



**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**

**Miami Dade Aluminum Supply, Inc.**  
**1615 West 31 Place**  
**Hialeah ,FL 33012**

Your application for Notice of Acceptance (NOA) of:

**20 ga. (min. thickness 0.037") Galvanized Steel Storm Shutter Panel**

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.

Raul Rodriguez  
Chief Product Control Division

**ACCEPTANCE NO.: 01-0718.07**  
**EXPIRES: 09/03/2006**

**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: 08/16/2001**

**NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS**

**1. SCOPE**

This renews a 20 ga. (minimum thickness 0.037") Galvanized Steel Storm shutter Panel, 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**

The 20 ga. (minimum thickness 0.037") Galvanized Steel Storm shutter Panel and its components shall be constructed in strict compliance with the following documents: Drawing No. 98-56, titled "20 Gage Storm Panel," prepared by Tilteco, Inc., dated March 20, 1998, last revision #1 dated 07/30/98, sheets 1 through 4 of 4, signed and sealed by Walter A. Tillit Jr., P.E., bearing the Miami-Dade County Product Control Renewal stamp with the Notice of Acceptance number and expiration date 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 time.

**4. INSTALLATION**

The 20 ga. (minimum thickness 0.037") Galvanized Steel Storm shutter Panel and its components shall be installed in strict compliance with the approved drawings.

**5. LABELING**

Each panel shall bear a permanent label with the manufacturer's name or logo, city, state and 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.

  
\_\_\_\_\_  
Raul Rodriguez, Chief  
Product Control Division

**Miami Dade Aluminum Supply, Inc.**

**ACCEPTANCE No. :** 01-0718.07

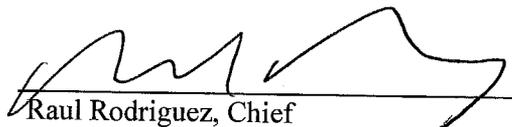
**APPROVED :** August 16, 2001

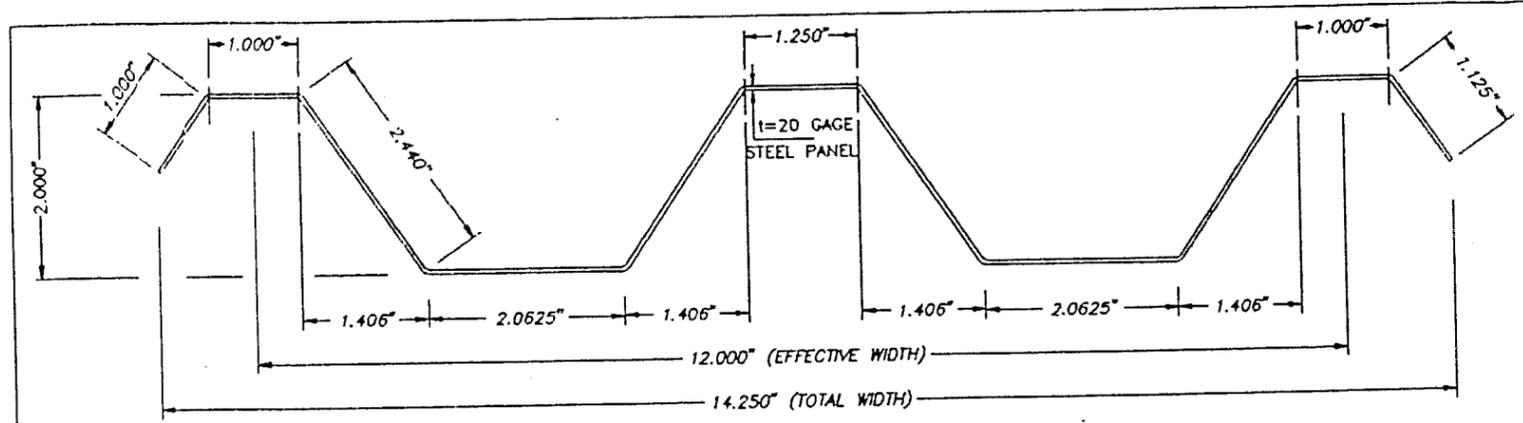
**EXPIRES :** September 3, 2006

**NOTICE OF ACCEPTANCE: STANDARD CONDITIONS**

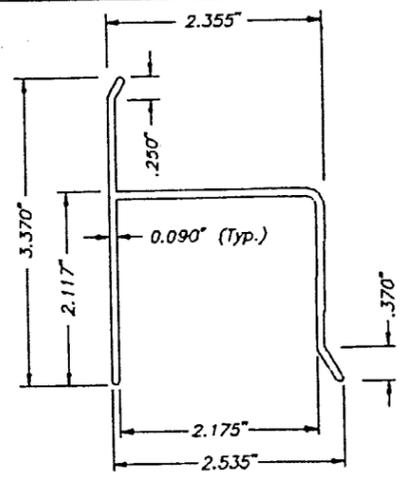
1. Renewal of this Acceptance (approval) shall be considered after a renewal application has been filed and the original submitted documents, including test-supporting data, engineering documents, are no older than eight (8) years.
2. Any and all approved products shall be permanently labeled with the 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 need 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**

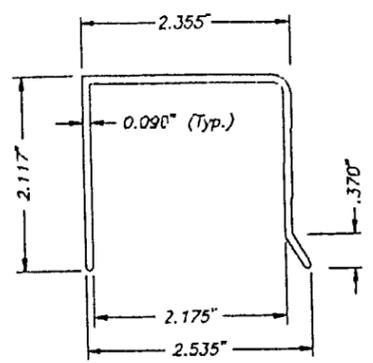
  
\_\_\_\_\_  
Raul Rodriguez, Chief  
Product Control Division



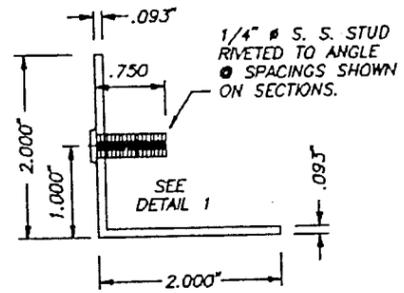
① PANEL  
SCALE: 1/2" = 1"



