



BUILDING AND NEIGHBORHOOD COMPLIANCE DEPARTMENT (BNC)
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599

NOTICE OF ACCEPTANCE (NOA)

www.miamidade.gov/building

Mitsubishi Plastics Composites America, Inc.
401 Volvo Parkway
Chesapeake, VA 23320

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County BNC-Product Control Section 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 Section (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. BNC reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section 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: "Alpolic and Alpolic/FR " Composite Wall Panel Systems

APPROVAL DOCUMENT: Drawing No. 1, titled "Alpolic and Alpolic/fr Composite Wall Panel Systems", sheets 1 through 10 of 10, prepared by Mitsubishi Chemical America, Inc., dated 11/11/02, last revision #1, dated 09/01/09, signed and sealed by Robert A. Walz, P.E., bearing the Miami-Dade County Product Control Renewal stamp with the Notice of Acceptance number and expiration date by Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Small Missile Impact Resistant

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 renews NOA # 09-0923.05 and consists of this page 1, evidence submitted pages E-1, E-2, & E-3 as well as approval document mentioned above.

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



Helmy A. Makar
06/09/2011

NOA No. 11-0421.08
Expiration Date: 08/09/2012
Approval Date: 06/09/2011
Page 1

Mitsubishi Plastics Composites America, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 00-0315.07

A. DRAWINGS

1. *Drawing No. 2, titled "Alpolic and Alpolic/FR Composite Wall Panel Systems", prepared by C. W. Stater, P.E., dated April 16, 1999, last revision #1 dated February 13, 2001, sheets 1 through 5 of 5, signed and sealed by C. W. Stater, P.E.*

B. TESTS

1. *Test report on **Small Missile Impact Test, Cyclic Wind Pressure Test, and Uniform Static Air Pressure Test on Alpolic and Alpolic/FR Composite Wall Panel Systems**, prepared by Architectural Testing Inc., Report No. 01-35789.02, dated 05/31/00, signed and sealed by Allen Reeves, P.E.*
2. *Test report on Ignition Properties, prepared by Southwest Research Institute, Report No. 01-8361-038, dated 10/28/96, signed by Betty J. Covey and Alex B. Wenzel.*
3. *Test report on Flame Spread Index and Smoke Developed Index, prepared by Southwest Research Institute, Report No. 01-7520-359a, dated 09/26/96, signed by Anthony L. Saucedo and Alex B. Wenzel.*

C. CALCULATIONS

1. *Calculations titled "Structural Calculations for Composite Panel System", pages 1 through 22 of 22, dated April 13, 2000, prepared by C. W. Stater, P.E., signed and sealed by C. W. Stater, P.E.*

D. MATERIAL CERTIFICATIONS

1. *Spec. Data issued by Alcoa Mill Products, dated November 08, 2000, with chemical composition and mechanical properties of Aluminum Alloy 3105-H14.*
2. *Tensile Test Report No 01-35789.03, prepared by Architectural Testing, dated July 07, 2000, signed and sealed by Allen N. Reeves, P.E.*

2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #03-0130.06

A. DRAWINGS

1. *Drawing No. 1, titled "Alpolic and Alpolic/fr Composite Wall Panel Systems", sheets 1 through 10 of 10, prepared by Mitsubishi Chemical America, Inc., signed and sealed by Christopher W. Stater, P.E., dated November 11, 2002.*

B. TESTS

1. *Test report on **Small Missile Impact Test, Cyclic Wind Pressure Test, and Uniform Static Air Pressure Test on Alpolic and Alpolic/FR Composite Wall Panel Systems**, prepared by Architectural Testing Inc., Report No. 01-43055.01, dated January 07, 2003, signed and sealed by Joseph A. Reed, P.E.*


Helmy A. Makar, P.E., M.S.

BNC, Product Control Unit Supervisor

NOA No. 11-0421.08

Expiration Date: 08/09/2012

Approval Date: 06/09/2011

Mitsubishi Plastics Composites America, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

C. CALCULATIONS

1. *None.*

D. MATERIAL CERTIFICATIONS

1. *Tensile Test Report No 01-43055.02, prepared by Architectural Testing, dated March 04, 2003, signed and sealed by Joseph A. Reed, P.E.*

3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #06-0531.12

A. DRAWINGS

1. *None.*

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.*

4. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 09-0923.05

A. DRAWINGS

1. *Drawing No. 1, titled " Alpolic and Alpolic/fr Composite Wall Panel Systems ", sheets 1 through 10 of 10, prepared by Mitsubishi Chemical America, Inc., dated 11/11/02, last revision #1 dated 09/01/09, signed and sealed by Robert A. Walz, 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., M.S.
BNC, Product Control Unit Supervisor
NOA No. 11-0421.08
Expiration Date: 08/09/2012
Approval Date: 06/09/2011

Mitsubishi Plastics Composites America, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

5. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *None.*

B. TESTS

1. *None.*

C. CALCULATIONS

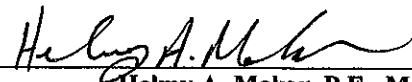
1. *None.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Building and Neighborhood Compliance Department.*

E. MATERIAL CERTIFICATIONS

1. *None.*



Helmy A. Makar, P.E., M.S.
BNC, Product Control Unit Supervisor

NOA No. 11-0421.08

Expiration Date: 08/09/2012

Approval Date: 06/09/2011

ALPOLIC and ALPOLIC/FR (FIRE RATED) COMPOSITE WALL PANEL SYSTEMS FOR FLORIDA BUILDING CODE SMALL MISSILE IMPACT

GENERAL NOTES

1. THESE ALPOLIC AND ALPOLIC/FR COMPOSITE PANELS SHALL BE USED FOR WALL CONSTRUCTION, SOFITS, AND OTHER EXTERIOR DETAILS WHOSE REQUIREMENTS FOR POSITIVE AND NEGATIVE PRESSURES ARE WITHIN THEN VALUES STATED IN NOTE 2 OF THIS DRAWING. EACH ACTUAL WALL PROJECT SHALL BE CONSTRUCTED USING THE DETAILS SHOWN ON THESE DRAWINGS AS MINIMUM REQUIRED SPECIFICATIONS
2. THE WALL DESIGN ALLOWABLE PRESSURES FOR THESE WALL PANEL SYSTEMS ARE + 70 PSF/ -90 PSF.

3. THESE ALPOLIC and ALPOLIC/FR COMPOSITE WALL PANEL SYSTEMS ARE TESTED IN ACCORDANCE WITH THE FOLLOWING PROTOCOLS:
TAS-201-94, IMPACT TEST, SMALL MISSILE
TAS-202-94, UNIFORM STATIC AIR PRESSURE TEST
TAS-203-94, CYCLIC WIND PRESSURE TEST
AND THEY SHALL BE INSTALLED AS SHOWN IN THESE APPROVED DRAWINGS.

PRODUCT REVIEWED
as complying with the Florida
Building Code
Acceptance No 11-0421.08
Expiration Date 08/09/2012
By *Helmut A. Mehn*
Miami Dade Product Control

MATERIAL SPECIFICATIONS:

ALUMINUM EXTRUSIONS

1. MATERIAL: M2, F2, A2, HS, and HR ARE EXTRUDED ALUMINUM ALLOY 6063 WITH A T6 TEMPER. (By Kistler McDougall)
2. MATERIAL: CAY-1009 TEE, CAY-1010 FEMALE, CAY-1011 MALE, CAY-1012 STIFFENER AND CAY-1013 RETAINER ARE EXTRUDED ALUMINUM ALLOY 6063 WITH A T6 TEMPER (By CAY ARCHITECTURAL PRODUCTS)
3. FINISH: MILL FINISH

COMPOSITE PANEL

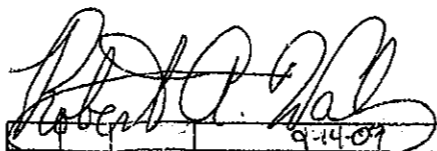
1. ALPOLIC ALUMINUM COMPOSITE METAL PANEL 4MM THICK (0.157") AND 6MM THICK (0.236") AS MANUFACTURED BY MITSUBISHI CHEMICAL AMERICA, INC., CHESAPEAKE, VA
2. ALPOLIC/FR (FIRE RATED) ALUMINUM COMPOSITE METAL PANEL 4MM THICK (0.157") AS MANUFACTURED BY MITSUBISHI CHEMICAL FUNCTIONAL PRODUCTS, INC., UEDA, JAPAN
3. CORE: THERMOPLASTIC MATERIAL WHICH IN COMPOSITE ASSEMBLY MEETS PERFORMANCE CHARACTERISTICS SPECIFIED.
4. FACE SHEET: 0.020" ALUMINUM 3105-H14 ALLOY
5. FINISH: LUMIFLON-BASE FLUROPOLYMER RESIN COATING.
6. MAXIMUM DIMENSIONS: 62" WIDE X 288" LONG
7. TECHNICAL DATA

