



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

CONTRACTOR LICENSING SECTION
(305) 375-2527 FAX (305) 375-2558

CONTRACTOR ENFORCEMENT DIVISION
(305) 375-2966 FAX (305) 375-2908

PRODUCT CONTROL DIVISION
(305) 375-2902 FAX (305) 372-6339

PRODUCT CONTROL NOTICE OF ACCEPTANCE

Awning, Shutters & Screens, Inc.
1631 S. Dixie Hwy, Bldg D-1
Pompano Beach ,FL 33060

Your application for Notice of Acceptance (NOA) of:

"Big Bertha" Aluminum Accordion Shutter

under Chapter 8 of the Code of Miami-Dade County governing the use of Alternate Materials and Types of Construction, and completely described herein, has been recommended for acceptance by the Miami-Dade County Building Code Compliance Office (BCCO) under the conditions specified herein.

This NOA shall not be valid after the expiration date stated below. BCCO reserves the right to secure this product or material at any time from a jobsite or manufacturer's plant for quality control testing. If this product or material fails to perform in the approved manner, BCCO may revoke, modify, or suspend the use of such product or material immediately. BCCO reserves the right to revoke this approval, if it is determined by BCCO that this product or material fails to meet the requirements of the South Florida Building Code.

The expense of such testing will be incurred by the manufacturer.

ACCEPTANCE NO.: 01-0813.01
EXPIRES: 08/10/2006

Raul Rodriguez
Chief Product Control Division

**THIS IS THE COVERSHEET, SEE ADDITIONAL PAGES FOR SPECIFIC AND GENERAL
CONDITIONS
BUILDING CODE & PRODUCT REVIEW COMMITTEE**

This application for Product Approval has been reviewed by the BCCO and approved by the Building Code and Product Review Committee to be used in Miami-Dade County, Florida under the conditions set forth above.

Francisco J. Quintana, R.A.
Director
Miami-Dade County
Building Code Compliance Office

APPROVED: 09/13/2001

Awnings, Shutters & Screens, Inc.

ACCEPTANCE No. : 01-0813.01

APPROVED : 09/13/2001

EXPIRES : 08/10/2006

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

1. SCOPE

This renews the Notice of Acceptance No. 99-0930.02, which was issued on December 24, 1999. It approves an aluminum accordion type shutter, as described in Section 2 of this Notice of Acceptance, designed to comply with the South Florida Building Code, 1994 Edition for Miami-Dade County, for the locations where the pressure requirements, as determined by SFBC Chapter 23, do not exceed the Design Pressure Rating values indicated in the approved drawings.

2. PRODUCT DESCRIPTION

This aluminum accordion type shutter and its components shall be constructed in strict compliance with the following documents: Drawing No. 99-278, titled "Accordion Shutter," prepared by Tilteco Inc., dated September 3, 1999, last revision #1 dated September 3, 1999, sheets 1 through 6 of 6, bearing the Miami-Dade County Product Control approval and renewal stamps with the Notice of Acceptance numbers and approval dates by the Miami-Dade County Product Control Division. These documents shall hereinafter be referred to as the approved drawings.

3. LIMITATIONS

All permanent set components, included but not limited to embedded anchor bolts, threaded cones, metal shields, headers and sills, must be protected against corrosion, contamination and damage at all times.

4. INSTALLATION

This aluminum accordion type shutter and its components shall be installed in strict compliance with the approved drawings.

5. 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".

6. BUILDING PERMIT REQUIREMENTS

6.1 Application for building permit shall be accompanied by copies of the following:

6.1.1 This Notice of Acceptance.

6.1.2 Duplicate copies of the approved drawings, as identified in Section 2 of this Notice of Acceptance, clearly marked to show the components selected for the proposed installation.

6.1.3 Any other documents required by the Building Official or the South Florida Building Code (SFBC) in order to properly evaluate the installation of this system.



Helmy A. Makar, P.E. - Product Control Examiner
Product Control Division

Awnings, Shutters & Screens, Inc.

ACCEPTANCE No. : 01-0813.01

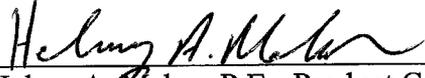
APPROVED : 09/13/2001

EXPIRES : 08/10/2006

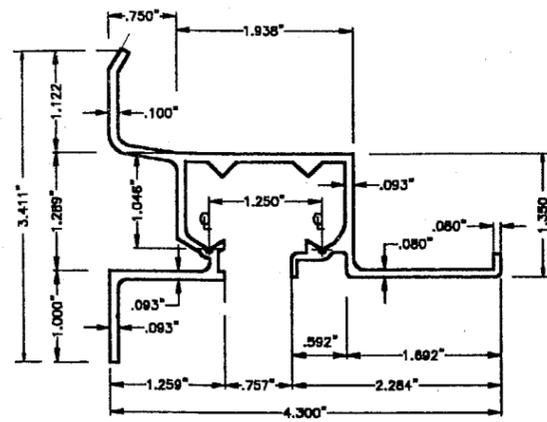
NOTICE OF ACCEPTANCE: STANDARD CONDITIONS

1. Renewal of this Acceptance (approval) shall be considered after a renewal application has been filed and the original submitted documents, including test-supporting data, engineering documents, are no older than eight (8) years.
2. Any and all approved products shall be permanently labeled with the manufacturer's name, city, state, and the following statement: "Miami-Dade County Product Control Approved", or as specifically stated in the specific conditions of this Acceptance.
3. Renewals of Acceptance will not be considered if:
 - a. There has been a change in the South Florida Building Code affecting the evaluation of this product and the product is not in compliance with the code changes.
 - b. The product is no longer the same product (identical) as the one originally approved.
 - c. If the Acceptance holder has not complied with all the requirements of this acceptance, including the correct installation of the product.
 - d. The engineer, who originally prepared, signed and sealed the required documentation initially submitted, is no longer practicing the engineering profession.
4. Any revision or change in the materials, use, and/or manufacture of the product or process shall automatically be cause for termination of this Acceptance, unless prior written approval has been requested (through the filing of a revision application with appropriate fee) and granted by this office.
5. Any of the following shall also be grounds for removal of this Acceptance:
 - a. Unsatisfactory performance of this product or process.
 - b. Misuse of this Acceptance as an endorsement of any product, for sales, advertising or any other purposes.
6. The Notice of Acceptance 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 Notice of Acceptance is displayed, then it shall be done in its entirety.
7. A copy of this Acceptance as well as approved drawings and other documents, where it applies, shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at all time. The engineer needs not reseal the copies.
8. Failure to comply with any section of this Acceptance shall be cause for termination and removal of Acceptance.
9. This Notice of Acceptance consists of pages 1, 2 and this last page 3.

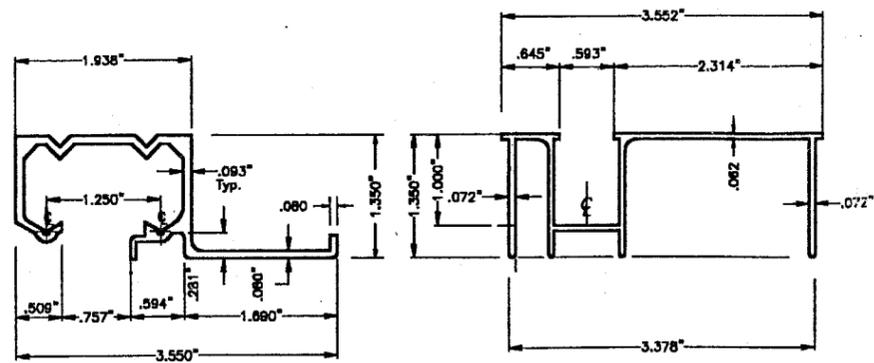
END OF THIS ACCEPTANCE



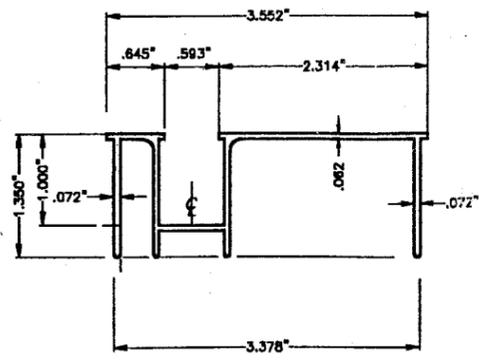
Helmy A. Makar, P.E.- Product Control Examiner
Product Control Division



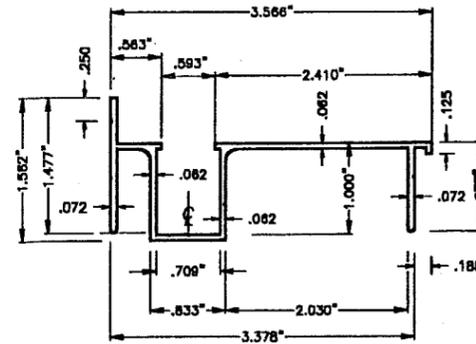
(A) HEADER
SCALE: 1/2" = 1"



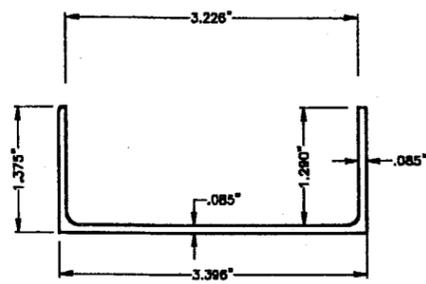
(B) HEADER
SCALE: 1/2" = 1"



