



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

Roll-A-Way Security Shutters
10601 Oak Street N.E. c/o Prime Marketing Group
St. Petersburg ,FL 33716

Your application for Notice of Acceptance (NOA) of:

Extruded Aluminum (6005-T5 Alloy) Omega 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.

Raul Rodriguez
Chief Product Control Division

ACCEPTANCE NO.: 00-0609.04
EXPIRES: 09/25/2003

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: 08/24/2000

Roll-A-Way Security Shutters

ACCEPTANCE No. : 00-0609.04

APPROVED : AUG 24 2000

EXPIRES : 09/25/2003

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

1. SCOPE

This renews the Notice of Acceptance No. 97-0513.01, which was issued on September 25, 1997. 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. 96-161 titled "Omega Accordion Shutter / Hi-Rise", prepared by Tilteco Inc., dated May 29, 1996, last revision #1 dated August 28, 1997, sheets 1 through 8 of 8, 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".

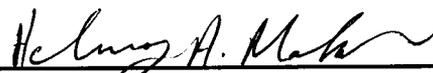
6. BUILDING PERMIT REQUIREMENTS

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

Roll-A-Way Security Shutters

ACCEPTANCE No. : 00-0609.04

APPROVED : AUG 24 2000

EXPIRES : 09/25/2003

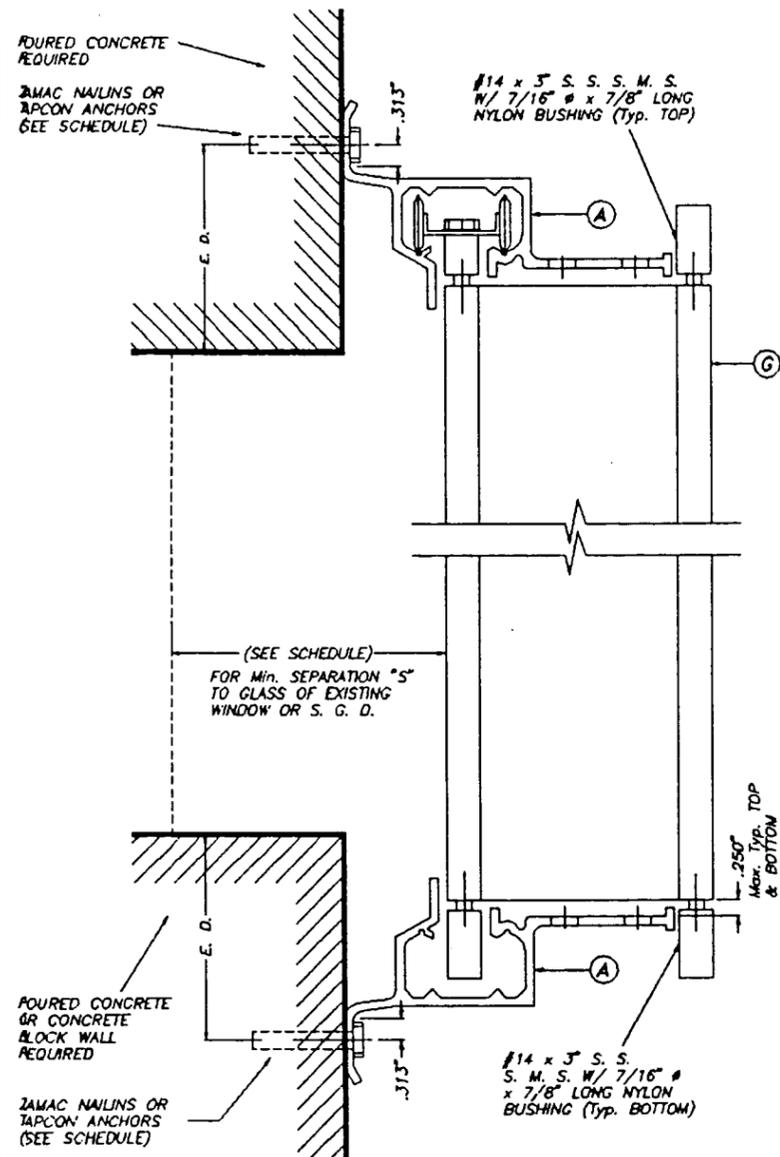
NOTICE OF ACCEPTANCE: STANDARD CONDITIONS

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.