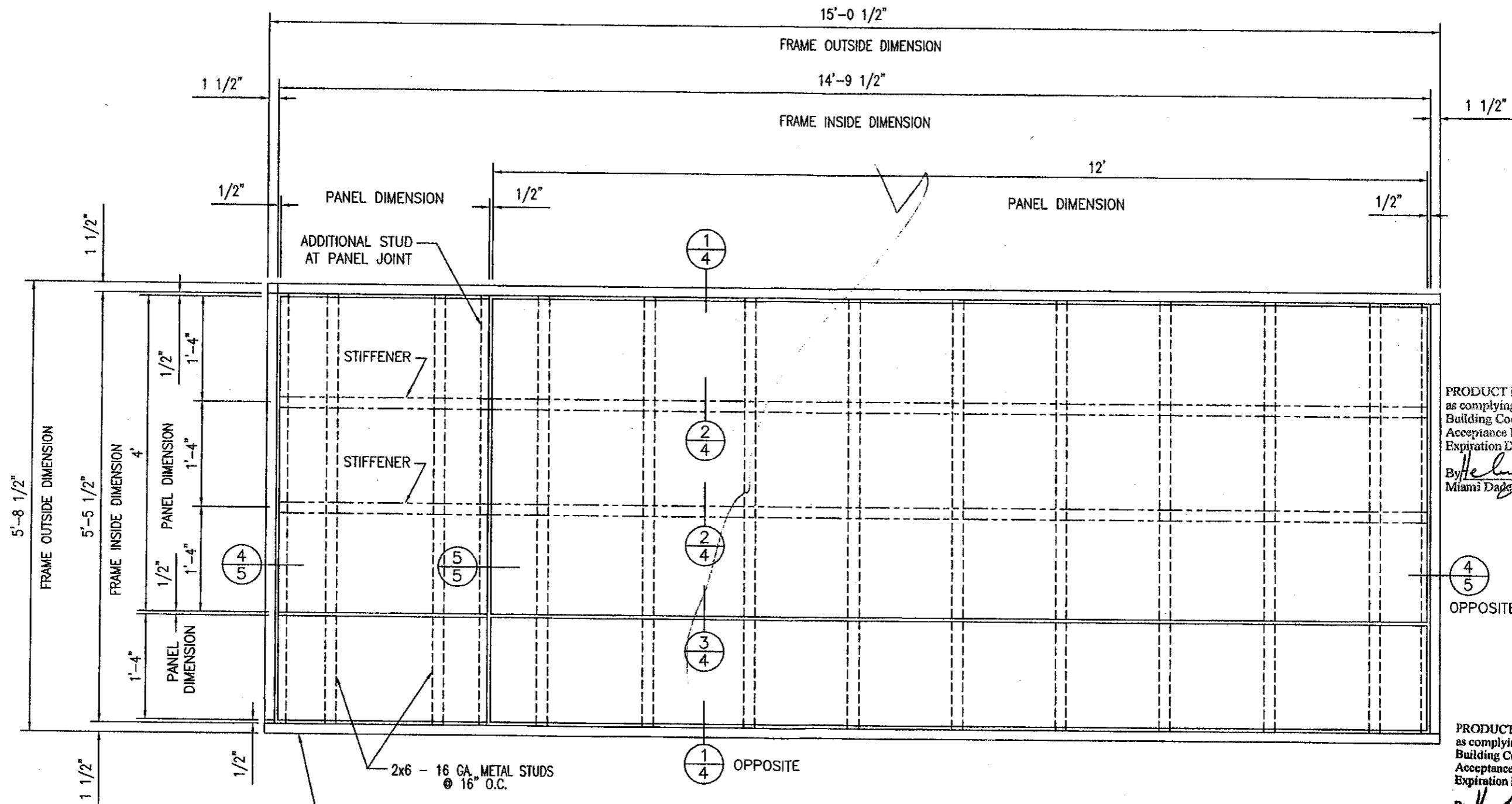
| DESCRIPTION | TEST | 4MM ALPOLIC | 4MM ALPOLIC/FR | 6MM ALPOLIC |
|------------------------------------|----------------|---------------|----------------|---------------|
| SPECIFIC GRAVITY | | 1.38 | 1.90 | 1.23 |
| WEIGHT | | 1.12 LB/SQ.FT | 1.56 LB/SQ.FT | 1.50 LB/SQ.FT |
| TENSILE STRENGTH | ASTM E-8 | 7452 PSI | 5693 PSI | 5399 PSI |
| YIELD STRENGTH | ASTM E-8 | NDY | NDY | NDY |
| ELONGATION | ASTM E-8 | 16% | 8% | 13% |
| PUNCHING SHEAR RESISTANCE (1"DIA.) | ASTM D-732 | 4025 PSI | 4837 PSI | 2816 PSI |
| PUNCHING SHEAR MAX LOAD | ASTM D-732 | 1920 PSI | 2259 PSI | 2121 LBS |
| BOND INTEGRITY VERTICAL PULL | ASTM C-297 | 1806 PSI | 427 PSI | 1664 PSI |
| DRUM PEEL | ASTM D-1781-76 | 33.6 IN-LB/IN | 27.6 IN-LB/IN | 33.6 IN-LB/IN |
| FLATWISE SHEAR | ASTM C-273 | 1225 PSI | 949 PSI | 1195 PSI |
| RATE OF BURNING | ASTM D-635 | CC1 | -- | -- |
| FLAME SPREAD INDEX | ASTM E-84 | 00 | 00 | 00 |
| SMOKE DEVELOPED INDEX | ASTM E-84 | 00 | 10 | 10 |
| SELF IGNITION TEMPERATURE | ASTM D-1929 | 752°F | 837°F | 752°F |
| FLASH IGNITION TEMPERATURE | ASTM D-1929 | 716°F | 811°F | 716°F |
| SURFACE FLAMMABILITY | ASTM E-108-88 | PASSED | PASSED | PASSED |
| SOUND TRANSMISSION | ASTM E-413 | STC-26 | -- | STC-26 |

FRAMING & ACCESSORIES

1. STEEL STUDS AND TRACKS: 16 GA. MIN. GALVANIZED STEEL WITH MIN. PROPERTIES OF 50 KSI YIELD, 65 KSI ULTIMATE.
2. STUD & TRACK FASTENERS: #12 x 1-1/2" HEX WASHER HEAD TRAXX 3 BUILDEX SCREW.
3. PANEL FASTENERS: #10 x 1" HEX WASHER HEAD TEK SCREWS SPACED AT 16" O.C.
4. STIFFENER FASTENERS: #10 x 1" HEX WASHER HEAD TEK SCREWS.
5. JOINT SILICONE: DOW CORNING #795 SILICONE SEALANT.
6. STRUCTURAL SILICONE: DOW CORNING #1199 SILICONE SEALANT.
7. BACKER ROD: 3/4" DIA. DENVER FOAM OPEN CELL BACKER ROD.
8. THE STRUCTURAL ADEQUACY OF THE 16 GA. GALVANIZED STEEL STUDS AND THE REST OF THE STRUCTURAL FRAMING SUPPORTING THE METAL PANELS IS NOT PART OF THIS PRODUCT CONTROL APPROVAL AND IT SHALL BE REVIEWED BY THE STRUCTURAL PLANS EXAMINER OF THE CORRESPONDING BUILDING DEPARTMENT.

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 09-0923.05
Expiration Date 08/09/2011
By *Helmut A. Mehn*
Miami Dade Product Control
Division

| | | | | | | | | | |
|--|--------|---|---|---------------|----------------------|-----------------------------------|--|---------------|-----------|
|  9-14-09 | | UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: | | CONTRACT NO. | | MITSUBISHI CHEMICAL AMERICA, INC. | | | |
| | | FRACTIONS 1/32 | DECIMALS .001 | ANGLES 1/2 | APPROVALS | DATE | ALPOLIC and ALPOLIC/FR COMPOSITE WALL PANEL SYSTEMS | | |
| MATERIAL | FINISH | | ENGINEERING | MS | 11/11/02 | SIZE | | | CAGE CODE |
| 1 | TH | 9/01/09 | 99A NOTE 1 VAR FOR WALL CONSTRUCTION ONLY | | PRODUCTION | B | | 1 | 1 |
| REV. BY | | DATE | CHANGE | | DO NOT SCALE DRAWING | | SCALE | SHEET 1 OF 10 | |



THE WOOD BUCK FRAME DETAILED IN THIS DRAWING IS FOR TEST PURPOSES ONLY AND IS NOT INTENDED AS A RECOMMENDATION FOR ACTUAL CONSTRUCTION.

PANEL ELEVATION

3/4" = 1'-0"

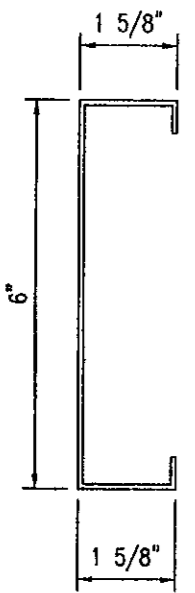
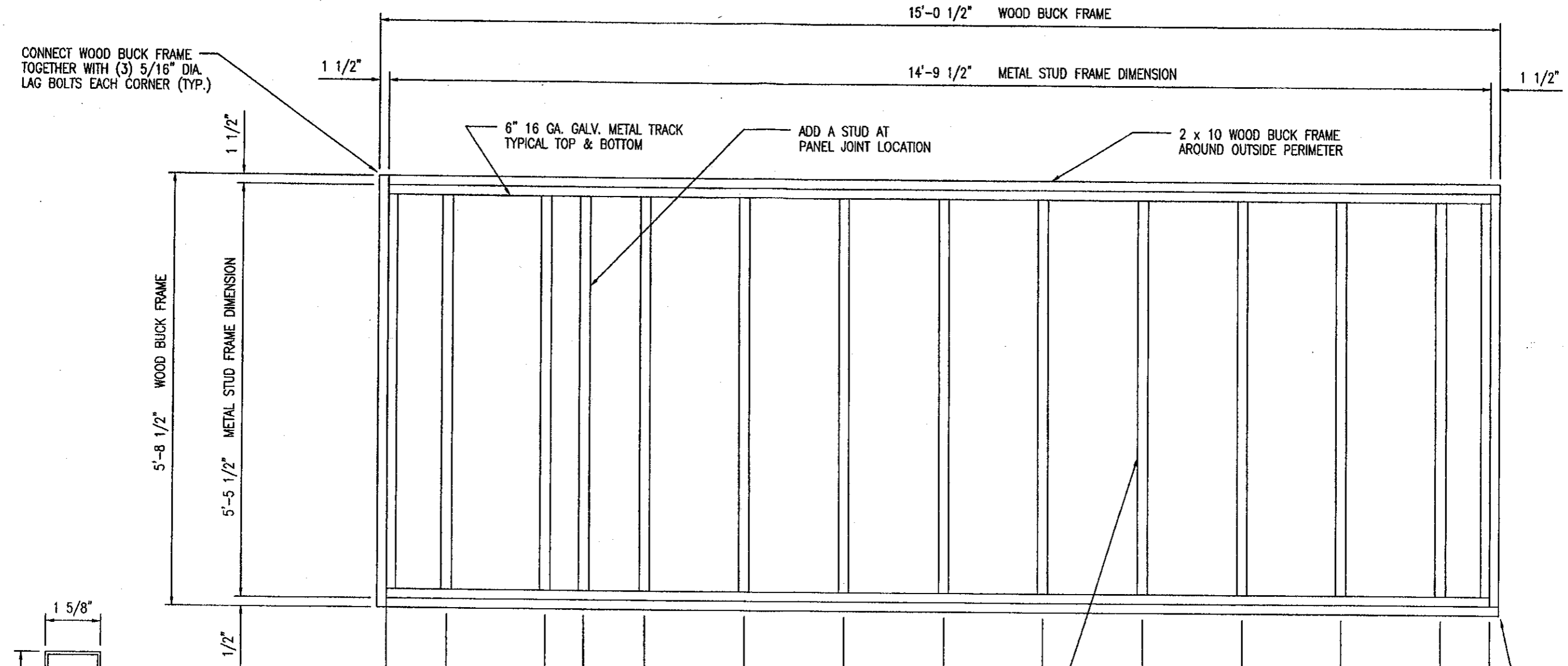
PRODUCT RENEWED
 as complying with the Florida
 Building Code
 Acceptance No 11-0421.08
 Expiration Date 08/09/2012
 By *Helmy A. Miller*
 Miami Dade Product Control

PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No 09-0923.05
 Expiration Date 08/09/2011
 By *Helmy A. Miller*
 Miami Dade Product Control
 Division

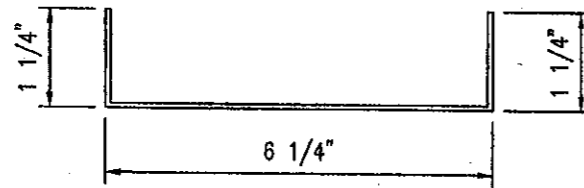
Handwritten signature and date: 9/14/09

| | | | |
|--|----------------|-----------------|------|
| DIMENSIONS UNLESS SPECIFIED ARE IN INCHES TOLERANCES ARE | | BATCH NO. 91409 | |
| FINISH | PRODUCTION | APPROVALS | DATE |
| MATERIAL 4MM & 6MM ALPOLIC & 4MM ALPOLIC/fr | ENGINEERING MS | 11/11/02 | |
| DO NOT SCALE DRAWING | | | |

| | | | |
|--|-----------|---------------|----------|
| Kistler McDougall | | | |
| MITSUBISHI CHEMICAL AMERICA, INC. | | | |
| ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEMS | | | |
| SIZE B | CAGE CODE | DWG NO. 1 | REV 1 |
| SCALE SHOWN | | SHEET 2 OF 10 | |



METAL STUD



STEEL TRACK

PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No 11-0421.08
Expiration Date 08/09/2012
By Helmy H. Maher
Miami Dade Product Control

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 9-0923.05
Expiration Date 08/09/2011
By Helmy H. Maher
Miami Dade Product Control
Division

6" x 1-5/8" 16 GA.
GALV. METAL STUDS
50 KSI YIELD (TYP.)

THE WOOD BUCK FRAME DETAILED IN THIS DRAWING IS FOR TEST PURPOSES ONLY AND IS NOT INTENDED AS A RECOMMENDATION FOR ACTUAL CONSTRUCTION.

STUD FRAMING ELEVATION

3/4" = 1'-0"

| | | | | | |
|---|------------------------------------|---------------------------|-----------|-------------------|-----------------------------------|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES: | | CONTRACT NO. <u>21409</u> | | Kistler McDougall | |
| FRACTIONS ± 1/32 | DECIMALS .005 | ANGLES ± 1/2 | APPROVALS | DATE | MITSUBISHI CHEMICAL AMERICA, INC. |
| MATERIAL | 4MM & 6MM ALPOLIC & 4MM ALPOLIC/FR | DESIGN | | | ALPOLIC and ALPOLIC/FR |
| FRONT | | ENGINEERING | MS | 11/11/02 | COMPOSITE WALL PANEL SYSTEM |
| DO NOT SCALE DRAWING | | PROJ MGMT | | | SIZE CAGE CODE QWS NO. |
| | | PRODUCTION | | | B 1 |
| | | | | | SCALE SHOWN SHEET 3 OF |

#12 x 1 1/2" HWH WOOD SCREW
@16" O.C. TO MAIN STRUCTURE

2 X 10 WOOD BUCK FRAME
CONNECT FRAME TOGETHER WITH
(3) 5/16" DIA. LAG BOLTS

DOW CORNING *795 SILICONE
SEALANT & 3/4" DIA. OPEN CELL
BACKER ROD (TYPICAL)

#10 x 1" HWH TEK SCREW
16" O.C. TYPICAL EACH PANEL

4MM OR 6MM ALPOLIC
OR 4MM ALPOLIC/fr
ALUMINUM COMPOSITE
PANEL

ATTACH EACH STUD TO TRACK
W/ #12 x 1 1/2" HWH
TRAXX 3 BUILDDEX SCREWS
TWO (2) EA. SIDE

#12 x 1 1/2" HWH TEK SCREW
16" O.C. (FASTEN TO STUDS)

PLASTIC SHIM SPACE
(AS REQUIRED)

A2 ALUMINUM
EXTRUSION

6" X 16 GA.
GALV. STEEL STUD
16" O.C.

1
4
DETAIL
SCALE: 6" = 1'

HS EXTRUDED ALUMINUM
PANEL STIFFENER

DOW-CORNING #1199
SILICONE SEALANT

HR EXTRUDED ALUMINUM
PANEL STIFFENER

#12 x 1 1/2" HWH TEK SPACE
16" O.C. (FASTEN TO STUDS)

PLASTIC SHIM SPACE
(AS REQUIRED)

6" X 16 GA.
GALV. STEEL STUD
16" O.C.

2
4
STIFFENER DETAIL
SCALE: 6" = 1'

THE WOOD BUCK FRAME DETAILED IN THIS DRAWING
IS FOR TEST PURPOSES ONLY AND IS NOT INTENDED
AS A RECOMMENDATION FOR ACTUAL CONSTRUCTION.

#10 x 1" HWH TEK SCREW
16" O.C. TYPICAL EACH PANEL

BACKER ROD
AND SEALANT

F2 ALUMINUM
EXTRUSION

M2 ALUMINUM
EXTRUSION

#12 x 1 1/2" HWH TEK SCREW
16" O.C. (FASTEN TO STUDS)

PLASTIC SHIM SPACE
(AS REQUIRED)

6" X 16 GA.
GALV. STEEL STUD
16" O.C.

3
4
JOINT DETAIL
SCALE: 6" = 1'

PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No 11-0421.08
Expiration Date 08/09/2012
By *Heather H. Walker*
Miami Dade Product Control

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 09-0923.05
Expiration Date 08/09/2011
By *Heather H. Walker*
Miami Dade Product Control
Division

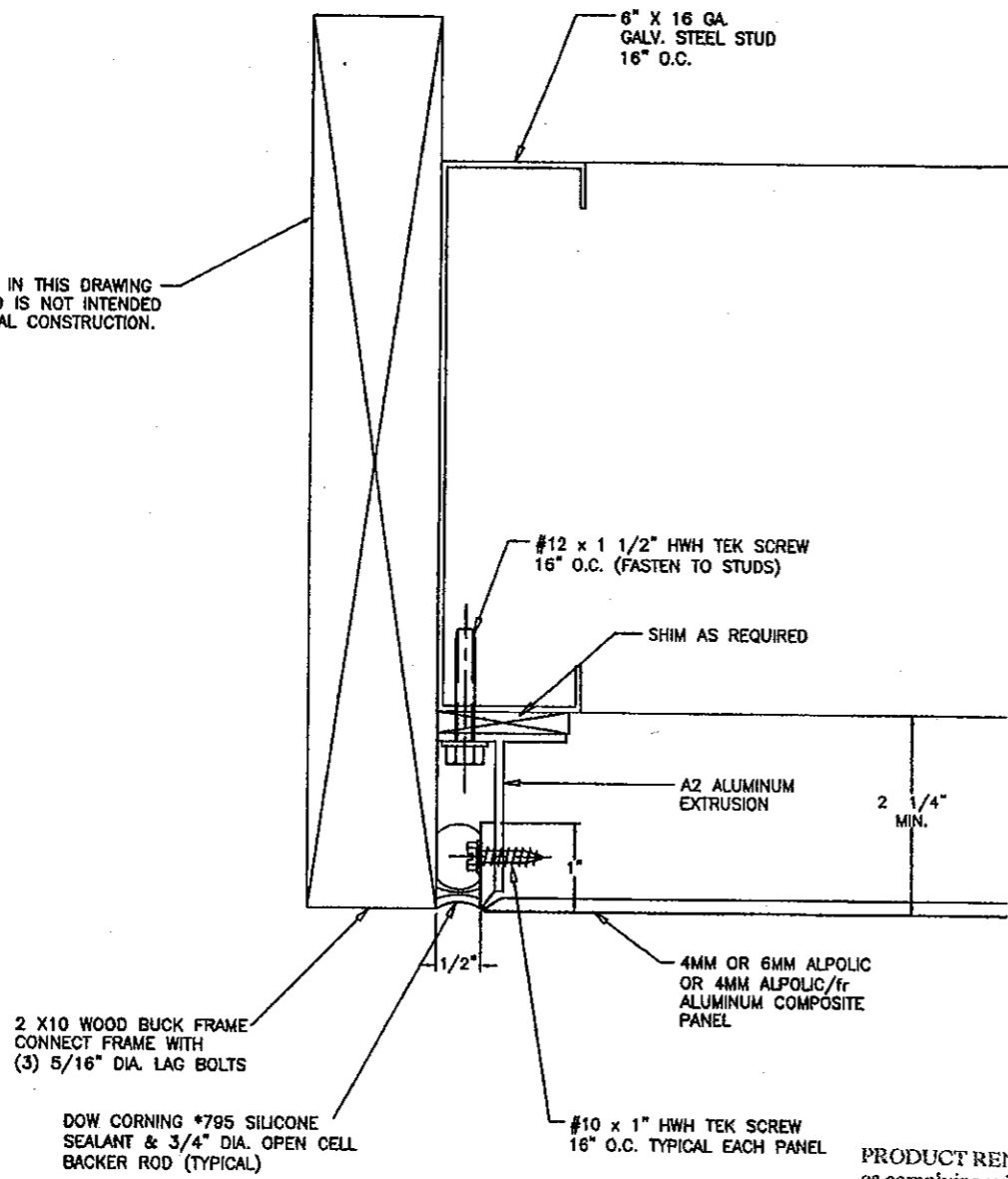
Robert A. Gal

| | |
|---|----------|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES EXCEPT AS NOTED | |
| FRUCTIONS | DECIMALS |
| 1/8" | 0.125" |
| 1/4" | 0.250" |
| 3/8" | 0.375" |
| 1/2" | 0.500" |
| 5/8" | 0.625" |
| 3/4" | 0.750" |
| 7/8" | 0.875" |
| 1" | 1.000" |

