MIAMI-DADE

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)

Miami Dade Aluminum Supply, Inc.
1615 W. 31st Place
Hialeah, Florida 33012

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. 3126, titled " 0.063" min. Aluminum Storm Panels", sheets 1 through 4 of 4, prepared by Ramms Engineering, Inc., dated December 06, 1995, last revision dated October 13, 2004, signed and sealed by Robert S. Monsour, 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 panel 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 and renews NOA # 00-0201.02** and consists of this page 1, evidence submitted page(s) as well as approval document mentioned above.

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

Helmy A. Makar
12/30/2004

PRODUCT CONTROL ACCEPTED

NOA No 03-0417.02
Expiration Date: 04/21/2008
Approval Date: 12/30/2004
Page 1

Miami Dade Aluminum Supply, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 95-1220.01

A. DRAWINGS

1. *Drawing No. 3126, Miami Dade Aluminum Supply, Sheets 1 through 4 of 4 prepared by Ramms Engineering, Inc., dated 12/06/95, revised 05/16/96, signed and sealed by Robert Monsour, P.E.*

B. TESTS

1. *Test report on Uniform Static Air Pressure Test, prepared by Hurricane Engineering & Testing Inc., Report No. HETI-95-479, dated August 21, 1995, and Report No. HETI-95-481, dated August 24, 1995, signed and sealed by Hector M. Medina, P.E.*
2. *Test report on Large Missile Impact & Cyclic Wind Pressure Test, prepared by Hurricane Engineering & Testing Inc., Report No. HETI-95-472, dated August 8, 1995, signed and sealed by Hector M. Medina, P.E.*
3. *Test report on Large Missile Impact Test, prepared by Hurricane Engineering & Testing Inc., Report No. HETI-95-481i, dated August 24, 1995, signed and sealed by Hector M. Medina, P.E.*

C. CALCULATIONS

1. *Comparative Analysis and Anchor Calculations, dated 03/11/96, Pages 1 through 5 of 5 and Pages 1 through 8 of 8, dated 05/01/96, prepared by Ramms Engineering, Inc., signed and sealed by Robert Monsour, P.E.*

D. MATERIAL CERTIFICATIONS

1. *Mill Certified Inspection Reports issued by MSC Metals, dated 08/25/95.*
2. *Certified Tensile Test Report issued by Hurricane Engineering & Testing Inc., Report No. HETI-95-T104, dated October 30, 1995, signed and sealed by Hector M. Medina, P.E.*

2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 00-0201.02

A. DRAWINGS

1. *None.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

Helmy A. Makar, P. E.
Product Control Examiner
NOA No 03-0417.02
Expiration Date: 04/21/2008
Approval Date: 12/30/2004

D. MATERIAL CERTIFICATIONS

1. *None.*

E. OTHERS

1. *Letter from Ramms Engineering, Inc., dated November 3, 1999, signed and sealed by Robert S. Monsour, P.E., certify that he is still in the engineering business.*
2. *Letter from Miami Dade Aluminum Supply, Inc., signed by Mr. Juan M. Delgado, certify that the product has not changed.*

3. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. 3126, titled " 0.063" min. Aluminum Storm Panels", sheets 1 through 4 of 4, prepared by Ramms Engineering, Inc., dated December 06, 1995, last revision dated October 13, 2004, signed and sealed by Robert S. Monsour, P.E.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

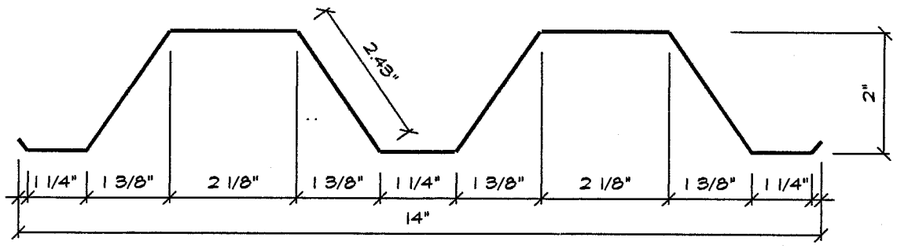
D. QUALITY ASSURANCE

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

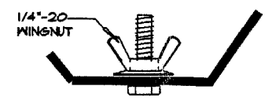
E. MATERIAL CERTIFICATIONS

1. *None.*

Helmy A. Makar, P. E.
Product Control Examiner
NOA No 03-0417.02
Expiration Date: 04/21/2008
Approval Date: 12/30/2004