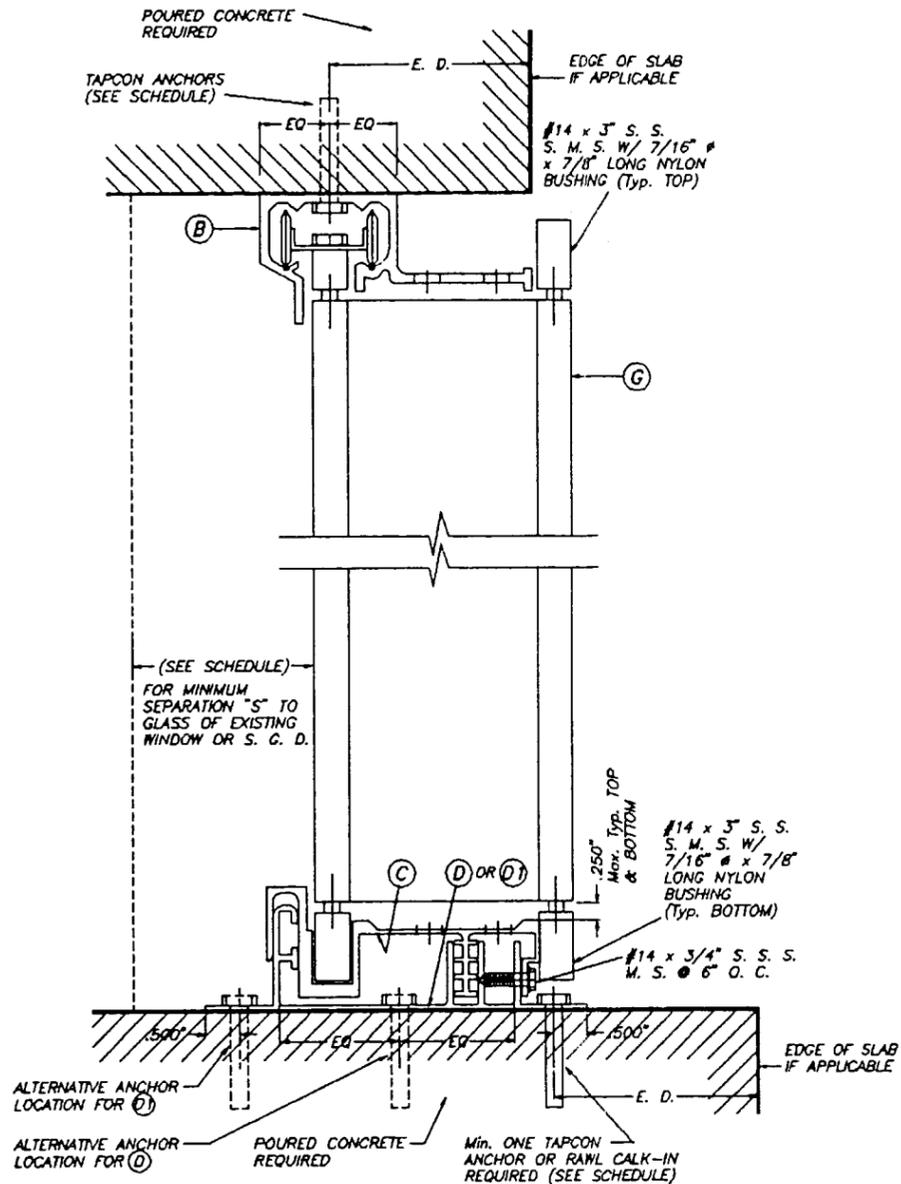
END OF THIS ACCEPTANCE



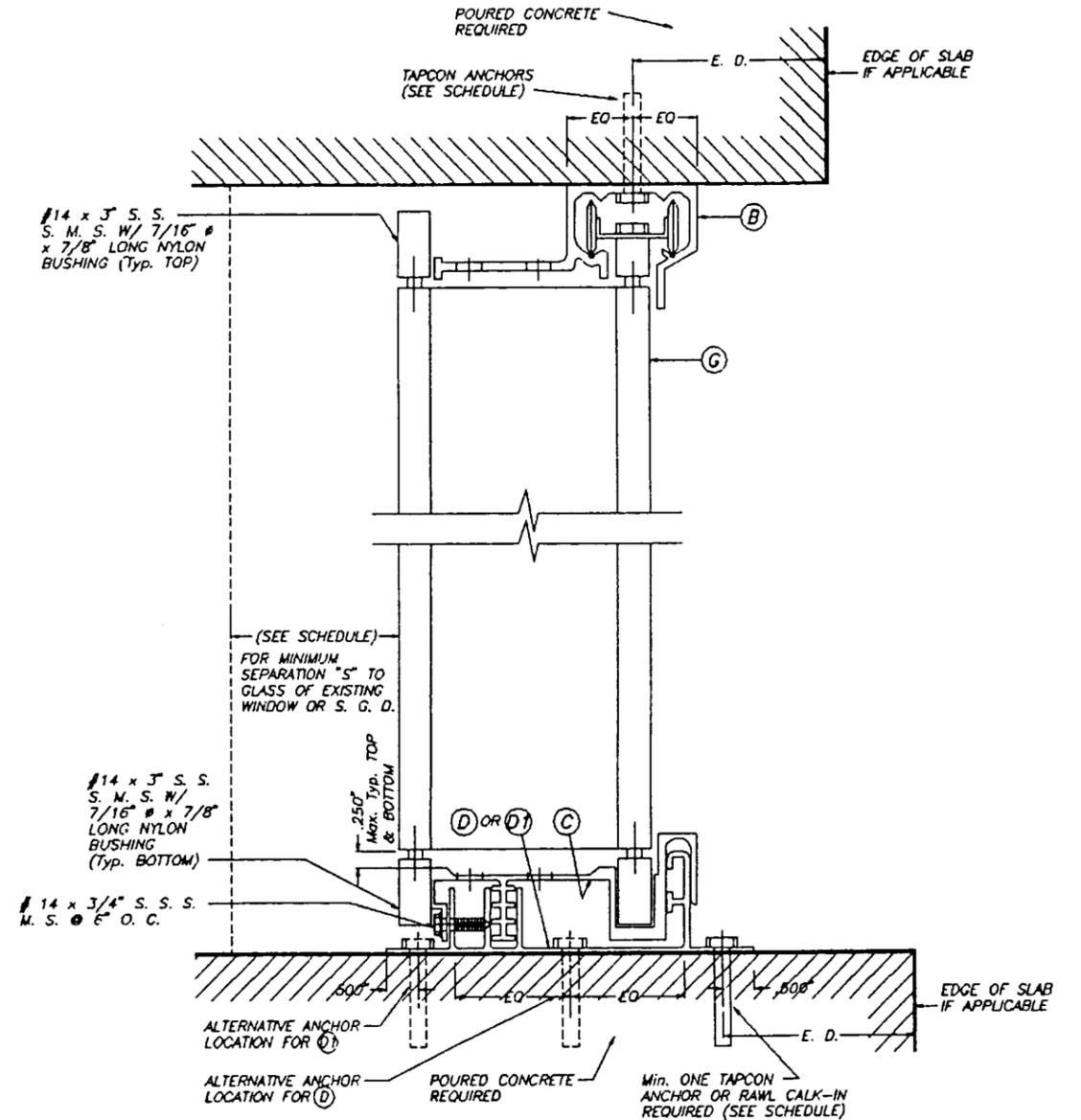
Helmy A. Makar, P.E.- Product Control Examiner
Product Control Division



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



CEILING & FLOOR MOUNT. INSTALLATION
 - SECTION B, W/ REGULARLY ORIENTED TRACKS TOP & BOTTOM SCALE: 3/8" = 1"



CEILING & FLOOR MOUNT. INSTALLATION
 - SECTION B1, W/ REVERSED TRACKS TOP & BOTTOM SCALE: 3/8" = 1"

PRODUCT RENEWED

ACCEPTANCE No. 00-0609.04

EXPIRATION DATE 09/25/2003

By Herling A. Mader
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE

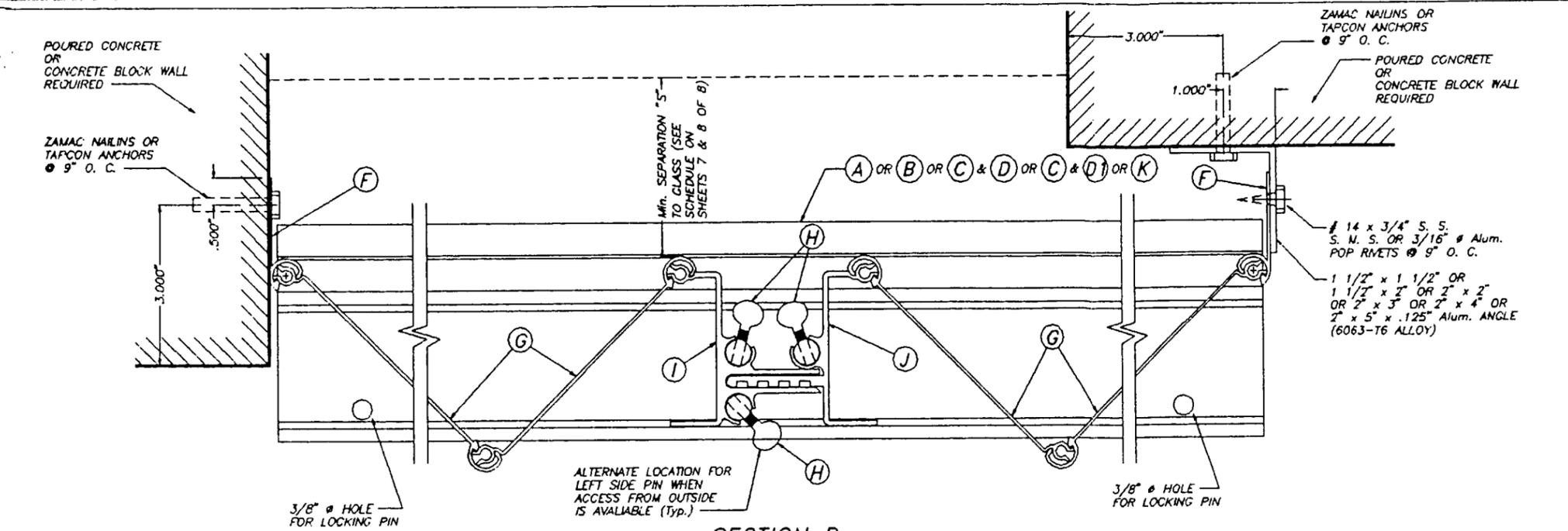
APPROVED AS COMPLYING WITH THE
 SOUTH FLORIDA BUILDING CODE
 DATE SEPTEMBER 25 1997
 BY Herling A. Mader
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE
 ACCEPTANCE NO. 97-0513.01

DADE COUNTY

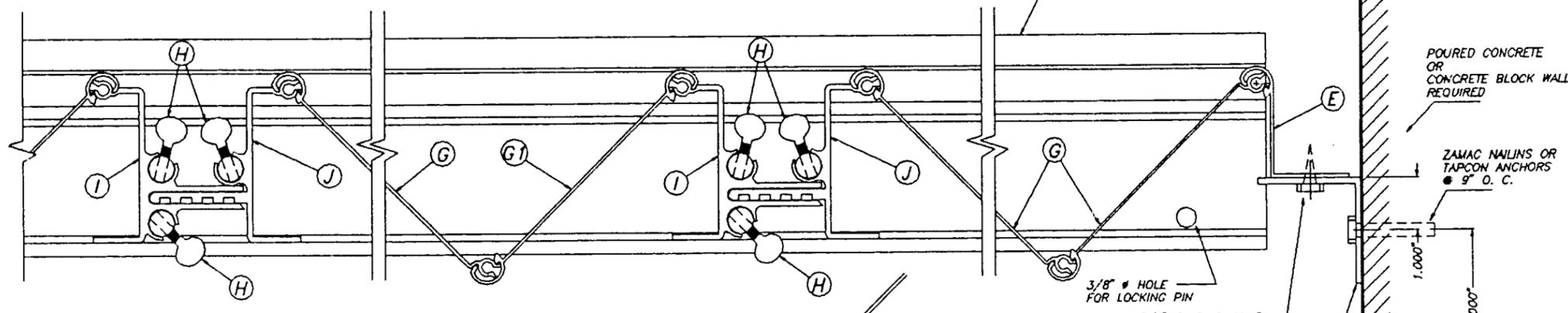
David [Signature]
 9/2/97

TILTECO INC.
 TILLIT TESTING & ENGINEERING COMPANY
 8395 N.W. 36th St., Ste. 217, VIRGINIA GARDENS, FL 33186
 Phone: (305)871-1530 Fax: (305)871-1531
 WALTER A. TILLIT Jr. P. E.
 FLORIDA Lic. # 44167

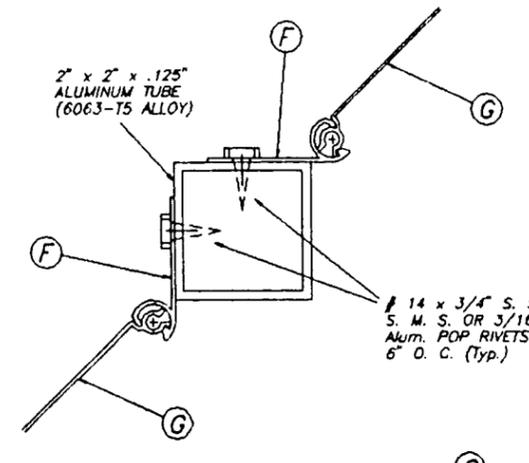
| | | | | | | |
|---|---------|---------|---|--|--|---------------------|
| OMEGA ACCORDION SHUTTER / HI-RISE | | | | | | AS SHOWN SCALE |
| ROLL-A-WAY STORM & SECURITY SHUTTERS 10587 OAK STREET N. E. ST. PETERSBURG, FLORIDA 33716 | | | | | | 5/29/96 DATE |
| REV. NO DESCRIPTION DATE REV. BY DESCRIPTION DATE | | | | | | 96 - 161 DRAWING No |
| 1 | GENERAL | 8/28/97 | 8 | | | SHEET 2 OF 8 |
| 2 | | | 4 | | | |



