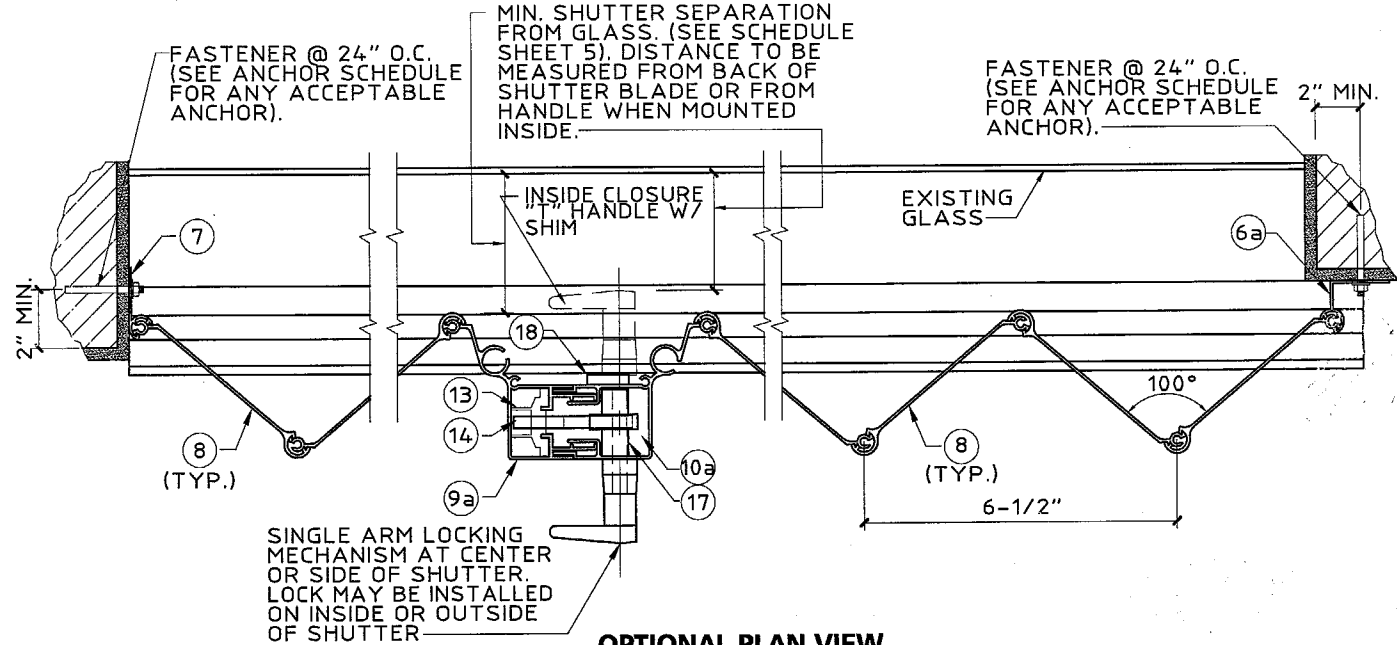


#10 x 3" SMS. MANUFACTURED FROM #410HT STAINLESS STEEL W/ Xylan 5200 FLUOROCARBON COATING & .460" ϕ x .050" THICK 300 SERIES STAINLESS STEEL WASHER (TYP. TOP & BOTTOM)

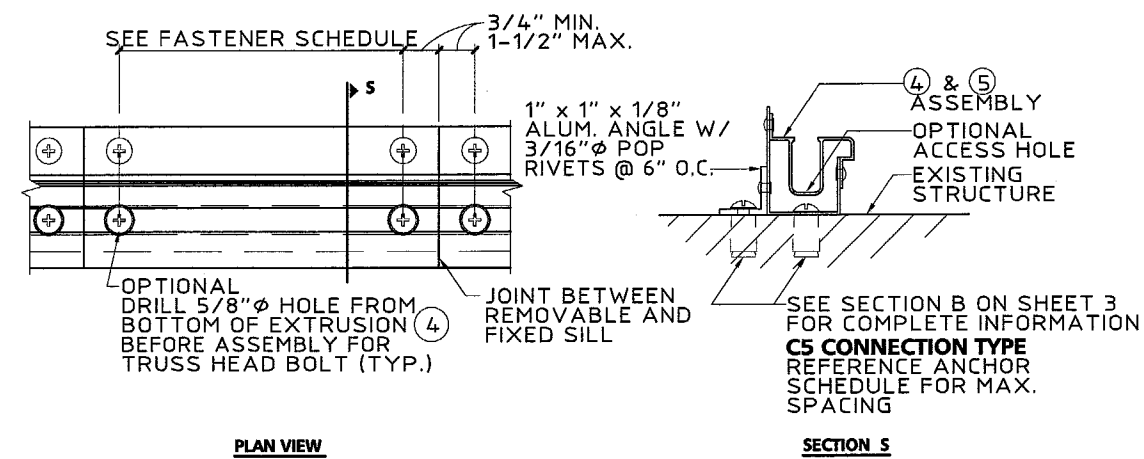
SCREW BUSHING & ROLLER/BUSHING ASSEMBLY
SCALE: HALF SIZE



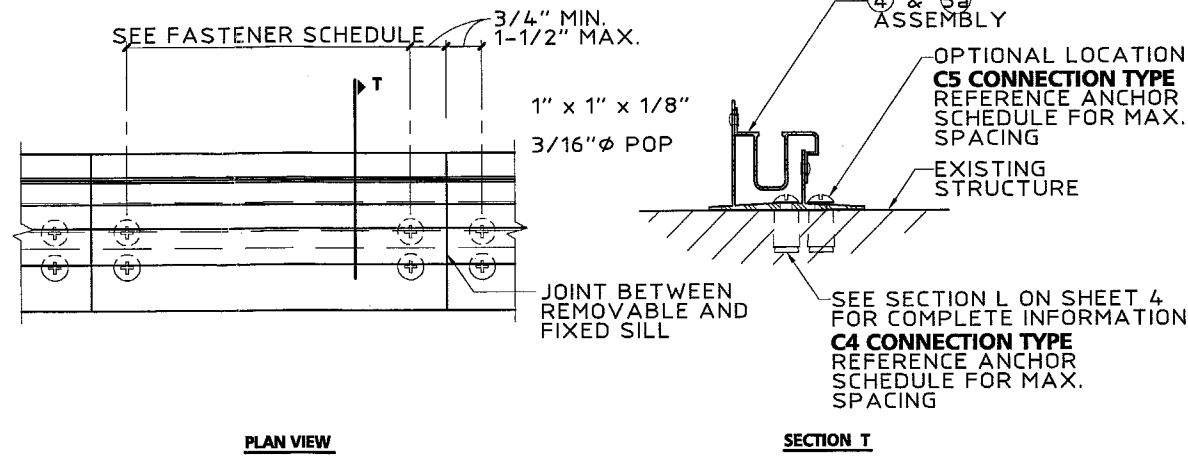
TYPICAL PLAN VIEW
SCALE: 3" = 1'-0"