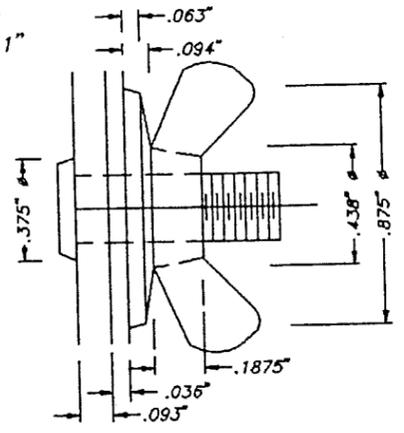
② HEADER  
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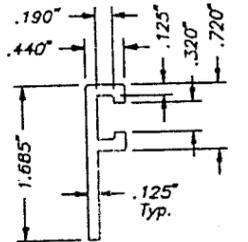
③ HEADER  
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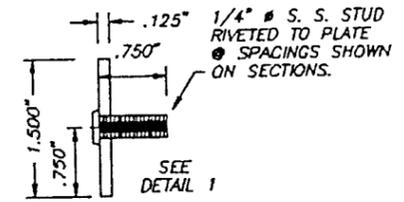
④ BASE ANGLE  
SCALE: 1/2" = 1"



DETAIL 1: STUD W/ WING NUT  
SCALE: 1 1/2" : 1"



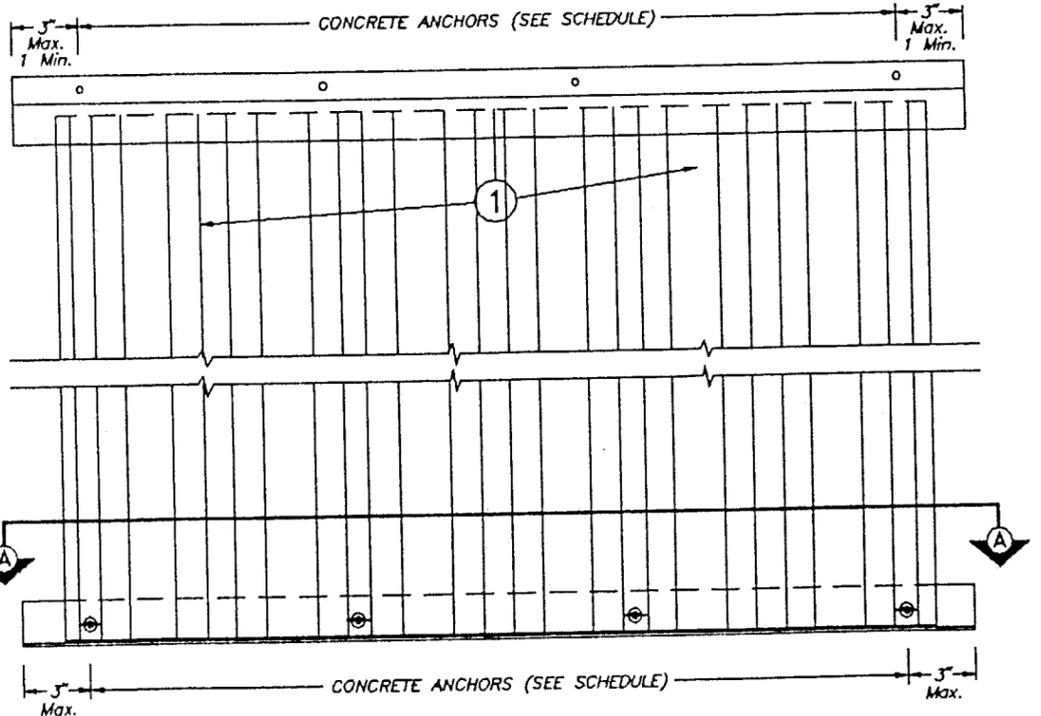
⑤ "F" TRACK  
6063-T6 ALLOY  
SCALE: 1/2" = 1"



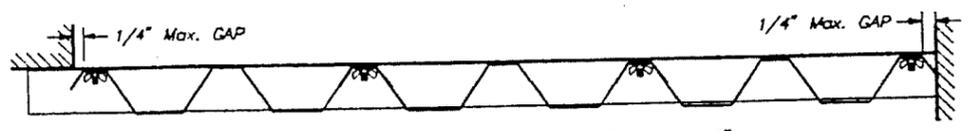
⑥ .125" PLATE  
6063-T6 ALLOY  
SCALE: 1/2" = 1"

GENERAL NOTES:

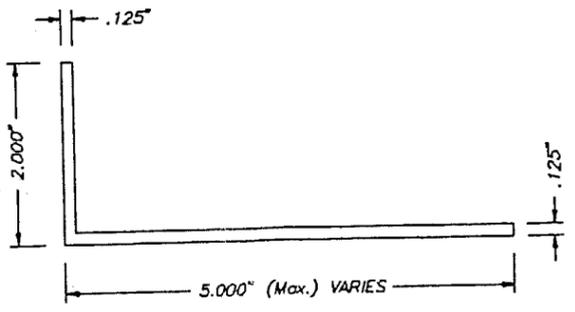
- STORM PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE DADE COUNTY, 1994 EDITION OF THE SOUTH FLORIDA BUILDING CODE. DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTION 6 OF ASCE 7-88, WITH 110 m.p.h. BASIC WIND SPEED. STORM PANEL'S ADEQUACY FOR IMPACT AND FATIGUE RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTIONS 2315 & 2314 RESPECTIVELY OF THE ABOVE MENTIONED CODE AS PER HETI LAB REPORTS # 98-710, 98-711 & 98-730.
- ALL STEEL SHEET METAL PANELS TO BE STRUCTURAL QUALITY ASTM A-446-91 GRADE C WITH  $F_y = 49.7$  k.s.i. (AFTER ROLLED), G-90 GALVANIZED AS PER HETI LAB REPORT # 98-193.
- ALL ALUMINUM EXTRUSIONS SHALL BE 6063-T5 ALLOY (UNLESS OTHERWISE NOTED)
- ALL SCREWS TO BE STAINLESS STEEL 304 OR 316 SERIES.
- 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.
    - 1/4" ELCO male/female PANELMATE ANCHORS, AS MANUFACTURED BY ELCO INDUSTRIES.
    - 1/4" # x 7/8" RAWL CALK-IN ANCHORS, AS MANUFACTURED BY THE RAWL PLUG COMPANY.
  - (B) TO EXISTING CONCRETE BLOCK WALL:
    - 1/4" # TAPCON ANCHORS, AS MANUFACTURED BY I.T.W. RAMSET OR ELCO INDUSTRIES.
    - 1/4" ELCO male/female PANELMATE ANCHORS, AS MANUFACTURED BY ELCO INDUSTRIES.
    - 1/4" # x 7/8" RAWL CALK-IN ANCHORS, AS MANUFACTURED BY THE RAWL PLUG COMPANY.
  - (C) ANCHORS SHALL BE INSTALLED FOLLOWING ALL OF THE RECOMMENDATIONS AND SPECIFICATIONS OF THE ANCHOR'S MANUFACTURER.
- PANELS MAY ALSO BE INSTALLED HORIZONTALLY FOLLOWING INSTALLATION DETAILS SHOWN ON SECTIONS 1, 2, 3 & 4 (SHEET 2 OF 4). EXCEPT THAT FOR SECTIONS 1 & 2 ONLY, COMPONENT # ④ SHALL BE USED AT BOTH ENDS.
- 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 MANUFACTURER'S LABEL SHALL BE PLACED AT EACH PANEL. LABEL SHALL READ AS FOLLOWS:  
MIAMI DADE ALUMINUM SUPPLY, INC.  
HALEAH, FLORIDA  
DADE COUNTY PRODUCT CONTROL APPROVED.



