



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

NOTICE OF ACCEPTANCE (NOA)

www.miamidade.gov

Southeastern Metals Manufacturing Co., Inc.
11801 Industry Drive
Jacksonville, FL 32218

SCOPE:

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

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

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

DESCRIPTION: 0.063" (min.) Aluminum Storm Panels Shutter

APPROVAL DOCUMENT: Drawing No. 01-215T, titled " 0.063" Aluminum Storm Panels ", sheets 1 through 3 of 3, prepared by Engco. Inc., dated June 19, 2001, last revision #D dated March 28, 2007, signed and sealed by Barry J. Gaines, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the 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 # 01-0718.15** and consists of this page 1, evidence submitted page E-1 as well as approval document mentioned above.

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



Helmy A. Makar
 04/19/2007

NOA No 06-1012.05
Expiration Date: 11/15/ 2011
Approval Date: 04/19/2007
Page 1

Southeastern Metals Manufacturing Co., Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 01-0718.15

A. DRAWINGS

1. *Drawing No. 01-215, prepared by Engco, Inc., last revision #I dated August 24, 2001, sheets 1 through 3 of 3, signed and sealed by Pedro De Figueiredo, P.E.*

B. TESTS

1. *Test report on Large Missile Impact Test, Cyclic Wind Pressure Test, and Uniform Static Air Pressure Test of .063" aluminum storm panels, prepared by Construction Testing Corporation, Report No. 01-016, dated July 04, 2001, signed and sealed by Christopher G. Tyson, P.E.*

C. CALCULATIONS

1. *Anchor analysis dated 07/11/2001 Pages 1 through 13, prepared by Engco, Inc., signed and sealed by Pedro De Figueiredo, P.E.*

D. MATERIAL CERTIFICATIONS

1. *Mill certified inspection report issued by Vulcan Aluminum dated 05/16/2001, with chemical composition and mechanical properties for aluminum alloy 5052-H32.*
2. *Certified Tensile Test Report Number CTL-0887G, prepared by Certified Testing Laboratories, dated 07/10/2001 for aluminum, tested per ASTM E8-93, signed and sealed by Ramesh Patel, P.E.*

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. 01-215T, titled "0.063" Aluminum Storm Panels", sheets 1 through 3 of 3, prepared by Engco. Inc., dated June 19, 2001, last revision #D dated March 28, 2007, signed and sealed by Barry J. Gaines, P.E.*

B. TESTS

1. *None.*

C. CALCULATIONS

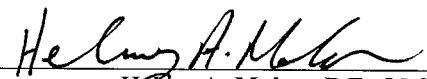
1. *Revised anchor calculations, dated February 15, 2007, 22 pages, prepared by Barry J. Gaines, P.E., signed and sealed by Barry J. Gaines, P.E. on February 15, 2007.*

D. QUALITY ASSURANCE

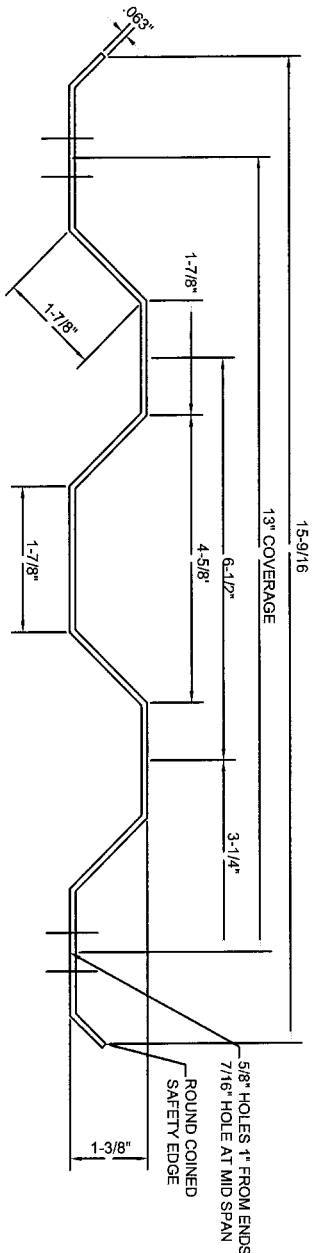
1. *By Miami-Dade County Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

