



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](http://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.*

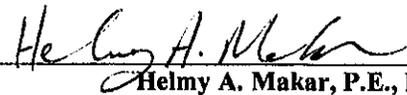
**2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #03-0130.06**

**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 " Alpolyc and Alpolyc/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**

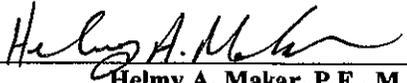
1. *None.*

**D. QUALITY ASSURANCE**

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

**E. MATERIAL CERTIFICATIONS**

1. *None.*

  
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**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

### 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

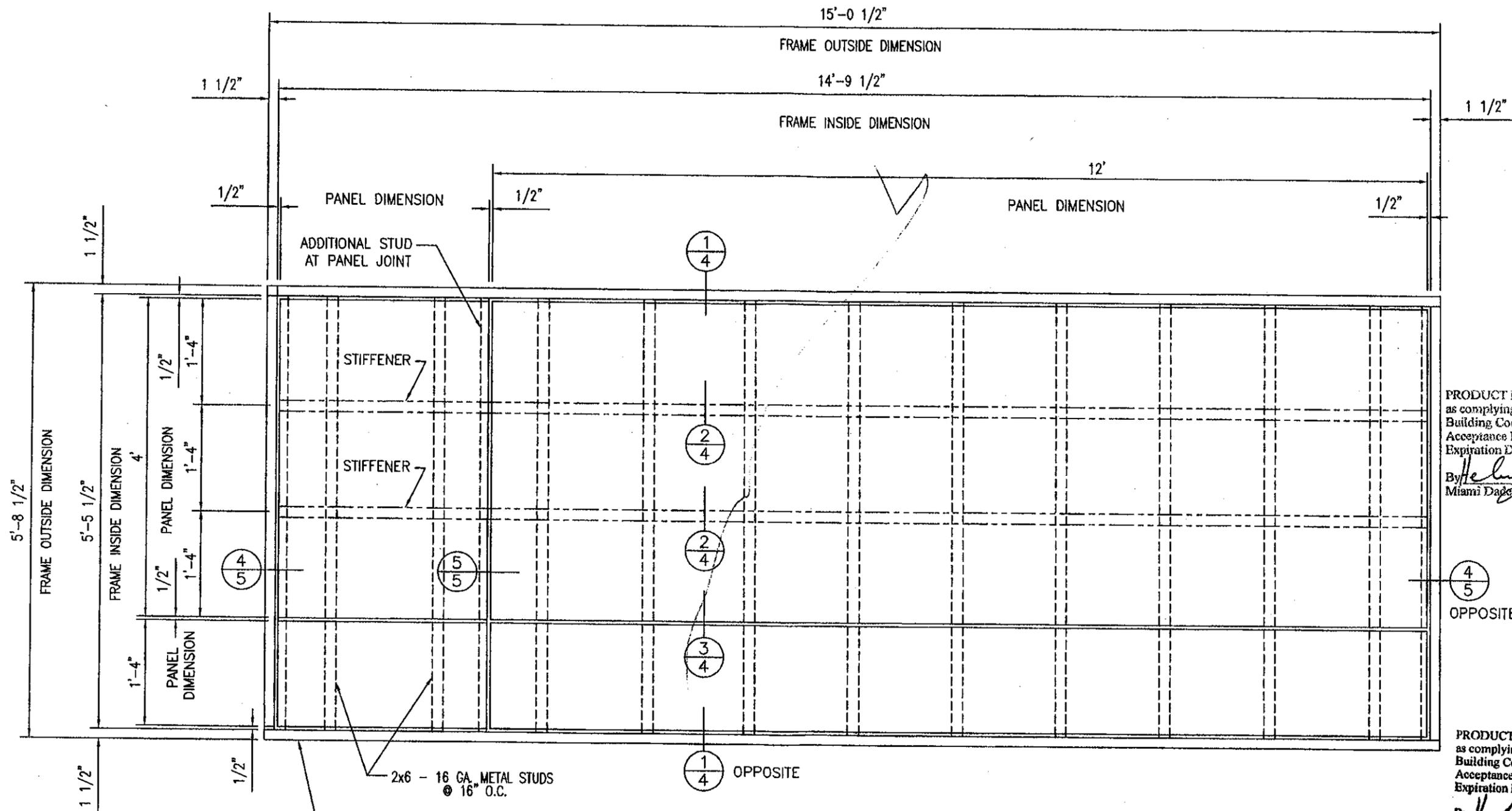
### COMPOSITE PANEL

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 ALPDIC	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