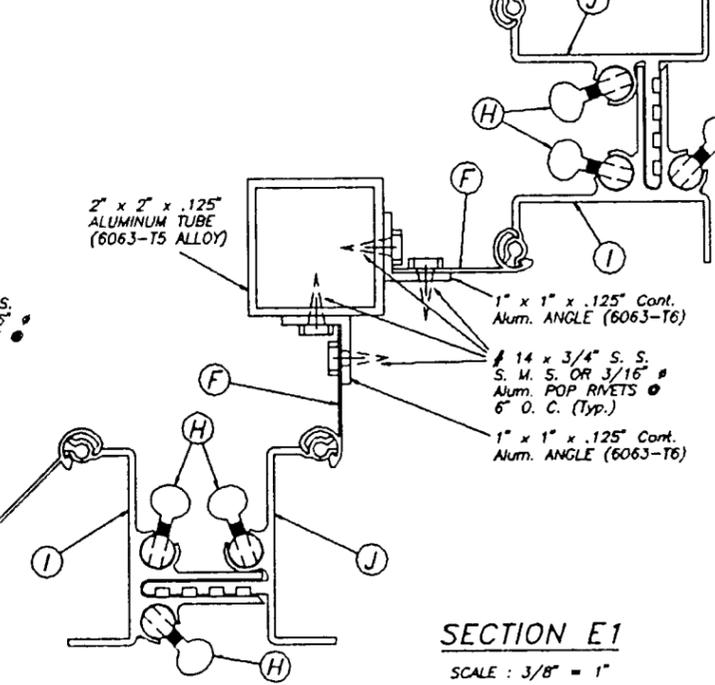
SECTION D
SCALE: 3/8" = 1"



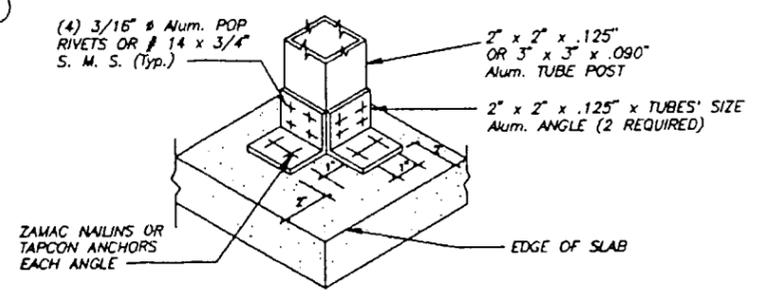
SECTION D1 (& MULTIPLE SHUTTERS)
SCALE: 3/8" = 1"



SECTION E
SCALE: 3/8" = 1"

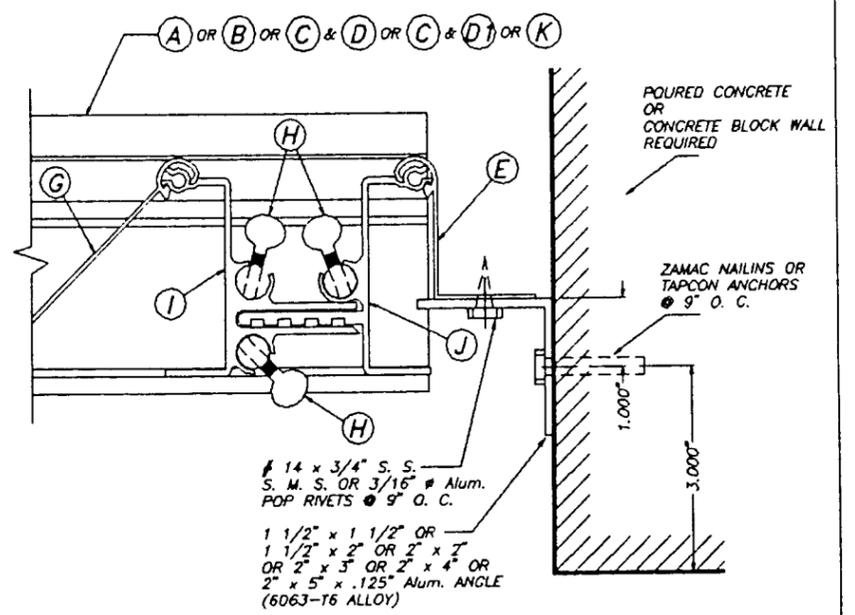


SECTION E1
SCALE: 3/8" = 1"



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

Handwritten signature: Varias B
9/2/97



ONE SIDED SECTION: END CONNECTION DETAIL
SCALE: 3/8" = 1"

NOTE:
SECTIONS E & E1 CAN BE COMBINED TO SUIT ANY INSTALLATION.

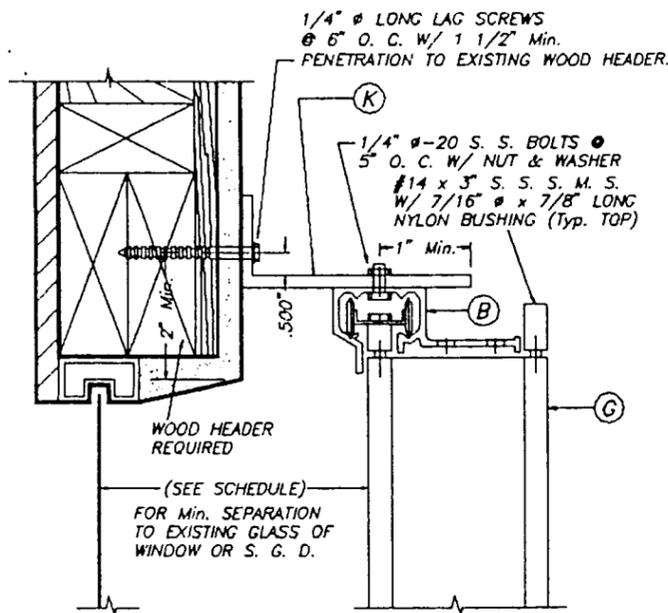
PRODUCT RENEWED
ACCEPTANCE No. 00-06 09.04
EXPIRATION DATE 09/25/2003
By Helmy A. Mark
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE SEPTEMBER 25 1997
BY Helmy A. Mark
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 97-0513.01

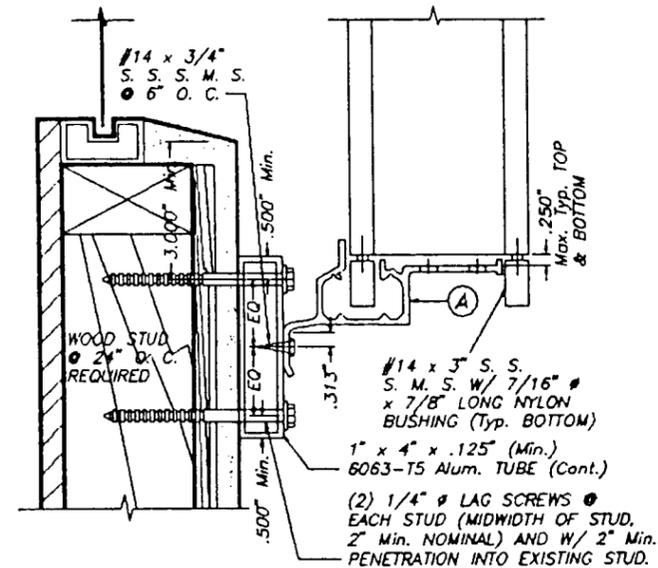
DADE COUNTY

TILECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6595 N.W. 36th St., Ste. 217, VIRGINIA GARDENS, FL 33166
Phone: (305)871-1530 Fax: (305)871-1531
WALTER A. TILLIT Jr. P. E.
FLORIDA Lic. # 44167

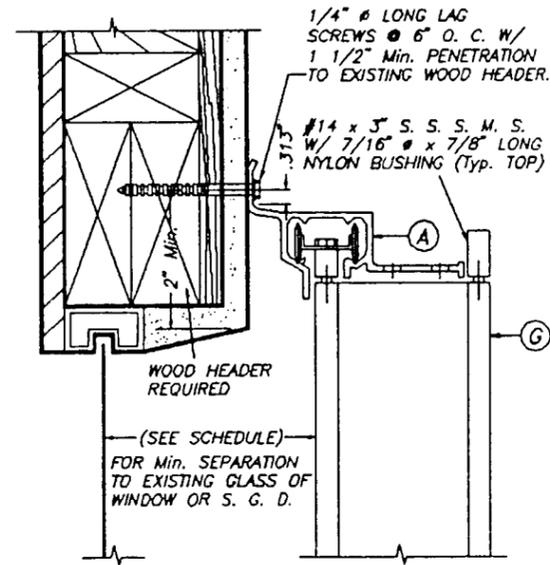
| | | | | | | |
|--|---------|---------|---|--|--|------------------------|
| OMEGA ACCORDION SHUTTER / HI-RISE | | | | | | AS SHOWN SCALE |
| ROLL-A-WAY STORM & SECURITY SHUTTERS 10507 OAK STREET N. E. ST. PETERSBURG, FLORIDA 33716 | | | | | | 5/29/96 DATE |
| REV. NO. DESCRIPTION DATE REV. NO. DESCRIPTION DATE | | | | | | 96 - 161 DRAWING No |
| 1 | GENERAL | 8/26/97 | 3 | | | SHEET 4 OF 8 |
| 2 | | | 4 | | | |