1. *None.*

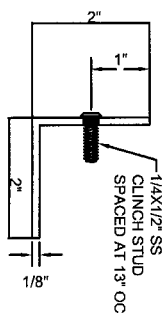


Helmy A. Makar, P.E., M.S.
Product Control Examiner
NOA No 06-1012.05
Expiration Date: 11/15/ 2011
Approval Date: 04/19/2007

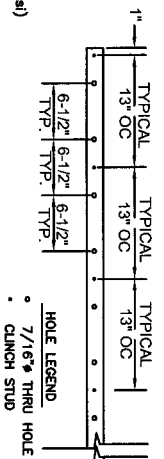


1- TYPICAL .063 ALUMINUM PANEL
 5052-H32 ALLOY (F_{tu}= 31 Ksi & F_y=23 Ksi)
 3004-H34 ALLOY (F_{tu}= 32 Ksi & F_y=25 Ksi)

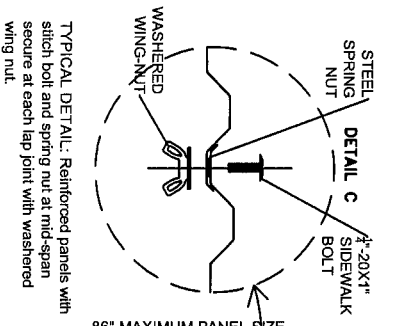
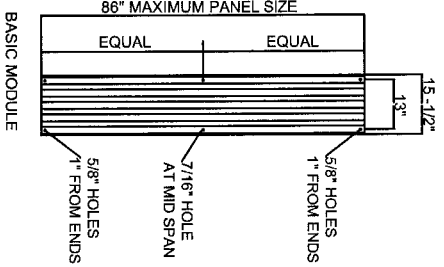
DESIGN PRESSURES:
 Pd = +80 -80 PSF



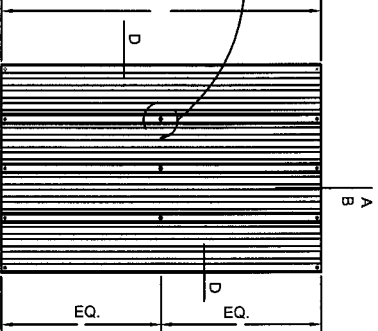
2- STUD ANGLE
 6063-T6 ALLOY (F_{tu}= 30 Ksi & F_y=25 Ksi)



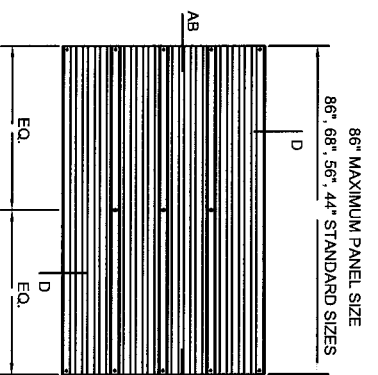
STUD ANGLE LAY-OUT



86" MAXIMUM PANEL SIZE
 86", 68", 56", 44" STANDARD SIZES



TYPICAL ELEVATION
 PANELS CAN BE INSTALLED VERTICALLY OR
 HORIZONTALLY USING APPLICABLE ANCHORING
 DETAILS



GENERAL NOTES:
 1- THIS STRUCTURE IS DESIGNED AS PER THE FLORIDA BUILDING CODE 2004 EDITION FOR MIAMI-DADE COUNTY, ALSO FOR WIND LOADS AS PER ASCE 7-02 USING CORRESPONDING LOADS.
 2- DESIGN CRITERIA FOR ALUMINUM, MINIMUM MECHANICAL PROPERTIES AND SAFETY FACTORS ARE IN ACCORDANCE WITH THE ALUMINUM CONSTRUCTION MANUAL, 2005 EDITION.
 3- ALL EXTRUSIONS SHALL BE ALLOYS AS SHOWN ON DETAILS.
 4- ANCHORS SHALL BE AS SHOWN ON DETAILS, ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING.
 5- PRODUCT MARKINGS SHALL BE ONE PER EACH PANEL END AND SHALL BE LABELED AS FOLLOWS:
 SOUTHEASTERN METALS MANUFACTURING
 JACKSONVILLE - FLORIDA
 MIAMI-DADE COUNTY PRODUCT APPROVED