*Robert A. Wal*  
9-14-09

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		CONTRACT NO.		MITSUBISHI CHEMICAL AMERICA, INC.	
FRACTIONS 1/32	DECIMALS .001	APPROVALS	DATE	ALPOLIC and ALPOLIC/FR COMPOSITE WALL PANEL SYSTEMS	
ANGLES 1/2	1/16	ENGINEERING MS	11/11/02		
MATERIAL	FINISH	PROJ. NO.	SCALE	SIZE	REV
				B	1
DO NOT SCALE DRAWING			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.

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

### 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	PROJ. MGMT.	APPROVALS	DATE
MATERIAL 4MM & 6MM ALPOLIC & 4MM ALPOLIC/FR	ENGINEERING MS		11/11/02
DO NOT SCALE DRAWING		PRODUCTION	

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

CONNECT WOOD BUCK FRAME TOGETHER WITH (3) 5/16" DIA. LAG BOLTS EACH CORNER (TYP.)

15'-0 1/2" WOOD BUCK FRAME

14'-9 1/2" METAL STUD FRAME DIMENSION

1 1/2"

1 1/2"

1 1/2"

6" 16 GA. GALV. METAL TRACK TYPICAL TOP & BOTTOM

ADD A STUD AT PANEL JOINT LOCATION

2 x 10 WOOD BUCK FRAME AROUND OUTSIDE PERIMETER

5'-8 1/2" WOOD BUCK FRAME

5'-5 1/2" METAL STUD FRAME DIMENSION

1 1/2"

9 1/2" 1'-4" 1'-4" 1'-4" 1'-4" 1'-4" 1'-4" 1'-4" 1'-4" 1'-4" 1'-4" 8"

CENTERLINE DIM. (TYP.)

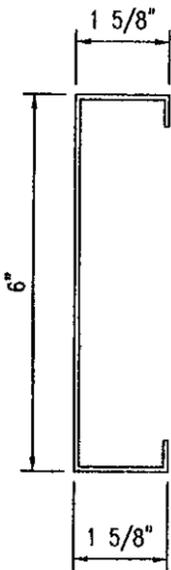
2'-7 3/4"

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

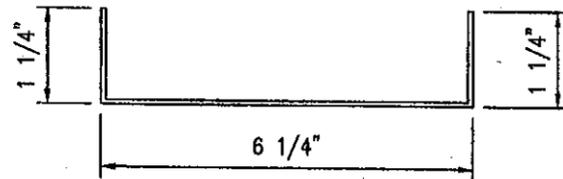
THE WOOD BUCK FRAME DETAILED IN THIS DRAWING IS FOR TEST PURPOSES ONLY AND IS NOT INTENDED AS A RECOMMENDATION FOR ACTUAL CONSTRUCTION.

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 09-0923.05  
Expiration Date 08/09/2011  
By *Helmy H. Maher*  
Miami Dade Product Control Division



METAL STUD



STEEL TRACK

STUD FRAMING ELEVATION

3/4" = 1'-0"

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES:		CONTRACT NO. 01409		Kistler McDougall	
FRACTIONS ± 1/32	DECIMALS .005	ANGLES ± 1/2	APPROVALS	DATE	MITSUBISHI CHEMICAL AMERICA, INC.
MATERIAL 4MM & 6MM ALPOLIC & 4MM ALPOLICfr	FRONT	PROJ MGMT	MS	11/11/02	ALPOLIC and ALPOLICfr COMPOSITE WALL PANEL SYSTEM
DO NOT SCALE DRAWING	PRODUCTION	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