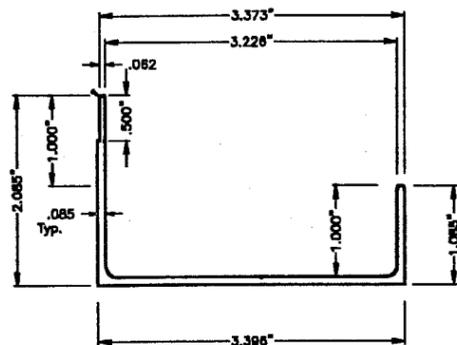
(C) SILL
SCALE: 1/2" = 1"



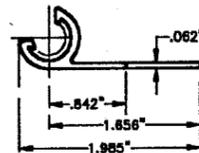
(C1) SILL
SCALE: FULL



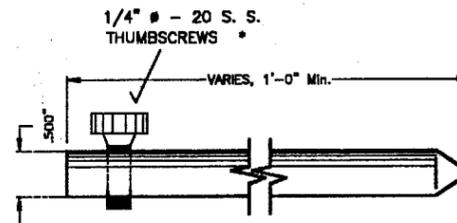
(D) SILL ADAPTOR
SCALE: 1/2" = 1"



(D1) SILL ADAPTOR
SCALE: FULL

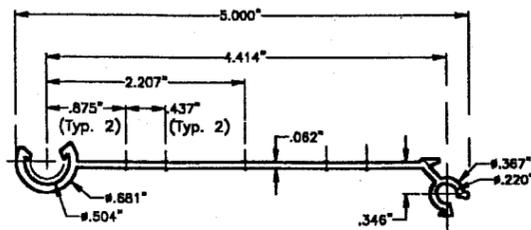


(F) 180° STARTER
SCALE: 1/2" = 1"

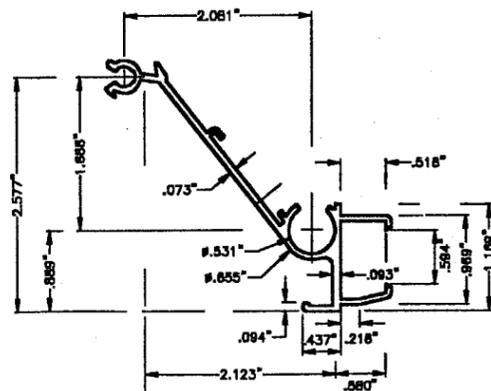


(G) LOCKING PIN
SCALE: 1/2" = 1"

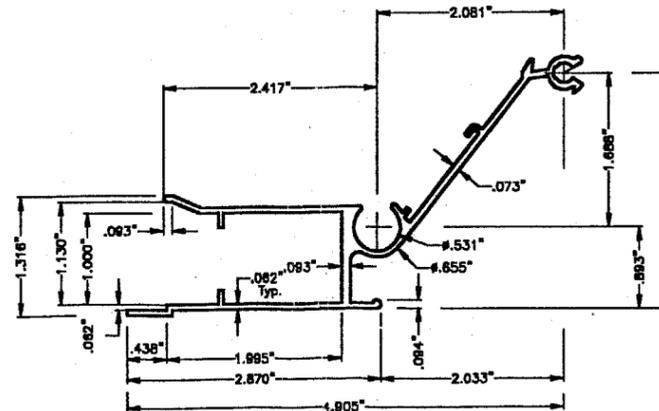
* THUMBSCREWS CAN ALSO BE FLAT HEAD TYPE.



(H) BLADE
SCALE: 1/2" = 1"



(I) MALE LOCK SLAT
SCALE: 1/2" = 1"



(J) FEMALE LOCK SLAT
SCALE: 1/2" = 1"

COMPONENTS

Drawn by [Signature]
9/7/99

GENERAL NOTES:

- ACCORDION SHUTTER HAS BEEN DESIGNED IN ACCORDANCE WITH THE DADE COUNTY, 1994 EDITION OF THE SOUTH FLORIDA BUILDING CODE. DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTION 6 OF ASCE 7-88, WITH 110 m.p.h. BASIC WIND SPEED. ACCORDION SHUTTER'S ADEQUACY FOR IMPACT AND FATIGUE RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTIONS 2315 & 2314 RESPECTIVELY OF THE ABOVE MENTIONED CODE.
- STAINLESS STEEL SHEET METAL SCREWS USED AT LOUVER PIN SHALL BE # 14 x 3", 410-HT MINIMUM SERIES W/ 135.0 ksi YIELD POINT & 180 ksi TENSILE STRENGTH. SCREWS SHALL BE COATED WITH XYLAN 6000 SERIES FLUOROPOLYMER COATINGS AS MANUFACTURED BY WHITFORD Co., BOX 507, WESTCHESTER PA. 19381.
- ALL ALUMINUM EXTRUSIONS SHALL BE 6063-T6 ALLOY (UNLESS OTHERWISE NOTED).
- ALL SCREWS TO BE STAINLESS STEEL 304 OR 316 SERIES W/ 50 ksi YIELD POINT AND 90 ksi TENSILE STRENGTH.
- ALL ALUMINUM POP RIVETS TO BE 5052 ALUMINUM ALLOY WITH ALUMINUM MANDREL.
- BOLTS TO BE 2024-T4 ALUMINUM ALLOY GALVANIZED OR STAINLESS STEEL WITH 36 ksi MINIMUM YIELD POINT.
- ANCHORS TO WALL SHALL BE AS FOLLOWS: (UNLESS OTHERWISE NOTED)
 - (A) TO EXISTING POURED CONCRETE:
 - 1/4" # TAPCON ANCHORS, AS MANUFACTURED BY I.T.W. RAMSET OR ELCO INDUSTRIES, INC.
 - 1/4" # RAWL ZAMAC NAILIN ANCHORS, AS MANUFACTURED BY THE RAWL PLUG COMPANY, INC.
 - 1/4" # x 7/8" RAWL CALK-IN AS MANUFACTURED BY THE RAWL PLUG COMPANY, INC.
 - NOTES:
 - A.1) MINIMUM EMBEDMENT OF TAPCON ANCHORS INTO POURED CONCRETE IS 1 3/4", AND FOR RAWL ZAMAC NAILIN IS 1 3/8".
 - A.2) 7/8" RAWL CALK-IN ANCHORS SHALL BE ENTIRELY EMBEDDED INTO THE POURED CONCRETE. NO EMBEDDED INTO STUCCO SHALL BE PERMITTED. 1/4" # -20 SCREWS USED SHALL BE 1 1/2" LONG MINIMUM SHOULD STUCCO EXIST.
 - A.3) IN CASE THAT PRECAST STONE, PRECAST CONCRETE PANELS, OR PAVERS BE FOUND ON THE EXISTING WALL OR FLOOR, ANCHORS SHALL BE LONG ENOUGH TO REACH THE MAIN STRUCTURE BEHIND SUCH PANELS. ANCHORAGE SHALL BE AS INDICATED ON NOTES A.1) & A.2) ABOVE.
 - (B) TO EXISTING CONCRETE BLOCK WALL:
 - 1/4" # TAPCON ANCHORS AS MANUFACTURED BY I.T.W. RAMSET OR ELCO INDUSTRIES, INC.
 - 1/4" # RAWL ZAMAC NAILIN ANCHORS, AS MANUFACTURED BY THE RAWL PLUG COMPANY, INC.
 - 1/4" # x 7/8" RAWL CALK-IN AS MANUFACTURED BY THE RAWL PLUG COMPANY, INC.
 - NOTES:
 - B.1) MINIMUM EMBEDMENT OF TAPCON ANCHORS AND ZAMAC NAILIN ANCHORS INTO THE CONCRETE BLOCK UNIT SHALL BE 1 1/4".
 - B.2) 7/8" RAWL CALK-IN ANCHORS SHALL BE ENTIRELY EMBEDDED INTO THE CONCRETE BLOCK UNIT. NO EMBEDDED INTO STUCCO SHALL BE PERMITTED. 1/4" # -20 SCREWS USED SHALL BE 1 1/2" LONG MINIMUM SHOULD STUCCO EXIST.
 - B.3) IN CASE THAT PRECAST STONE OR PRECAST CONCRETE PANELS BE FOUND ON THE EXISTING WALL, ANCHORS SHALL BE LONG ENOUGH TO REACH THE MAIN STRUCTURE BEHIND SUCH PANELS. ANCHORAGE SHALL BE 1 1/4" MINIMUM FOR ANCHORS MENTIONED IN B.1.) & B.2) ABOVE.
 - (C) ANCHORS SHALL BE INSTALLED FOLLOWING ALL OF THE RECOMENDATIONS AND SPECIFICATIONS OF THE ANCHOR'S MANUFACTURER.
- BLADE (H), AND THE KNUCKLES FOR CENTERMATES (D) & (D1), & STARTER (F) ARE UNDER THE PATENT OF EASTERN METALS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SOUNDNESS OF THE STRUCTURE WHERE SHUTTER IS TO BE ATTACHED TO INSURE PROPER ANCHORAGE.
- SHUTTER'S MANUFACTURER STAMP SHALL BE PLACED ON THE EXPOSED SURFACE OF THE FEMALE LOCK SLAT COMPONENT (J). ONE LABEL SHALL BE PLACED FOR EVERY OPENING. LABEL SHALL READ AS FOLLOWS: AWNINGS, SHUTTERS & SCREENS, INC. POMPANO BEACH, FLORIDA MIAMI-DADE COUNTY PRODUCT CONTROL APPROVED.