| | |
|--------------|-------------|
| CONTRACT NO. | 91409 |
| APPROVALS | DATE |
| DRAWN | |
| ENGINEERING | MS 11/11/02 |
| PROJECT | |
| PRODUCTION | |

| | |
|--|---------|
| Kistler McDougall | |
| MITSUBISHI CHEMICAL AMERICA, INC. | |
| ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEMS | |
| SHEET | 4 OF 10 |

THE WOOD BUCK FRAME DETAILED IN THIS DRAWING IS FOR TEST PURPOSES ONLY AND IS NOT INTENDED AS A RECOMMENDATION FOR ACTUAL CONSTRUCTION.

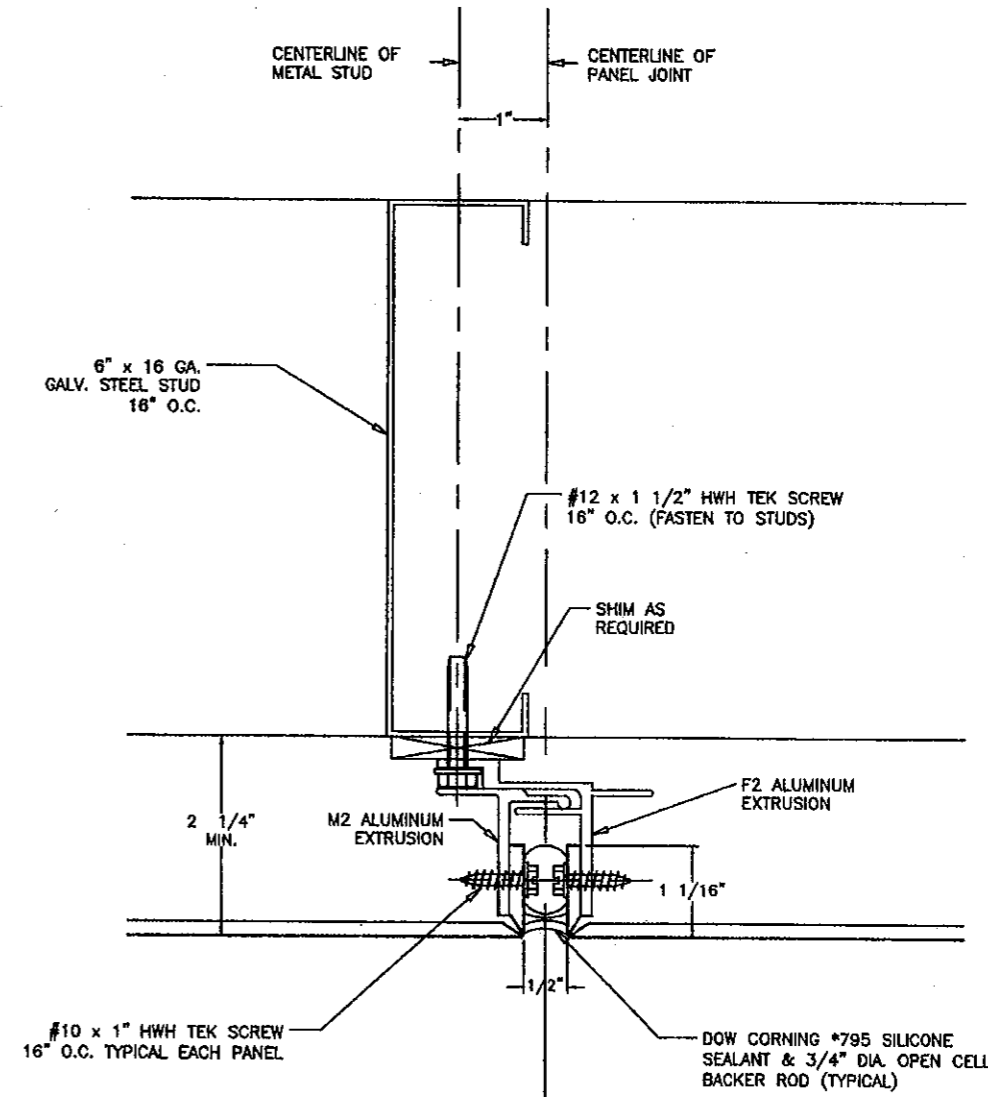


2 X10 WOOD BUCK FRAME
CONNECT FRAME WITH
(3) 5/16\" DIA. LAG BOLTS

DOW CORNING *795 SILICONE
SEALANT & 3/4\" DIA. OPEN CELL
BACKER ROD (TYPICAL)

4
5
DETAIL
SCALE: 6\" = 1'

PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No 11-0421.08
Expiration Date 08/09/2012
By *Helmut A. Nelson*
Miami Dade Product Control



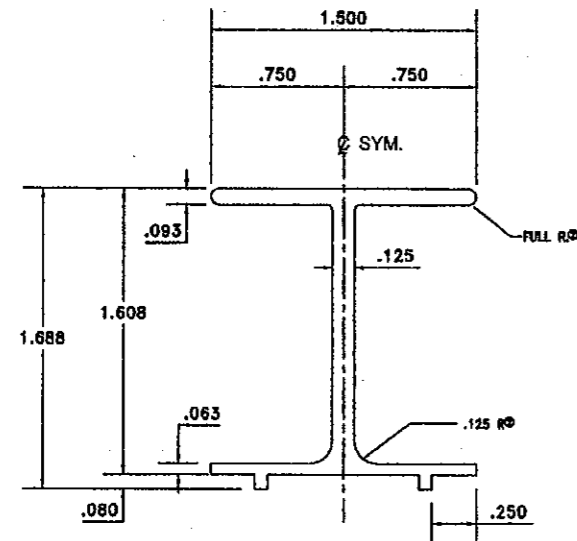
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 09-0923.05
Expiration Date 08/09/2011
By *Robert G. Wal*
Miami Dade Product Control
Division

5
5
DETAIL
SCALE: 6\" = 1'