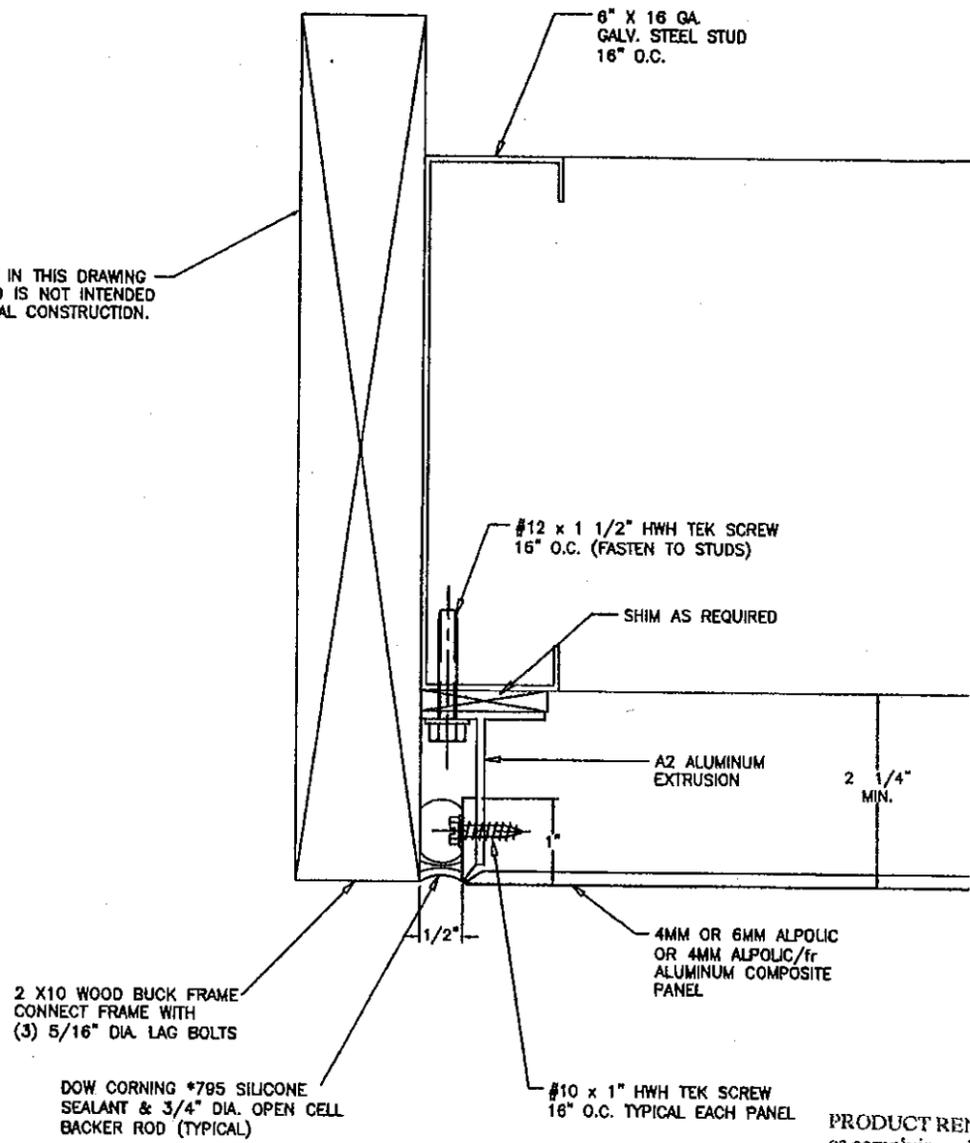
*Robert A. Gal*

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES EXCEPT AS NOTED	
FRCTIONS	DECIMALS
1/8"	.125
1/4"	.250
3/8"	.375
1/2"	.500
5/8"	.625
3/4"	.750
7/8"	.875
1"	1.000