OPTIONAL PLAN VIEW
SCALE: 3" = 1'-0"



REMOVABLE FLOOR TRACK DETAIL
SCALE: 3" = 1'-0"



OPTIONAL REMOVABLE FLOOR TRACK DETAIL
SCALE: 3" = 1'-0"

PRODUCT REVISED as complying with the Florida Building Code
Acceptance No. 05-9906-02
Expiration Date 01/18/2011
By *Helmut A. Mader*
Miami Date Product Control Division

Thornton-Tomasetti Group
330 N. Andrews Ave., Suite 450 • Ft. Lauderdale, FL 33301
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R.B.S. HT100 ACCORDION SHUTTER

7521 N.W. 77TH TERRACE
MEDLEY, FL 33166
TEL: (305) 888-8664
FAX: (305) 885-0680

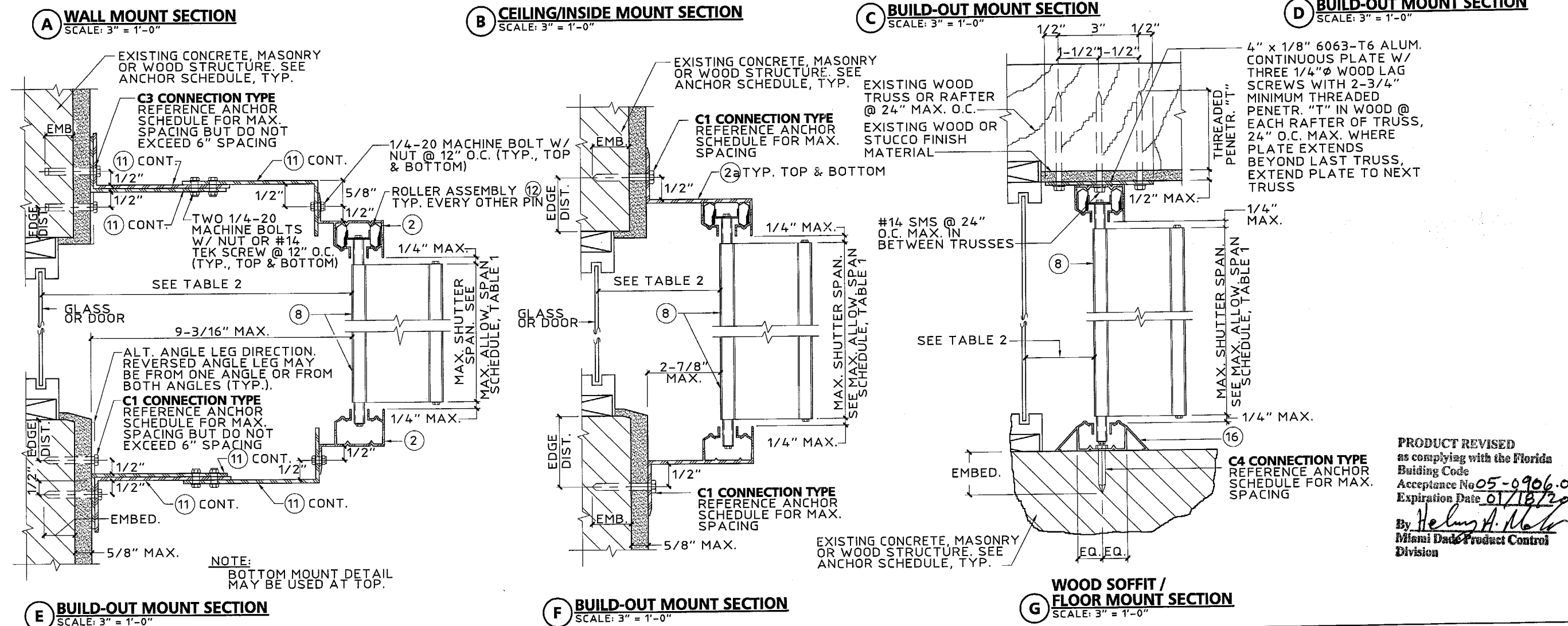
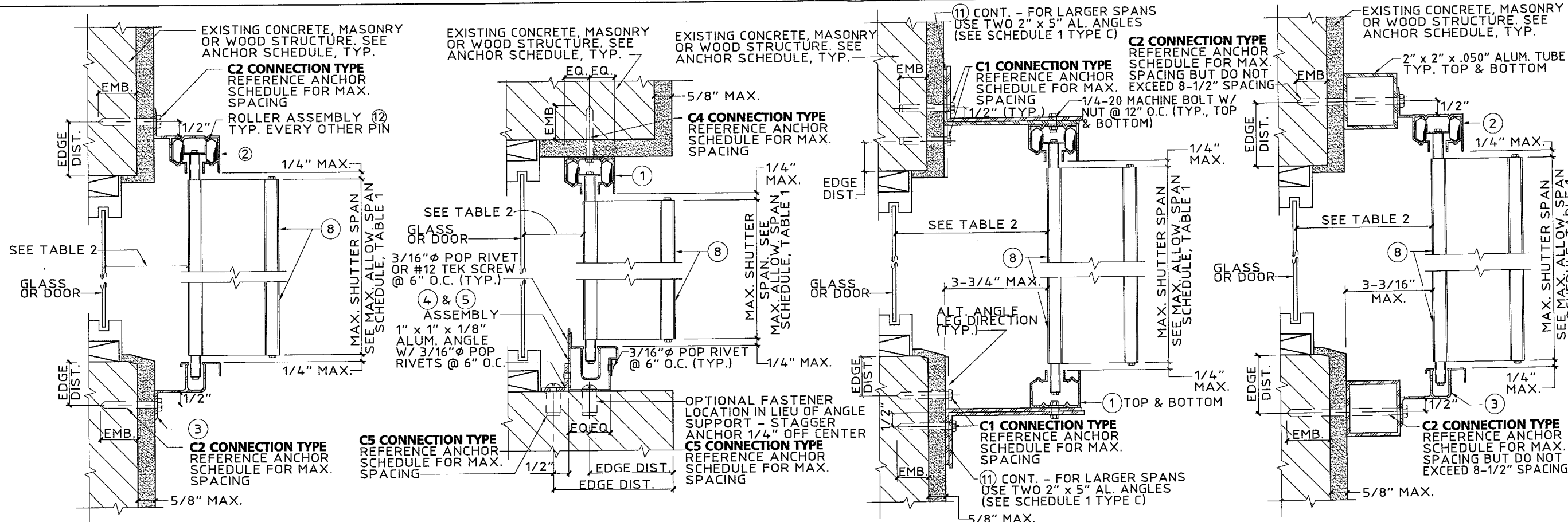
V.J. Knezevich
Professional Engineer
FL License No.: PE 0010983