PRODUCT RENEWED

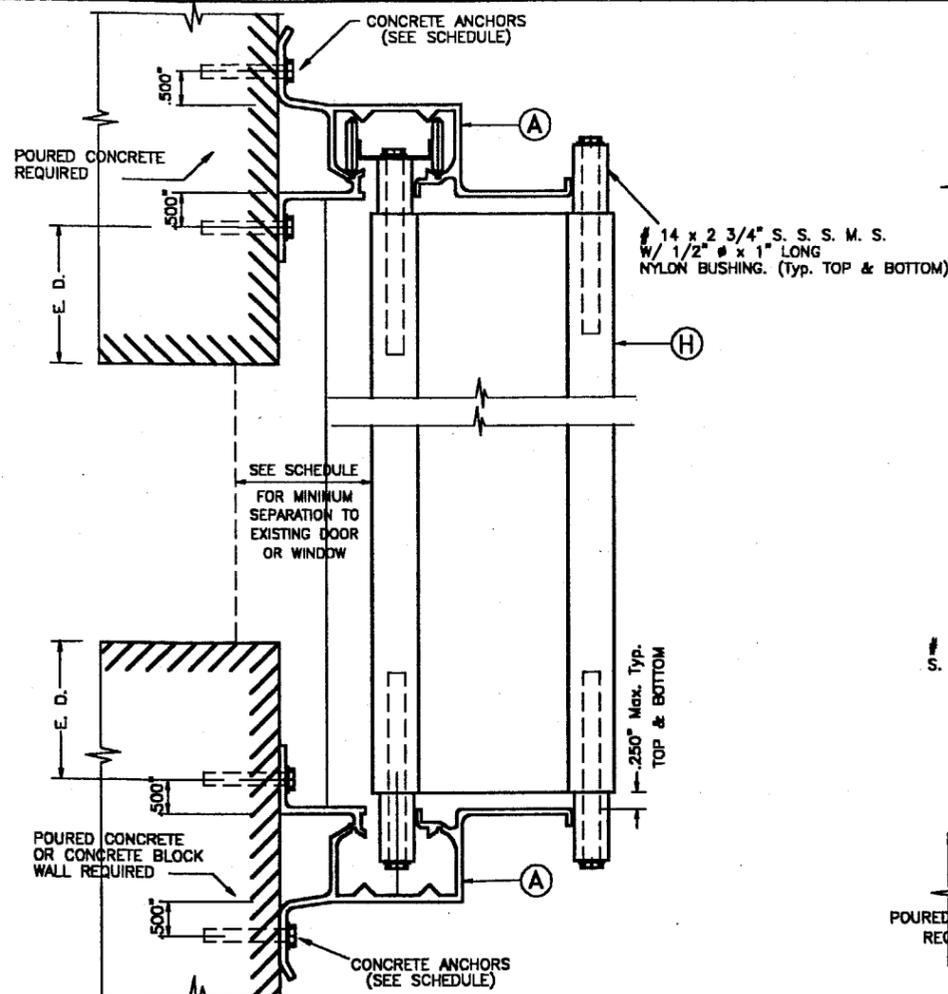
ACCEPTANCE No. 01-0813.01
EXPIRATION DAT. 08/10/2006
By *Helmy A. Matar*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE: *December 24, 1999*
BY *Helmy A. Matar*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. *99-0930.02*

MIAMI-DADE COUNTY

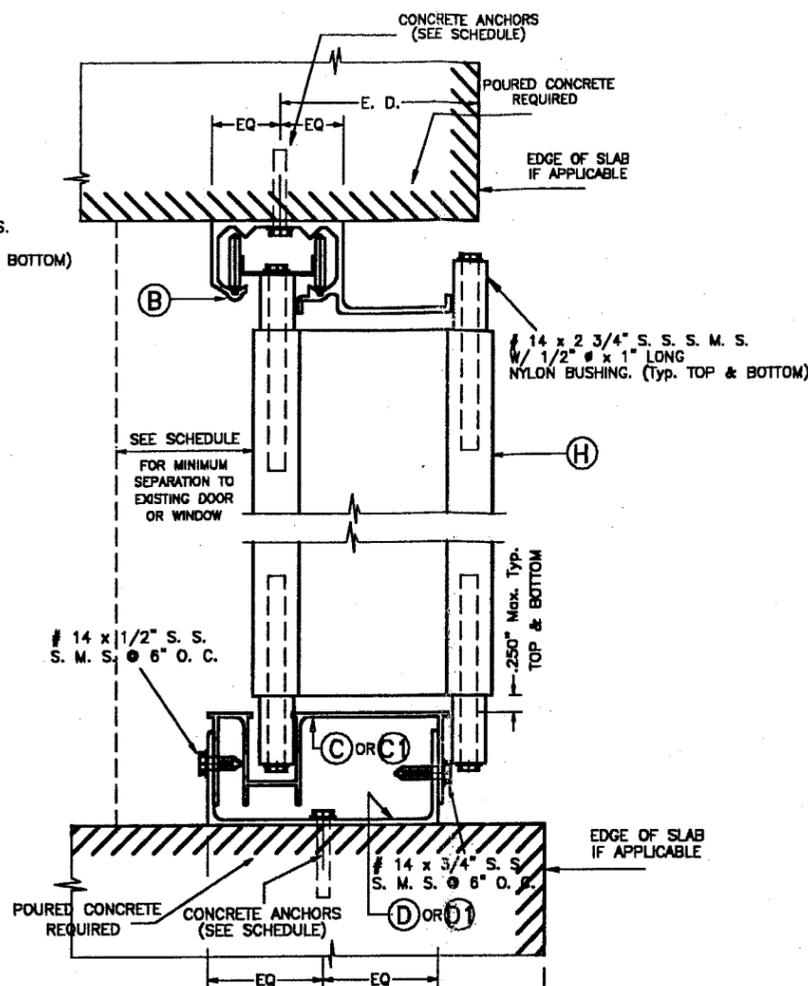
 TILECO Inc. TILLIT TESTING & ENGINEERING COMPANY 6565 N.W. 36th St., Ste. 217, VIRGINIA GARDENS, FLORIDA 33168 Phone: (305)871-1530 Fax: (305)871-1531 WALTER A. TILLIT, Jr., P. E. FLORIDA Lic. # 44167		ACCORDION SHUTTER AS SHOWN SCALE			
		AWNINGS, SHUTTERS & SCREENS, INC. 1631 S. DIXIE HWY. BLDG D-1 POMPANO BEACH, FLORIDA 33060			
		9/3/99 DATE			
		99 - 278 DRAWING No			
		SHEET 1 OF 6			
REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
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2			4		

99-0930.02



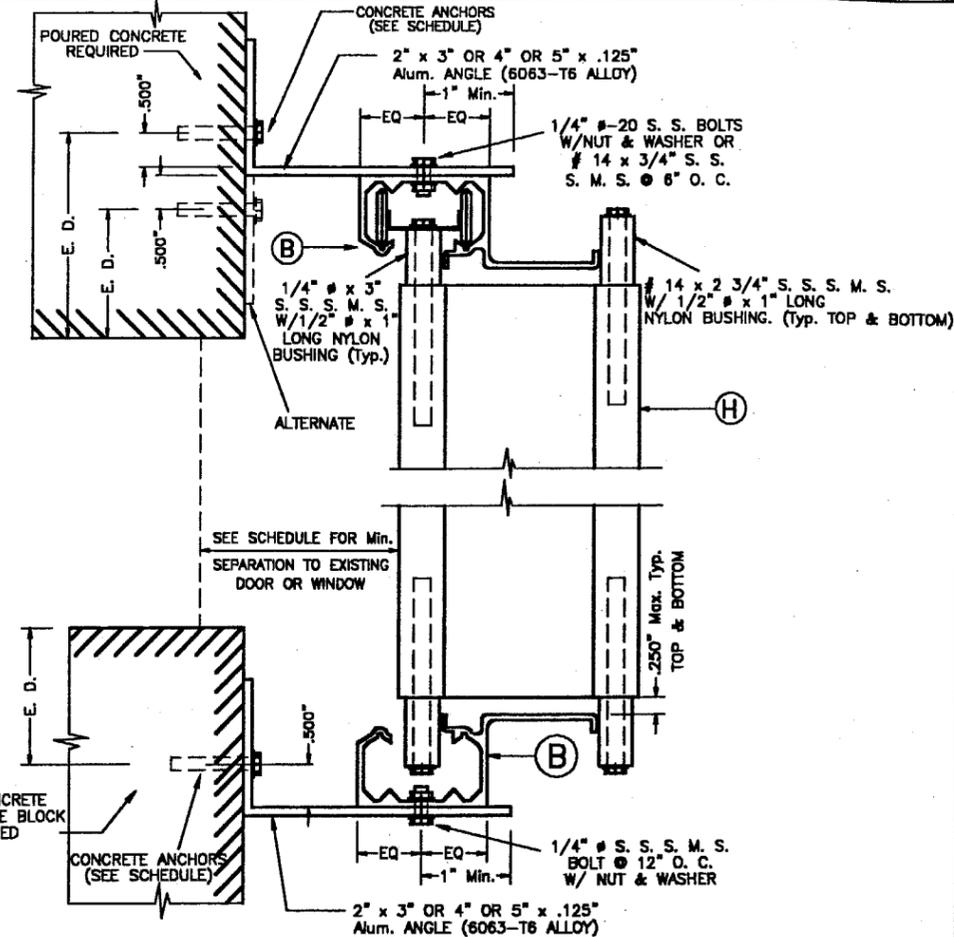
WALL MOUNTING INSTALLATION - SECTION A

SCALE: 3/8" = 1"