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

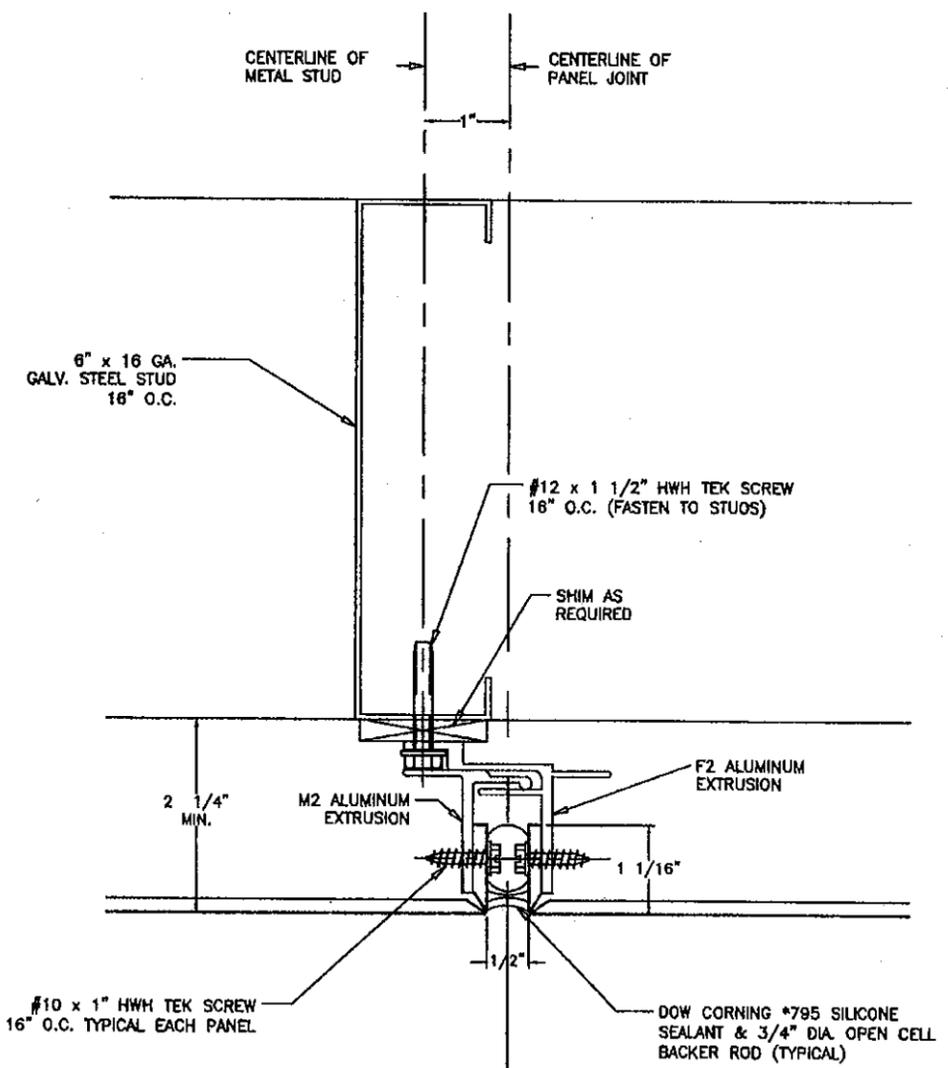
Kistler McDougall	
MITSUBISHI CHEMICAL AMERICA, INC.	
ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEMS	
SHEET	1
DATE CODE	09/11/02
REV	1
SCALE SHOWN	SHEET 4 OF 10

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



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 *Helmy A. Nader*  
Miami Dade Product Control



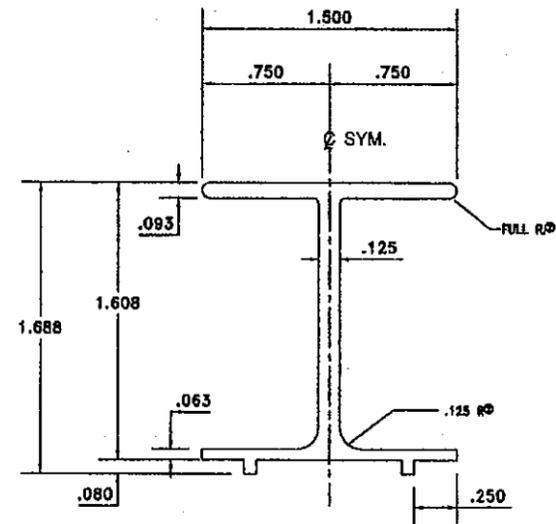
PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No 09-0923.05  
Expiration Date 08/09/2011  
By *Robert J. Nader*  
Miami Dade Product Control  
Division