STORM PANEL TYPICAL ELEVATION SCALE 3" = 1'-0"



SECTION A-A SCALE 3" = 1'-0"



⑦ 2" x 5" (Max.) x .125" ANGLE  
SCALE: 1/2" = 1"

COMPONENTS

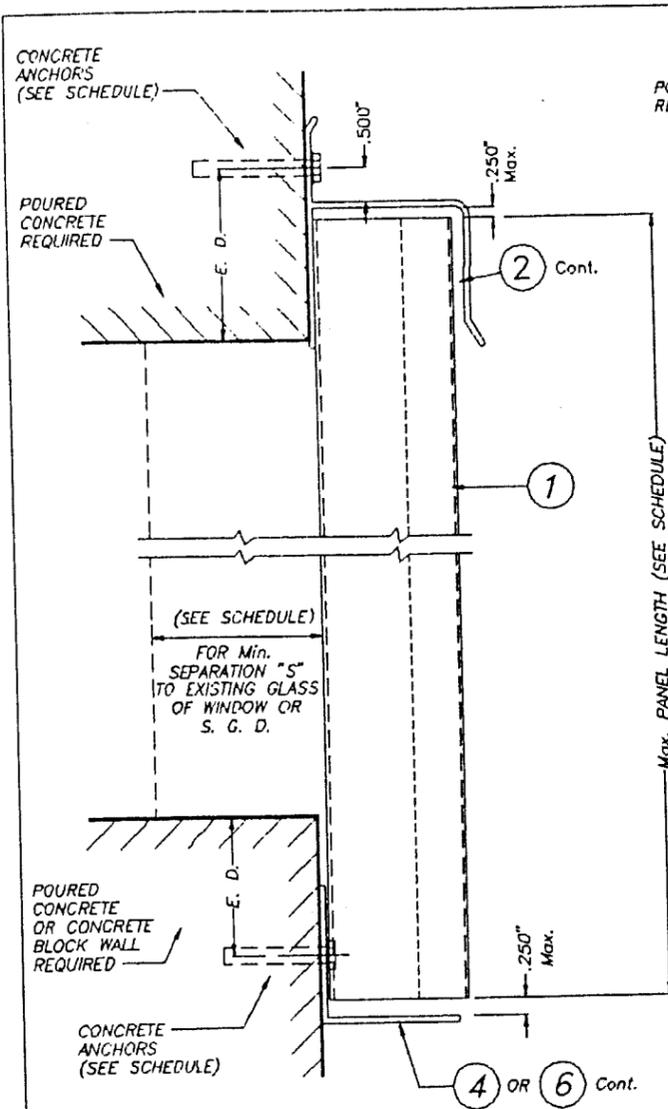
*Walter A. Tillit*  
7/30/98

PRODUCT REVIEW  
ACCEPTANCE NO. 01-0718.07  
EXPIRATION DATE Sep. 03, 2006  
BY *[Signature]*  
PRODUCT CONTROL DIVISION  
BUILDING CODE COMPLIANCE OFFICE

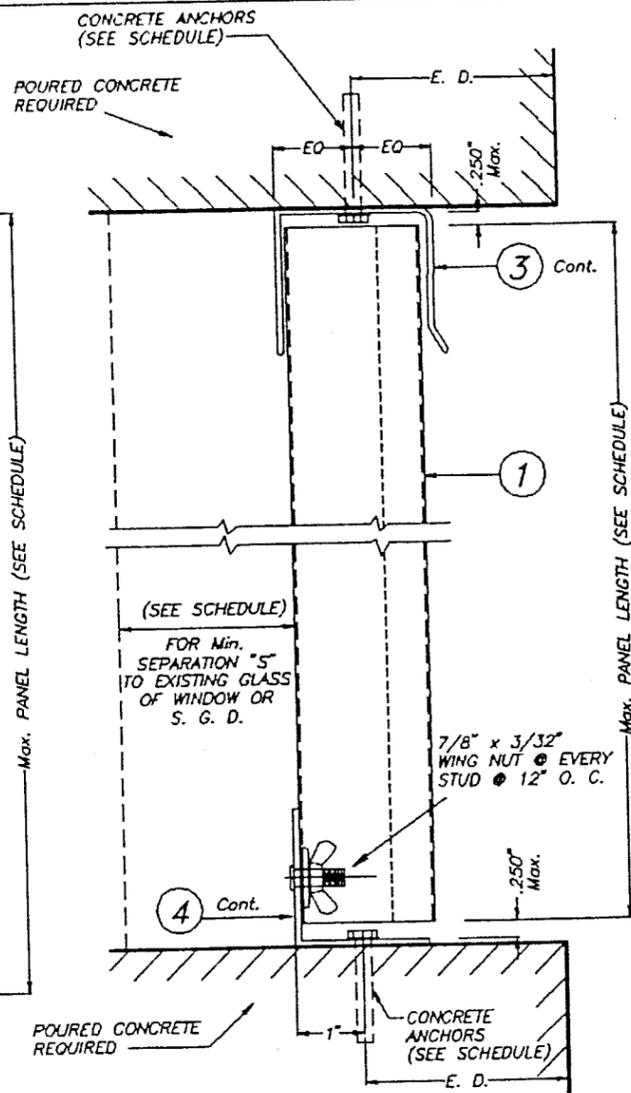
APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE  
DATE September 03, 1998  
BY *Helmy A. Maki*  
PRODUCT CONTROL DIVISION  
BUILDING CODE COMPLIANCE OFFICE  
ACCEPTANCE NO. 98-0608.19