| | | | |
|--|----------|-----------------------|------|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS ARE AS SHOWN | | CONTRACT NO. 91409 | |
| FRACTIONS | DECIMALS | APPROVALS | DATE |
| 1/16 | .015625 | | |
| 1/8 | .125 | | |
| 1/4 | .25 | | |
| 3/8 | .375 | | |
| 1/2 | .5 | | |
| 3/4 | .75 | | |
| 1 | 1.0 | | |
| 1 1/8 | 1.125 | | |
| 1 1/4 | 1.25 | | |
| 1 3/8 | 1.375 | | |
| 1 1/2 | 1.5 | | |
| 1 5/8 | 1.625 | | |
| 1 3/4 | 1.75 | | |
| 1 7/8 | 1.875 | | |
| 2 | 2.0 | | |
| 2 1/8 | 2.125 | | |
| 2 1/4 | 2.25 | | |
| 2 3/8 | 2.375 | | |
| 2 1/2 | 2.5 | | |
| 2 5/8 | 2.625 | | |
| 2 3/4 | 2.75 | | |
| 2 7/8 | 2.875 | | |
| 3 | 3.0 | | |
| 3 1/8 | 3.125 | | |
| 3 1/4 | 3.25 | | |
| 3 3/8 | 3.375 | | |
| 3 1/2 | 3.5 | | |
| 3 5/8 | 3.625 | | |
| 3 3/4 | 3.75 | | |
| 3 7/8 | 3.875 | | |
| 4 | 4.0 | | |
| 4 1/8 | 4.125 | | |
| 4 1/4 | 4.25 | | |
| 4 3/8 | 4.375 | | |
| 4 1/2 | 4.5 | | |
| 4 5/8 | 4.625 | | |
| 4 3/4 | 4.75 | | |
| 4 7/8 | 4.875 | | |
| 5 | 5.0 | | |
| 5 1/8 | 5.125 | | |
| 5 1/4 | 5.25 | | |
| 5 3/8 | 5.375 | | |
| 5 1/2 | 5.5 | | |
| 5 5/8 | 5.625 | | |
| 5 3/4 | 5.75 | | |
| 5 7/8 | 5.875 | | |
| 6 | 6.0 | | |
| 6 1/8 | 6.125 | | |
| 6 1/4 | 6.25 | | |
| 6 3/8 | 6.375 | | |
| 6 1/2 | 6.5 | | |
| 6 5/8 | 6.625 | | |
| 6 3/4 | 6.75 | | |
| 6 7/8 | 6.875 | | |
| 7 | 7.0 | | |
| 7 1/8 | 7.125 | | |
| 7 1/4 | 7.25 | | |
| 7 3/8 | 7.375 | | |
| 7 1/2 | 7.5 | | |
| 7 5/8 | 7.625 | | |
| 7 3/4 | 7.75 | | |
| 7 7/8 | 7.875 | | |
| 8 | 8.0 | | |
| 8 1/8 | 8.125 | | |
| 8 1/4 | 8.25 | | |
| 8 3/8 | 8.375 | | |
| 8 1/2 | 8.5 | | |
| 8 5/8 | 8.625 | | |
| 8 3/4 | 8.75 | | |
| 8 7/8 | 8.875 | | |
| 9 | 9.0 | | |
| 9 1/8 | 9.125 | | |
| 9 1/4 | 9.25 | | |
| 9 3/8 | 9.375 | | |
| 9 1/2 | 9.5 | | |
| 9 5/8 | 9.625 | | |
| 9 3/4 | 9.75 | | |
| 9 7/8 | 9.875 | | |
| 10 | 10.0 | | |
| 10 1/8 | 10.125 | | |
| 10 1/4 | 10.25 | | |
| 10 3/8 | 10.375 | | |
| 10 1/2 | 10.5 | | |
| 10 5/8 | 10.625 | | |
| 10 3/4 | 10.75 | | |
| 10 7/8 | 10.875 | | |
| 11 | 11.0 | | |
| 11 1/8 | 11.125 | | |
| 11 1/4 | 11.25 | | |
| 11 3/8 | 11.375 | | |
| 11 1/2 | 11.5 | | |
| 11 5/8 | 11.625 | | |
| 11 3/4 | 11.75 | | |
| 11 7/8 | 11.875 | | |
| 12 | 12.0 | | |
| 12 1/8 | 12.125 | | |
| 12 1/4 | 12.25 | | |
| 12 3/8 | 12.375 | | |
| 12 1/2 | 12.5 | | |
| 12 5/8 | 12.625 | | |
| 12 3/4 | 12.75 | | |
| 12 7/8 | 12.875 | | |
| 13 | 13.0 | | |
| 13 1/8 | 13.125 | | |
| 13 1/4 | 13.25 | | |
| 13 3/8 | 13.375 | | |
| 13 1/2 | 13.5 | | |
| 13 5/8 | 13.625 | | |
| 13 3/4 | 13.75 | | |
| 13 7/8 | 13.875 | | |
| 14 | 14.0 | | |
| 14 1/8 | 14.125 | | |
| 14 1/4 | 14.25 | | |
| 14 3/8 | 14.375 | | |
| 14 1/2 | 14.5 | | |
| 14 5/8 | 14.625 | | |
| 14 3/4 | 14.75 | | |
| 14 7/8 | 14.875 | | |
| 15 | 15.0 | | |
| 15 1/8 | 15.125 | | |
| 15 1/4 | 15.25 | | |
| 15 3/8 | 15.375 | | |
| 15 1/2 | 15.5 | | |
| 15 5/8 | 15.625 | | |
| 15 3/4 | 15.75 | | |
| 15 7/8 | 15.875 | | |
| 16 | 16.0 | | |
| 16 1/8 | 16.125 | | |
| 16 1/4 | 16.25 | | |
| 16 3/8 | 16.375 | | |
| 16 1/2 | 16.5 | | |
| 16 5/8 | 16.625 | | |
| 16 3/4 | 16.75 | | |
| 16 7/8 | 16.875 | | |
| 17 | 17.0 | | |
| 17 1/8 | 17.125 | | |
| 17 1/4 | 17.25 | | |
| 17 3/8 | 17.375 | | |
| 17 1/2 | 17.5 | | |
| 17 5/8 | 17.625 | | |
| 17 3/4 | 17.75 | | |
| 17 7/8 | 17.875 | | |
| 18 | 18.0 | | |
| 18 1/8 | 18.125 | | |
| 18 1/4 | 18.25 | | |
| 18 3/8 | 18.375 | | |
| 18 1/2 | 18.5 | | |
| 18 5/8 | 18.625 | | |
| 18 3/4 | 18.75 | | |
| 18 7/8 | 18.875 | | |
| 19 | 19.0 | | |
| 19 1/8 | 19.125 | | |
| 19 1/4 | 19.25 | | |
| 19 3/8 | 19.375 | | |
| 19 1/2 | 19.5 | | |
| 19 5/8 | 19.625 | | |
| 19 3/4 | 19.75 | | |
| 19 7/8 | 19.875 | | |
| 20 | 20.0 | | |
| 20 1/8 | 20.125 | | |
| 20 1/4 | 20.25 | | |
| 20 3/8 | 20.375 | | |
| 20 1/2 | 20.5 | | |
| 20 5/8 | 20.625 | | |
| 20 3/4 | 20.75 | | |
| 20 7/8 | 20.875 | | |
| 21 | 21.0 | | |
| 21 1/8 | 21.125 | | |
| 21 1/4 | 21.25 | | |
| 21 3/8 | 21.375 | | |
| 21 1/2 | 21.5 | | |
| 21 5/8 | 21.625 | | |
| 21 3/4 | 21.75 | | |
| 21 7/8 | 21.875 | | |
| 22 | 22.0 | | |
| 22 1/8 | 22.125 | | |
| 22 1/4 | 22.25 | | |
| 22 3/8 | 22.375 | | |
| 22 1/2 | 22.5 | | |
| 22 5/8 | 22.625 | | |
| 22 3/4 | 22.75 | | |
| 22 7/8 | 22.875 | | |
| 23 | 23.0 | | |
| 23 1/8 | 23.125 | | |
| 23 1/4 | 23.25 | | |
| 23 3/8 | 23.375 | | |
| 23 1/2 | 23.5 | | |
| 23 5/8 | 23.625 | | |
| 23 3/4 | 23.75 | | |
| 23 7/8 | 23.875 | | |
| 24 | 24.0 | | |
| 24 1/8 | 24.125 | | |
| 24 1/4 | 24.25 | | |
| 24 3/8 | 24.375 | | |
| 24 1/2 | 24.5 | | |
| 24 5/8 | 24.625 | | |
| 24 3/4 | 24.75 | | |
| 24 7/8 | 24.875 | | |
| 25 | 25.0 | | |
| 25 1/8 | 25.125 | | |
| 25 1/4 | 25.25 | | |
| 25 3/8 | 25.375 | | |
| 25 1/2 | 25.5 | | |
| 25 5/8 | 25.625 | | |
| 25 3/4 | 25.75 | | |
| 25 7/8 | 25.875 | | |
| 26 | 26.0 | | |
| 26 1/8 | 26.125 | | |
| 26 1/4 | 26.25 | | |
| 26 3/8 | 26.375 | | |
| 26 1/2 | 26.5 | | |
| 26 5/8 | 26.625 | | |
| 26 3/4 | 26.75 | | |
| 26 7/8 | 26.875 | | |
| 27 | 27.0 | | |
| 27 1/8 | 27.125 | | |
| 27 1/4 | 27.25 | | |
| 27 3/8 | 27.375 | | |
| 27 1/2 | 27.5 | | |
| 27 5/8 | 27.625 | | |
| 27 3/4 | 27.75 | | |
| 27 7/8 | 27.875 | | |
| 28 | 28.0 | | |
| 28 1/8 | 28.125 | | |
| 28 1/4 | 28.25 | | |
| 28 3/8 | 28.375 | | |
| 28 1/2 | 28.5 | | |
| 28 5/8 | 28.625 | | |
| 28 3/4 | 28.75 | | |
| 28 7/8 | 28.875 | | |
| 29 | 29.0 | | |
| 29 1/8 | 29.125 | | |
| 29 1/4 | 29.25 | | |
| 29 3/8 | 29.375 | | |
| 29 1/2 | 29.5 | | |
| 29 5/8 | 29.625 | | |
| 29 3/4 | 29.75 | | |
| 29 7/8 | 29.875 | | |
| 30 | 30.0 | | |

| | |
|--|---------------|
| Kistler McDougall | |
| MITSUBISHI CHEMICAL AMERICA, INC. | |
| ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEMS | |
| SIZE | CODE |
| B | |
| DWG NO. | 1 |
| REV | 1 |
| SCALE SHOWN | SHEET 5 OF 10 |

HS

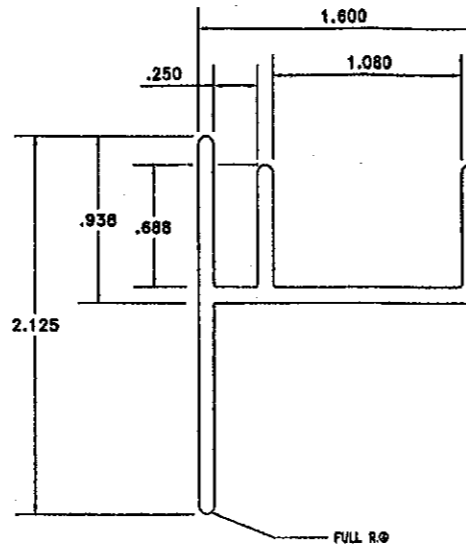


BREAK CORNERS .015 R
EXCEPT AS NOTED
ACTUAL SIZE

DIE DATA

EST. AREA: .430 DIE SIZE: 6
EST. WEIGHT: .516 NO. HOLES: 1
EST. PERI.: EXT. LENGTH: 5 1/8" = 1 @ 35'
FACTOR: R/R:

HR

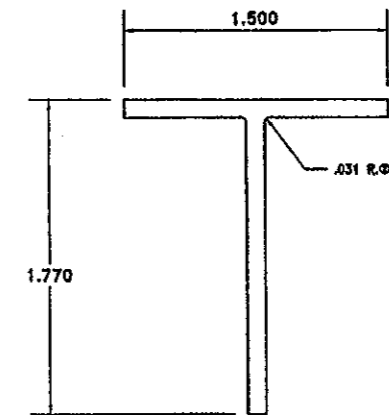


BREAK CORNERS .015 R
.090 TYPICAL METAL THICKNESS
ACTUAL SIZE

DIE DATA

EST. AREA: .465 DIE SIZE: 6
EST. WEIGHT: .558 NO. HOLES: 1
EST. PERI.: EXT. LENGTH: 5 1/8" = 1 @ 36'
FACTOR: R/R:

A2



BREAK CORNERS .010 R
.100 WALL THICK TYPICAL
ACTUAL SIZE

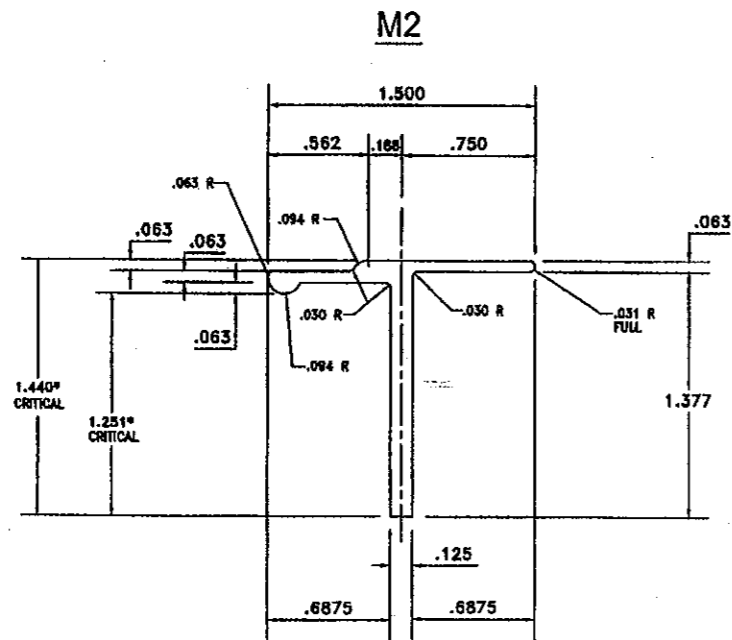
DIE DATA

EST. AREA: .317 DIE SIZE: 6
EST. WEIGHT: .380 NO. HOLES: 1
EST. PERI.: 6.94 EXT. LENGTH:
FACTOR: 1.7 R/R: 5 1/8" = 1 @ 53'

PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No 11-0421.08
Expiration Date 08/09/2012
By *Helmut A. Mohr*
Miami Dade Product Control

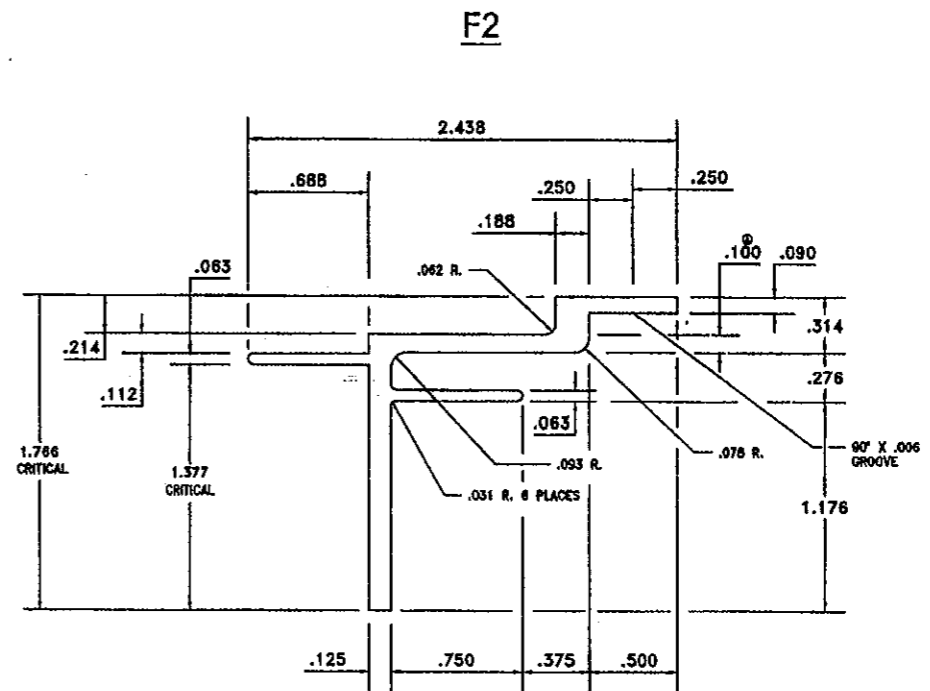
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 09-0923.05
Expiration Date 08/09/2011
By *Helmut A. Mohr*
Miami Dade Product Control
Division:

| | | | | | |
|---|--|-------------------------|--|--|--|
| MATERIALS SPECIFIED DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE | | CONTRACT NO. 9-14-09 | | Kistler McDougall | |
| FRACTIONS: 1/2, 3/4, 1, 1 1/2 DECIMALS: .01, .05, .1, .25, .5, 1 | | APPROVALS | | MITSUBISHI CHEMICAL AMERICA, INC. | |
| MATERIAL 4MM & 8MM ALPOLIC & 4MM ALPOLIC/II | | DATE 11/11/02 | | ALPOLIC and ALPOLIC/II COMPOSITE WALL PANEL SYSTEMS | |
| DO NOT SCALE DRAWING | | PRODUCTION | | REV 0 | |
| SCALE | | SHEET 6 OF 10 | | | |



ACTUAL SIZE
BREAK SHARP CORNERS .005 R

DIE DATA
 EST. AREA: .275 DIE SIZE: 6
 EST. WEIGHT: .330 NO. HOLES: 1
 EST. PERI.: 5.831 EXT. LENGTH: 4 1/2 = 1- 46'
 FACTOR: 18 R/R: 5 1/8" = 1- 62'



ACTUAL SIZE
BREAK SHARP CORNERS .010R

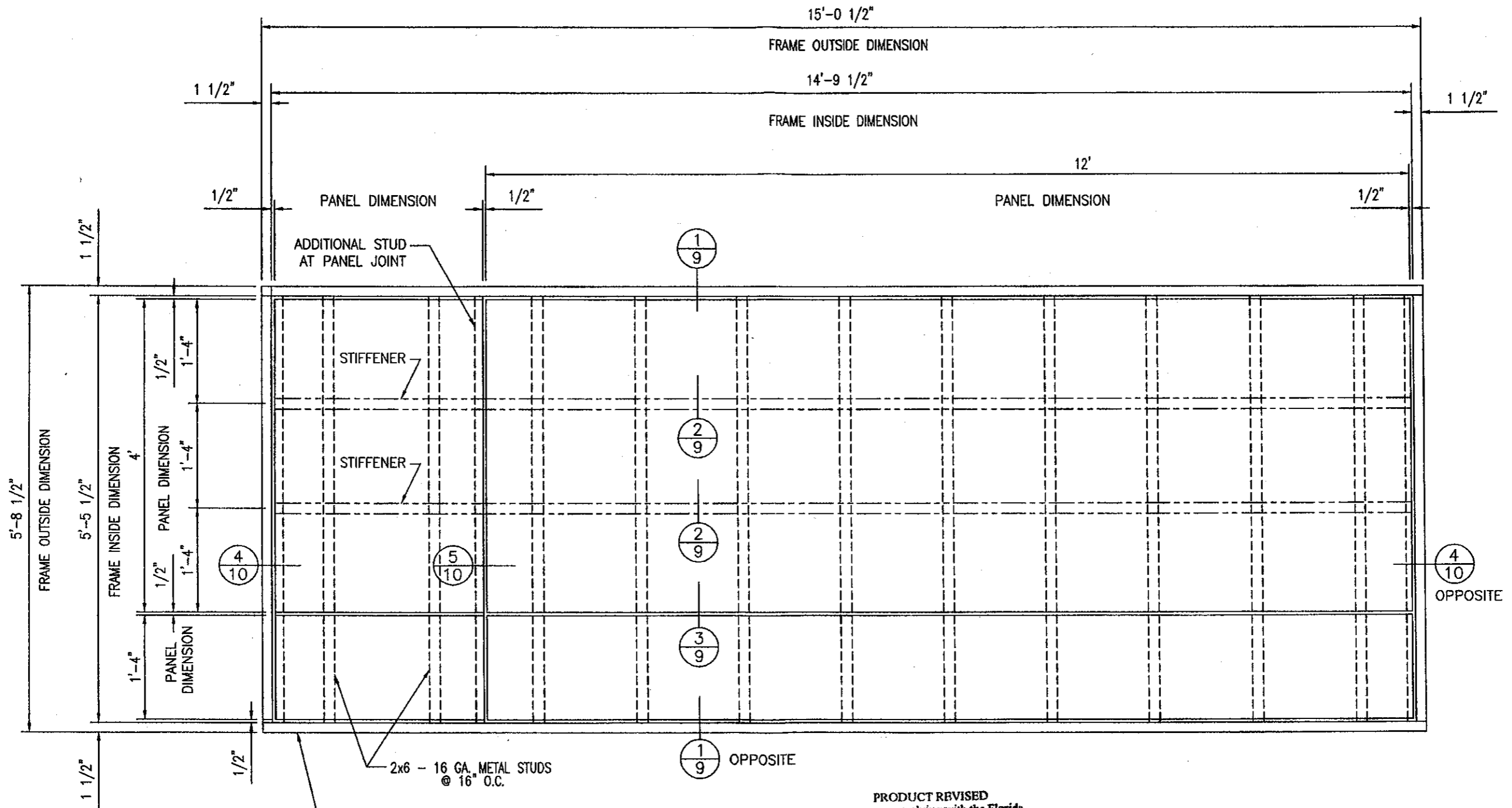
DIE DATA
 EST. AREA: .484 DIE SIZE: 6
 EST. WEIGHT: .581 NO. HOLES: 1
 EST. PERI.: 9.900 EXT. LENGTH: 5 1/8 = 1- 54'
 FACTOR: 17 R/R

PRODUCT RENEWED
 as complying with the Florida
 Building Code
 Acceptance No 11-0421.08
 Expiration Date 08/09/2012
 By *Helmut A. Weber*
 Miami Dade Product Control

PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No 09-0923.05
 Expiration Date 08/09/2011
 By *Helmut A. Weber*
 Miami Dade Product Control
 Division

Robert A. [Signature]
 Kistler McDougall

| | | | | | |
|---|-------------------|--------------------------|--|-----------------------------------|--|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: | | CONTRACT NO. 09-14-09 | | MITSUBISHI CHEMICAL AMERICA, INC. | |
| FRACTIONS ± 1/32 | DECIMALS ± .01 | ANGLES ± 1' | APPROVALS | DATE | |
| MATERIAL 4MM & 6MM ALPOLIC & 4MM ALPOLIC/fr | | DATE | ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEMS | | |
| PRODUCTION | | 11/11/02 | REV | 0 | |
| DO NOT SCALE DRAWING | | PRODUCTION | SCALE | SHEET 7 OF 10 | |



THE WOOD BUCK FRAME DETAILED IN THIS DRAWING IS FOR TEST PURPOSES ONLY AND IS NOT INTENDED AS A RECOMMENDATION FOR ACTUAL CONSTRUCTION.