PRODUCT REVIEWED
 as complying with the Florida Building Code
 Acceptance No. 06-1012-05
 Expiration Date 11/15/2011
 By *William H. Miller*
 Miami Dade District Council
 Division

Manufacturer:

Southeastern Metals Manufacturing Co., Inc.
 11801 Industry Drive
 Jacksonville - Florida
 Tel.: (904) 757-4200



Product:
0.063 Aluminum Storm Panels

Engineer of Record:
 ENCO Inc. CA 8116
 8817 W. Sunrise Blvd. 104
 Fort Lauderdale, FL 33322
 Tel: (954) 555-0294
 Fax: (954) 555-0294
 Date: 06/19/07
 Scale: NTS
 Design by: FRNF

Revision: "A"
 UPDATE CODE FBC TO 2004 & NEW CALCULATIONS
 ASCE 7-02 MIAMI-DADE 02-08-2007
 REV'B' SPACING A-382 REMOVE EDGE DIST 05/18/2007
 REV'C' ADD EDGE DIST HDR. SILL SHT 2 ONLY 03/20/2007
 REV'D' TO PROVIDE THREE SHT (1, 2, 3) CONSISTANCY 3/28/2007
 ENGINEER OF REV. AB, CID ONLY
 3/28/2007

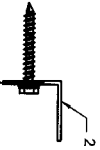
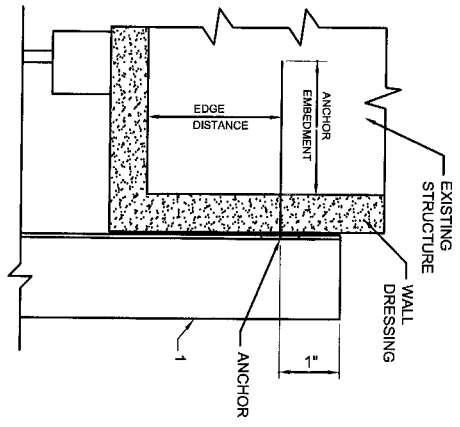
Barry J. Gaines
 3-28-07

Engineer Seal
 BARRY J. GAINES
 FL PE 18893
 SEMCO JACKSONVILLE FL
 PH (904)856-4651 FX (904) 886-4207

Drawing Number
01-215T

Sheet
1 of 3

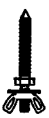
HEADER (DIRECT MOUNT)



OPTION A1 - STUDED ANGLE TO WOOD WALL
 STRUCTURE: WOOD
 ANCHOR TYPE: 1/2" WOOD LAG SCREWS
 ANCHOR EMBEDMENT: 1.5/32" MIN. THRD LGTH



OPTION A3 - REMOVABLE WALL STUDED ANGLE
 STRUCTURE: WOOD
 ANCHOR TYPE: 1/20 BRASS WOOD BUSHING W/ 1/4-20 SS SIDEWALK BOLT
 ANCHOR EMBEDMENT: 1-1/8" MIN.



OPTION A5 - MALE PANEL MATE
 STRUCTURE: WOOD, CONCRETE AND HOLLOW BLOCK
 ANCHOR TYPE: 1/2"x21/2" PANEL MATE W/ WASHED WING NUT
 ANCHOR EMBEDMENT: 1 1/2" (Concrete), 1 1/2" (Wood)



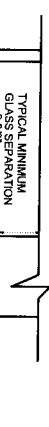
OPTION B1 - REMOVABLE FLOOR STUDED ANGLE
 STRUCTURE: CONCRETE
 ANCHOR TYPE: 1/20 ALL POINTS SOLID SET W/ 1/4-20 SS SIDEWALK BOLT
 ANCHOR EMBEDMENT: 7/8" MIN.



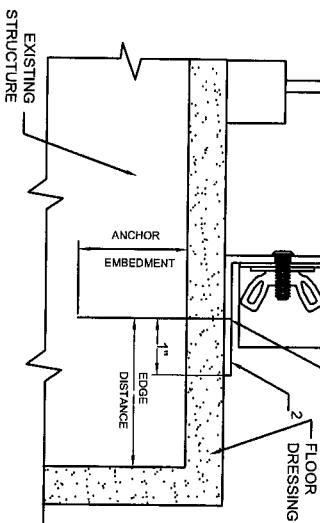
OPTION B2 - REMOVABLE FLOOR STUDED ANGLE
 STRUCTURE: WOOD
 ANCHOR TYPE: 1/20 BRASS WOOD BUSHING W/ 1/4-20 SS SIDEWALK BOLT
 ANCHOR EMBEDMENT: 1-1/8" MIN.