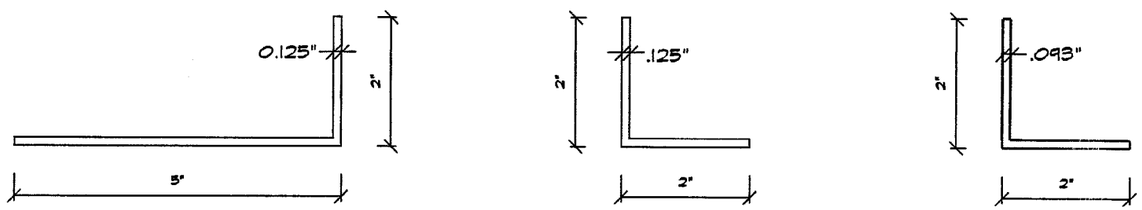
TYPICAL PANEL SECTION



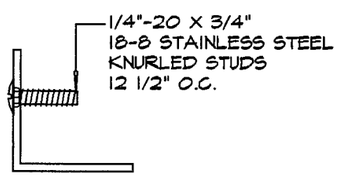
WINGNUT

.063 (MIN.) ALUMINUM STORM PANELS

ALUMINUM ALLOY 5052-H32



VARIOUS ANGLES



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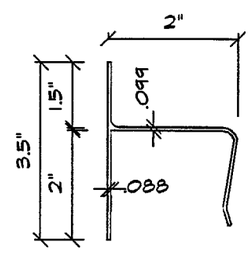
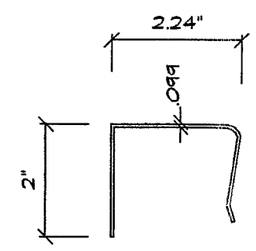
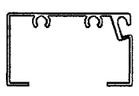


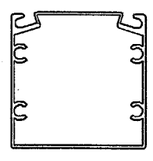
"h" HEADER



"u" HEADER



1 X 2 BLOCKING



2 X 2 BLOCKING

.063 (MIN.) ALUMINUM STORM PANELS

ALUMINUM ALLOY 5052-H32

COMPLIES WITH:

FLORIDA BUILDING CODE, 2001 EDITION
AND ASCE 7-98 WIND CODE.

DESIGN CRITERIA:

WIND LOAD PER FLORIDA BUILDING CODE, 2001
PRESSURE REQUIREMENT CALCULATIONS MUST BE
PERFORMED PER ASCE 7-98 "MINIMUM DESIGN
LOADS FOR BUILDING AND OTHER STRUCTURES"
DEFLECTION - L/30 W/2" MAX (POSITIVE LOAD)

GENERAL NOTES:

ALL ALUMINUM EXTRUSIONS TO BE ALLOY 6063-T6 OR EQUAL.

STORM PANELS SHALL BE .063 (MIN.) 5052 H32 ALUMINUM.

THE STORM PANEL SHUTTER MAY BE INSTALLED VERTICALLY OR HORIZONTALLY, IN ACCORDANCE TO THE DETAILED SPECIFICATIONS HEREIN.

ANCHORAGE OF THE SHUTTER SYSTEM TO CONCRETE OR MASONARY SHALL BE AS SHOWN ON THESE SPECIFICATIONS.