PRODUCT RENEWED
 as complying with the Florida
 Building Code
 Acceptance No 11-0421.08
 Expiration Date 08/09/2012
 By *Heather H. McLean*
 Miami Dade Product Control

PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No 09-0923.05
 Expiration Date 08/09/2011
 By *Heather H. McLean*
 Miami Dade Product Control
 Division

PANEL ELEVATION

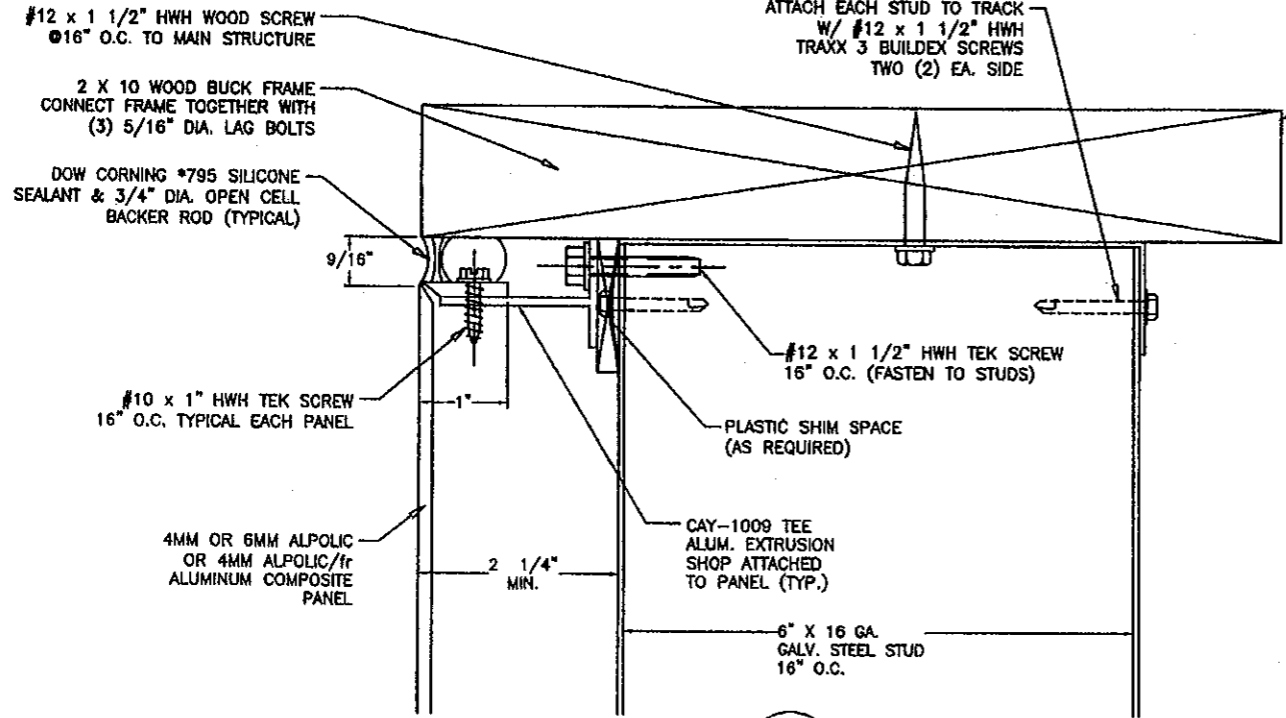
3/4" = 1'-0"

| | | | | | |
|---|------------------------------------|----------------------|-----------------------------|------------------|--|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: | | | CONTRACT NO. <u>9-14-09</u> | | CAY ARCHITECTURAL PRODUCTS MITSUBISHI CHEMICAL AMERICA, INC |
| FRACTIONS ± 1/32 | DECIMALS XX ± .01 XXX ± .005 | ANGLES ± 1/2 | APPROVALS | DATE | |
| MATERIAL 4MM & 6MM ALPOLIC & 4MM ALPOLIC/fr | FINISH | DO NOT SCALE DRAWING | ENGINEERING MS | DATE 11/11/02 | ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEM |
| | | | PROJ MGMT | PRODUCTION | SIZE CAGE CODE DWG NO. B 1 |
| | | | | | SCALE SHOWN SHEET 8 OF |

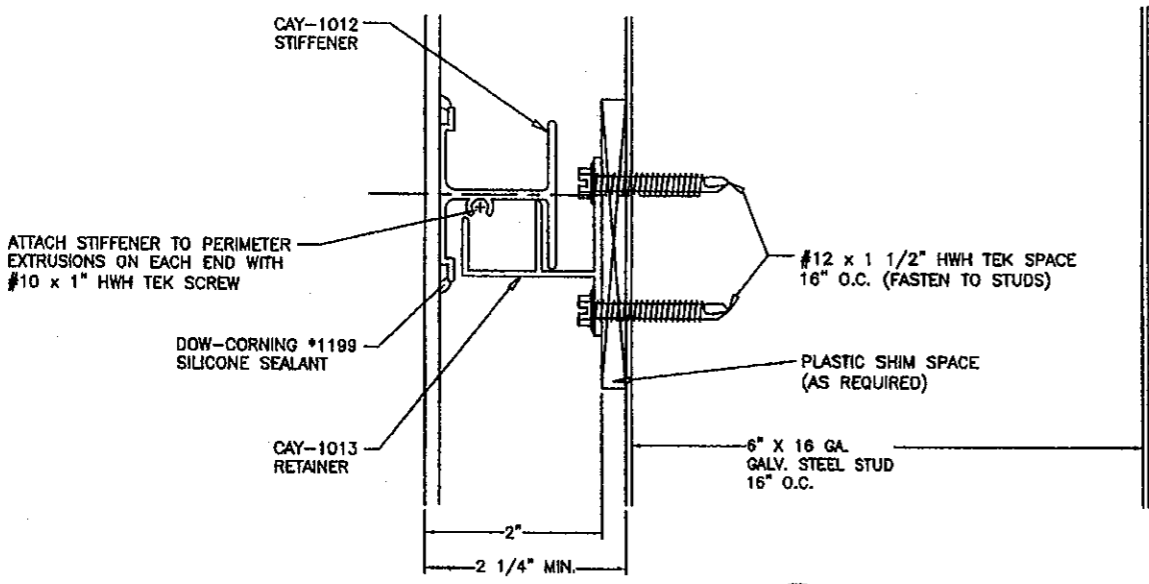
4
10
OPPOSITE

1
9
OPPOSITE

2x6 - 16 GA. METAL STUDS
 @ 16" O.C.

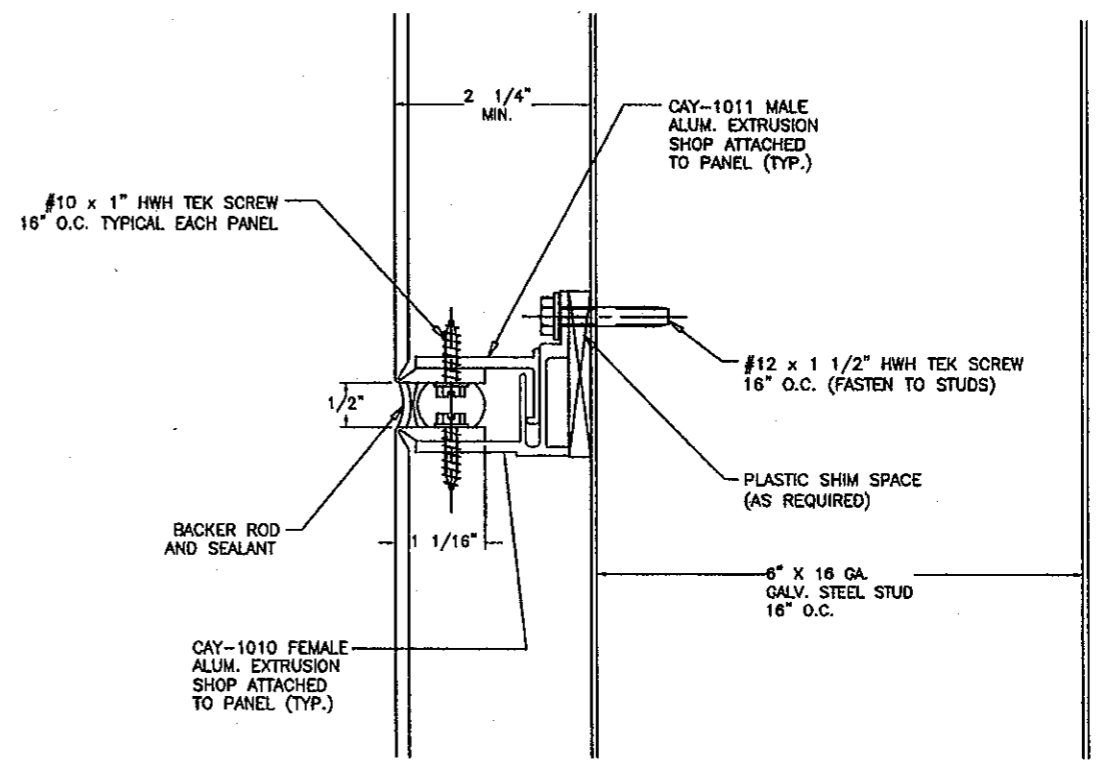


1
9
DETAIL
SCALE: 6" = 1'



2
9
STIFFENER DETAIL
SCALE: 6" = 1'

THE WOOD BUCK FRAME DETAILED IN THIS DRAWING IS FOR TEST PURPOSES ONLY AND IS NOT INTENDED AS A RECOMMENDATION FOR ACTUAL CONSTRUCTION.