 TILIT TESTING & ENGINEERING COMPANY 6595 N.W. 36th St., Ste. 217, VIRGINIA GARDENS, FL 33169 Phone: (305) 871-1530 Fax: (305) 871-1531 WALTER A. TILLIT JR., P. E. FLORIDA Lic. 44167				20 GAGE STORM PANEL		AS SHOWN SCALE
				MIAMI DADE ALUMINUM SUPPLY, INC. 1815 WEST 31ST. PLACE HALEAH, FLORIDA 33012		J/20/98 DATE
REV. No.	DESCRIPTION	DATE	REV. No.	DESCRIPTION	DATE	98 - 56 DRAWING No
1	NOTES	7/30/98	2			SHEET 1 OF 4
2			4			

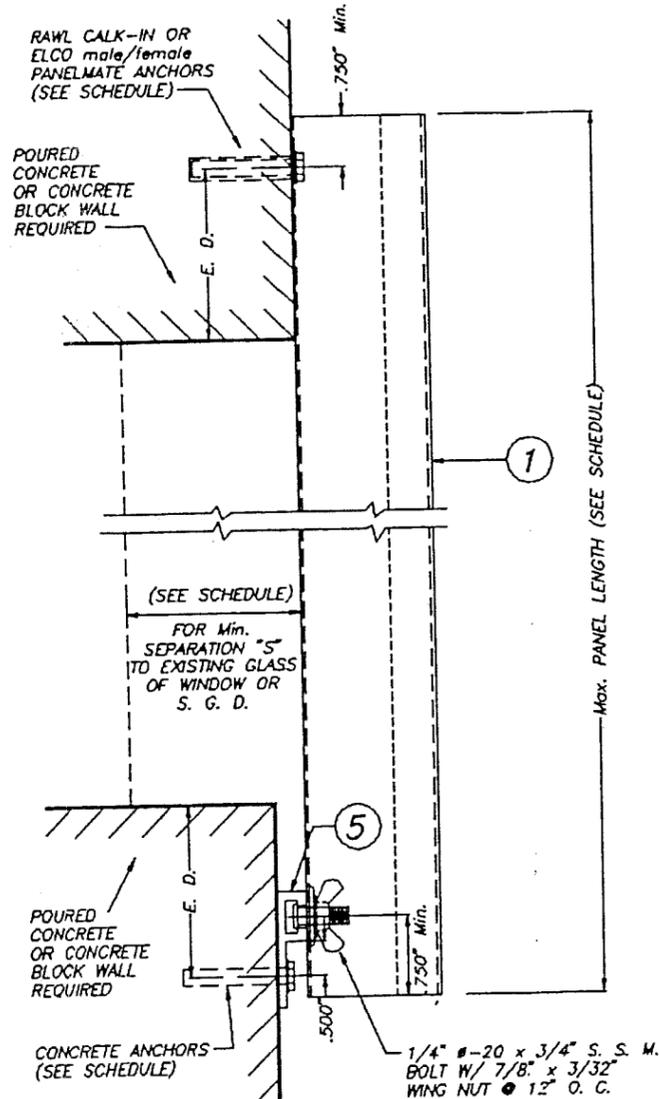
DADE COUNTY



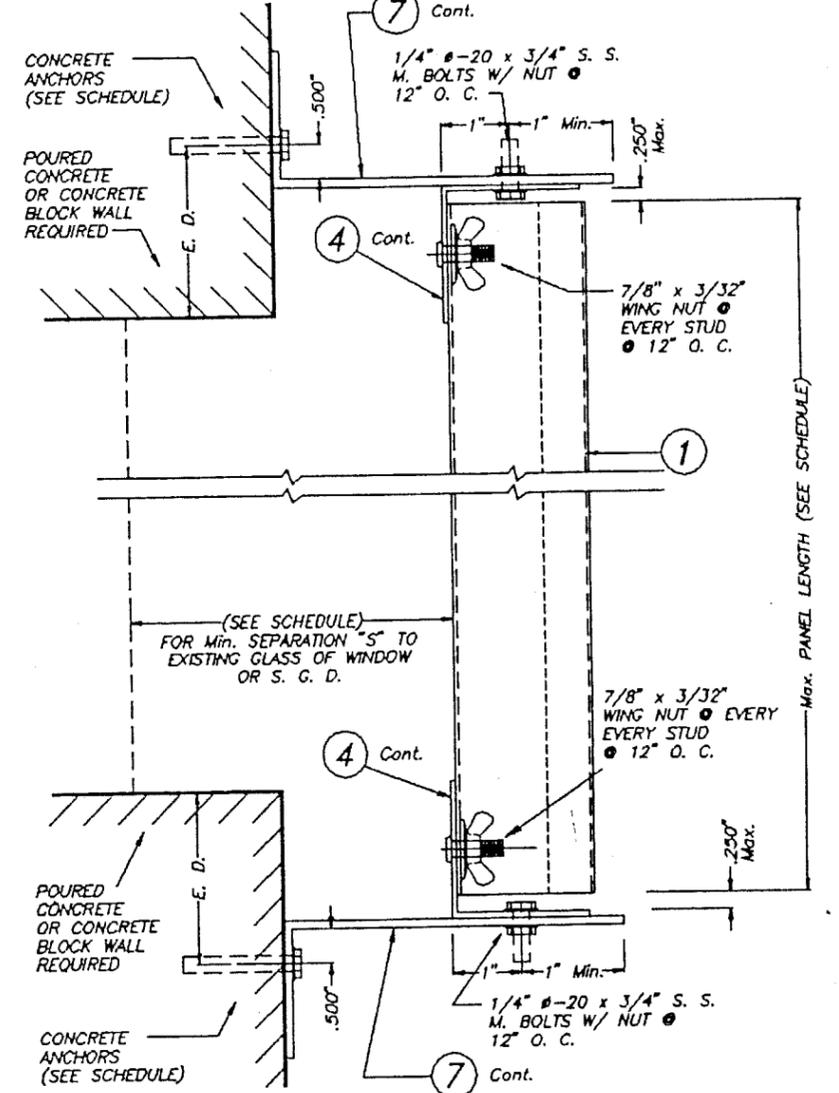
SECTION @ ANCHOR



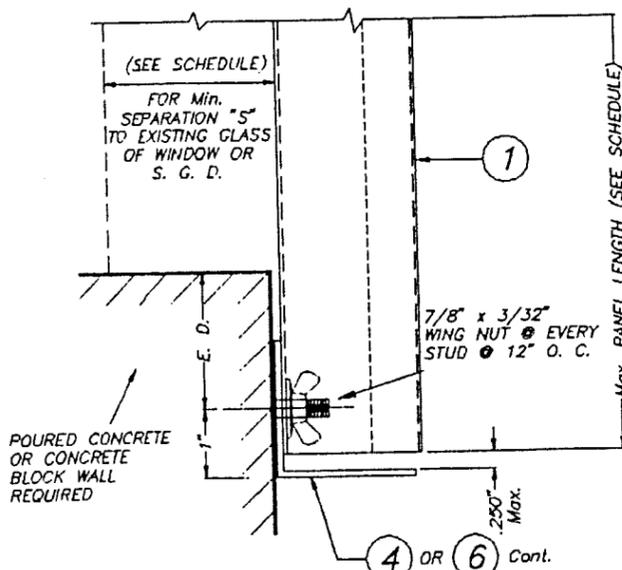
CEILING & FLOOR MOUNT. INSTALL.  
- SECTION 2 SCALE: 3/8" = 1"



WALL MOUNTING INSTALLATION W/  
DIRECT MOUNT - SECTION 3  
SCALE: 3/8" = 1"



BUILD-OUT WALL MOUNTING INSTALLATION  
- SECTION 4 SCALE: 3/8" = 1"



SECTION @ STUD  
WALL MOUNTING INSTALLATION  
- SECTION 1 SCALE: 3/8" = 1"

NOTE FOR COMBINATION OF SECTIONS :  
WALL/FLOOR/CEILING MOUNTING SECTIONS  
CAN BE COMBINED IN ANY WAY TO SUIT  