ANCHORAGE TO WOOD CONSTRUCTION SHALL BE 1/4" STEEL LAGS OR LARGER WITH 1 1/4" MIN. PENETRATION, 1/4-20 BRASS WOOD BUSHINGS.

ALTERNATIVE ANCHORS AND CONDITIONS ON SHEET NO. 2 & 3.

EACH STORM PANEL SHALL BEAR A PERMANENT LABEL SHOWING
" MIAMI - DADE COUNTY PRODUCT APPROVED" .

WARNING TO OWNER OR TENANT:
"STORM PANELS WILL NOT OFFER HURRICANE PROTECTION UNLESS
ALL 1/4-20 STITCHING IS PROPERLY INSTALLED DURING
WIND VELOCITIES EXCEEDING 75 M.P.H.

PERMANENT FASTENER COMPONENTS, EMBEDDED ANCHOR BOLTS,
THREADED CONES OR METAL SHIELDS, NOT IN USE,
MUST BE PROTECTED AGAINST CORROSION, CONTAMINATION
AND DAMAGE AT ALL TIMES.

DESIGN PRESSURE RATING:

POSITIVE = 55 PSF, NEGATIVE = 72PSF

(*FOR PANEL SPAN = 110")

Monsour 10/15/04

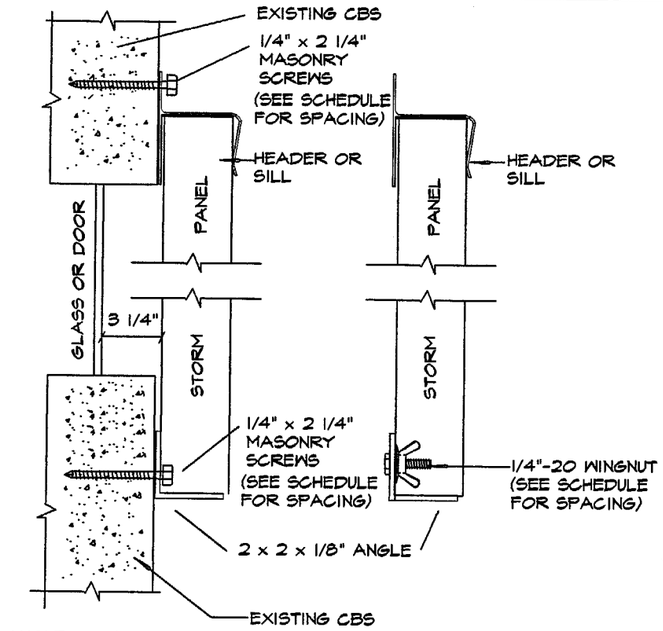
PRODUCT REVISED
as complying with the Florida
Buiding Code
Acceptance No 03-0417.02
Expiration Date 04/21/2008
By Helena A. Mah
Miami Dade Product Control
Division

REVISIONS	BY
2/19/96	
2/26/96	
4/30/96	
6/20/03	
10-13-04	

RAMMS ENGINEERING, INC.
Structural Design
2100 W. 76th STREET, SUITE 311
HIALEAH, FLORIDA 33016
305 822 3141
11955
EB 0006024

Miami Dade Aluminum Supply
1615 W 31 PLACE
HIALEAH, FLORIDA

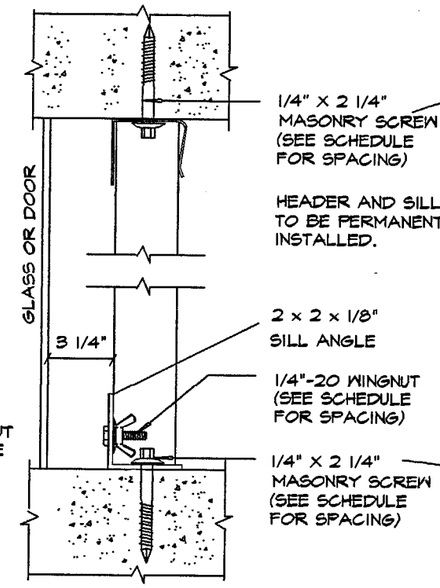
DRAWN: JUAN JARA
APPROVED: Monsour
DATE: 12/6/95
JOB: 3126
SHEET: 1 OF 4 SHEETS