NOV 09 2005

no.	date	by	description
0	09/14/05	VJK	PREVIOUSLY DRAWING NO. 02-458

HTSG I.D. # 05110805509D

date 09/14/2005
scale AS NOTED
design by VJK
checked by VJK
drawing no. 05-570
sheet 2 of 7



NOTE:
BOTTOM MOUNT DETAIL
MAY BE USED AT TOP.

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 05-0906.02
Expiration Date 01/18/2011
By *Helmut A. Mohr*
Miami Dade Product Control
Division

Thornton-Tomasetti Group
330 N. Andrews Ave., Suite 450 • Ft. Lauderdale, FL 33301
Tel. (954) 522-3690 • Fax (954) 522-3691 • COA # 7519
Website: www.thtgroup.com
Copyright © 2005 Thornton-Tomasetti Group, Inc.
HT100 LICENSED BY HI-TECH SHUTTER GROUP, INC.

P.B.S. HT100 ACCORDION SHUTTER
7521 N.W. 77TH TERRACE
MEDLEY, FL 33166
TEL: (305) 889-8664
FAX: (305) 885-0680

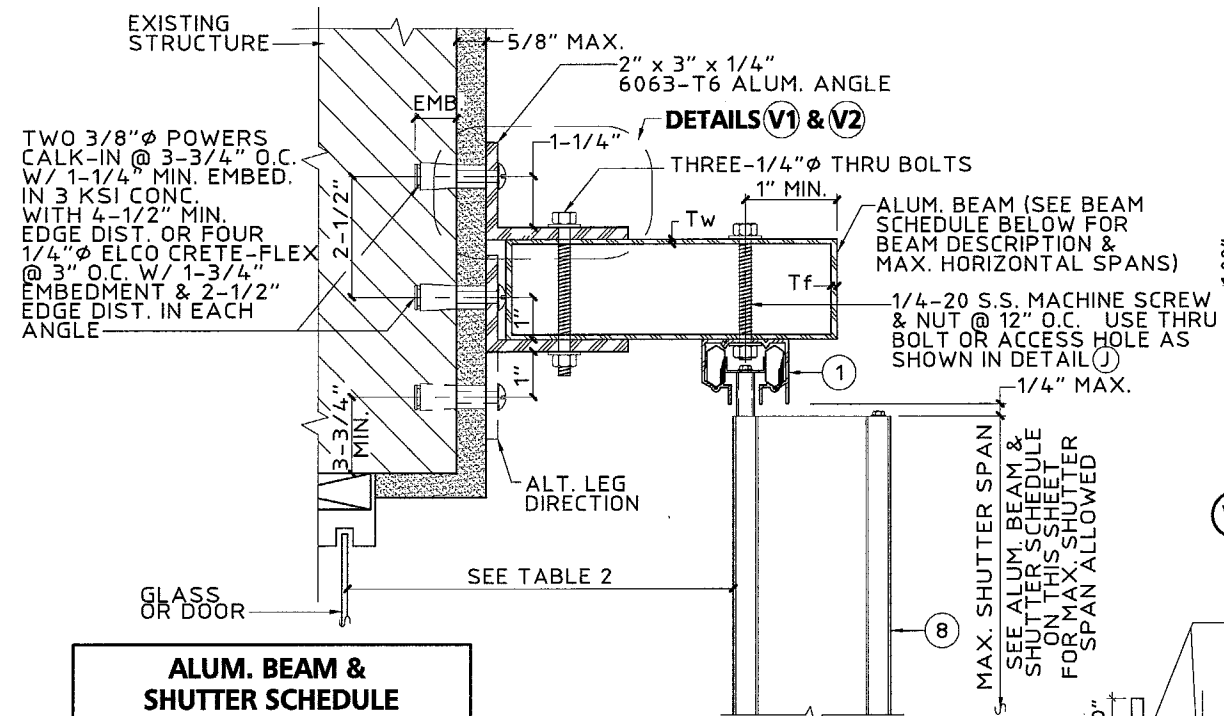
V.J. Knezevich
Professional Engineer
FL License No. 0010233
NOV 08 2005

no	date	by	description
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revisions

date 09/14/2005
scale AS NOTED
drawing no. 05-570
sheet 3 of 7

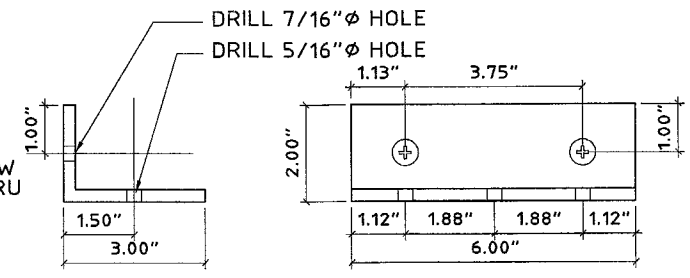
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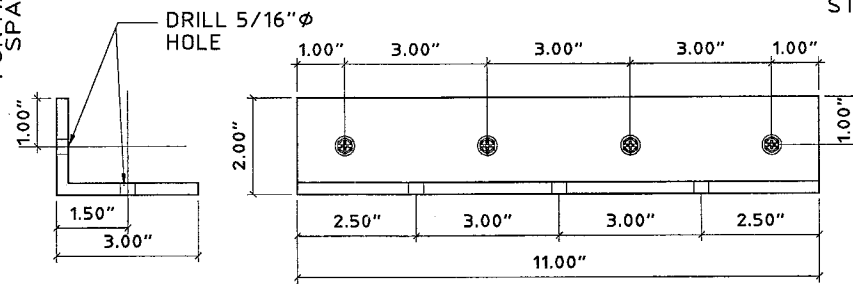
ALUM. BEAM & SHUTTER SCHEDULE		
DESCRIPTION	SHUTTER SPAN	BEAM SPAN
2" x 5" Tw = .125" Tf = .125"	5'-0"	9'-5"
	8'-0"	8'-1"
	10'-0"	7'-6"
2" x 8" Tw = .072" Tf = .224"	5'-0"	14'-0"
	8'-0"	11'-6"
	10'-0"	10'-4"
2" x 9" Tw = .072" Tf = .224"	5'-0"	15'-5"
	8'-0"	12'-5"
	10'-0"	11'-2"