ANY INSTALLATION.

E. D. = EDGE DISTANCE  
(SEE SCHEDULE  
ON SHEET 3 OF 4)

PRODUCT REVIEW  
ACCEPTANCE NO. 01-0718.07  
EXPIRATION DATE Sep. 3, 2006  
BY *[Signature]*  
BUILDING CODE COMPLIANCE OFFICE

APPROVED AS COMPLYING WITH THE  
SOUTH FLORIDA BUILDING CODE  
DATE September 03, 1998  
BY *[Signature]*  
PRODUCT CONTROL DIVISION  
BUILDING CODE COMPLIANCE OFFICE  
ACCEPTANCE NO. 98-0600-19

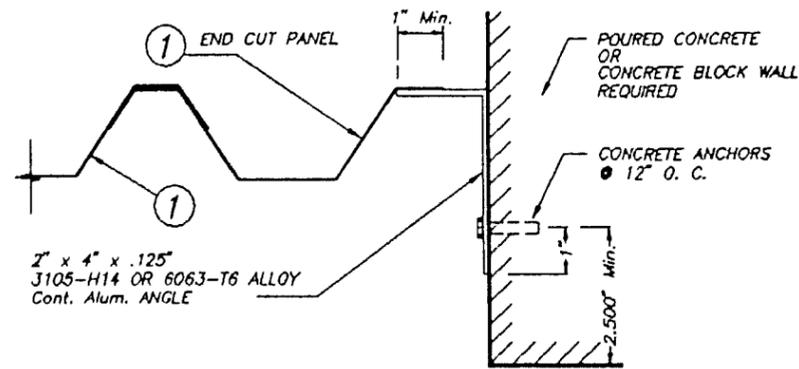
*Walter A. Tillit*  
7/30/98

**TILECO INC.**  
TILLIT TESTING & ENGINEERING COMPANY  
6595 N.W. 36th St., Ste. 217, WILMOTA GARDENS, FL 33169  
Phone: (305)871-1530 Fax: (305)871-1531  
WALTER A. TILLIT JR., P. E.  
FLORIDA LIC. 44167

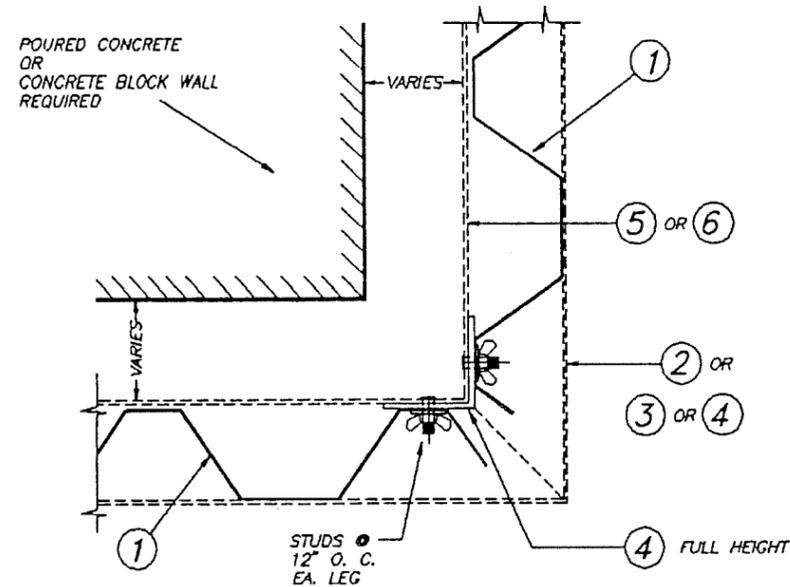
20 GAGE STORM PANEL			AS SHOWN SCALE		
MIAMI DADE ALUMINUM SUPPLY, INC.			3/20/98 DATE		
1615 WEST 31ST. PLACE HALEAH, FLORIDA 33012			98 - 56 DRAWING No		
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	GENERAL	7/30/98	3		
2			4		