OPTION B3 - FIXED FLOOR STUDED ANGLE
 STRUCTURE: CONCRETE
 ANCHOR TYPE: 1/2" TAPCONS BY ELCO
 ANCHOR EMBEDMENT: 1.3/4" MIN.



FOR DIRECT MOUNT AT HEADER OR SILL



SILL W/ STUD ANGLE

DETAIL A - WALL MOUNT

OPTION A2 - REMOVABLE WALL STUDED ANGLE
 STRUCTURE: HOLLOW BLOCK OR CONCRETE
 ANCHOR TYPE: 1/20 All Points Solid Set w/ 1/4-20 SS SIDEWALK BOLT
 ANCHOR EMBEDMENT: 7/8" MIN.



OPTION A4 - PANEL MATE PLUS
 STRUCTURE: WOOD, CONCRETE AND HOLLOW BLOCK
 ANCHOR TYPE: 1/2"x21/2" PANEL MATE PLUS W/ WASHED WING NUT
 ANCHOR EMBEDMENT: 1 1/2" (Wood), 1 1/2" (Block), 2" (Concrete)



OPTION A6 - FIXED STUDED ANGLE WALL
 STRUCTURE: BLOCK AND CONCRETE
 ANCHOR TYPE: 1/4" CRETE FLEX SCREW
 ANCHOR EMBEDMENT: 1 1/4" MIN. (Block) 1 3/4" (Concrete)



OPTION B2 - REMOVABLE FLOOR STUDED ANGLE
 STRUCTURE: WOOD
 ANCHOR TYPE: 1/20 BRASS WOOD BUSHING W/ 1/4-20 SS SIDEWALK BOLT
 ANCHOR EMBEDMENT: 1-1/8" MIN.

DETAIL B - FLOOR MOUNT

OPTION B1 - REMOVABLE FLOOR STUDED ANGLE
 STRUCTURE: CONCRETE
 ANCHOR TYPE: 1/20 ALL POINTS SOLID SET W/ 1/4-20 SS SIDEWALK BOLT
 ANCHOR EMBEDMENT: 7/8" MIN.

OPTION B3 - FIXED FLOOR STUDED ANGLE
 STRUCTURE: CONCRETE
 ANCHOR TYPE: 1/2" TAPCONS BY ELCO
 ANCHOR EMBEDMENT: 1.3/4" MIN.

DESIGN PRESSURES (PSF) - ANCHORAGE SPACING EMBEDMENT, EDGE DIST FOR DIRECT MOUNT AT HEADER OR SILL

PSF - WIND LOAD PRESSURE = ± 80 PSF

FAST. OPTION	DESCRIPTION	86"	68"	56"	44"	EDGE DIST
A-1	1/4" Lag SS Wood Screws w/ 1-1/2" embedment into wood (SG= 55). By Elco	13"	13"	13"	13"	3/4"
A-2	1/4" Solid-Set 7/8" embedment into C90 -Hollow Block, by All Points	13"	13"	13"	13"	2"
A-2/B-1	1/4" Solid-Set 7/8" embedment into 3000 psi Concrete, By All Points	13"	13"	13"	13"	2"
A-3/B2	1/4" -20x5/8" Brass Wood Bushing by All Points w/1/4"x20 s/w. Embed 1-1/8"	6.5"	12"	13"	13"	3/4"
A-4	1/4" Male Panelmate Plus- 2" embedment into 3350 psi Concrete, by Elco	13"	13"	13"	13"	2-1/2"
A-4	1/4" Male Panelmate Plus- 1-1/4" embedment into C90 - Hollow Block, by Elco	6.5"	13"	13"	13"	3"
A-4	1/4" Male Panelmate Plus- 1-7/8" embedment into wood (SG= 54). By Elco	13"	13"	13"	13"	3"
A-4	1/4" Male Panelmate - 1-3/4" embedment into 3000 psi Concrete, by Elco	13"	13"	13"	13"	3-1/2"
A-5	1/4" Male Panelmate - 1-1/4" embed into C90 - Hollow Block 1780psi, by Elco	6.5"	13"	13"	13"	3"
A-5	1/4" Male Panelmate - 1-7/8" embedment into wood (SG= 53). By Elco	13"	13"	13"	13"	3-1/2"
A-6	1/4" Crete-Flex w/ 1-1/4" embedment into C90 - Hollow Block, by Elco	13"	13"	13"	13"	2-1/2"
A-6/B3	1/4" Tapcon w/ 1-3/4" embedment into 3000psi Conc by Elco	13"	13"	13"	13"	2-1/2"