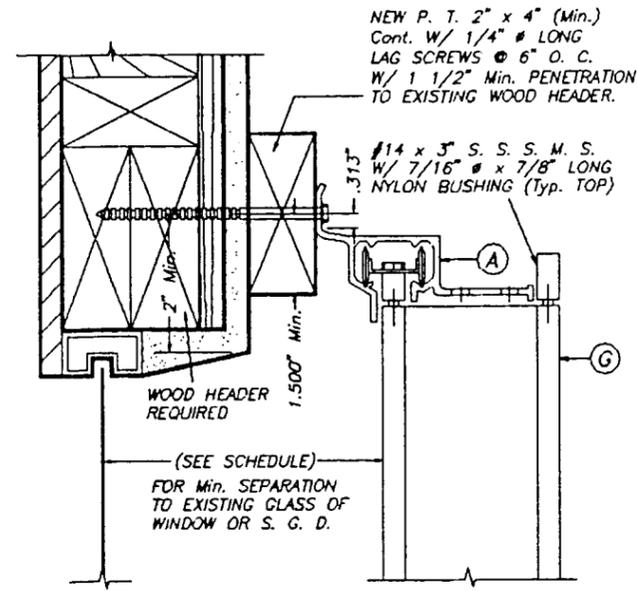
ALTERNATIVE 1



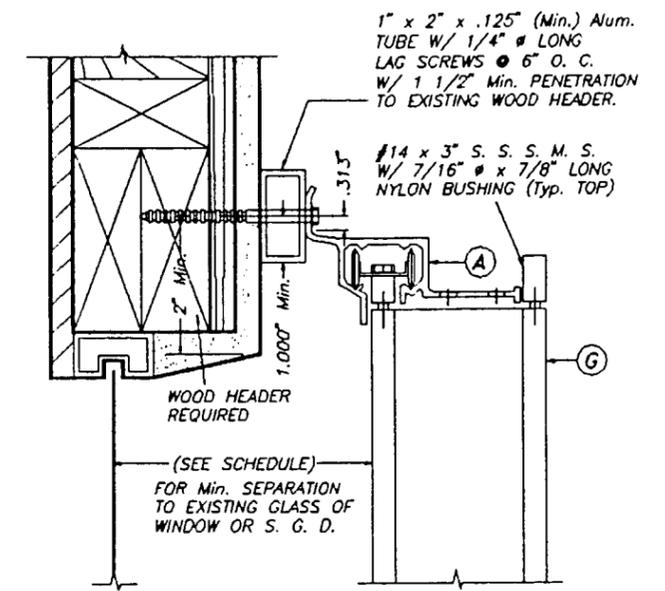
ALTERNATIVE 2



ALTERNATIVE 3



ALTERNATIVE 4



ALTERNATIVE 5

WALL MOUNTING INSTALLATION
SECTION A

SCALE: 1/4" = 1"

NOTE FOR COMBINATION OF SECTIONS:

WALL MOUNTING SECTIONS CAN BE COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.

NOTES:

- INSTALLATIONS ARE ONLY VALID FOR BUILDINGS WITH 75 p.s.f. Max DESIGN LOADS AND 9'-0" Max. SHUTTER SPAN.
- 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 FRAME BUILDINGS

PRODUCT RENEWED

ACCEPTANCE No. 00-0609-04

EXPIRATION DATE 09/25/2003

By *Herling A. Mako*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE

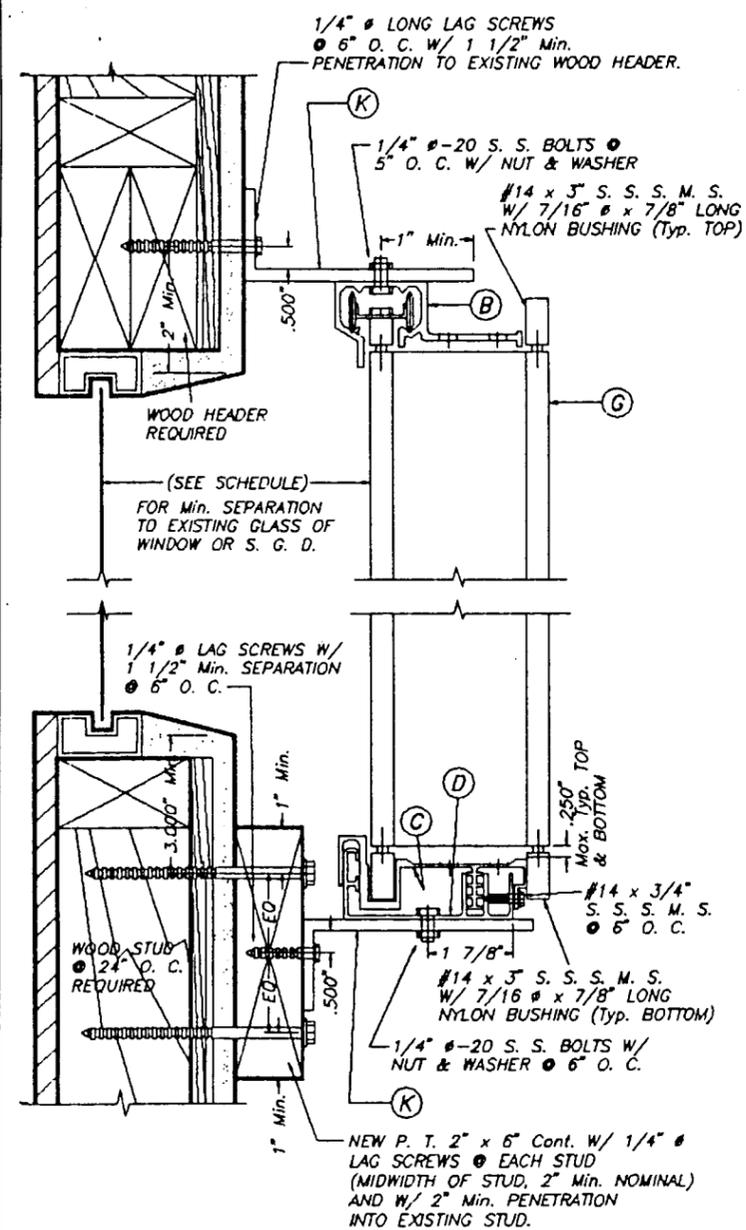
APPROVED AS COMPLYING WITH THE
SOUTH FLORIDA BUILDING CODE
DATE SEPTEMBER 25, 1997
BY *Herling A. Mako*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 97-0513.01

DADE COUNTY

TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6395 N.W. 36th St., Ste. 217, VIRIDIAN GARDENS, FL 33166
Phone: (305)871-1530 Fax: (305)871-1531
WALTER A. TILLIT Jr. P. E.
FLORIDA Lic. # 44167

| OMEGA ACCORDION SHUTTER / HI-RISE | | | | | | AS SHOWN SCALE |
|--|-------------|---------|---------|-------------|------|----------------|
| ROLL-A-WAY STORM & SECURITY SHUTTERS 10597 OAK STREET N. E. ST. PETERSBURG, FLORIDA 33716 | | | | | | 5/29/96 DATE |
| 96 - 161 | | | | | | DRAWING No |
| REVISIONS | | | | | | SHEET 5 OF 8 |
| REV. NO | DESCRIPTION | DATE | REV. No | DESCRIPTION | DATE | |
| 1 | GENERAL | 8/28/97 | 2 | | | |
| 2 | | | 3 | | | |