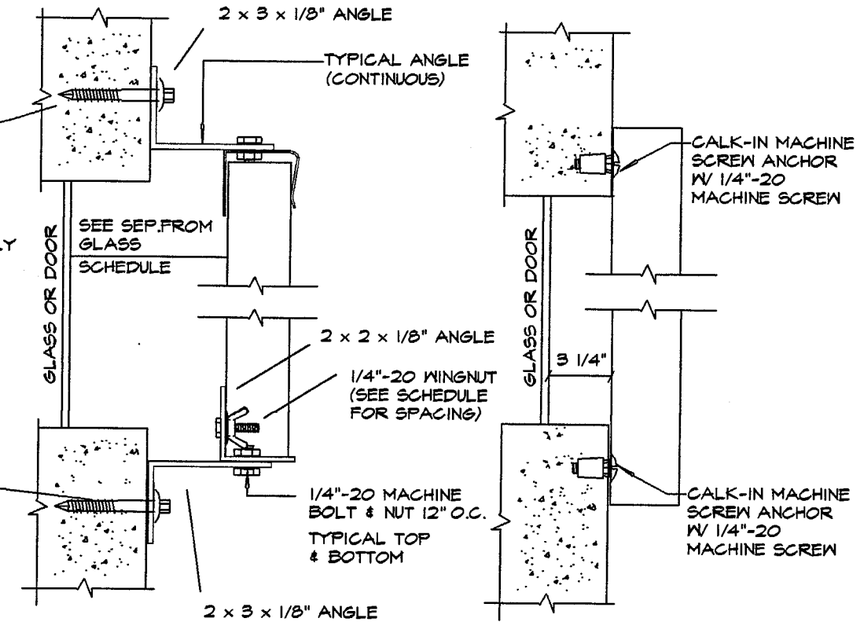
ANGLE TO WALL

PANEL TO ANGLE

WALL MOUNT SECTION

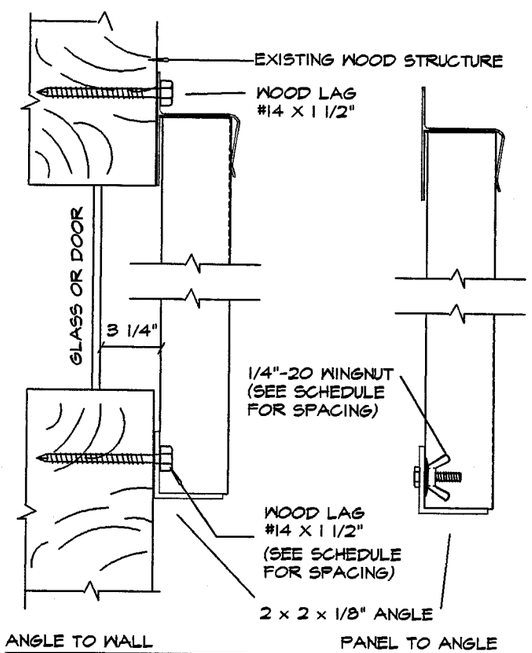


CEILING/INSIDE MOUNT



BUILD OUT MOUNT

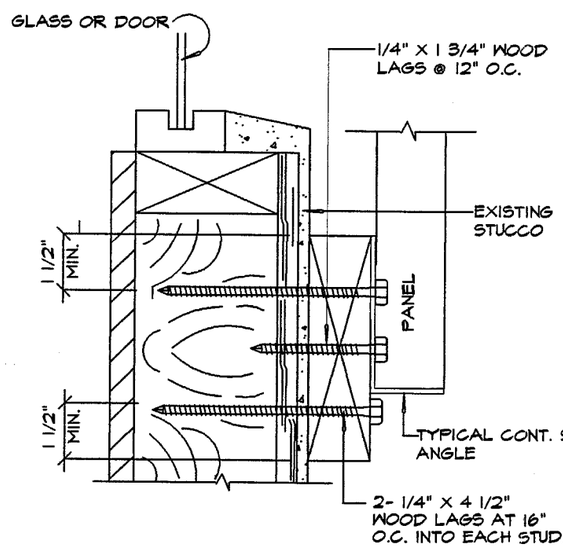
WALL MOUNT SECTION
DIRECT MOUNT



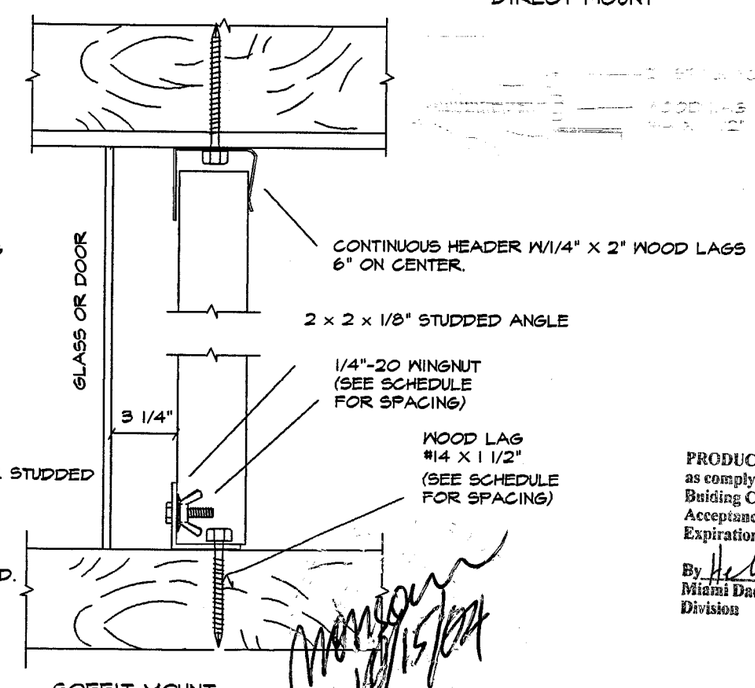
ANGLE TO WALL

PANEL TO ANGLE

WALL MOUNT SECTION



WALL MOUNT SECTION \ BOTTOM



SOFFIT MOUNT

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No. 03-0417.02
Expiration Date 04/21/2008
By [signature]
Miami Dade Product Control Division

Monsour 10/15/04

REVISIONS	BY
2/19/96	
2/26/96	
4/30/96	
6/20/03	
10-13-04	

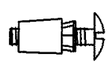
RAMIS ENGINEERING, INC.
Structural Design
2100 W. 76th STREET, SUITE 311
HIALEAH, FLORIDA 33016
305 822 3141
11955
EB 0006024