PRODUCT REVIEWED
 AS COMPARED WITH THE ORIGINAL
 BUILDING CODE
 APPROVED DATE 06-10-12-05
 EXPIRES DATE 11-15-12-01
 By: *Helena H. Hill*
 Miami-Dade County
 Division

Manufacturer: **EM**

Southeastern Metals Manufacturing Co., Inc.
 11801 Industry Drive
 Jacksonville - Florida
 Tel.: (904) 757-4200



Product: **0.063 Aluminum Storm Panels**

Engineering of Record:
 EngCo Inc.
 8971 W. Sunrise Blvd. 104
 Plantation, FL 33313
 Tel: (954) 855-6304
 Scale: NTS
 Design by PMF

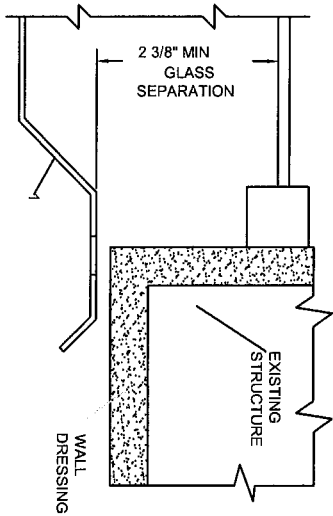
Revision: "A"
 UNIFORM CODE FBC TO 2004
 ASCE 7-02 MIAMI-DADE 02-08-2007
 REV "B" SPACING A-3/B2, REMOVE EDGE DIST 03/16/2007
 REV "C" ADD EDGE DIST, HDR, SILL SHT 2 ONLY 03/20/2007
 REV "D" TO PROVIDE THREE SHT (1, 2, 3) CONSISTENCY 3/29/2007
 ENGINEER OF REV. A,B,C,D ONLY

3/28/2007
Barry J. Gaines
 Barry J. Gaines
 Engineer/Seal
 BARRY J. GAINES
 FL. PE. 18830

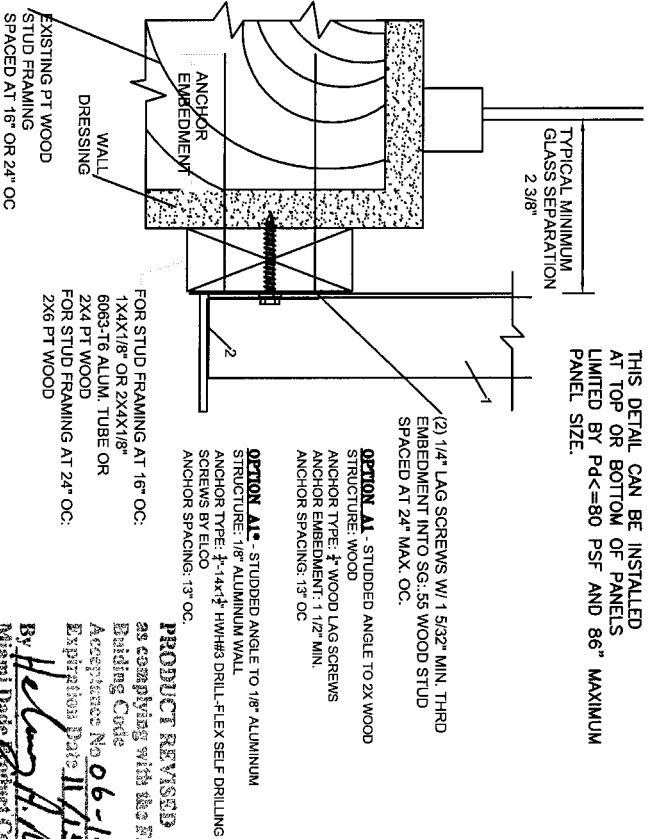
SEMCO JACKSONVILLE, FL
 PH (904) 956-4651 FX (904) 956-4207
 Drawing Number **01-2151**

INSTALLATION ON WOOD STUDDED WALL

THIS DETAIL CAN BE INSTALLED
AT TOP OR BOTTOM OF PANELS
LIMITED BY PD<=80 PSF AND 86" MAXIMUM
PANEL SIZE.