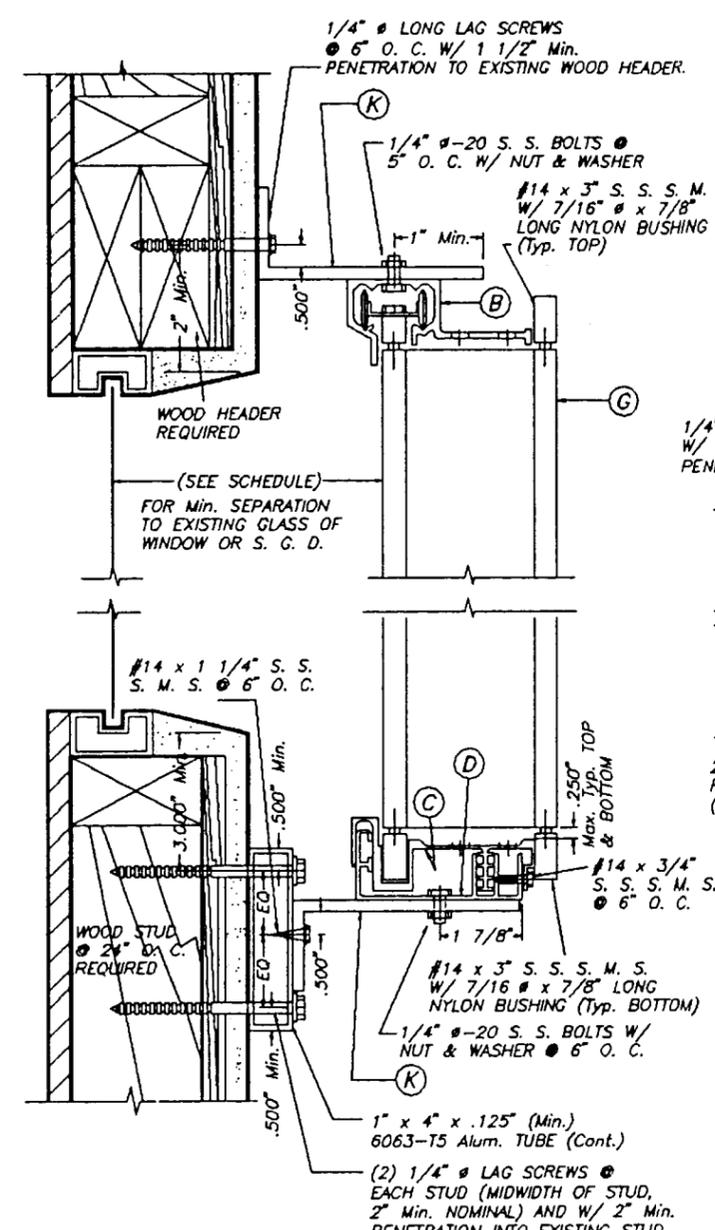
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9/2/97



ALTERNATIVE 6

WALL MOUNTING INSTALLATION
 SECTION A

SCALE: 1/4" = 1"

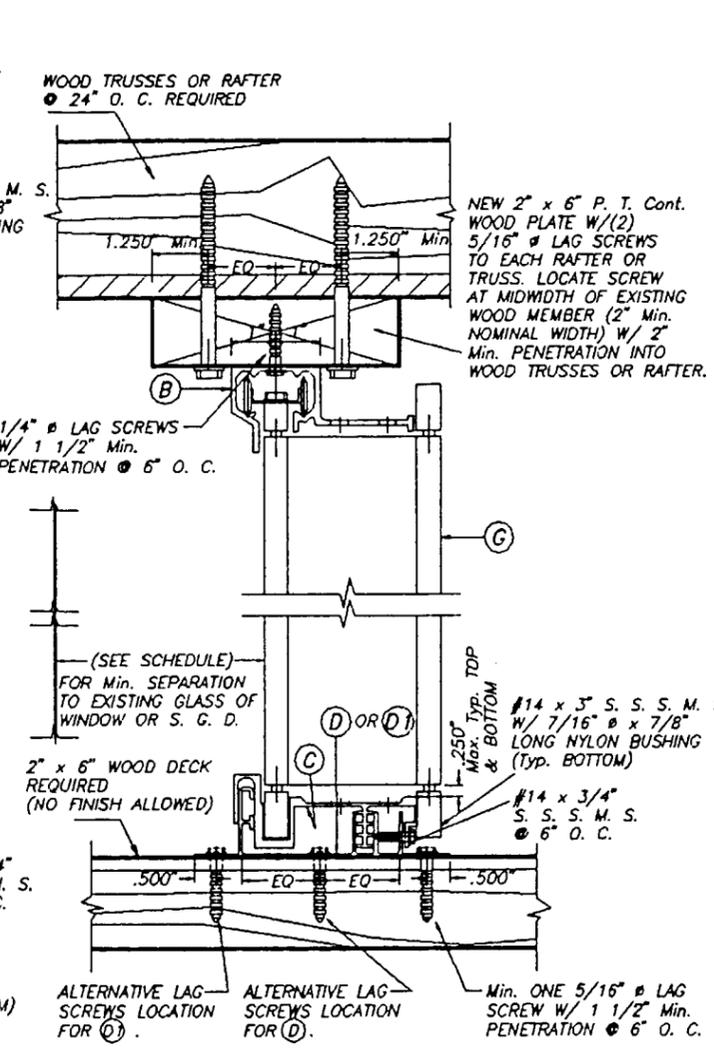


ALTERNATIVE 7

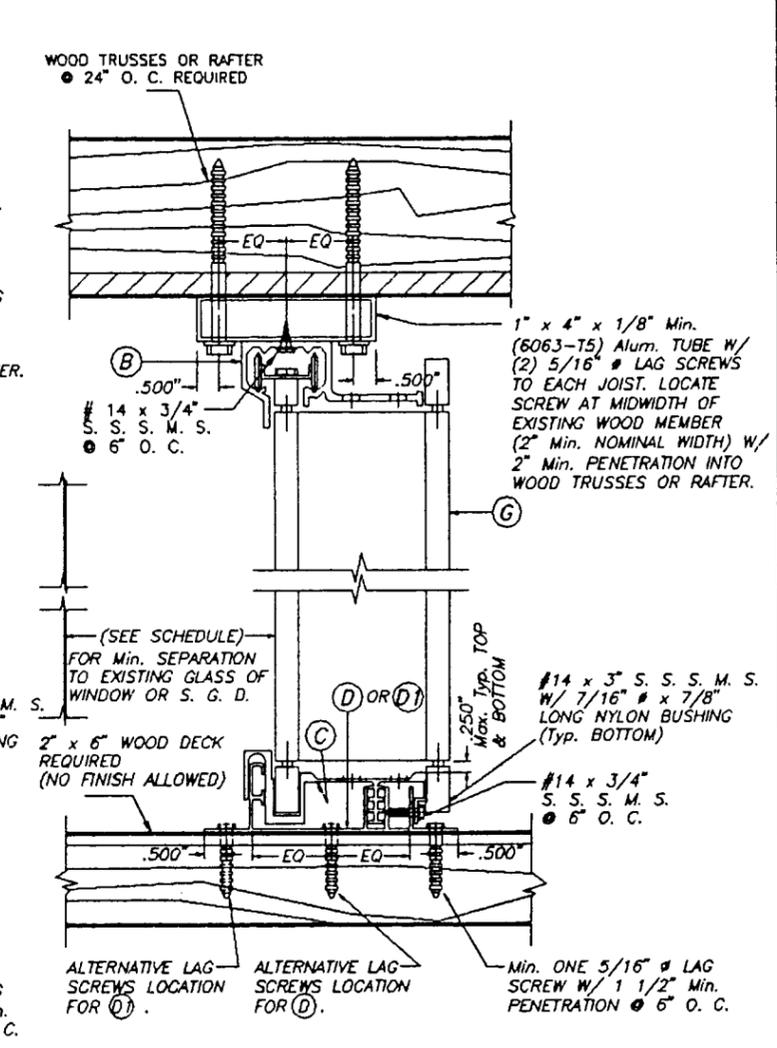
- NOTES:
- INSTALLATIONS ARE ONLY VALID FOR BUILDINGS WITH 75 p.s.f. Max. DESIGN LOADS AND 9'-0" Max. SHUTTER SPAN.
 - NEW 2" x 6" P. T. TO BE SOUTHERN PINE No. 2, SURFACED DRY WITH 19 % M. M. C. W/ SPECIFIC DENSITY OF 0.55.
 - FOR NEW WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO BE SOUTHERN PINE No. 2, W/ SPECIFIC DENSITY OF 0.55 OR EQUAL.

INSTALLATION DETAILS ON EXISTING
 WOOD FRAME BUILDINGS

Handwritten signature and date: 4/2/97



ALTERNATIVE 1



ALTERNATIVE 2

CEILING & REMOVABLE FLOOR MOUNTING INSTALLATION
 SECTION B

SCALE: 1/4" = 1"

PRODUCT RENEWED APPROVED AS COMPLYING WITH THE
 SOUTH FLORIDA BUILDING CODE
 ACCEPTANCE No. 00-0609-04 DATE SEPTEMBER 25, 1997
 EXPIRATION DATE 09/25/2003 BY Helmut A. Mark
 By Helmut A. Mark PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE

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

TILECO INC.
 TILLIT TESTING & ENGINEERING COMPANY
 1520 N.W. 30th St., Ft. Lauderdale, FL 33309
 Phone: (305)871-1530 Fax: (305)871-1531
 WALTER A. TILLIT Jr. P. E.
 FLORIDA Lic. # 44167

OMEGA ACCORDION SHUTTER / HI-RISE

ROLL-A-WAY
 STORM & SECURITY SHUTTERS
 10507 OAK STREET N. E.
 ST. PETERSBURG, FLORIDA 33716

| |
|----------------|
| AS SHOWN SCALE |
| 5/29/96 DATE |
| 96 - 161 |
| DRAWING No |
| SHEET 6 OF 8 |

| REV. NO | DESCRIPTION | DATE | REV. NO | DESCRIPTION | DATE |
|---------|-------------|---------|---------|-------------|------|
| 1 | GENERAL | 8/28/97 | 2 | | |
| 2 | | | 3 | | |

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

(VALID FOR SECTIONS A, B & C ON SHEETS 2 & 3 OF 8).