CEILING & FLOOR MOUNTING INSTALLATION - SECTION B

SCALE: 3/8" = 1"



WALL MOUNTING INSTALLATION (OFFSET) - SECTION C

SCALE: 3/8" = 1

PRODUCT RENEWED

ACCEPTANCE No. 01-0813.01

EXPIRATION DATE 08/10/2006

By Helmy A. Matar
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE

APPROVED AS COMPLYING WITH THE

SOUTH FLORIDA BUILDING CODE

DATE December 24, 1999

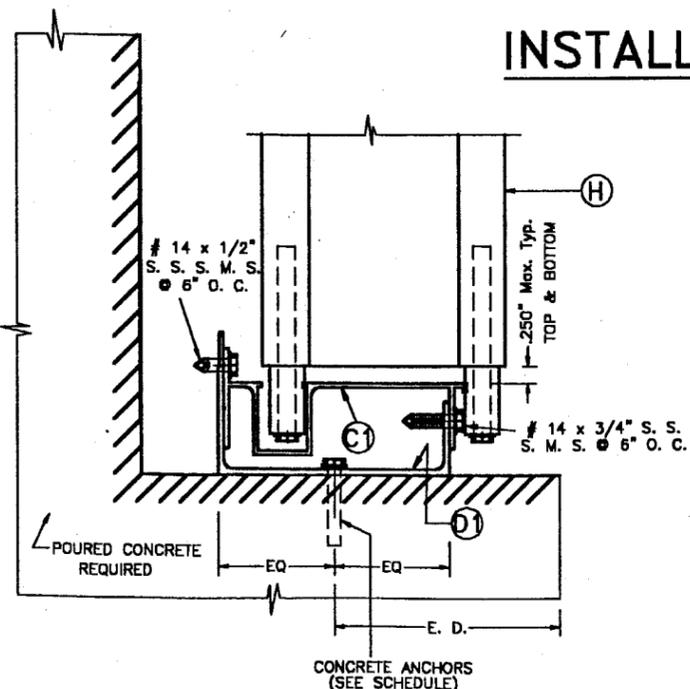
BY Helmy A. Matar

PRODUCT CONTROL DIVISION

BUILDING CODE COMPLIANCE OFFICE

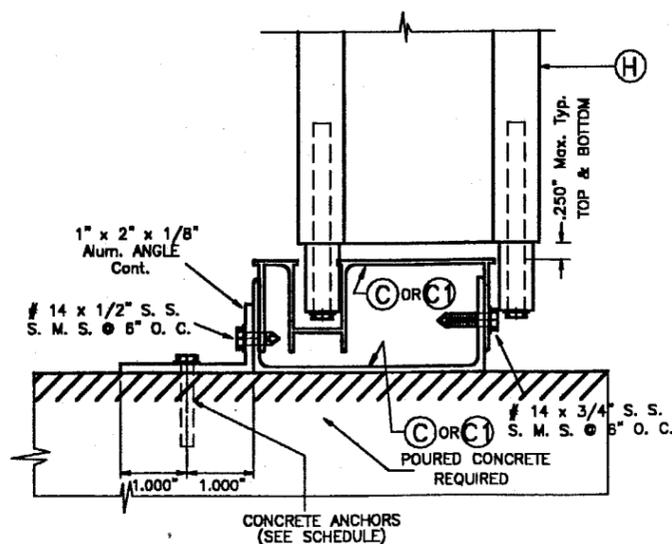
ACCEPTANCE No. 99-0930.02

MIAMI-DADE COUNTY



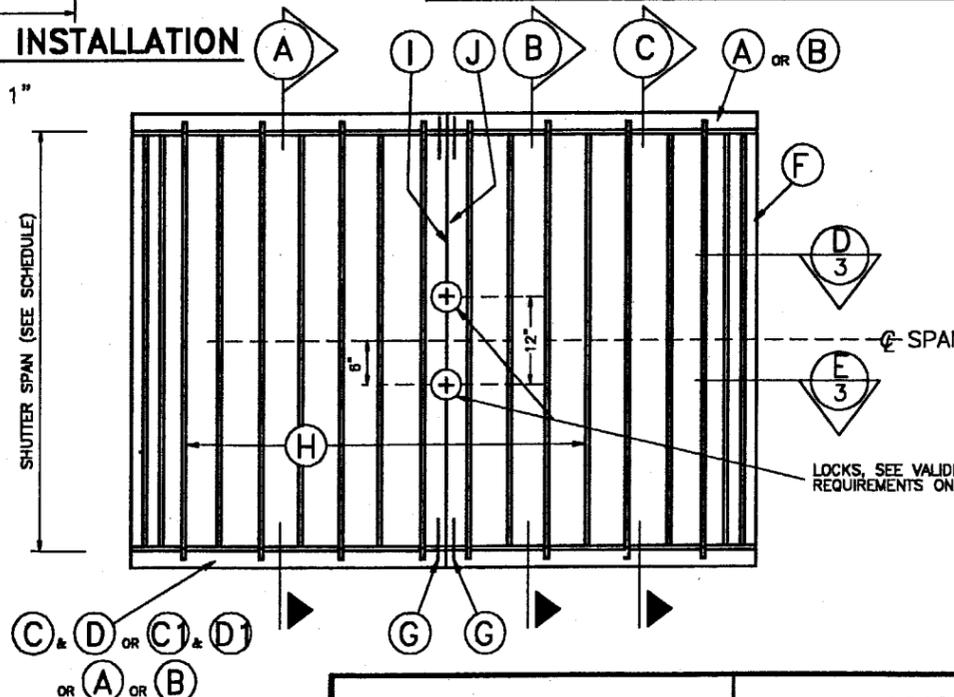
ALTERNATE FLOOR MOUNT. INSTALLAT. - SECTION B1

SCALE: 3/8" = 1"



REMOVABLE FLOOR MOUNTING INSTALLATION - SECTION B2

SCALE: 3/8" = 1"