Miami Dade Aluminum Supply
1615 W 31 PLACE
HIALEAH, FLORIDA

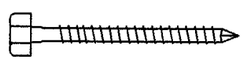
DRAWN: JUAN JARA
APPROVED: Monsour
DATE: 12/6/95
JOB: 3126
SHEET 2 OF 4 SHEETS

EDGE DISTANCE AND ANCHOR SPACING VERSUS DESIGN PRESSURE AND PANEL HEIGHT

HARDWARE SCHEDULES

	ANCHOR TYPE	E.D.	59.6 PSF POURED CONCRETE TENSILE	59.6 PSF POURED CONCRETE SHEAR	59.6 PSF CONCRETE BLOCK TENSILE	59.6 PSF CONCRETE BLOCK SHEAR	71.5 PSF POURED CONCRETE TENSILE	71.5 PSF POURED CONCRETE SHEAR	71.5 PSF CONCRETE BLOCK TENSILE	71.5 PSF CONCRETE BLOCK SHEAR
	1/4" MASONRY SCREWS 1 1/2" EMBEDMENT	2"	6"	6"	3"	6"	5"	6"	3"	5"
		3"	6"	6"	4"	6"	5"	6"	3"	6"
	CALK-IN 1/2" MACHINE SCREW ANCHOR USED W/1/4-20 MACHINE SCREW	2"	6"	6"	3"	6"	6"	6"	3"	6"
		3"	6"	6"	3"	6"	6"	6"	3"	6"
		2"								
		3"								