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.) | |
|----------------------------------|------------------------------|---------------------------------------|----|
| | | * | ** |
| 35.0 | 16'-0" | 3 1/16" | 3" |
| 40.0 | 16'-0" | 3 1/16" | 3" |
| 45.0 | 15'-7" | 3 1/16" | 3" |
| 47.8 | 15'-4" | 3 1/16" | 3" |
| 49.0 | 15'-3" | 3 1/16" | 3" |
| 50.5 | 15'-1" | 3 1/16" | 3" |
| 52.0 | 15'-0" | 3 1/16" | 3" |
| 52.4 | 15'-0" | 3 1/16" | 3" |
| 55.0 | 14'-10" | 3 1/16" | 3" |
| 55.2 | 14'-9" | 3 1/16" | 3" |
| 55.6 | 14'-9" | 3 1/16" | 3" |
| 57.2 | 14'-7" | 3 1/16" | 3" |
| 58.6 | 14'-5" | 3 1/16" | 3" |
| 58.8 | 14'-5" | 3 1/16" | 3" |
| 59.5 | 14'-3" | 3 1/16" | 3" |
| 59.7 | 14'-3" | 3 1/16" | 3" |
| 61.5 | 14'-1" | 3 1/16" | 3" |
| 61.8 | 14'-0" | 3 1/16" | 3" |
| 61.9 | 14'-0" | 3 1/16" | 3" |
| 63.7 | 13'-10" | 3 1/16" | 3" |
| 66.9 | 13'-6" | 3 1/16" | 3" |
| 67.0 | 13'-6" | 3 1/16" | 3" |

| MAXIMUM DESIGN LOAD "W" (p.s.f.) | MAXIMUM PANEL SPAN "L" (ft.) | MINIMUM SEPARATION "S" TO GLASS (in.) | |
|----------------------------------|------------------------------|---------------------------------------|----|
| | | * | ** |
| 67.5 | 13'-5" | 3 1/16" | 3" |
| 70.1 | 13'-2" | 3 1/16" | 3" |
| 71.1 | 13'-1" | 3 1/16" | 3" |
| 71.4 | 13'-1" | 3 1/16" | 3" |
| 71.5 | 13'-0" | 3 1/16" | 3" |
| 72.9 | 12'-11" | 3 1/16" | 3" |
| 75.1 | 12'-9" | 3 1/16" | 3" |
| 75.2 | 12'-9" | 3 1/16" | 3" |
| 75.3 | 12'-8" | 3 1/16" | 3" |
| 77.0 | 12'-7" | 3 1/16" | 3" |
| 77.5 | 12'-6" | 3 1/16" | 3" |
| 78.8 | 12'-5" | 3 1/16" | 3" |
| 80.7 | 12'-3" | 3 1/16" | 3" |
| 81.5 | 12'-3" | 3 1/16" | 3" |
| 82.5 | 12'-2" | 3 1/16" | 3" |
| 83.4 | 12'-1" | 3 1/16" | 3" |
| 86.2 | 11'-10" | 3 1/16" | 3" |
| 86.7 | 11'-10" | 3 1/16" | 3" |
| 86.8 | 11'-10" | 3 1/16" | 3" |
| 88.5 | 11'-9" | 3 1/16" | 3" |
| 90.3 | 11'-7" | 3 1/16" | 3" |
| 90.8 | 11'-7" | 3 1/16" | 3" |

| MAXIMUM DESIGN LOAD "W" (p.s.f.) | MAXIMUM PANEL SPAN "L" (ft.) | MINIMUM SEPARATION "S" TO GLASS (in.) | |
|----------------------------------|------------------------------|---------------------------------------|----------|
| | | * | ** |
| 91.4 | 10'-6" | 3 1/16" | 3" |
| 92.7 | 11'-5" | 3 1/16" | 3" |
| 93.8 | 11'-5" | 3 1/16" | 3" |
| 94.8 | 11'-4" | 3 1/16" | 3" |
| 96.6 | 11'-3" | 3 1/16" | 3" |
| 96.8 | 11'-2" | 3 1/16" | 3" |
| 97.7 | 11'-2" | 3 1/16" | 3" |
| 100.5 | 11'-0" | 3 1/16" | 3" |
| 101.5 | 10'-11" | 3 1/16" | 3" |
| 103.7 | 10'-10" | 3 1/16" | 3" |
| 106.5 | 10'-8" | 3 1/16" | 3" |
| 108.8 | 10'-7" | 3 1/16" | 3" |
| 110.6 | 10'-6" | 3 1/16" | 3" |
| 111.0 | 10'-6" | 3 1/16" | 3" |
| 114.1 | 10'-4" | 3 1/16" | 3" |
| 116.5 | 10'-3" | 3 1/16" | 3" |
| 116.9 | 10'-2" | 3 1/16" | 3" |
| 117.6 | 10'-2" | 3 1/16" | 3" |
| 119.7 | 10'-1" | 3 1/16" | 3" |
| 120.0 | 10'-1" | 3 1/16" | 3" |
| 121.2 | 10'-0" | 2 7/16" | 1 15/16" |
| 122.5 | 10'-0" | 2 7/16" | 1 15/16" |

| MAXIMUM DESIGN LOAD "W" (p.s.f.) | MAXIMUM PANEL SPAN "L" (ft.) | MINIMUM SEPARATION "S" TO GLASS (in.) | |
|----------------------------------|------------------------------|---------------------------------------|----------|
| | | * | ** |
| 125.3 | 9'-10" | 2 7/16" | 1 15/16" |
| 125.8 | 9'-10" | 2 7/16" | 1 15/16" |
| 126.7 | 9'-10" | 2 7/16" | 1 15/16" |
| 129.6 | 9'-8" | 2 7/16" | 1 15/16" |
| 130.9 | 9'-8" | 2 7/16" | 1 15/16" |
| 131.6 | 9'-7" | 2 7/16" | 1 15/16" |
| 134.3 | 9'-6" | 2 7/16" | 1 15/16" |
| 136.2 | 9'-5" | 2 7/16" | 1 15/16" |
| 137.9 | 9'-5" | 2 7/16" | 1 15/16" |
| 140.7 | 9'-4" | 2 7/16" | 1 15/16" |
| 142.8 | 9'-3" | 2 7/16" | 1 15/16" |
| 143.5 | 9'-2" | 2 7/16" | 1 15/16" |
| 147.0 | 9'-1" | 2 7/16" | 1 15/16" |
| 148.4 | 9'-1" | 2 7/16" | 1 15/16" |
| 152.6 | 8'-10" | 2 7/16" | 1 3/4" |
| 153.1 | 8'-10" | 2 7/16" | 1 3/4" |
| 156.8 | 8'-7" | 2 7/16" | 1 3/4" |
| 157.5 | 8'-7" | 2 7/16" | 1 3/4" |
| 157.8 | 8'-7" | 2 7/16" | 1 3/4" |
| 160.8 | 8'-5" | 2 7/16" | 1 3/4" |
| 161.7 | 8'-4" | 2 7/16" | 1 3/4" |
| 164.4 | 8'-3" | 2 7/16" | 1 3/4" |

| MAXIMUM DESIGN LOAD "W" (p.s.f.) | MAXIMUM PANEL SPAN "L" (ft.) | MINIMUM SEPARATION "S" TO GLASS (in.) | |
|----------------------------------|------------------------------|---------------------------------------|--------|
| | | * | ** |
| 165.2 | 8'-2" | 2 7/16" | 1 3/4" |
| 168.1 | 8'-0" | 2 7/16" | 1 3/4" |
| 168.7 | 8'-0" | 2 7/16" | 1 3/4" |
| 170.0 | 7'-11" | 2 7/16" | 1 3/4" |
| 175.6 | 7'-8" | 2 7/16" | 1 3/4" |
| 176.6 | 7'-8" | 2 7/16" | 1 3/4" |
| 180.3 | 7'-6" | 2 7/16" | 1 3/4" |
| 188.0 | 7'-2" | 2 7/16" | 1 3/4" |
| 195.2 | 6'-11" | 2 7/16" | 1 3/4" |
| 197.2 | 6'-10" | 2 7/16" | 1 3/4" |
| 199.1 | 6'-9" | 2 7/16" | 1 3/4" |
| 204.7 | 6'-7" | 2 7/16" | 1 3/4" |
| 211.3 | 6'-5" | 2 7/16" | 1 3/4" |
| 216.9 | 6'-3" | 2 7/16" | 1 3/4" |
| 221.6 | 6'-1" | 2 7/16" | 1 3/4" |
| 226.3 | 6'-0" | 2 7/16" | 1 3/4" |

NOTES ON "p.s.f." VS SPAN SCHEDULE

- * MINIMUM SEPARATION BETWEEN GLASS & SHUTTER, FOR SHUTTERS INSTALLED WITHIN THE FIRST 30'-0" ELEVATION OF BUILDING MEASURED AT BOTTOM OF SHUTTER. SEE TABLE 1 FOR MINIMUM SEPARATION TO GLASS FOR SPANS SHORTER THAN THE MAXIMUM ALLOWED SHOWN ON SCHEDULE.
 - ** FOR SHUTTERS INSTALLED ABOVE 30'-0" ELEVATION OF BUILDING, MEASURED AT BOTTOM OF SHUTTER.
- SEPARATION "S" TO BE MEASURED AS INDICATED ON SECTION D, SHEET 4 OF 8.