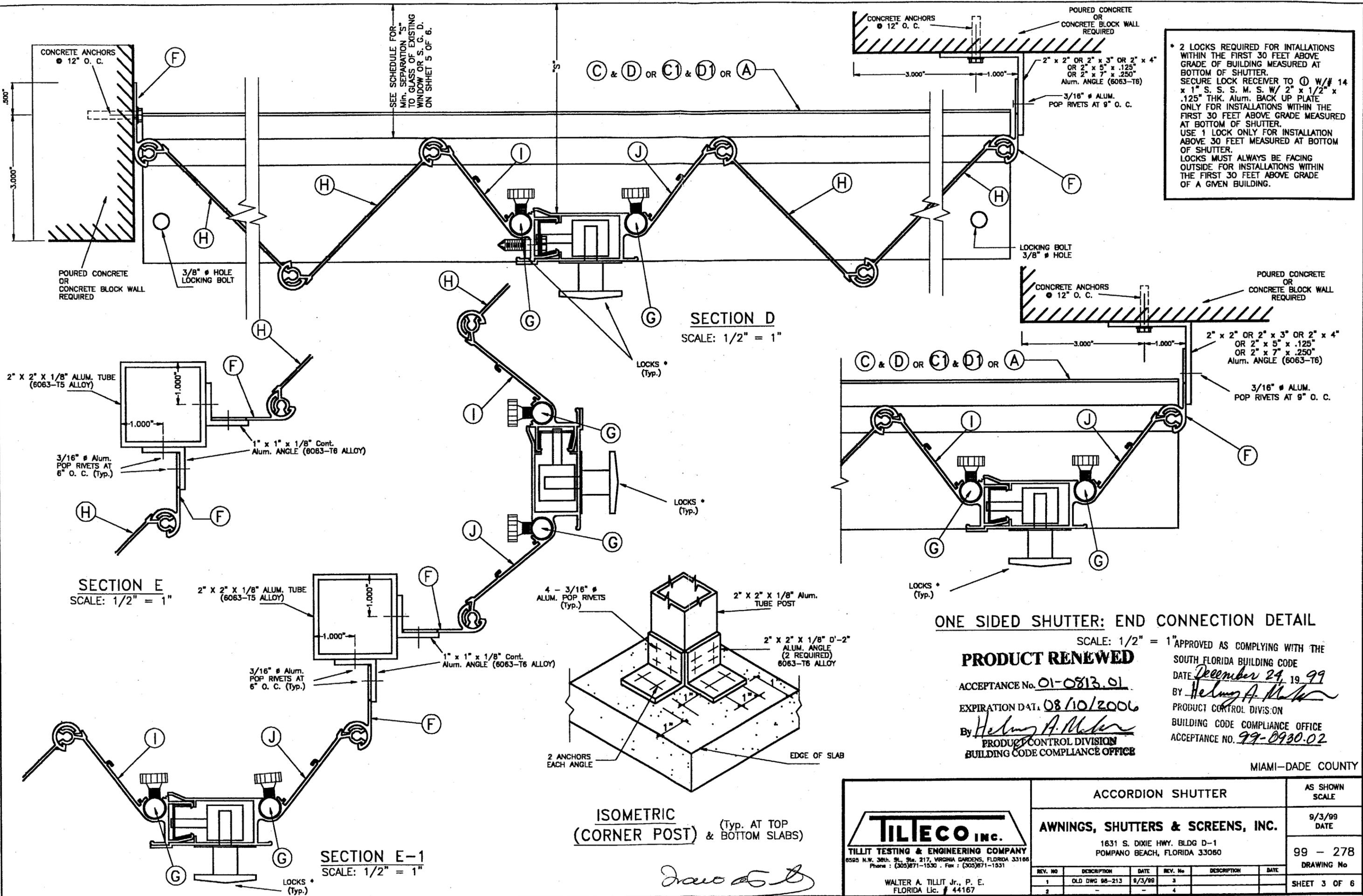
TYPICAL ELEVATION

N. T. S.

TILECO INC.
 TILLIT TESTING & ENGINEERING COMPANY
 8595 N.W. 36th St., Ste. 217, VIRGINIA GARDENS, FLORIDA 33166
 Phone: (305)871-1530 Fax: (305)871-1531
 WALTER A. TILLIT Jr., P. E.
 FLORIDA Lic. # 44167

ACCORDION SHUTTER				AS SHOWN SCALE	
AWNINGS, SHUTTERS & SCREENS, INC.				9/3/99 DATE	
1831 S. DIXIE HWY. BLDG D-1 POMPANO BEACH, FLORIDA 33060				99 - 278 DRAWING No	
REV. NO	DESCRIPTION	DATE	REV. NO	DESCRIPTION	DATE
1	OLD DWG 98-213	9/3/99	3		
2			4		

SHEET 2 OF 6



* 2 LOCKS REQUIRED FOR INSTALLATIONS WITHIN THE FIRST 30 FEET ABOVE GRADE OF BUILDING MEASURED AT BOTTOM OF SHUTTER. SECURE LOCK RECEIVER TO 14 x 1" S. S. M. S. W. 2" x 1/2" x .125" THK. Alum. BACK UP PLATE ONLY FOR INSTALLATIONS WITHIN THE FIRST 30 FEET ABOVE GRADE MEASURED AT BOTTOM OF SHUTTER. USE 1 LOCK ONLY FOR INSTALLATION ABOVE 30 FEET MEASURED AT BOTTOM OF SHUTTER. LOCKS MUST ALWAYS BE FACING OUTSIDE FOR INSTALLATIONS WITHIN THE FIRST 30 FEET ABOVE GRADE OF A GIVEN BUILDING.

ONE SIDED SHUTTER: END CONNECTION DETAIL

SCALE: 1/2" = 1"
PRODUCT RENEWED
 ACCEPTANCE No. 01-0813.01
 EXPIRATION DATE 08/10/2006
 By Helmy A. Mader
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
 DATE December 24, 1999
 BY Helmy A. Mader
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE
 ACCEPTANCE NO. 99-0930.02

MIAMI-DADE COUNTY

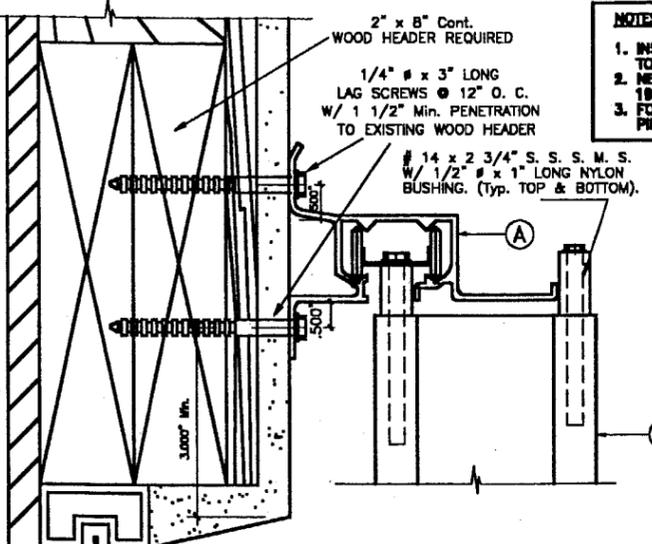
<p>TILLIT TESTING & ENGINEERING COMPANY 8585 N.W. 38th St., Ste. 217, VIRGINIA GARDENS, FLORIDA 33168 Phone: (305)871-1530 Fax: (305)871-1531 WALTER A. TILLIT Jr., P. E. FLORIDA Lic. # 44167</p>						ACCORDION SHUTTER AWNINGS, SHUTTERS & SCREENS, INC. 1631 S. DIXIE HWY. BLDG D-1 POMPANO BEACH, FLORIDA 33060		AS SHOWN SCALE
						REV. NO. DESCRIPTION DATE REV. NO. DESCRIPTION DATE		9/3/99 DATE
1 OLD DWG 98-213 8/3/98 3		99 - 278 DRAWING No						
2 - - - - 4		SHEET 3 OF 6						

ISOMETRIC (CORNER POST) (Typ. AT TOP & BOTTOM SLABS)

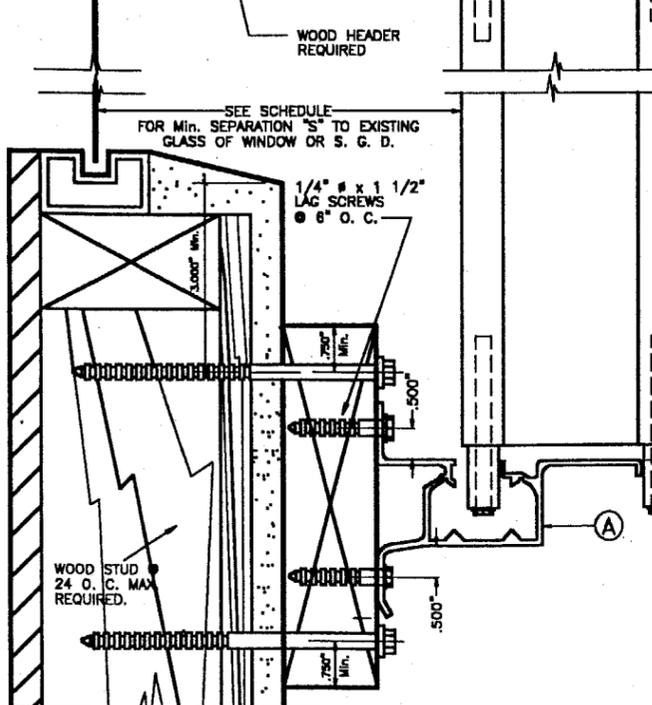
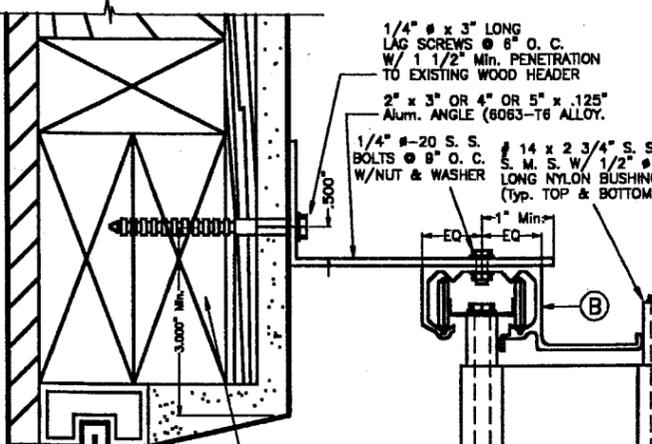
Drawn by [Signature]

- NOTES:**
1. INSTALLATIONS ARE ONLY VALID FOR BUILDINGS WITH DESIGN LOADS UP TO 75 p.s.f. AND 8'-0" Max. SHUTTER SPAN.
 2. NEW 2" x 8" P.T. TO BE SOUTHERN PINE No. 2, SURFACED DRY WITH 18% M. L. C. W/ SPECIFIC DENSITY OF 0.55.
 3. FOR NEW WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO BE SOUTHERN PINE No. 2, W/ SPECIFIC DENSITY OF 0.55 OR EQUAL.