H TOP SUPPORT BEAM DETAIL
SCALE: 3" = 1'-0"

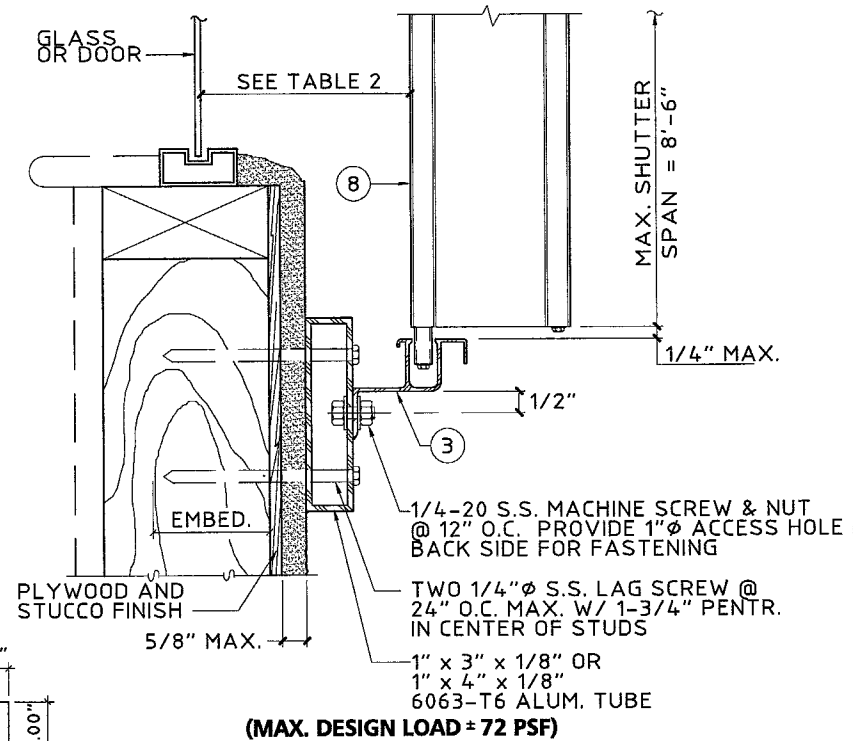
- NOTE:**
1. USE BEAM SCHEDULE FOR DETAILS (H) AND (J).
 2. SHUTTER SPAN TO BE LIMITED TO THOSE SHOWN IN TABLE, SHEET 5.
 3. BEAM SPAN SHALL BE CONSIDERED AS THE DISTANCE FROM C OF SUPPORT TO C OF SUPPORT.



V1 ANGLE DETAIL USING CALK-IN ANCHOR
SCALE: 3" = 1'-0"

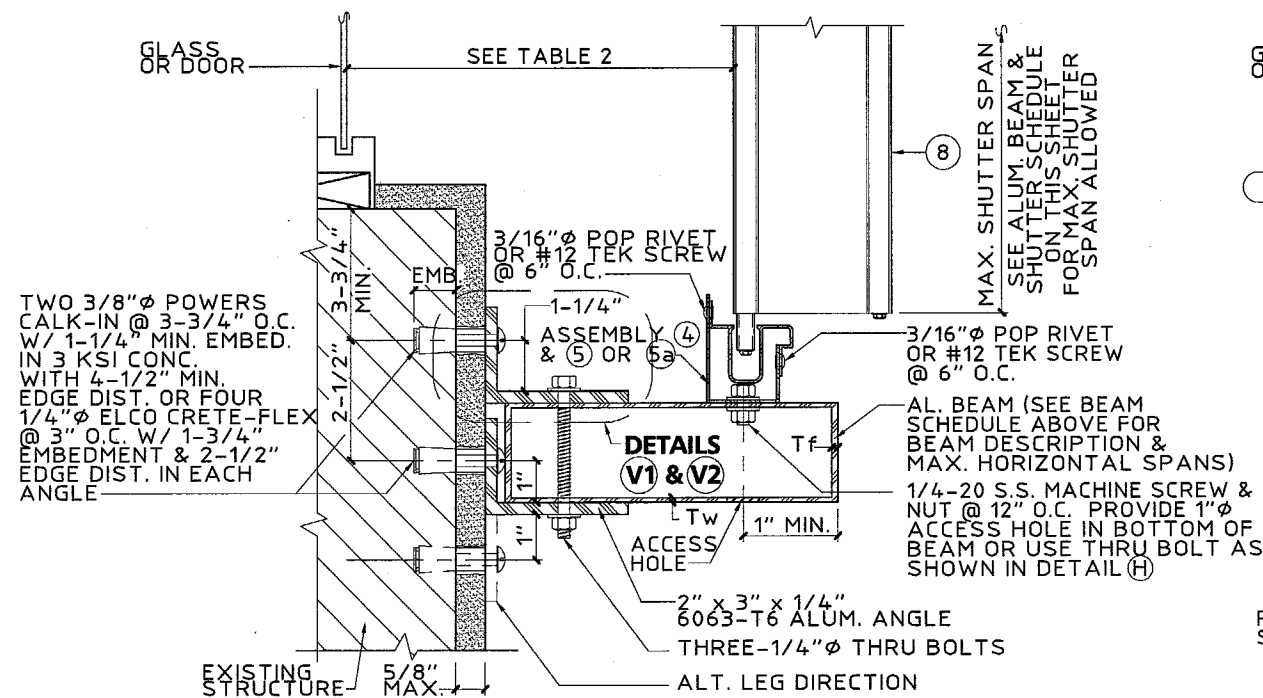


V2 ANGLE DETAIL USING CRETE-FLEX ANCHOR
SCALE: 3" = 1'-0"