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		
MATERIAL	QUANTITY	DATE	
4MM & 6MM ALPOLIC & 4MM ALPOLIC/fr			
FINISH	PROJ. NO.	DATE	
	MS	11/11/02	
DO NOT SCALE DRAWING	PRODUCTION		

Kistler McDougall	
MITSUBISHI CHEMICAL AMERICA, INC.	
ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEMS	
SIZE	REV
B	1
SCALE SHOWN	SHEET 5 OF 10

HS

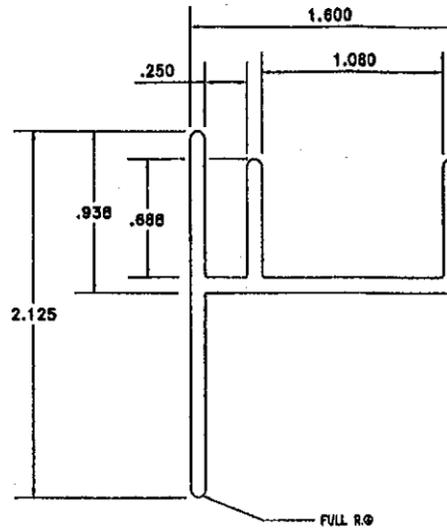


BREAK CORNERS .015 R  
EXCEPT AS NOTED  
ACTUAL SIZE

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

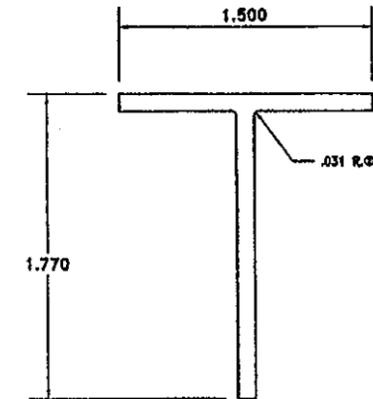


BREAK CORNERS .015 R  
.090 TYPICAL METAL THICKNESS  
ACTUAL SIZE

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

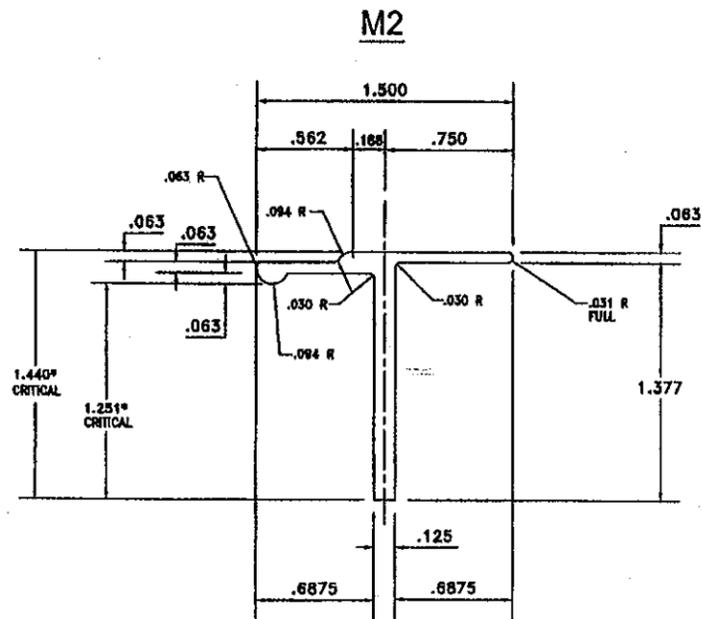
PRODUCT RENEWED  
as complying with the Florida  
Building Code  
Acceptance No 11-0421.08  
Expiration Date 08/09/2012  
By *Helmut A. Mohr*  
Miami Dade Product Control

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:

DIE DATA

EST. AREA: .317      DIE SIZE: 6  
EST. WEIGHT: .380    NO. HOLES: 1  
EST. PERI.: 6.94      EXT. LENGTH:  
FACTOR: 1.1          R/R: 5 1/8" = 1 @ 53'