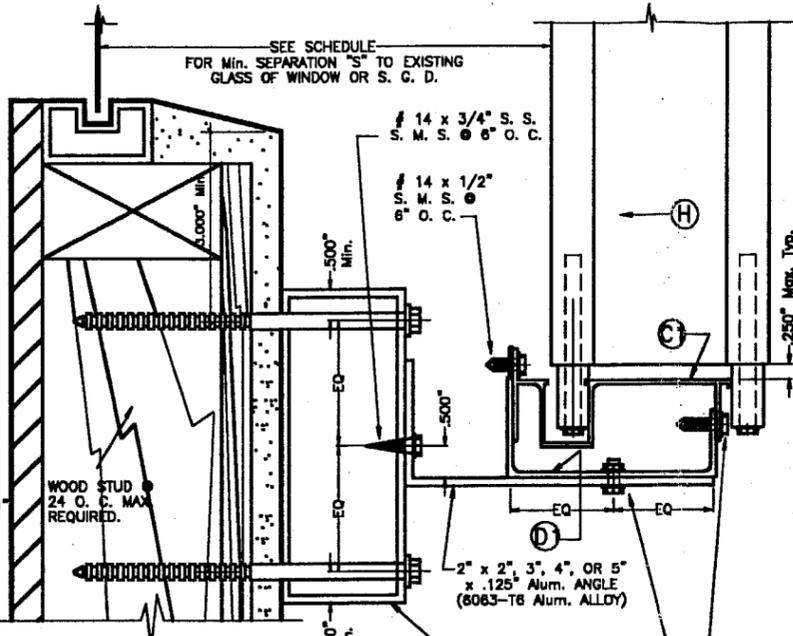
INSTALLATION DETAILS ON EXISTING WOOD BUILDINGS



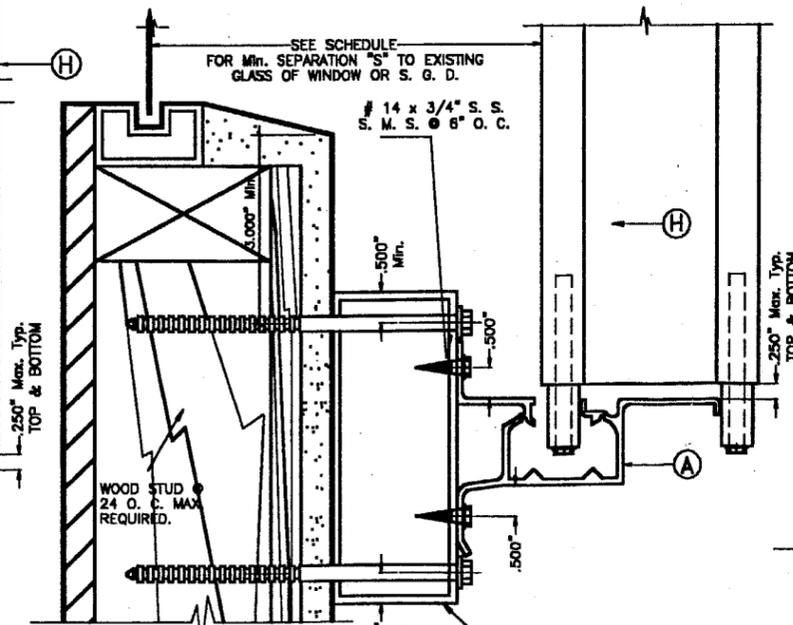
WALL MOUNTING INSTALLATION - SECTION A
SCALE: 3/4" = 1"



ALTERNATIVE 2

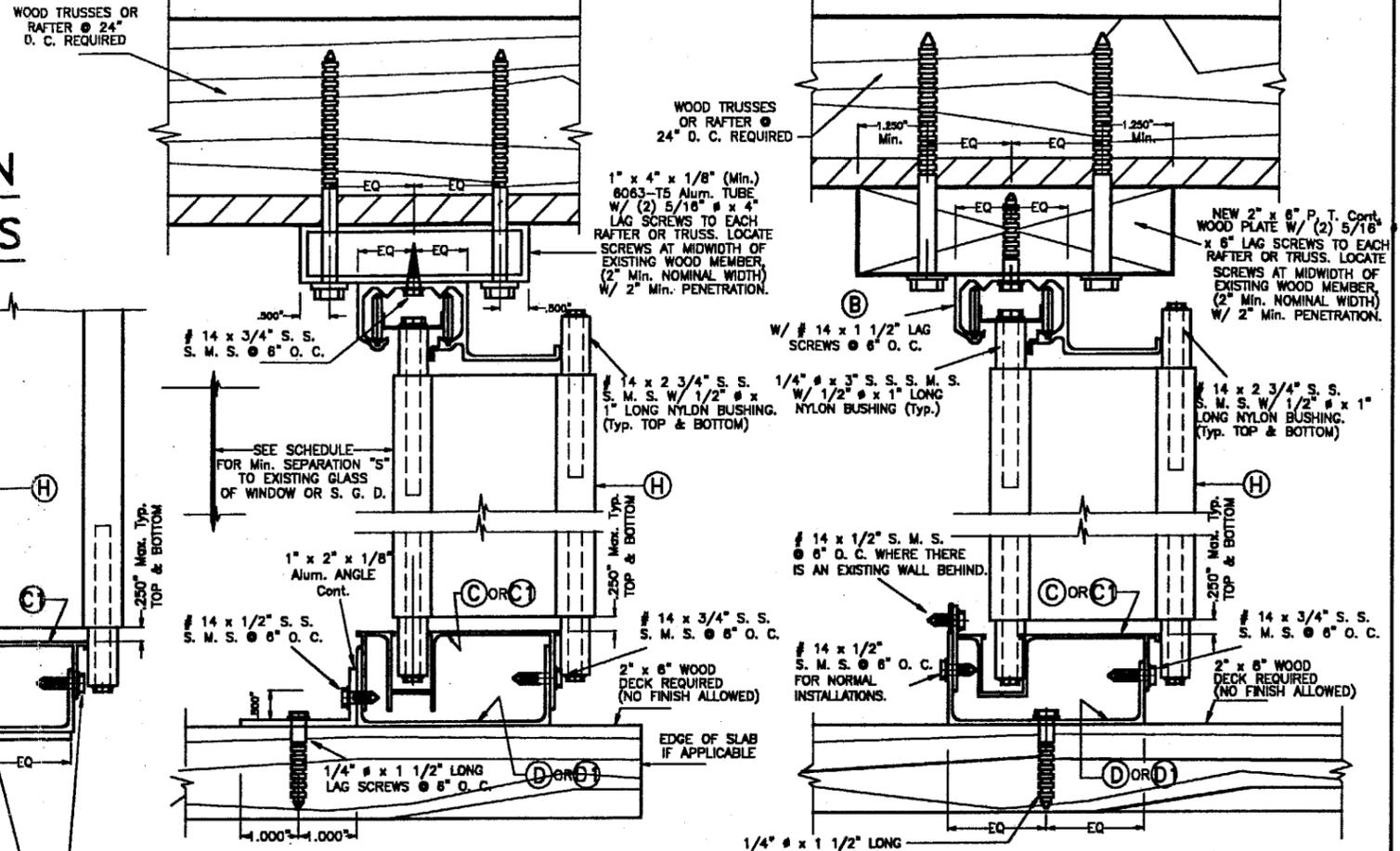


ALTERNATIVE 1

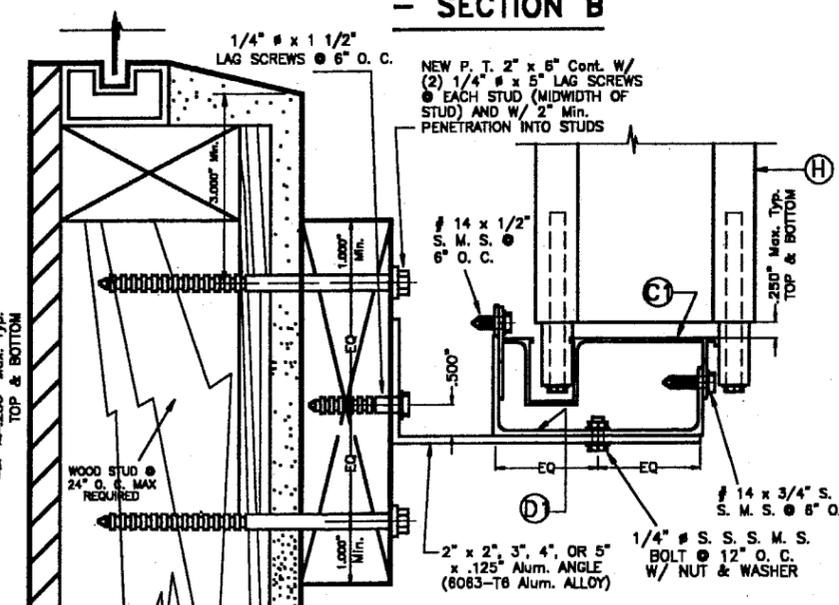


ALTERNATIVE 3

WALL MOUNTING INSTALLATION (OFFSET) - SECTION A1



ALTERNATIVE 1
ALTERNATIVE 2
CEILING & FLOOR MOUNTING INSTALLATION - SECTION B



ALTERNATIVE 4

PRODUCT RENEWED

ACCEPTANCE No. 01-0813.01
EXPIRATION DATE: 08/10/2006
By *Helmy A. Matar*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE: *December 24, 1999*
BY *Helmy A. Matar*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 99-0930.02

MIAMI-DADE COUNTY

 TILECO Inc. TILLIT TESTING & ENGINEERING COMPANY 6595 N.W. 30th St., Ste. 217, VIRGINIA GARDENS, FLORIDA 33186 Phone: (305)871-1530 Fax: (305)871-1531 WALTER A. TILLIT Jr., P. E. FLORIDA Lic. # 44167		AWNINGS, SHUTTERS & SCREENS, INC. 1631 S. DIXIE HWY. BLDG D-1 POMPANO BEACH, FLORIDA 33060		- SCALE 9/3/99 DATE 99 - 278 DRAWING No SHEET 4 OF 6
		ACCORDION SHUTTER	REV. NO. DESCRIPTION DATE 1 OLD DWG 98-213 9/3/99 2 - - -	REV. No. DESCRIPTION DATE 3 - - - 4 - - -

MAXIMUM DESIGN PRESSURE RATING "W" (p.s.f.) AND CORRESPONDING MAXIMUM SPAN "L" SCHEDULE.