SHEET 2 OF 4

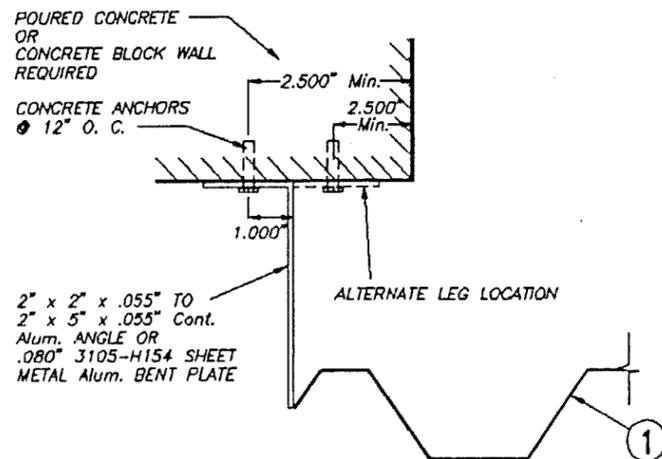
DADE COUNTY



CASE A (Plan)



CASE B (Plan)



CASE C (Plan)

END CLOSURES DETAILS

SCALE : 3/8" = 1"

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

MAXIMUM DESIGN LOAD W (p.s.f.)	Max. PANEL SPAN L (ft.)	MINIMUM SEPARATION TO GLASS	APPLICABLE TO SECTIONS # (SEE SHEET 2 OF 4) OR ANY COMBINATION OF THEM
+60.0, -64.0	10'-0" OR LESS	3 3/8"	1, 2, 3 & 4

MAXIMUM DESIGN PRESSURE RATING "W" (p.s.f.) AND CORRESPONDING MAXIMUM ANCHOR SPACING SCHEDULE FOR INSTALLATIONS INTO CONCRETE AND C.B.S. STRUCTURES \*

MAXIMUM DESIGN LOAD W (p.s.f.)	MAXIMUM ANCHORS SPACING **						APPLICABLE TO SECTIONS #	MAXIMUM PANEL SPAN L (ft.)
	TAPCON		RAWL CALK-IN		PANELMATE			
	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY		
+60.0, -64.0	7"	N/A	7"	N/A	3"	N/A	1 (TOP)	10'-0" OR LESS
	12"	7 1/2"	12"	11"	10"	10"	1 (BOTTOM)	
	12"	N/A	12"	N/A	7"	N/A	2 (TOP)	
	10 1/2"	N/A	11"	N/A	5 1/2"	N/A	2 (BOTTOM)	
	N/A	N/A	12"	6"	6"	6"	3 (TOP)	
	11 1/2"	7 1/2"	11 1/2"	11"	10"	10"	3 (BOTTOM)	
	12"	5"	12"	7"	6 1/2"	6 1/2"	4 (TOP/BOTTOM)	

- \* SEE SHEET 4 OF 4 FOR ANCHORS TYPE & SPACING FOR INSTALLATION 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 / PANELMATE	RAWL CALK-IN
3"	.86	.75
2 1/2"	.71	.50
2"	.50	-

THIS EDGE DISTANCE REDUCTION IS NOT ALLOWED FOR DIRECT MOUNT INSTALLATIONS (SEE SECTION 3 (TOP) ON SHEET 2 OF 4)

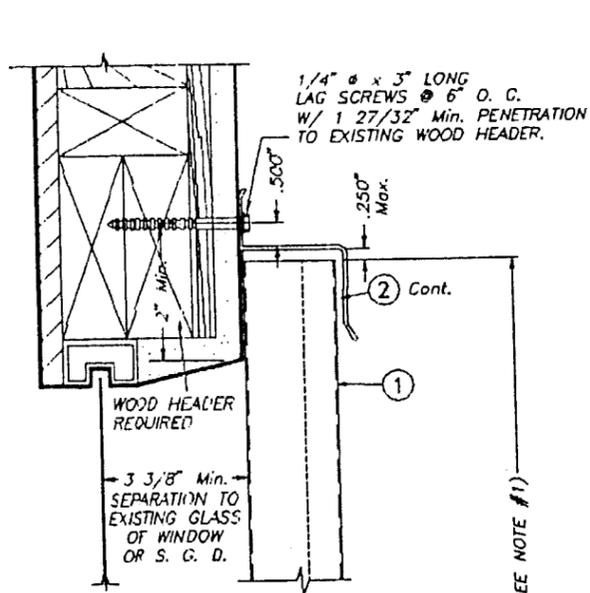
*Drawn by*  
7/30/98

PRODUCT REVIEW  
ACCEPTANCE NO. 01-0718.07  
EXPIRATION DATE Sep. 03, 2006  
By: *[Signature]*  
PRODUCT CONTROL DIVISION  
BUILDING CODE COMPLIANCE OFFICE