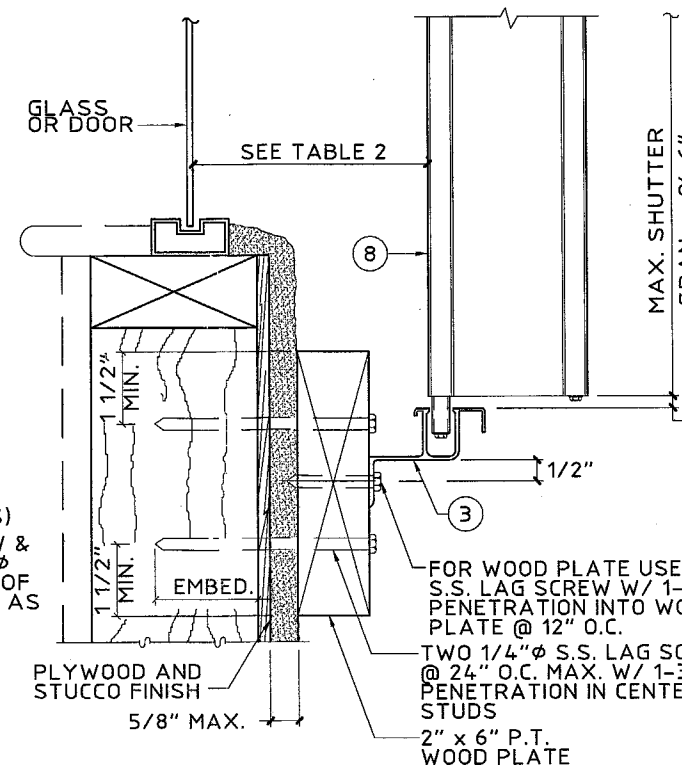


I WALL MOUNT SECTION - USING ALUM. TUBE
SCALE: 3" = 1'-0"

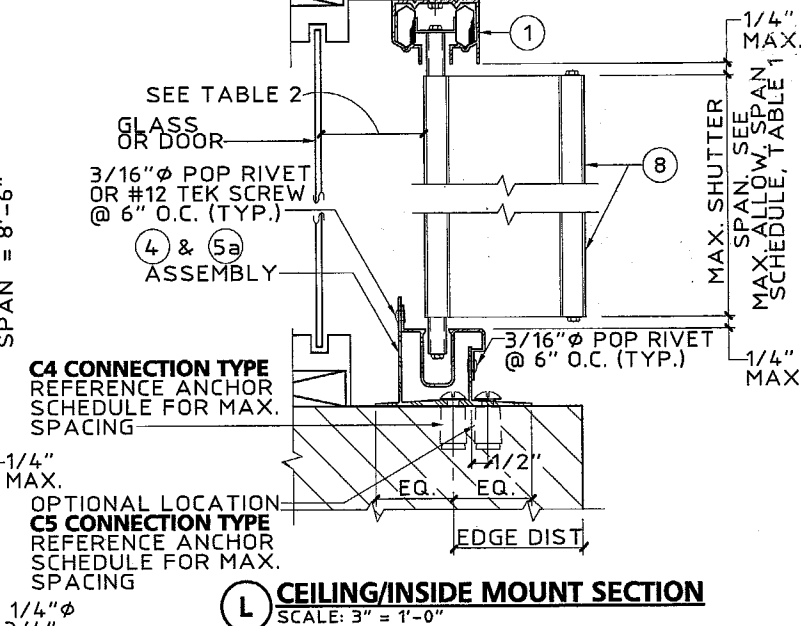
EXISTING CONCRETE, MASONRY OR WOOD STRUCTURE. SEE ANCHOR SCHEDULE, TYP.



J BOTTOM SUPPORT BEAM DETAIL
SCALE: 3" = 1'-0"



K WALL MOUNT SECTION - USING 2" x 6" P.T. WOOD PLATE
SCALE: 3" = 1'-0"



L CEILING/INSIDE MOUNT SECTION
SCALE: 3" = 1'-0"

PRODUCT REVISED
as complying with the Florida Building Code
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By *Helmut A. Knezevich*
Miami Dade Product Control Division

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R.B.S. HT100 ACCORDION SHUTTER

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V.J. Knezevich
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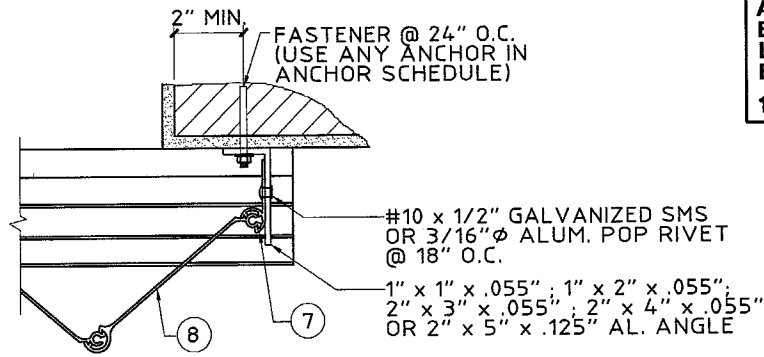
NOV 08 2005

revisions

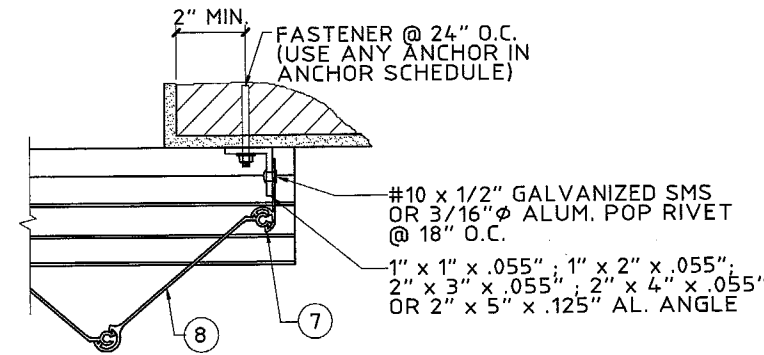
no.	date	by	description
0	09/14/2005	VJK	PREVIOUSLY DRAWING NO. 02-458

date 09/14/2005
scale AS NOTED
design by VJK
checked by VJK
drawing no. 05-570
sheet 4 of 7