NOTE: DESIGN PRESSURE RATING CORRESPONDS ONLY TO NEGATIVE PRESSURE (SUCTION) LOADS, IN ACCORDANCE WITH ASCE 7-88 CRITERIA FOR A GIVEN OPENING. IF NEGATIVE PRESSURE VALUES COMPLY WITH THE REQUIRED PRESSURE FOR THE OPENING, THE POSITIVE PRESSURE WILL AUTOMATICALLY QUALIFY AND NEED NOT TO BE CHECKED.

MAXIMUM DESIGN LOAD W (p.s.f.)	MAXIMUM PANEL SPAN L (ft.)		MINIMUM SEPARATION "S" TO GLASS (in.)	
	*	**	*	**
45.1	15'-7"	10'-11"	3"	2"
47.8	15'-1"	10'-9"	3"	2"
49.0	14'-11"	10'-8"	2 7/8"	2"
50.5	14'-8"	10'-7"	2 7/8"	2"
52.0	14'-6"	10'-6"	2 7/8"	2"
52.4	14'-5"	10'-6"	2 7/8"	2"
55.0	14'-1"	10'-5"	2 7/8"	2"
55.2	14'-1"	10'-5"	2 7/8"	2"
55.6	14'-0"	10'-5"	2 3/4"	2"
57.2	13'-10"	10'-4"	2 3/4"	2"
58.6	13'-8"	10'-3"	2 3/4"	2"
58.8	13'-8"	10'-3"	2 3/4"	2"
59.5	13'-7"	10'-2"	2 3/4"	2"
59.7	13'-6"	10'-2"	2 3/4"	2"
61.5	13'-4"	10'-2"	2 3/4"	2"
61.8	13'-4"	10'-1"	2 3/4"	2"
61.9	13'-3"	10'-1"	2 3/4"	2"
63.4	13'-1"	10'-1"	2 3/4"	2"
63.6	13'-1"	10'-0"	2 3/4"	2"
63.7	13'-1"	10'-0"	2 3/4"	2"
66.9	12'-9"	10'-0"	2 5/8"	2"
67.0	12'-9"	9'-11"	2 5/8"	2"
67.5	12'-9"	9'-11"	2 5/8"	2"
70.1	12'-6"	9'-10"	2 5/8"	2"
71.1	12'-5"	9'-9"	2 5/8"	2"
71.4	12'-4"	9'-9"	2 5/8"	2"
71.5	12'-4"	9'-9"	2 5/8"	2"
72.9	12'-3"	9'-8"	2 5/8"	2"
75.1	12'-1"	9'-8"	2 5/8"	2"
75.2	12'-1"	9'-8"	2 5/8"	2"
75.3	12'-0"	9'-7"	2 1/2"	2"
77.0	11'-11"	9'-7"	2 1/2"	2"
77.5	11'-10"	9'-7"	2 1/2"	2"
78.8	11'-9"	9'-6"	2 1/2"	2"
80.7	11'-8"	9'-6"	2 1/2"	2"
81.5	11'-7"	9'-5"	2 1/2"	2"
82.5	11'-6"	9'-5"	2 1/2"	2"
83.4	11'-5"	9'-5"	2 1/2"	2"
86.2	11'-3"	9'-4"	2 1/2"	2"
86.7	11'-3"	9'-3"	2 1/2"	2"

MAXIMUM DESIGN LOAD W (p.s.f.)	MAXIMUM PANEL SPAN L (ft.)		MINIMUM SEPARATION "S" TO GLASS (in.)	
	*	**	*	**
86.8	11'-3"	9'-3"	2 1/2"	2"
88.5	11'-1"	9'-3"	2 1/2"	2"
90.3	11'-0"	9'-2"	2 3/8"	2"
90.8	11'-0"	9'-2"	2 3/8"	2"
91.4	10'-11"	9'-2"	2 3/8"	2"
92.7	10'-10"	9'-2"	2 3/8"	2"
93.8	10'-10"	9'-1"	2 3/8"	2"
94.5	10'-9"	9'-1"	2 3/8"	2"
96.6	10'-8"	9'-1"	2 3/8"	2"
96.8	10'-7"	9'-0"	2 3/8"	2"
97.7	10'-7"	9'-0"	2 3/8"	2"
100.5	10'-5"	8'-11"	2 3/8"	2"
101.5	10'-5"	8'-11"	2 3/8"	2"
103.7	10'-3"	8'-11"	2 3/8"	2"
106.5	10'-2"	8'-10"	2 3/8"	2"
108.8	10'-0"	8'-9"	2 3/16"	2"
110.6	9'-11"	8'-9"	2 3/16"	2"
111.0	9'-11"	8'-9"	2 3/16"	2"
114.1	9'-9"	8'-8"	2 3/16"	2"
116.5	9'-8"	8'-8"	2 3/16"	2"
116.9	9'-8"	8'-7"	2 3/16"	2"
117.6	9'-8"	8'-7"	2 3/16"	2"
119.7	9'-7"	8'-7"	2 3/16"	2"
121.2	9'-6"	8'-7"	2 3/16"	2"
122.5	9'-5"	8'-6"	2 3/16"	2"
125.3	9'-4"	8'-6"	2 3/16"	2"
125.8	9'-4"	8'-6"	2 3/16"	2"
126.7	9'-3"	8'-5"	2 3/16"	2"
129.6	9'-2"	8'-5"	2 3/16"	2"
130.9	9'-2"	8'-5"	2 3/16"	2"
131.6	9'-1"	8'-4"	2 3/16"	2"
134.3	9'-0"	8'-4"	2 1/16"	2"
136.2	9'-0"	8'-4"	2 1/16"	2"
137.9	8'-11"	8'-3"	2 1/16"	2"
140.7	8'-10"	8'-3"	2 1/16"	2"
142.8	8'-9"	8'-2"	2"	2"
143.5	8'-9"	8'-2"	2"	2"
147.0	8'-7"	8'-2"	2"	2"
148.4	8'-7"	8'-1"	2"	2"
152.6	8'-6"	8'-1"	2"	2"

MAXIMUM DESIGN LOAD W (p.s.f.)	MAXIMUM PANEL SPAN L (ft.)		MINIMUM SEPARATION "S" TO GLASS (in.)	
	*	**	*	**
153.1	8'-5"	8'-1"	2"	2"
156.8	8'-4"	8'-0"	2"	2"
157.5	8'-4"	8'-0"	2"	2"
157.8	8'-4"	8'-0"	2"	2"
160.6	8'-3"	8'-0"	2"	2"
161.7	8'-3"	7'-11"	2"	2"
164.4	8'-2"	7'-11"	2"	2"
165.2	8'-1"	7'-11"	2"	2"
168.1	8'-1"	7'-10"	2"	2"
168.7	8'-1"	7'-10"	2"	2"
170.0	8'-0"	7'-10"	2"	2"
175.6	7'-9"	7'-9"	2"	2"

MAXIMUM DESIGN LOAD W (p.s.f.)	MAXIMUM PANEL SPAN L (ft.)		MINIMUM SEPARATION "S" TO GLASS (in.)	
	*	**	*	**
176.6	7'-8"	7'-8"	2"	2"
180.3	7'-6"	7'-6"	2"	2"
185.0	7'-4"	7'-4"	2"	2"
188.0	7'-2"	7'-2"	2"	2"
192.5	7'-0"	7'-0"	2"	2"
197.2	6'-10"	6'-10"	2"	2"
199.1	6'-10"	6'-10"	2"	2"
204.7	6'-7"	6'-7"	2"	2"
211.3	6'-5"	6'-5"	2"	2"
216.9	6'-3"	6'-3"	2"	2"
221.6	6'-1"	6'-1"	2"	2"
226.3	6'-0"	6'-0"	2"	2"

* FOR SHUTTERS INSTALLED WITHIN THE FIRST 30'-0" ELEVATION OF BUILDING, SEE TABLE 1 FOR MINIMUM SEPARATION FOR SPANS LESS THAN THE MAXIMUM ALLOWED.
 ** FOR SHUTTERS INSTALLED ABOVE 30'-0" ELEVATION OF BUILDING, MEASURED AT BOTTOM OF SHUTTER.

TABLE 1:

MINIMUM SEPARATION BETWEEN GLASS & BACK OF SHUTTER FOR A GIVEN SHUTTER SPAN "L", FOR SHUTTERS INSTALLED WITHIN THE FIRST 30'-0" ABOVE GRADE OF A GIVEN BUILDING. 30'-0" ELEVATION SHALL BE MEASURED AT BOTTOM OF SHUTTER.