MINIMUM SPACING OF ALL ANCHORS TO BE 3" O.C.
SPACING SHOWN ABOVE ARE FOR MAXIMUM CONDITIONS
(MAX. PRESSURE = -72 / +55 P.S.F OF L = 110" MAX)
FOR PANEL SPANS 60" AND LESS, USE 6" SPACING THRUOUT.

* WOOD APPLICATIONS	TYPE	DIA.	TENSILE	SHEAR	TENSILE	SHEAR
	WOOD LAG 1 1/2" MINIMUM EMBEDMENT	1/4"	6"	4"	5"	6"
		3/8"	8"	6"	6"	6"

* ALL WOOD FASTNERS TO HAVE A MINIMUM EDGE DISTANCE OF 2 1/2"

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No. 03-0417.02
Expiration Date 04/21/2008
By Helmy A. Mehr
Miami Dade Product Control Division

Monsour 10/15/04

REVISIONS	BY
2/19/96	
2/26/96	
4/30/96	
6/20/03	
10-13-04	

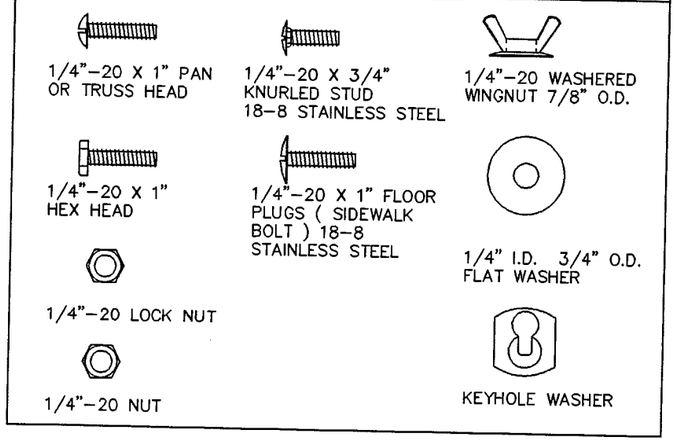
RAMMS ENGINEERING, INC.
Structural Design
11955 2100 W. 76th STREET, SUITE 311 305 822 3141
EB 0006024 HIALEAH, FLORIDA 33016

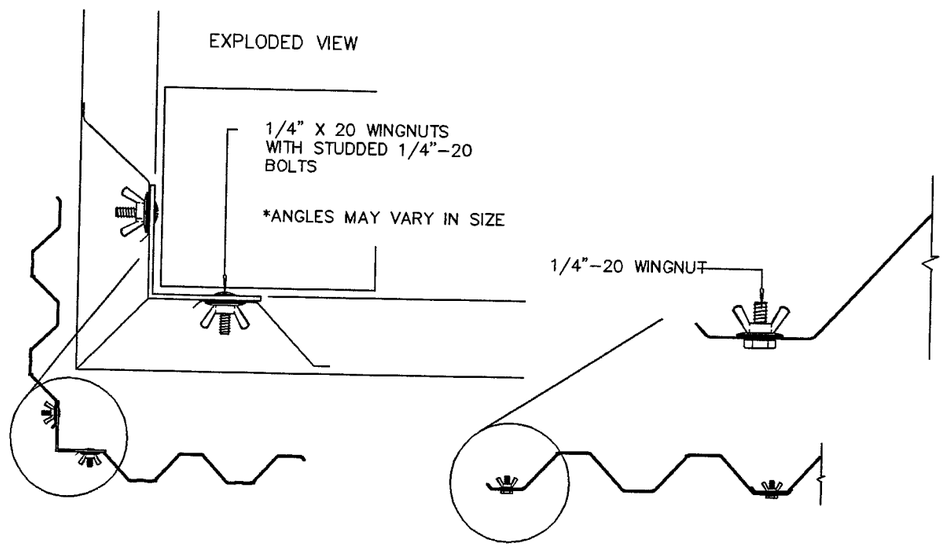
Miami Dade Aluminum Supply
1615 W 31 PLACE
HIALEAH, FLORIDA