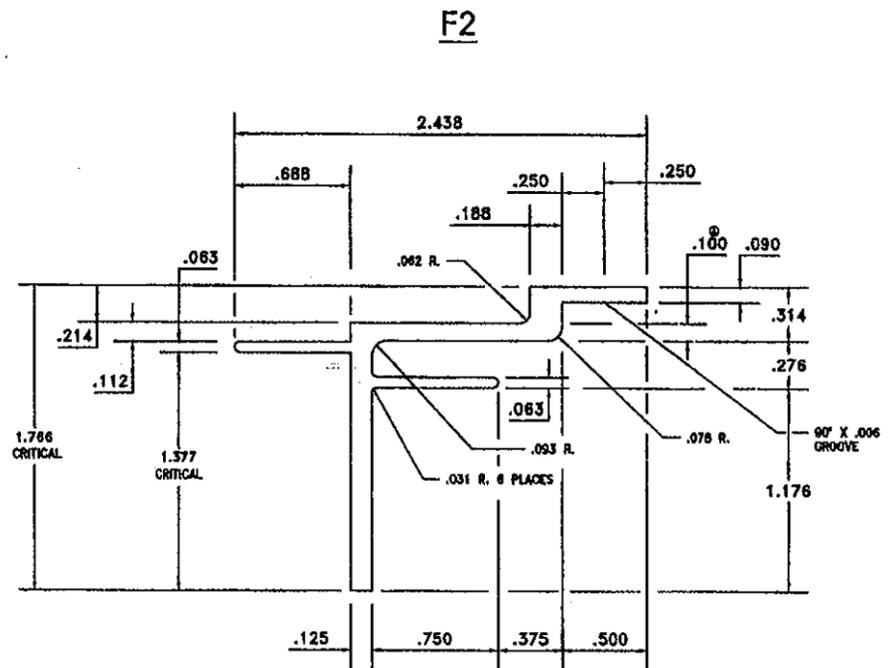
MATERIAL SPECIFIED DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE		CONTRACT NO. 9-14-09		Kistler McDougall	
FRACTIONS: 1/32, 1/16, 1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8		APPROVALS		MITSUBISHI CHEMICAL AMERICA, INC.	
MATERIAL 4MM & 8MM ALPOLIC & 4MM ALPOLIC/II		DATE 11/11/02		ALPOLIC and ALPOLIC/II COMPOSITE 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

PRODUCT RENEWED  
 as complying with the Florida  
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 Expiration Date 08/09/2012  
 By *Helmut A. Weber*  
 Miami Dade Product Control