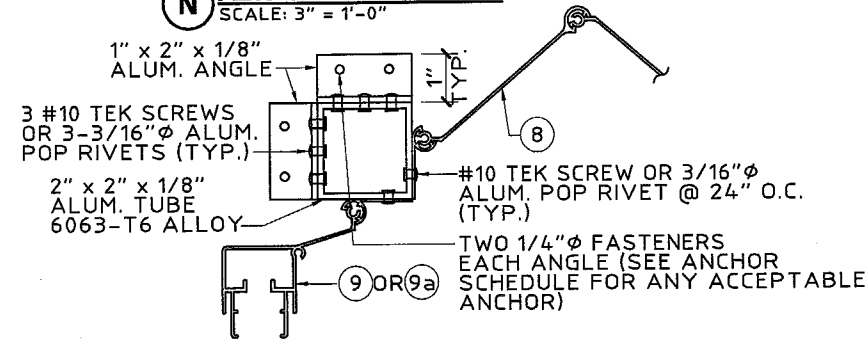
HTSG I.D. # 05110805.509D



M ALT. CLOSURE DETAIL
SCALE: 3" = 1'-0"

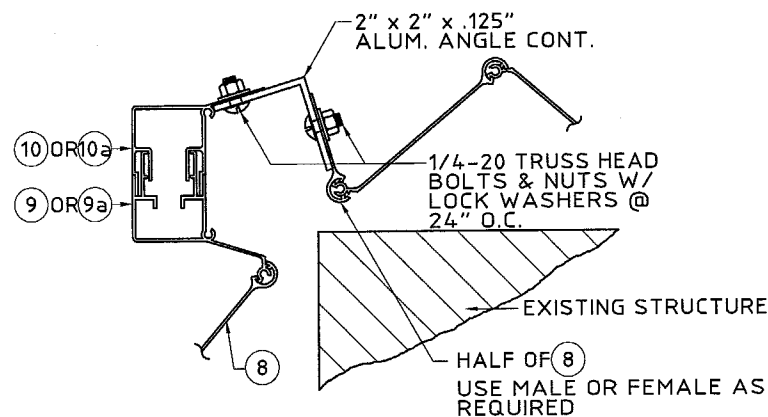


N ALT. CLOSURE DETAIL
SCALE: 3" = 1'-0"



NOTE:
EITHER CONDITION MAY BE TYPICAL FOR EITHER SIDE

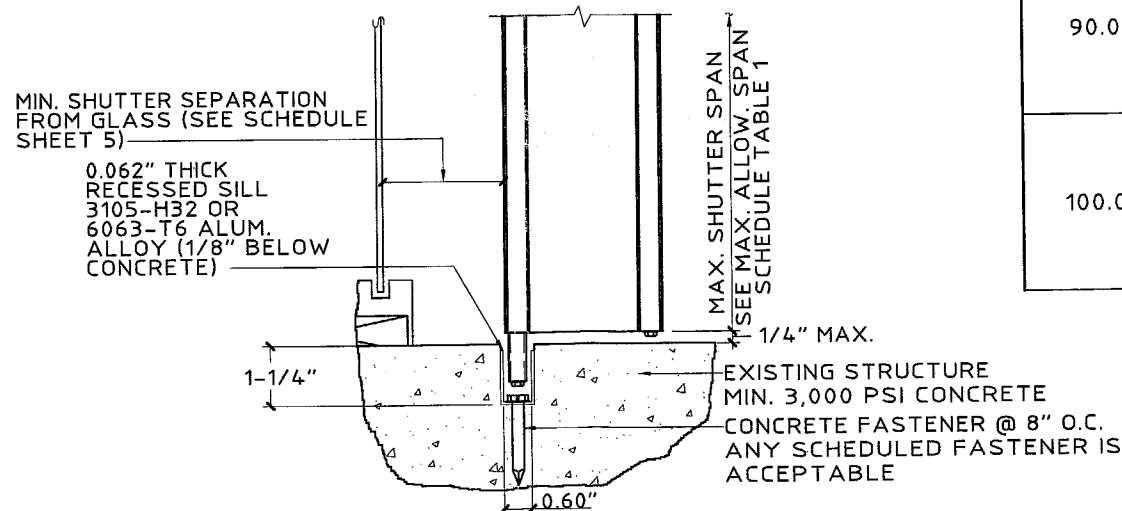
P CORNER CLOSURE DETAIL
SCALE: 3" = 1'-0"



Q ALT. CORNER CLOSURE DETAIL
SCALE: 3" = 1'-0"

MAXIMUM ALLOWABLE SPAN SCHEDULE				
NEG. DESIGN LOAD (PSF)	TYPE A ALL MOUNTING CONDITIONS EXCEPT (C)(E)(F) (FT - IN)	TYPE B DETAIL (F) OR DETAIL (C) W/ SINGLE ANGLE REQUIRED 3-3/4" MAX. B.O. (FT - IN)	TYPE C DETAIL (C) DOUBLE ANGLE REQUIRED 3-3/4" MAX. B.O. (FT - IN)	TYPE D DETAIL (E) 9-3/16" MAX. B.O. (FT - IN)
30.0	13 - 1	12 - 4	13 - 1	12 - 7
38.0	13 - 1	11 - 0	13 - 1	11 - 2
40.0	12 - 11	10 - 8	12 - 5	10 - 11
48.0	12 - 4	9 - 9	10 - 4	10 - 0
52.0	12 - 1	9 - 4	9 - 7	9 - 7
56.0	11 - 11	9 - 0	9 - 0	9 - 3
61.5	11 - 7	8 - 7	8 - 7	8 - 10
63.3	11 - 6	8 - 6	8 - 6	8 - 8
66.8	10 - 11	8 - 3	8 - 3	8 - 5
67.5	10 - 9	8 - 3	8 - 3	8 - 5
71.2	10 - 3	8 - 0	8 - 0	8 - 2
75.0	9 - 8	7 - 8	7 - 8	8 - 0
81.4	8 - 11	7 - 0	7 - 0	7 - 4
86.8	8 - 5	6 - 7	6 - 7	6 - 10
91.4	8 - 0	6 - 3	6 - 3	6 - 6
100.0	7 - 3	5 - 9	5 - 9	6 - 0
110.0	6 - 7	5 - 2	5 - 2	5 - 5
120.0	6 - 1	4 - 9	4 - 9	5 - 0
130.0	5 - 7	4 - 5	4 - 5	4 - 7
140.0	5 - 2	4 - 1	4 - 1	4 - 3
150.0	4 - 10	3 - 10	3 - 10	4 - 0
160.0	4 - 6	3 - 7	3 - 7	3 - 9
170.0	4 - 3	3 - 4	3 - 4	3 - 6

- NOTES:
1. REFERENCE APPROPRIATE COLUMN IN TABLE 1 BASED ON MOUNTING CONDITION IN FIELD.
 2. FOR DESIGN LOADS BETWEEN TABULATED VALUES, USE NEXT HIGHER LOAD OR LINEAR INTERPOLATION MAY BE USED TO DETERMINE ALLOWABLE SPANS.
 3. ENTER TABLE 1 WITH NEGATIVE DESIGN LOAD TO DETERMINE MAX. SHUTTER SPAN.
 4. ENTER TABLE 2 WITH POSITIVE DESIGN LOAD TO DETERMINE MIN. SHUTTER SEPARATION FROM GLASS.