SHUTTER SPAN "L" (ft.)	MINIMUM SEPARATION "S" (in.)
< 8'-9"	2"
>8'-9" TO 9'-0"	2 1/16"
>9'-0" TO 10'-0"	2 3/16"
>10'-0" TO 11'-0"	2 3/8"
>11'-0" TO 12'-0"	2 1/2"
>12'-0" TO 13'-0"	2 5/8"
>13'-0" TO 14'-0"	2 3/4"
>14'-0" TO 15'-0"	2 7/8"
>15'-0" TO 15'-7"	3"

PRODUCT RENEWED

ACCEPTANCE No. 01-0813.01
 EXPIRATION DATE: 08/10/2006
 By Helmut A. Moller
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE

APPROVED AS COMPLYING WITH THE
 SOUTH FLORIDA BUILDING CODE
 DATE December 24, 19 99
 BY Helmut A. Moller
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE
 ACCEPTANCE No. 99-0930.02

MIAMI-DADE COUNTY

TILECO Inc.
 TILLIT TESTING & ENGINEERING COMPANY
 6565 N.W. 38th St., Ste. 217, VIRGINIA GARDENS, FLORIDA 33166
 Phone: (305)871-1930 Fax: (305)871-1931
 WALTER A. TILLIT Jr., P. E.
 FLORIDA Lic. # 44167

ACCORDION SHUTTER						AS SHOWN SCALE
AWNINGS, SHUTTERS & SCREENS, INC.						9/3/99 DATE
1631 S. DIXIE HWY. BLDG D-1 POMPANO BEACH, FLORIDA 33060						99 - 278
REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE	DRAWING No
1	OLD DWG 98-213	9/3/99	3			SHEET 5 OF 6
2			4			

David B
 12/10/99

**MAXIMUM DESIGN PRESSURE RATING "W" (p.s.f.) AND CORRESPONDING
MAXIMUM ANCHOR SPACING (in.) SCHEDULE. ****

E. D. = EDGE DISTANCE

* SPACING ONLY VALID FOR WALL MOUNT INSTALLATION AS PER SECTIONS A & C (WITH BOTTOM ANGLE LEG POINTING UP).
 ** SEE SHEET 4 OF 6 FOR ANCHORS TYPE & SPACING FOR INSTALLATIONS INTO WOOD FRAME BUILDINGS.
 *** MAXIMUM ANCHOR SPACINGS ARE VALID FOR 3 1/2" EDGE DISTANCE. FOR E. D. LESS THAN 3 1/2", REDUCE ANCHOR SPACING BY MULTIPLYING SPACINGS SHOWN ON SCHEDULE BY THE FOLLOWING FACTORS. (Min. E. D. FOR RAWL CALK-IN ANCHORS IS 2 1/2").

ACTUAL E. D.	FACTOR	
	TAPCON / ZAMAC NAILIN	RAWL CALK-IN
3"	.86	.75
2 1/2"	.71	.50
2"	.50	-

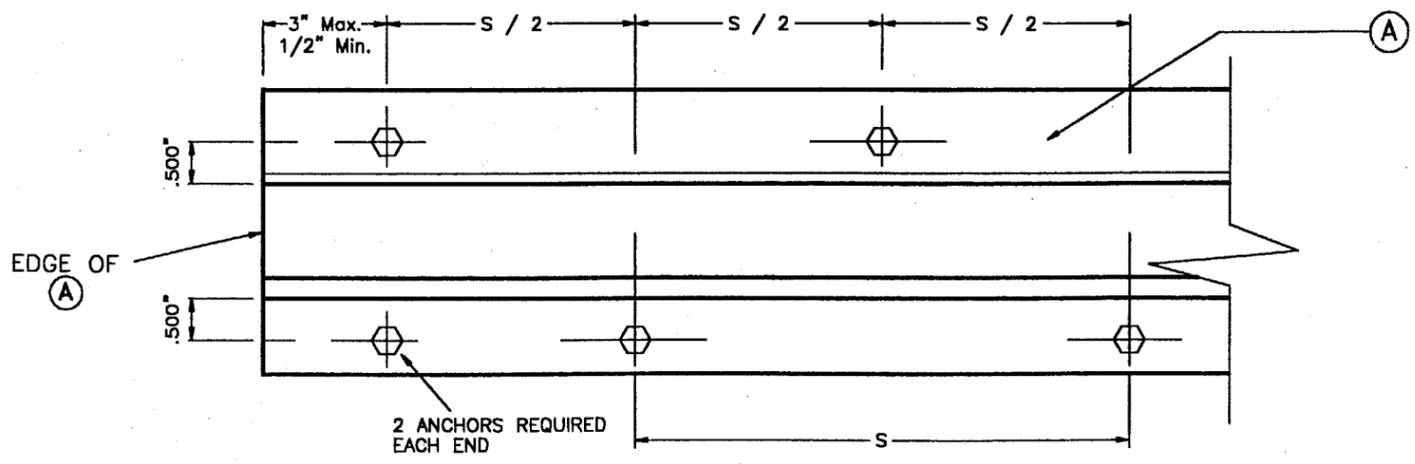
MAXIMUM DESIGN LOAD W (p.s.f.)	MAXIMUM ANCHOR SPACING FOR E. D. = 3 1/2" ***								
	WALL MOUNTING INSTALLATION AT TOP (TO CONCRETE)			WALL MOUNTING INSTALLATION AT BOTTOM (TO MASONRY)			CEILING MOUNTING INSTALLATION TOP & BOTTOM (TO CONCRETE)		
	NOTE 1	NOTE 2		NOTE 1	NOTE 2		NOTE 1	NOTE 2	
FROM 45.1 TO 61.8	10"	10"		9"	6"		10"	7"	
	10"	7"		10"	7"		7"	4 1/2"	
FROM 61.8 TO 91.4	10"	9"		6"	5"		7 1/2"	6"	
	7 1/2"	4 1/2"		7"	5 1/2"		5"	4"	
	NOTE 3	NOTE 4	NOTE 5	NOTE 3	NOTE 4	NOTE 5	NOTE 3	NOTE 4	NOTE 5
FROM 91.5 TO 134.3	10"	9"	6 1/2"	7" *	4 1/2" *	4" *	9"	6"	5"
	10"	4 1/2"	3 1/2"	8 1/2" *	5 1/2" *	4 1/2" *	6"	4"	3"
FROM 134.4 TO 168.1	10"	6"	5 1/2"	5 1/2" *	3 1/2" *	3 1/2" *	7"	4 1/2"	4 1/2"
	6 1/2"	3"	2 1/2"	6 1/2" *	4 1/2" *	4" *	4 1/2"	3"	2 1/2"
FROM 168.2 TO 226.3	7"	5 1/2"	5 1/2"	4" *	3 1/2" *	3 1/2" *	5"	4 1/2"	4 1/2"
	3 1/2"	2 1/2"	2 1/2"	5" *	4" *	4" *	3 1/2"	2 1/2"	2 1/2"

ANCHOR LEGEND

TAPCON OR RAWL CALK-IN
ZAMAC NAILIN

ANCHOR SPACING LEGEND

- (1) Max. ANCHOR SPCG. VALID FOR SPANS OF 8'-9" OR LESS.
- (2) Max. ANCHOR SPCG. VALID FOR SPANS GREATER THAN 8'-9" TO MAXIMUM ALLOWED.
- (3) Max. ANCHOR SPCG. VALID FOR SPANS OF 5'-0" OR LESS.
- (4) Max. ANCHOR SPCG. VALID FOR SPANS GREATER THAN 5'-0" TO 7'-6".
- (5) Max. ANCHOR SPCG. VALID FOR SPANS GREATER THAN 7'-6" TO Max. ALLOWED.



S = ANCHOR SPACING GIVEN ON SCHEDULE

STAGGERED ANCHORS

ANCHORS USED W/TRACK "A" (TOP & BOTTOM) SHALL BE INSTALLED STAGGERED AT Max. SPACINGS INDICATED ON SCHEDULE.

PRODUCT RENEWED

ACCEPTANCE No. 01-0813.01
 EXPIRATION DATE: 08/10/2006
 By *Helmut A. Miller*
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
 DATE *December 24, 1999*
 BY *Helmut A. Miller*
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE
 ACCEPTANCE NO. *99-0930.02*

MIAMI-DADE COUNTY

 TILIT TESTING & ENGINEERING COMPANY 6565 N.W. 39th St., Ste. 217, VIRGINIA GARDENS, FLORIDA 33166 Phone: (305)871-1530 - Fax: (305)871-1531 WALTER A. TILLIT, Jr., P. E. FLORIDA Lic. # 44167	ACCORDION SHUTTER AWNINGS, SHUTTERS & SCREENS, INC. 1631 S. DIXIE HWY. BLDG D-1 POMPANO BEACH, FLORIDA 33060	AS SHOWN SCALE 9/3/99 DATE 99 - 278 DRAWING No																		
	<table border="1"> <tr> <th>REV. NO</th> <th>DESCRIPTION</th> <th>DATE</th> <th>REV. No</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> <tr> <td>1</td> <td>OLD DWG 98-213</td> <td>9/3/99</td> <td>3</td> <td></td> <td></td> </tr> <tr> <td>2</td> <td></td> <td></td> <td>4</td> <td></td> <td></td> </tr> </table>	REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE	1	OLD DWG 98-213	9/3/99	3			2			4			
REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE															
1	OLD DWG 98-213	9/3/99	3																	
2			4																	

David B.
 2/21/99