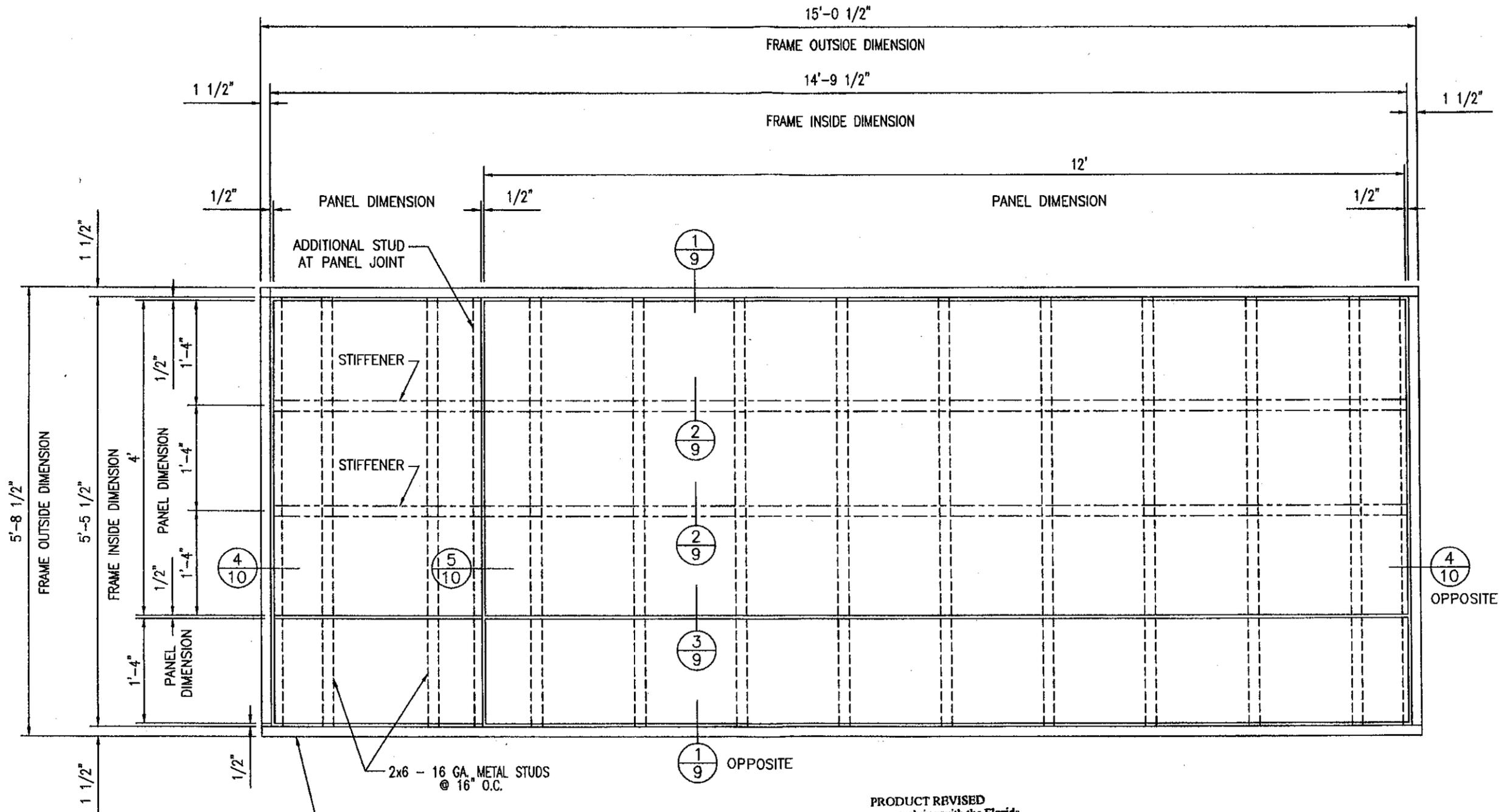
PRODUCT REVISED  
 as complying with the Florida  
 Building Code  
 Acceptance No 09-0923.05  
 Expiration Date 08/09/2011  
 By *Helmut A. Weber*  
 Miami Dade Product Control  
 Division

**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

*Robert A. Gal*  
 Robert A. Gal  
 Kistler McDougall

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		CONTRACT NO. 09-14-09		MITSUBISHI CHEMICAL AMERICA, INC.	
FRACTIONS	DECIMALS	ANGLES	APPROVALS	DATE	
± 1/32	± .005	± 1/2			
MATERIAL 4MM & 6MM ALPOLIC & 4MM ALPOLIC/fr		DATE	ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEMS		
FINISH		PRODUCTION	MS	11/11/02	
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.