DRAWN: JUAN JARA
APPROVED: Monsour
DATE: 12/6/95
JOB: 3126
SHEET 3 OF 4 SHEETS

REVISIONS	BY
2/19/96	
2/26/96	
4/30/96	
6/20/03	
10-13-04	

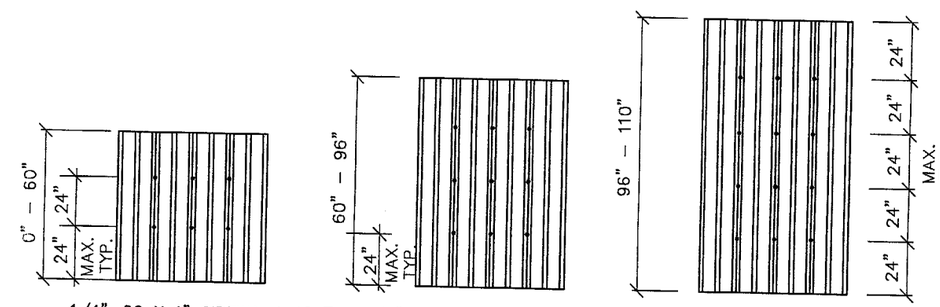
ADDITIONAL HARDWARE





CORNER CONNECTION

WINGNUT



1/4"-20 X 1" SIDEWALK BOLT (AS SHOWN)

1/4"-20 X 1" SIDEWALK BOLT (AS SHOWN)

1/4"-20 X 1" SIDEWALK BOLT EVERY 24" (AS SHOWN)

VERTICAL ELEVATIONS

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 03-0417.02
Expiration Date 04/21/2008
By Helmy A. Mehr
Miami Dade Product Control Division

GENERAL NOTES:

WHEN ANCHORING INTO WOOD, THE WOOD MUST BE A MINIMUM 2 X 4 EQUAL TO #2 SOUTHERN PINE AND STRUCTURALLY PART OF THE FRAMING STRUCTURE OR SUCURELY ATTATCHED TO FRAMING STRUCTURE.

REFER TO SCHEDULES FOR MINIMUM DISTANCES BETWEEN GLASS AND PANEL, ANCHOR SPACING FOR SPECIFIC ANCHORS AND EDGE DISTANCES (E.D.) FOR SPECIFIC ANCHORS.

PANEL HEIGHT	0" - 60"	60" - 96"	96" - 110"
	MIN. DISTANCE BETWEEN GLASS AND PANEL		
WALL MOUNT	3 1/4"	3 1/4"	3 1/4"
INSIDE MOUNT	3 1/4"	3 1/4"	3 1/4"
BUILD OUT	3 1/4"	3 1/4"	3 1/4"
DIRECT MOUNT	3 1/4"	3 1/4"	3 1/4"

Monsour 10/15/04

RAMS ENGINEERING, INC.
Structural Design
2100 W. 76th STREET, SUITE 311
HIALEAH, FLORIDA 33016
305 822 3141
11955
EB 0006024

Miami Dade Aluminum Supply
1615 W 31 PLACE
HIALEAH, FLORIDA

DRAWN: JUAN JARA
APPROVED: Monsour
DATE: 12/6/95
JOB: 3126
SHEET: 4 OF 4 SHEETS