MAXIMUM DESIGN PRESSURE RATING "W" (p.s.f.) AND CORRESPONDING MAXIMUM ANCHOR SPACING (in.) SCHEDULE. +
(VALID FOR SECTIONS A, B & C ON SHEETS 2 & 3 OF 8).

| MAXIMUM DESIGN LOAD "W" (p.s.f.) | SECTION A ONLY | | | | | | SECTION B | | | SECTION C | | | | | |
|----------------------------------|--|--------|--------|---|--------|--------|--|--------|--------|--|--------|--------|---|--------|--------|
| | WALL MOUNTING INSTALLATION AT TOP & BOTTOM (TO CONCRETE) | | | WALL MOUNTING INSTALLATION AT BOTTOM (TO MASONRY) | | | FLOOR/CEILING MOUNTING INSTALLATION TOP & BOTTOM (TO CONCRETE) | | | WALL MOUNTING INSTALLATION AT TOP & BOTTOM (TO CONCRETE) | | | WALL MOUNTING INSTALLATION AT BOTTOM (TO MASONRY) | | |
| | NOTE 1 | NOTE 2 | NOTE 3 | NOTE 1 | NOTE 2 | NOTE 3 | NOTE 1 | NOTE 2 | NOTE 3 | NOTE 1 | NOTE 2 | NOTE 3 | NOTE 1 | NOTE 2 | NOTE 3 |
| FROM 35.0 TO 61.8 | 6" | 6" | 6" | 6" | 6" | 6" | 6" | 6" | 5 1/2" | 6" | 6" | 6" | 6" | 6" | 6" |
| FROM 61.9 TO 75.3 | 6" | 6" | 5 1/2" | 6" | 6" | 3 1/2" | 6" | 6" | 5" | 6" | 6" | 6" | 6" | 6" | 5" |
| FROM 75.4 TO 91.4 | 6" | 6" | 5 1/2" | 6" | 6" | 3 1/2" | 6" | 6" | 5" | 6" | 6" | 6" | 6" | 6" | 5" |
| FROM 91.5 TO 120.0 | 6" | 4 1/2" | 2 1/2" | 6" | 3" | N/A | 6" | 5" | 4" | 6" | 6" | 6" | 6" | 5 1/2" | 4 1/2" |
| FROM 120.1 TO 168.1 | 6" | 2 1/2" | 2 1/2" | 6" | N/A | N/A | 6" | 3 1/2" | 3 1/2" | 6" | 6" | 6" | 6" | 4" | 4" |
| FROM 168.2 TO 226.3 | 3" | N/A | N/A | N/A | N/A | N/A | 4 1/2" | 3 1/2" | N/A | 6" | 6" | N/A | 5" | 4" | N/A |

ANCHOR SPACING LEGEND

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

| WALL MOUNTING | FLOOR/CEILING MOUNTING |
|---------------|------------------------|
| ZAMAC NAILIN | TAPCON |
| TAPCON | RAWL CALK-IN |

ANCHOR SPACING LEGEND

NOTES ON ANCHOR SPACING SCHEDULE

SEE SHEETS 5 & 6 OF 8 FOR ANCHORS TYPE & SPACING FOR INSTALLATIONS INTO WOOD FRAME BLDGS. 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. (NOTE: Min. E. D. FOR RAWL CALK-IN ANCHORS IS 2 1/2").

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

PRODUCT RENEWED

ACCEPTANCE No. 00-0609.04

EXPIRATION DATE 09/25/2003

By Helmut A. M...
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE

Handwritten signature and date: 9/2/99

TILECO INC.
TILIT TESTING & ENGINEERING COMPANY
6995 N.W. 30th St., Ste. 217, VIRGINIA GARDENS, FL 33166
Phone: (305)871-1530 Fax: (305)871-1531
WALTER A. TILIT Jr., P. E.
FLORIDA Lic. # 44167

TABLE 1:

| SHUTTER SPAN "L" (ft.) | MINIMUM SEPARATION "S" (in.) |
|---------------------------|------------------------------|
| LESS OR EQUAL THAN 10'-0" | 2 7/16" |
| > 10'-0" TO 16'-0" | 3 1/16" |

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE SEPTEMBER 25 1999
BY Helmut A. M...
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 97-0513.01 DADE COUNTY

| | | | | | |
|--|---------|-----------------|---|--|--------------|
| OMEGA ACCORDION SHUTTER / HI-RISE | | AS SHOWN SCALE | | | |
| ROLL-A-WAY STORM & SECURITY SHUTTERS 10597 OAK STREET N. E. ST. PETERSBURG, FLORIDA 33716 | | 5/29/96 DATE | | | |
| REV. NO. DESCRIPTION DATE REV. NO. DESCRIPTION DATE | | DRAWING No | | | |
| 1 | GENERAL | 8/28/97 | 3 | | 96 - 161 |
| 2 | | | 4 | | SHEET 7 OF 8 |

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

(VALID FOR SECTIONS B1 & C1 ON SHEETS 2 & 3 OF 8).

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.) | |
|----------------------------------|------------------------------|---------------------------------------|----|
| | | * | ** |
| 35.0 | 16'-0" | 3 3/16" | 3" |
| 40.0 | 15'-7" | 3 3/16" | 3" |
| 45.0 | 15'-2" | 3 3/16" | 3" |
| 47.8 | 14'-11" | 3 3/16" | 3" |
| 49.0 | 14'-0" | 3 3/16" | 3" |
| 50.5 | 14'-9" | 3 3/16" | 3" |
| 52.0 | 14'-7" | 3 3/16" | 3" |
| 52.4 | 14'-7" | 3 3/16" | 3" |
| 55.0 | 14'-5" | 3 3/16" | 3" |
| 55.2 | 14'-5" | 3 3/16" | 3" |
| 55.6 | 14'-5" | 3 3/16" | 3" |
| 57.2 | 14'-3" | 3 3/16" | 3" |
| 58.6 | 14'-2" | 3 3/16" | 3" |
| 58.8 | 14'-2" | 3 3/16" | 3" |
| 59.5 | 14'-2" | 3 3/16" | 3" |
| 59.7 | 14'-2" | 3 3/16" | 3" |
| 61.5 | 14'-0" | 3 3/16" | 3" |
| 61.8 | 14'-0" | 3 3/16" | 3" |
| 61.9 | 14'-0" | 3 3/16" | 3" |
| 63.7 | 13'-11" | 3 3/16" | 3" |
| 66.9 | 13'-9" | 3 3/16" | 3" |
| 67.0 | 13'-9" | 3 3/16" | 3" |

| MAXIMUM DESIGN LOAD "W" (p.s.f.) | MAXIMUM PANEL SPAN "L" (ft.) | MINIMUM SEPARATION "S" TO GLASS (in.) | |
|----------------------------------|------------------------------|---------------------------------------|----|
| | | * | ** |
| 67.5 | 13'-8" | 3 3/16" | 3" |
| 70.1 | 13'-7" | 3 3/16" | 3" |
| 71.1 | 13'-6" | 3 3/16" | 3" |
| 71.4 | 13'-6" | 3 3/16" | 3" |
| 71.5 | 13'-6" | 3 3/16" | 3" |
| 72.9 | 13'-5" | 3 3/16" | 3" |
| 75.1 | 13'-4" | 3 3/16" | 3" |
| 75.2 | 13'-4" | 3 3/16" | 3" |
| 75.3 | 13'-4" | 3 3/16" | 3" |
| 77.0 | 13'-3" | 3 3/16" | 3" |
| 77.5 | 13'-3" | 3 3/16" | 3" |
| 78.8 | 13'-2" | 3 3/16" | 3" |
| 80.7 | 13'-1" | 3 3/16" | 3" |
| 81.5 | 13'-1" | 3 3/16" | 3" |
| 82.5 | 13'-0" | 3 3/16" | 3" |
| 83.4 | 13'-0" | 3 3/16" | 3" |
| 86.2 | 12'-11" | 3 3/16" | 3" |
| 86.7 | 12'-10" | 3 3/16" | 3" |
| 86.8 | 12'-10" | 3 3/16" | 3" |
| 88.5 | 12'-10" | 3 3/16" | 3" |
| 90.3 | 12'-8" | 3 3/16" | 3" |
| 90.8 | 12'-8" | 3 3/16" | 3" |