DETAIL D



PSF - WIND LOAD PRESSURE = ± 80 PSF

FAST. OPTION	DESCRIPTION	86"	68"	56"	44"	EDGE DIST
A-1	1/4" Lag SS Wood Screws w/ 1-1/2" embedment into wood (SG=55), By Elco	N/A	N/A	6.5	6.5	3/4"
A-2	1/4" Solid-Set 7/8" embedment into C90 -Hollow Block, by All Points	N/A	6.5	6.5	6.5	2"
A-2/B-1	1/4" Solid-Set 7/8" embedment into 3000 psi Concrete, By All Points	6.5	6.5	6.5	6.5	2"
A-3/B2	1/4" 20x5/8" Brass Wood Bushing by All Points w/1/4"x20 slw., Embed 1-1/8"	N/A	N/A	6.5	6.5	3/4"
A-4	1/4" Male Panelmate Plus- 2" embedment into 3350 psi Concrete, by Elco	6.5	6.5	6.5	6.5	2-1/2"
A-4	1/4" Male Panelmate Plus- 1-7/8" embedment into C90 - Hollow Block, by Elco	N/A	6.5	6.5	6.5	3"
A-4	1/4" Male PanelmatePlus - 1-7/8" embedment into wood (SG=54), By Elco	6.5	6.5	6.5	6.5	3.4"
A-5	1/4" Male Panelmate - 1-3/4 embedment into 3000 psi Concrete, by Elco	6.5	6.5	6.5	6.5	1-1/2"
A-5	1/4" Male Panelmate - 1-1/4 embed into C90 - Hollow Block 1780psi, by Elco	N/A	6.5	6.5	6.5	3"
A-5	1/4" Male Panelmate - 1-7/8" embedment into wood (SG=53), By Elco	6.5	6.5	6.5	6.5	3/4"
A-6	1/4" Crete-Flex w/ 1-1/4" embedment into C90 - Hollow Block, by Elco	6.5	6.5	6.5	6.5	2-1/2"
A-6/B3	1/4" Tapcon w/ 1-3/4" embedment into 3000psi Conc by Elco	6.5	6.5	6.5	6.5	2-1/2"

BYVISION

By Helen H. Miller

Accepted Date 11/15/2011

06-1012.05

Building Code

ASCE 7-02 MIAMI-DADE 02-08-2007

REV 'B' SPACING A-3/B2 REMOVE EDGE DIST 03/16/2007

REV 'C' ADD EDG DIST, HDR, SILL SHT 2 ONLY 03/20/2007

REV 'D' TO PROVIDE THREE SHT (1, 2, 3) CONSISTANCY

ENGINEER OF REV. A.B.C.D ONLY

3/28/2007

3/28/2007

3/28/2007

3/28/2007

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Manufacturer:
Southeastern Metals Manufacturing Co., Inc.
11801 Industry Drive
Jacksonville - Florida
Tel.: (904) 757-4200



Product:
0.063 Aluminum Storm Panels

Engineering of Record:
EngCo Inc. CA 8116
6971 W. Sunrise Blvd. 104
Pompano Beach, FL 33063
Tel: (904) 961-9001
Fax: (904) 961-9001
Design by PPHW

Revision: "A"
UPDATE CODE PBC TO 2004 & NEW CALCULATIONS
ASCE 7-02 MIAMI-DADE 02-08-2007
REV 'B' SPACING A-3/B2 REMOVE EDGE DIST 03/16/2007
REV 'C' ADD EDG DIST, HDR, SILL SHT 2 ONLY 03/20/2007
REV 'D' TO PROVIDE THREE SHT (1, 2, 3) CONSISTANCY

ENGINEER OF REV. A.B.C.D ONLY
3/28/2007

Engineer Seal
BARRY L. GAINES
FL. PE 18330
SEMCO JACKSONVILLE, FL
PH (904)966-4651 FX (904) 966-4207

Drawing Number
01-215T
Sheet
3 of 3