R ALTERNATE FLOOR MOUNT DETAIL
SCALE: 3" = 1'-0"

MINIMUM SHUTTER SEPARATION FROM GLASS (IN)			
POSITIVE DESIGN LOAD (W) (PSF)	ACTUAL SPAN (FT - IN)	MINIMUM SEPARATION FROM GLASS FOR INSTALLATIONS LESS THAN OR EQUAL TO 30' ABOVE GRADE (INCHES)	MINIMUM SEPARATION FROM GLASS FOR INSTALLATIONS GREATER THAN 30' ABOVE GRADE (INCHES)
30.0	5 - 0	2-7/8	1-1/2
	7 - 0	2-7/8	1-5/8
	8 - 0	2-7/8	1-5/8
	11 - 0	3	2-1/8
40.0	13 - 1	3-3/4	2-3/4
	5 - 0	2-7/8	1-1/2
	7 - 0	2-7/8	1-5/8
	8 - 0	2-7/8	1-5/8
50.0	11 - 0	3	2-1/4
	12 - 11	3-3/4	3
	5 - 0	2-7/8	1-1/2
	7 - 0	2-7/8	1-5/8
60.0	8 - 0	2-7/8	1-3/4
	11 - 0	3	2-1/2
	12 - 2	3-3/4	3
	5 - 0	2-7/8	1-1/2
70.0	7 - 0	2-7/8	1-5/8
	8 - 0	2-7/8	1-7/8
	11 - 0	3	1-3/4
	11 - 8	3-3/4	3
80.0	9 - 6	3	2-1/4
	10 - 4	3	2-5/8
	5 - 0	2-7/8	1-1/2
	7 - 0	2-7/8	1-3/4
90.0	8 - 0	2-7/8	1-7/8
	11 - 0	3-1/8	3-1/8
	12 - 1	4	4
	5 - 0	2-7/8	1-1/2
100.0	7 - 0	2-7/8	1-3/4
	8 - 0	2-7/8	2
	11 - 0	3-3/8	3-3/8
	11 - 6	3-7/8	4
100.0	5 - 0	2-7/8	1-1/2
	7 - 0	2-7/8	1-3/4
	8 - 0	2-7/8	2
	9 - 0	3	2-3/4
100.0	10 - 3	3	3

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 05-0906.02
Expiration Date 01/10/2011
By *Helmut A. M...*
Miami Dade Product Control Division

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NOV 08 2005

revisions table with columns: no, date, by, description

HTSG I.D. # 05110805509D

date 09/14/2005
scale AS NOTED
design by VJK
checked by VJK
drawing no. 05-570
sheet 5 of 7