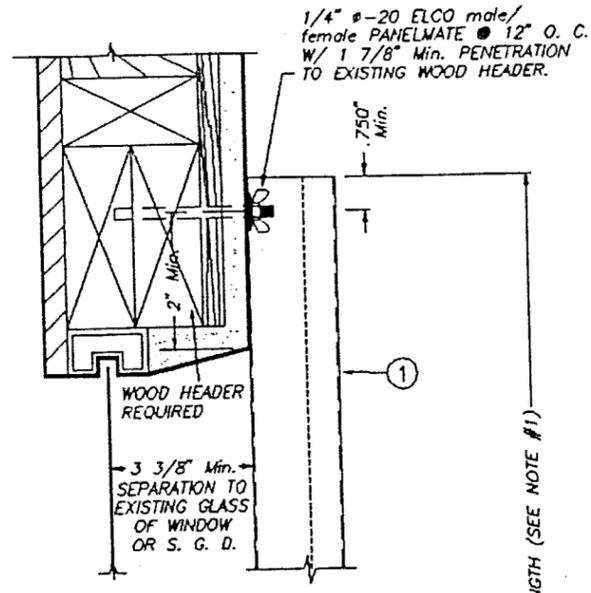
APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE  
DATE: September 03, 1998  
BY: *Heung A. Mark*  
PRODUCT CONTROL DIVISION  
BUILDING CODE COMPLIANCE OFFICE  
ACCEPTANCE NO. 98-0608.19

DADE COUNTY

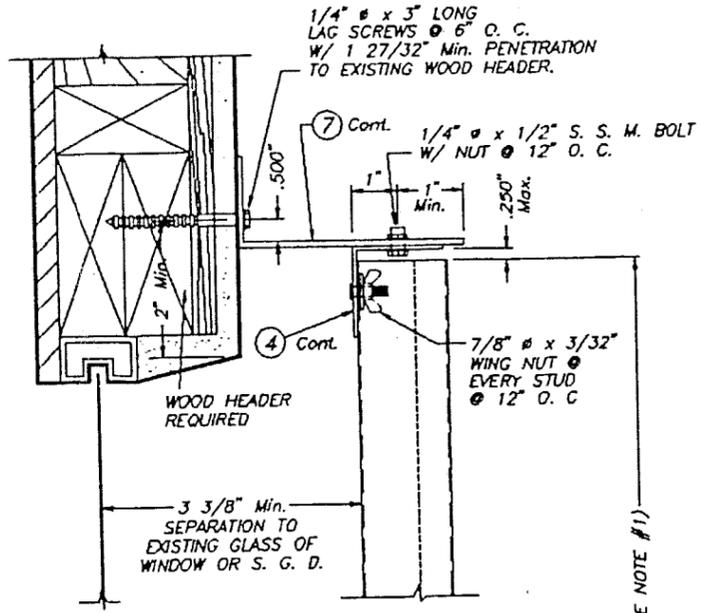
 TILIT TESTING & ENGINEERING COMPANY 6505 N.W. 36th St. Ste. 217, VIRGINIA GARDENS, FL 33166 Phone: (305)871-1530 Fax: (305)871-1531 WALTER A. TILIT Jr., P. E. FLORIDA Lic. 44167	20 GAGE STORM PANEL	AS SHOWN SCALE																		
	MIAMI DADE ALUMINUM SUPPLY, INC. 1615 WEST 31ST. PLACE HIALEAH, FLORIDA 33012	3/20/98 DATE	98 - 56 DRAWING No																	
<table border="1"> <thead> <tr> <th>REV. NO</th> <th>DESCRIPTION</th> <th>DATE</th> <th>REV. NO</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>GENERAL</td> <td>7/30/98</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> </tbody> </table>	REV. NO	DESCRIPTION	DATE	REV. NO	DESCRIPTION	DATE	1	GENERAL	7/30/98	3			2			4				SHEET 3 OF 4
REV. NO	DESCRIPTION	DATE	REV. NO	DESCRIPTION	DATE															
1	GENERAL	7/30/98	3																	
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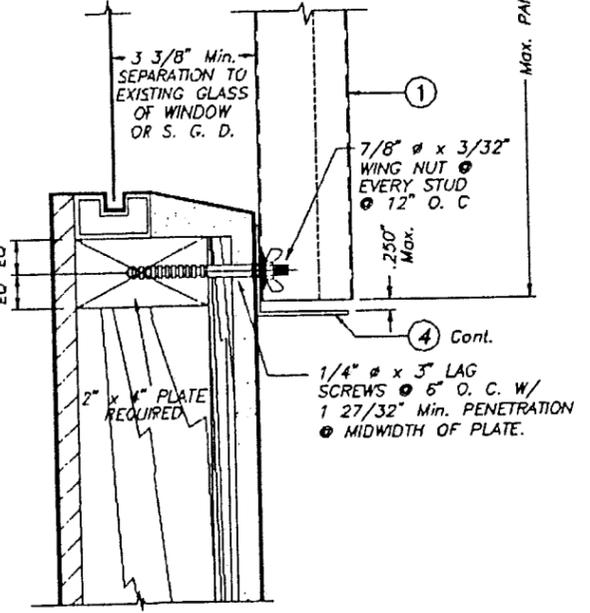
ALTERNATIVE 1