3
9
JOINT DETAIL
SCALE: 6" = 1'

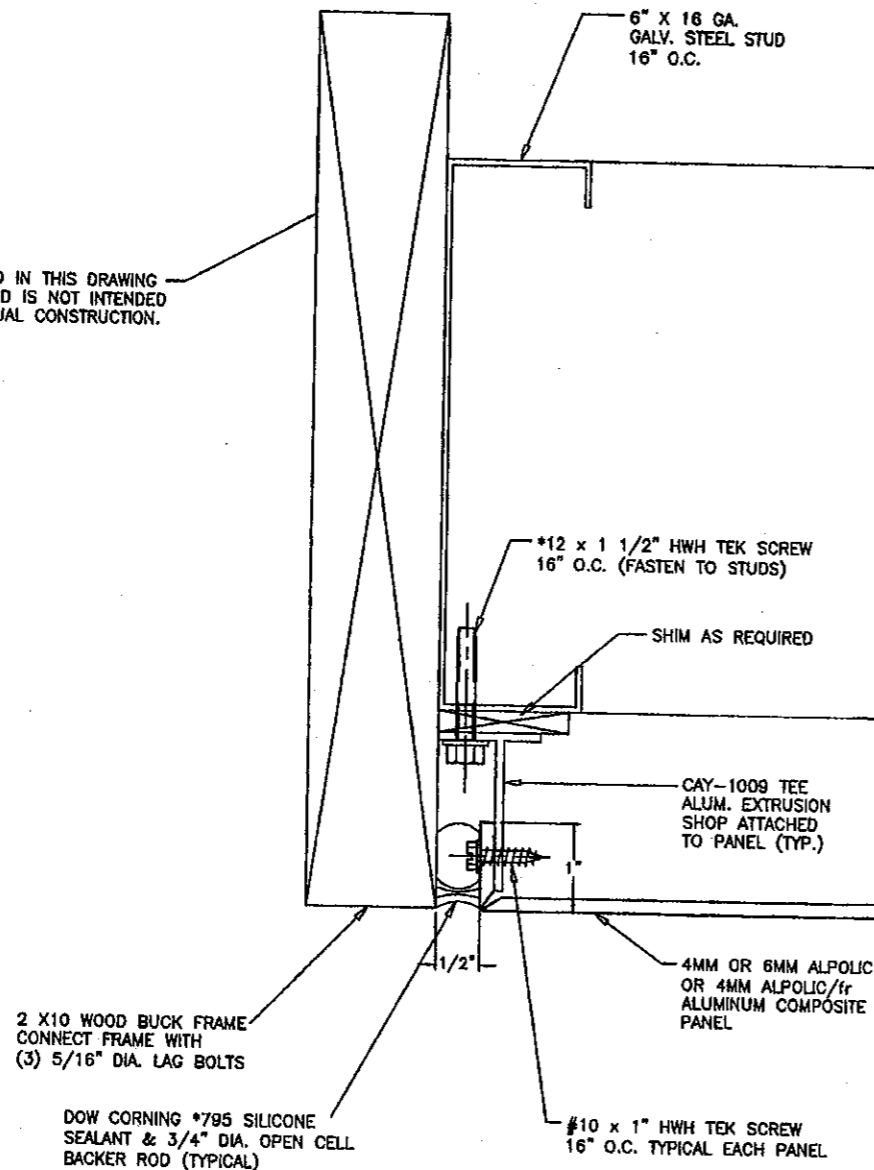
PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No 11-0421.08
Expiration Date 08/09/2012
By *Halley A. Miller*
Miami Dade Product Control

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 09-0923.05
Expiration Date 08/09/2011
By *Halley A. Miller*
Miami Dade Product Control
Division

Robert A. Gal
9-14-09

| | | | |
|--|--|---------------|--|
| GAY ARCHITECTURAL PRODUCTS | | CONTRACTOR | |
| MITSUBISHI CHEMICAL AMERICA, INC. | | 9-14-09 | |
| ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEMS | | APPROVALS | |
| DATE | | DATE | |
| 11/11/02 | | 11/11/02 | |
| DESIGNER | | DATE | |
| MS | | 11/11/02 | |
| PROJECT | | DATE | |
| PRODUCTION | | DATE | |
| SCALE SHOWN | | SHEET 9 OF 10 | |

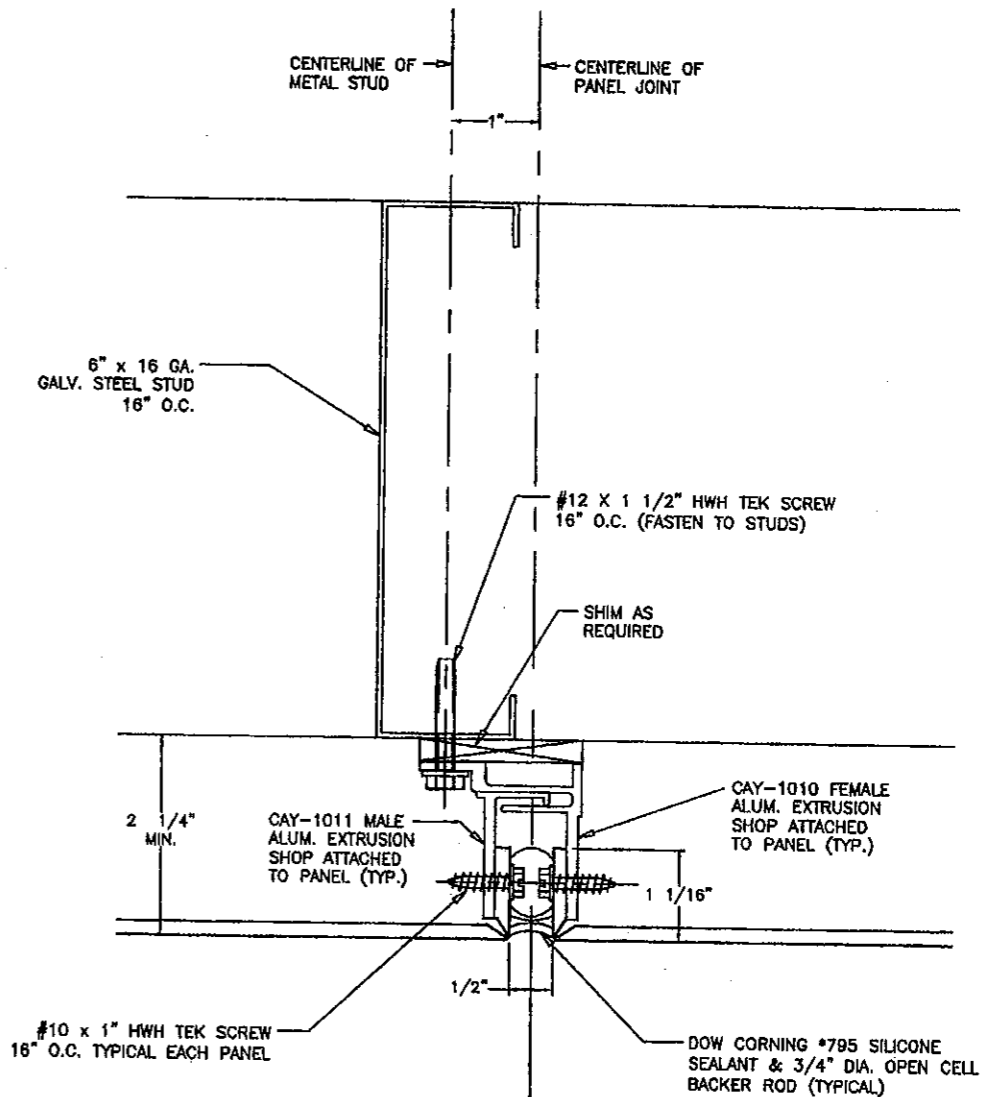
THE WOOD BUCK FRAME DETAILED IN THIS DRAWING IS FOR TEST PURPOSES ONLY AND IS NOT INTENDED AS A RECOMMENDATION FOR ACTUAL CONSTRUCTION.



4
10
DETAIL
SCALE: 8" = 1"

PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No 11-0421.08
Expiration Date 08/09/2012
By Helmut A. Meier
Miami Dade Product Control

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 09-0923.05
Expiration Date 08/09/2011
By Helmut A. Meier
Miami Dade Product Control
Division



5
10
DETAIL
SCALE: 6\"/>

| | | |
|------------------------------------|--------------|--------|
| FUNCTIONS | DECIMALS | ANGLES |
| 1 0/2 | 3/32 1/2 1/2 | 1/2 |
| ARTIST | DATE | |
| 4MM & 6MM ALPOLIC & 4MM ALPOLIC/ir | 11/1/02 | |
| FINISH | PRODUCTION | |

| | |
|--|----------------|
| CAY ARCHITECTURAL PRODUCTS | |
| MITSUBISHI CHEMICAL AMERICA, INC. | |
| ALPOLIC and ALPOLIC/ir COMPOSITE WALL PANEL SYSTEMS | |
| SIZE | REV |
| B | 1 |
| SCALE SHOWN | SHEET 10 OF 10 |