ANCHOR SCHEDULE

FASTENER MAXIMUM SPACING (INCHES) REQUIRED FOR VARIOUS DESIGN LOADS AND SPANS

EXIST. STRUC.	ANCHOR TYPE	LOAD (W) P.S.F. MAX. (SEE NOTE 1)	MIN. 2" EDGE DISTANCE																				MIN. 3" EDGE DISTANCE																			
			SPANS UP TO 5'-8"					SPANS UP TO 8'-0"					SPANS UP TO 9'-0"					SPANS UP TO 13'-1"					SPANS UP TO 5'-8"					SPANS UP TO 8'-0"					SPANS UP TO 9'-0"					SPANS UP TO 13'-1"				
			(SEE NOTE 1)					(SEE NOTE 1)					(SEE NOTE 1)					(SEE NOTE 1)					(SEE NOTE 1)					(SEE NOTE 1)					(SEE NOTE 1)					(SEE NOTE 1)				
			CONNECTION TYPE (SEE NOTE 3)					CONNECTION TYPE (SEE NOTE 3)					CONNECTION TYPE (SEE NOTE 3)					CONNECTION TYPE (SEE NOTE 3)					CONNECTION TYPE (SEE NOTE 3)					CONNECTION TYPE (SEE NOTE 3)					CONNECTION TYPE (SEE NOTE 3)					CONNECTION TYPE (SEE NOTE 3)				
	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5		
HOLLOW CONCRETE BLOCK		45.0	12	12	12	7	4	9	9	9	5	3	8	8	8	4	5	3	3	3	12	12	12	8	5	10	10	10	6	3	9	9	9	5	3	6	3	3	3			
		57.0	10	10	10	5	3	7	7	7	4	6	5	5	3	4	11	11	11	6	4	8	8	8	4	7	5	6	4	7	5	6	4	5	3	3	3					
		73.0	7	7	7	4	5	3	3	3	4	4	4	4	4	4	8	8	8	5	3	6	3	3	3	5	5	3	3	5	3	3	3	5	3	3	3					
		105.0	5	5	5	3	4	4	4	4	4	4	4	4	4	4	6	6	6	3	3	5	5	5	3	5	5	3	3	5	3	3	3	5	3	3	3					
		170.0	4	4	4	3	4	4	4	4	4	4	4	4	4	4	5	5	5	3	3	5	5	5	3	5	5	3	3	5	3	3	3	5	3	3	3					
		45.0	12	12	12	7	5	11	11	11	5	3	10	10	10	4	3	7	3	3	3	12	12	12	7	4	12	12	12	8	5	12	12	12	7	4	8	4	4	5	3	
		57.0	12	12	12	6	4	9	9	9	4	8	6	7	3	5	12	12	12	9	5	11	11	11	6	4	10	8	9	5	3	7	7	7	4	10	8	9	5	3		
		73.0	10	10	10	4	3	7	4	3	3	6	5	3	3	5	12	12	12	7	4	9	5	4	5	3	8	3	3	4	7	7	7	4	7	7	7	4	7	7	7	4
		105.0	7	3	3	3	5	5	5	5	5	5	5	5	5	5	8	4	4	5	3	7	7	7	4	7	7	7	4	7	7	7	4	7	7	7	4	7	7	7	4	
		170.0	5	5	5	3	5	5	5	5	5	5	5	5	5	5	7	7	7	4	4	7	7	7	4	7	7	7	4	7	7	7	4	7	7	7	4	7	7	7	4	
		45.0	12	12	12	7	4	8	8	8	5	3	7	7	7	4	5	8	4	4	3	12	12	12	9	5	9	9	9	6	3	8	8	8	5	3	6	3	3	3		
		57.0	9	9	9	6	3	6	6	6	4	6	4	5	3	4	10	10	10	7	4	7	7	7	5	6	5	6	4	4	4	4	4	4	4	4	4	4	4			
		73.0	7	7	7	4	5	3	3	3	4	4	4	4	4	4	8	8	8	5	3	6	3	3	4	5	5	3	3	4	4	4	4	4	4	4	4	4	4	4		
		105.0	5	5	5	3	4	4	4	4	4	4	4	4	4	4	6	6	6	3	3	4	4	4	3	4	4	4	3	4	4	4	4	4	4	4	4	4	4	4		
		170.0	4	4	4	3	4	4	4	4	4	4	4	4	4	4	5	5	5	3	3	4	4	4	3	4	4	4	3	4	4	4	4	4	4	4	4	4	4	4		
		45.0	12	12	12	9	5	12	12	12	6	4	11	11	11	5	3	8	4	4	3	12	12	12	10	6	12	12	12	7	4	12	12	12	6	4	8	4	4	4		
		57.0	12	12	12	7	4	10	10	10	5	3	9	7	8	4	6	6	6	3	3	12	12	12	8	5	10	10	10	5	3	9	7	8	5	3	6	3	3	3		
		73.0	11	11	11	5	3	8	4	4	3	7	3	3	3	6	6	6	3	3	3	12	12	12	6	4	8	4	4	4	7	3	3	4	6	3	3	3	3	3		
		105.0	8	4	4	3	6	6	6	3	3	6	6	6	3	6	6	6	3	3	3	8	4	4	4	6	6	6	3	6	6	6	3	6	6	6	3	6	6	6	3	
		170.0	6	6	6	3	6	6	6	3	3	6	6	6	3	6	6	6	3	3	3	6	6	6	3	6	6	6	3	6	6	6	3	6	6	6	3	6	6	6	3	
	45.0	12	12	12	10	5	11	11	11	7	4	10	10	10	6	3	7	3	3	4	12	12	12	12	7	12	12	12	9	5	12	12	12	8	4	8	4	4	5	3		
	57.0	12	12	12	8	4	9	9	9	5	3	8	6	7	5	5	5	5	3	3	12	12	12	10	5	11	11	11	7	4	10	8	9	6	3	7	7	7	4			
	73.0	10	10	10	6	3	7	4	3	4	6	5	3	3	5	5	5	3	3	3	12	12	12	7	4	8	5	4	5	3	7	3	3	4	7	7	7	4	7	7	7	4
	105.0	7	3	3	4	5	5	5	5	5	5	5	5	5	5	6	6	6	3	3	8	4	4	5	3	7	7	7	4	7	7	7	4	7	7	7	4	7	7	7	4	
	170.0	5	5	5	3	5	5	5	5	5	5	5	5	5	5	7	7	7	4	4	7	7	7	4	7	7	7	4	7	7	7	4	7	7	7	4	7	7	7	4		
	45.0	12	12	12	10	5	11	11	11	7	4	10	10	10	6	3	7	3	3	4	12	12	12	12	7	12	12	12	9	5	12	12	12	8	4	8	4	4	5	3		
	57.0	12	12	12	8	4	9	9	9	5	3	8	6	7	5	5	5	5	3	3	12	12	12	10	5	11	11	11	7	4	10	8	9	6	3	7	7	7	4			
	73.0	10	10	10	6	3	7	4	3	4	6	5	3	3	5	5	5	3	3	3	12	12	12	7	4	8	5	4	5	3	7	3	3	4	7	7	7	4	7	7	7	4
	105.0	7	3	3	4	5	5	5	5	5	5	5	5	5	5	6	6	6	3	3	8	4	4	5	3	7	7	7	4	7	7	7	4	7	7	7	4	7	7	7	4	
	170.0	5	5	5	3	5	5	5	5	5	5	5	5	5	5	7	7	7	4	4	7	7	7	4	7	7	7	4	7	7	7	4	7	7	7	4	7	7	7	4		

ANCHOR NOTES:

- SPANS AND LOADS SHOWN HERE ARE FOR DETERMINING ANCHOR SPACING ONLY. ALLOWABLE STORM SHUTTER SPANS FOR SPECIFIC LOADS MUST BE LIMITED TO THOSE SHOWN IN TABLE 1, PAGE 5.
- 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.
- EXISTING STRUCTURE MAY BE CONCRETE, HOLLOW BLOCK OR WOOD FRAMING. REFERENCE ANCHOR SCHEDULE FOR PROPER ANCHOR TYPE BASED ON TYPE OF EXISTING STRUCTURE AND APPROPRIATE CONNECTION TYPE. SEE MOUNTING SECTION DETAILS FOR IDENTIFICATION OF CONNECTION TYPE.
- ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
- MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES WALL FINISH OR STUCCO.
- WHERE EXISTING STRUCTURE IS WOOD FRAMING, WOOD FRAMING CONDITIONS VARY. FIELD VERIFY THAT FASTENERS ARE INTO ADEQUATE WOOD FRAMING MEMBERS, NOT PLYWOOD. FASTENING TO PLYWOOD 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 SCREWS 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.O.N.
- DESIGNATES ANCHOR CONDITIONS WHICH ARE NOT ACCEPTABLE USES.
- * DESIGNATES ANCHORS WHICH ARE REMOVABLE BY REMOVING MACHINE SCREW, NUT OR WASHERED WINGNUT.
- FOR BUILD-OUT MOUNT SECTION (D) ANCHOR SPACING SHALL NOT EXCEED 8-1/2" O.C.
- FOR BUILD-OUT MOUNT SECTION (E) ANCHOR SPACING SHALL NOT EXCEED 6" O.C.

PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No. 05-0906.02
 Expiration Date 01/18/2011

By: *Herb A. Nelson*
 Miami Dade Product Control
 Division

revisions	description	date	by
0	PREVIOUSLY DRAWING NO. 02-458	08/14/05	VJK
date	09/14/2005	scale	AS NOTED
drawn by	MCR	checked by	VJK
drawing no.	05-570	sheet	7 of 7

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NOV 08 2005

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