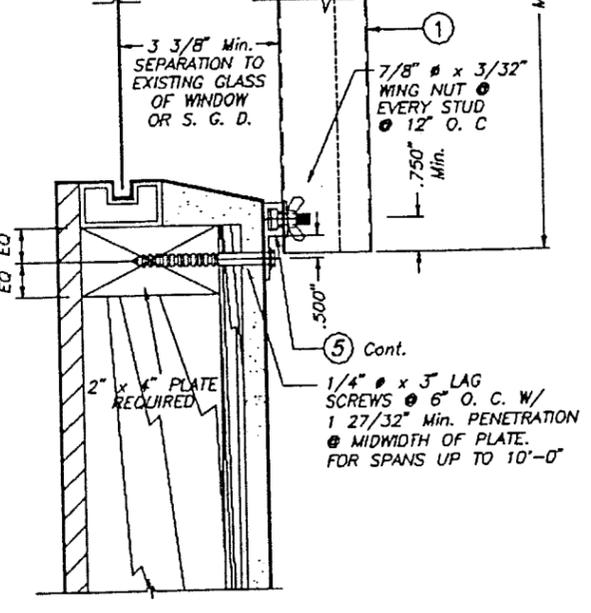
ALTERNATIVE 3



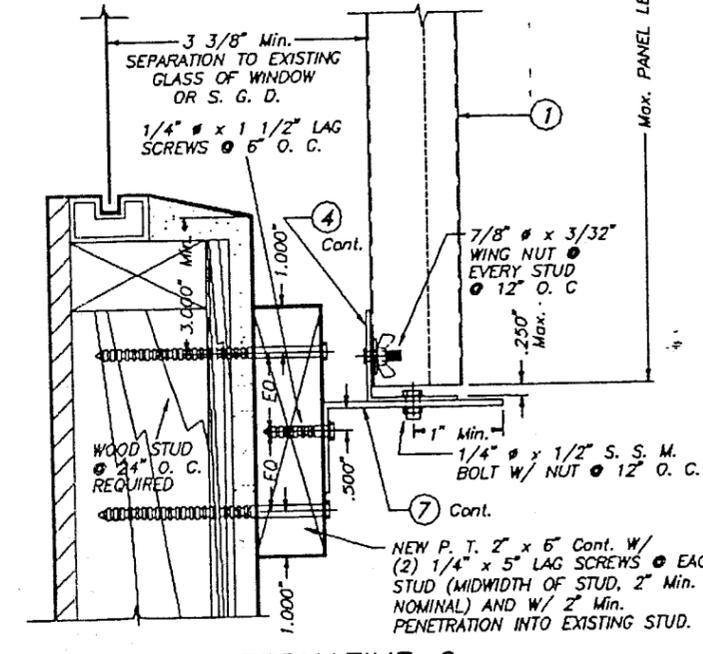
ALTERNATIVE 5



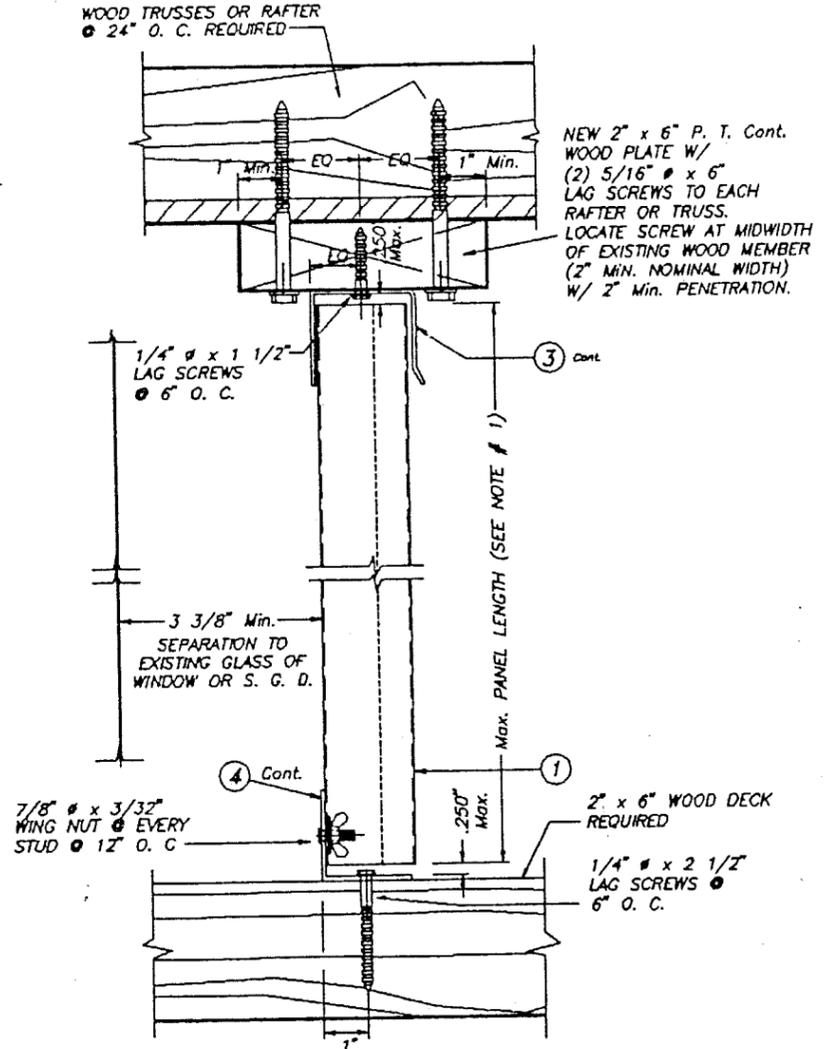
ALTERNATIVE 2



ALTERNATIVE 4



ALTERNATIVE 6



CEILING & FLOOR MOUNTING INSTALLATION

- SECTION B

SCALE: 1/4" = 1"

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE  
 DATE September 03, 1998  
 BY Helmut A. Mader  
 PRODUCT CONTROL DIVISION  
 BUILDING CODE COMPLIANCE OFFICE  
 ACCEPTANCE NO. 98-0608-19

PRODUCT REVIEW  
 ACCEPTANCE 01-0718.07  
 EXPIRES Sep. 3, 2006  
 BY [Signature]  
 BUILDING CODE COMPLIANCE OFFICE

WALL MOUNTING INSTALLATION - SECTION A

NOTE FOR COMBINATION OF SECTIONS:  
 SECTIONS CAN BE COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.

- NOTES:
- INSTALLATIONS ARE ONLY VALID FOR BUILDINGS WITH DESIGN LOADS UP TO +60.0, -64.0 p.s.f. AND PANEL'S LENGTH UP TO 10'-0".
  - NEW 2" x 6" P.T. TO BE SOUTHERN PINE No. 2, SURFACED DRY WITH 19 % M. M. C. W/ SPECIFIC DENSITY OF 0.55.
  - 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

Handwritten Signature  
 2/20/98

 TILLIT TESTING & ENGINEERING COMPANY 2095 N.W. 36th St., Ste. 217, VIRGINIA GARDENS, FL 33169 Phone: (305)871-1530 Fax: (305)871-1531 WALTER A. TILLIT Jr., P. E. FLORIDA Lic. 44167		20 GAGE STORM PANEL		AS SHOWN SCALE	
		MIAMI DADE ALUMINUM SUPPLY, INC. 1615 WEST 31ST. PLACE HIALEAH, FLORIDA 33012		J/20/98 DATE	
		98 - 56		DRAWING No	
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	GENERAL	7/30/98	3		
2			4		

DADE COUNTY

SHEET 4 OF 4