| MAXIMUM DESIGN LOAD "W" (p.s.f.) | MAXIMUM PANEL SPAN "L" (ft.) | MINIMUM SEPARATION "S" TO GLASS (in.) | |
|----------------------------------|------------------------------|---------------------------------------|----------|
| | | * | ** |
| 91.4 | 12'-8" | 3 3/16" | 3" |
| 92.7 | 12'-7" | 3 3/16" | 3" |
| 93.8 | 12'-6" | 3 3/16" | 3" |
| 94.8 | 12'-5" | 3 3/16" | 3" |
| 96.6 | 12'-3" | 3 3/16" | 3" |
| 96.8 | 12'-3" | 3 3/16" | 3" |
| 97.7 | 12'-3" | 3 3/16" | 3" |
| 100.5 | 12'-1" | 3 3/16" | 3" |
| 101.5 | 12'-0" | 2 13/16" | 2 13/16" |
| 103.7 | 11'-10" | 2 13/16" | 2 13/16" |
| 106.5 | 11'-8" | 2 13/16" | 2 13/16" |
| 108.8 | 11'-7" | 2 13/16" | 2 13/16" |
| 110.6 | 11'-6" | 2 13/16" | 2 13/16" |
| 111.0 | 11'-6" | 2 13/16" | 2 13/16" |
| 114.1 | 11'-4" | 2 13/16" | 2 13/16" |
| 116.5 | 11'-2" | 2 13/16" | 2 13/16" |
| 116.9 | 11'-2" | 2 13/16" | 2 13/16" |
| 117.6 | 11'-2" | 2 13/16" | 2 13/16" |
| 119.7 | 11'-0" | 2 13/16" | 2 13/16" |
| 120.0 | 11'-0" | 2 13/16" | 2 13/16" |
| 121.2 | 11'-0" | 2 13/16" | 2 13/16" |
| 122.5 | 10'-11" | 2 13/16" | 2 13/16" |

| MAXIMUM DESIGN LOAD "W" (p.s.f.) | MAXIMUM PANEL SPAN "L" (ft.) | MINIMUM SEPARATION "S" TO GLASS (in.) | |
|----------------------------------|------------------------------|---------------------------------------|----------|
| | | * | ** |
| 125.3 | 10'-9" | 2 13/16" | 2 13/16" |
| 125.8 | 10'-9" | 2 13/16" | 2 13/16" |
| 126.7 | 10'-9" | 2 13/16" | 2 13/16" |
| 129.6 | 10'-7" | 2 13/16" | 2 13/16" |
| 130.9 | 10'-7" | 2 13/16" | 2 13/16" |
| 131.6 | 10'-6" | 2 13/16" | 2 13/16" |
| 134.3 | 10'-5" | 2 13/16" | 2 13/16" |
| 136.2 | 10'-4" | 2 13/16" | 2 13/16" |
| 137.9 | 10'-3" | 2 13/16" | 2 13/16" |
| 140.7 | 10'-2" | 2 13/16" | 2 13/16" |
| 142.8 | 10'-1" | 2 13/16" | 2 13/16" |
| 143.5 | 10'-1" | 2 13/16" | 2 13/16" |
| 147.0 | 10'-0" | 2 3/4" | 2 1/4" |
| 148.4 | 9'-11" | 2 3/4" | 2 1/4" |
| 152.6 | 9'-9" | 2 3/4" | 2 1/4" |
| 153.1 | 9'-9" | 2 3/4" | 2 1/4" |
| 156.8 | 9'-8" | 2 3/4" | 2 1/4" |
| 157.5 | 9'-7" | 2 3/4" | 2 1/4" |
| 157.8 | 9'-7" | 2 3/4" | 2 1/4" |
| 160.8 | 9'-6" | 2 3/4" | 2 1/4" |
| 161.7 | 9'-6" | 2 3/4" | 2 1/4" |
| 164.4 | 9'-5" | 2 3/4" | 2 1/4" |

| MAXIMUM DESIGN LOAD "W" (p.s.f.) | MAXIMUM PANEL SPAN "L" (ft.) | MINIMUM SEPARATION "S" TO GLASS (in.) | |
|----------------------------------|------------------------------|---------------------------------------|--------|
| | | * | ** |
| 165.2 | 9'-5" | 2 3/4" | 2 1/4" |
| 168.1 | 9'-4" | 2 3/4" | 2 1/4" |
| 168.7 | 9'-4" | 2 3/4" | 2 1/4" |
| 170.0 | 9'-3" | 2 3/4" | 2 1/4" |
| 175.6 | 9'-1" | 2 3/4" | 2 1/4" |
| 176.6 | 9'-1" | 2 3/4" | 2 1/4" |
| 180.3 | 9'-0" | 2 3/4" | 2" |
| 188.0 | 8'-7" | 2 3/4" | 2" |
| 195.2 | 8'-4" | 2 3/4" | 2" |
| 197.2 | 8'-3" | 2 3/4" | 2" |
| 199.1 | 8'-2" | 2 3/4" | 2" |
| 204.7 | 7'-11" | 2 3/4" | 2" |
| 211.3 | 7'-8" | 2 3/4" | 2" |
| 216.9 | 7'-6" | 2 3/4" | 2" |
| 221.6 | 7'-4" | 2 3/4" | 2" |
| 226.3 | 7'-2" | 2 3/4" | 2" |

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

(VALID FOR SECTIONS B1 & C1 ON SHEETS 2 & 3 OF 8).

| MAXIMUM DESIGN LOAD "W" (p.s.f.) | SECTION C1 | | | | | | SECTION B1 | | |
|----------------------------------|--|--------|--------|---|--------|--------|--|--------|--------|
| | WALL MOUNTING INSTALLATION AT TOP & BOTTOM (TO CONCRETE) | | | WALL MOUNTING INSTALLATION AT BOTTOM (TO MASONRY) | | | FLOOR/CEILING MOUNTING INSTALLATION TOP & BOTTOM (TO CONCRETE) | | |
| | NOTE 1 | NOTE 2 | NOTE 3 | NOTE 1 | NOTE 2 | NOTE 3 | NOTE 1 | NOTE 2 | NOTE 3 |
| FROM 35.0 TO 61.8 | 6" | 6" | 6" | 3" | 3" | 3" | 6" | 6" | 5 1/2" |
| FROM 61.9 TO 75.3 | 6" | 6" | 6" | 3" | 3" | 3" | 6" | 6" | 5" |
| FROM 75.4 TO 91.4 | 6" | 6" | 6" | 3" | 3" | 3" | 6" | 6" | 4" |
| FROM 91.5 TO 120.0 | 6" | 6" | 6" | 3" | 3" | 3" | 6" | 5" | 3 1/2" |
| FROM 120.1 TO 168.1 | 3" | 3" | 3" | 3" | 3" | 3" | 6" | 3 1/2" | 3" |
| FROM 168.2 TO 226.3 | 3" | 3" | 3" | 3" | 3" | 3" | 4 1/2" | 3" | 3" |

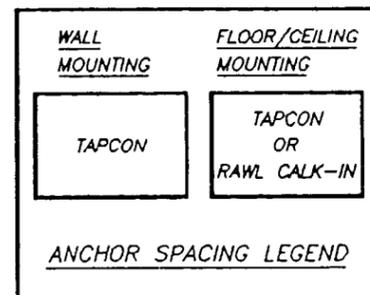
ANCHOR SPACING LEGEND

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

NOTES ON ANCHOR SPACING SCHEDULE

- + SEE SHEETS 5 & 6 OF 8 FOR ANCHORS TYPE & SPACING FOR INSTALLATIONS INTO WOOD FRAME BLDGS. 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. (NOTE : Min. E. D. FOR RAWL CALK-IN ANCHORS IS 2 1/2").

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



NOTES ON "p.s.f." VS SPAN SCHEDULE

- * MINIMUM SEPARATION BETWEEN GLASS & SHUTTER FOR SHUTTERS INSTALLED WITHIN THE FIRST 30'-0" ELEVATION OF BUILDING MEASURED AT BOTTOM OF SHUTTER. SEE TABLE 1 FOR MINIMUM SEPARATION TO GLASS FOR SPANS SHORTER THAN THE MAXIMUM ALLOWED SHOWN ON SCHEDULE.
- ** FOR SHUTTERS INSTALLED ABOVE 30'-0" ELEVATION OF BUILDING, MEASURED AT BOTTOM OF SHUTTER.

SEPARATION "S" TO BE MEASURED AS INDICATED ON SECTION D, SHEET 4 OF 8.

TABLE 1:

| SHUTTER SPAN "L" (ft.) | MINIMUM SEPARATION "S" (in.) |
|---------------------------|------------------------------|
| LESS OR EQUAL THAN 10'-0" | 2 3/4" |
| > 10'-0" TO 12'-0" | 2 13/16" |
| > 12'-0" TO 16'-0" | 3 3/16" |

PRODUCT RENEWED

ACCEPTANCE No. 00-0609.04
 EXPIRATION DATE 09/25/2003
 By Heung A. Mak
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
 DATE SEPTEMBER 25 1997
 BY Heung A. Mak
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE
 ACCEPTANCE NO. 97-0513.01

DADE COUNTY

| | | |
|---|--|----------------|
| TILIT TESTINO & ENGINEERING COMPANY 6595 N.W. 36th St., Ste. 217, WRCMHP GARDEN, FL 33186 Phone: (305) 671-1530 Fax: (305) 671-1531 | OMEGA ACCORDION SHUTTER / HI-RISE | AS SHOWN SCALE |
| | ROLL-A-WAY STORM & SECURITY SHUTTERS 10597 OAK STREET N. E. ST. PETERSBURG, FLORIDA 33716 | 5/29/96 DATE |
| WALTER A. TILIT Jr., P. E. FLORIDA Lic. # 44167 | REV. NO. DESCRIPTION DATE REV. No. DESCRIPTION DATE | SHEET 8 OF 8 |