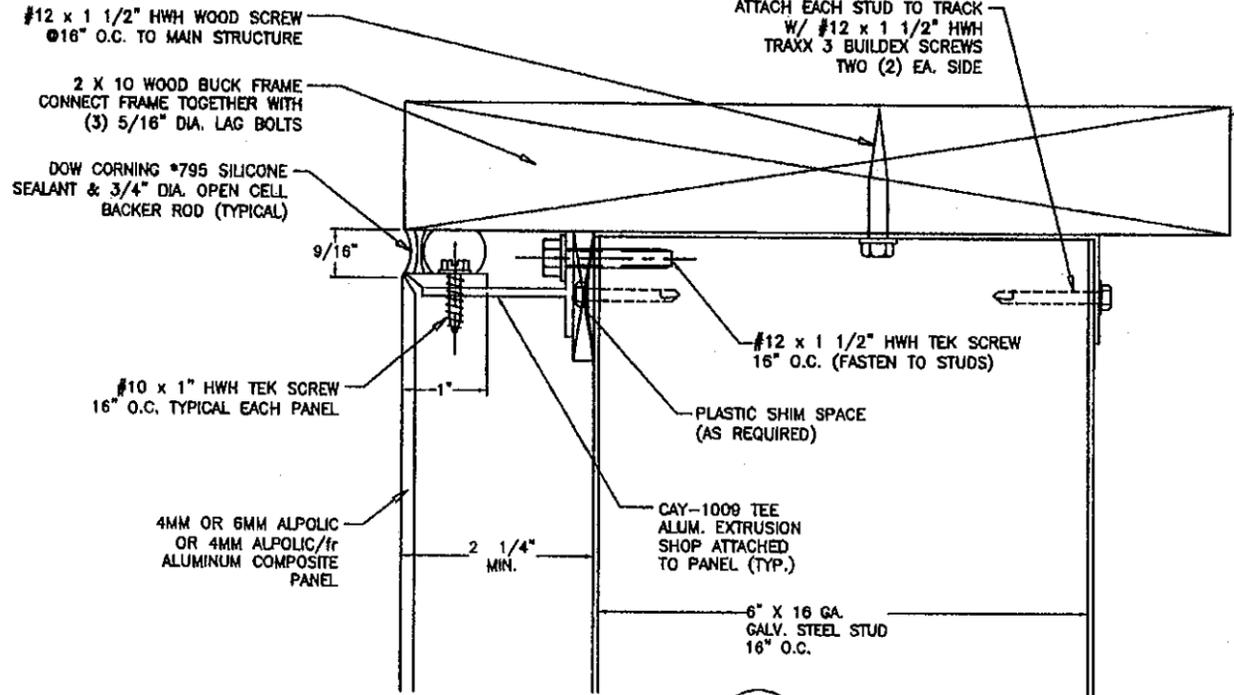
PRODUCT RENEWED  
 as complying with the Florida  
 Building Code  
 Acceptance No 11-0421.08  
 Expiration Date 08/09/2012  
 By *Heather H. Walker*  
 Miami Dade Product Control

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 as complying with the Florida  
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 Expiration Date 08/09/2011  
 By *Heather H. Walker*  
 Miami Dade Product Control  
 Division

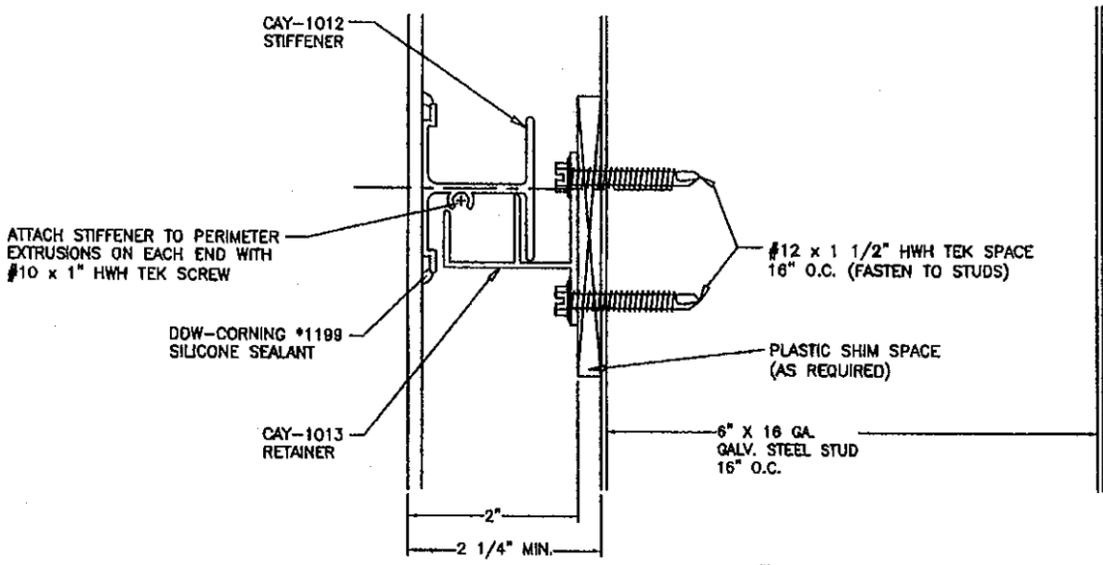
**PANEL ELEVATION**

3/4" = 1'-0"

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

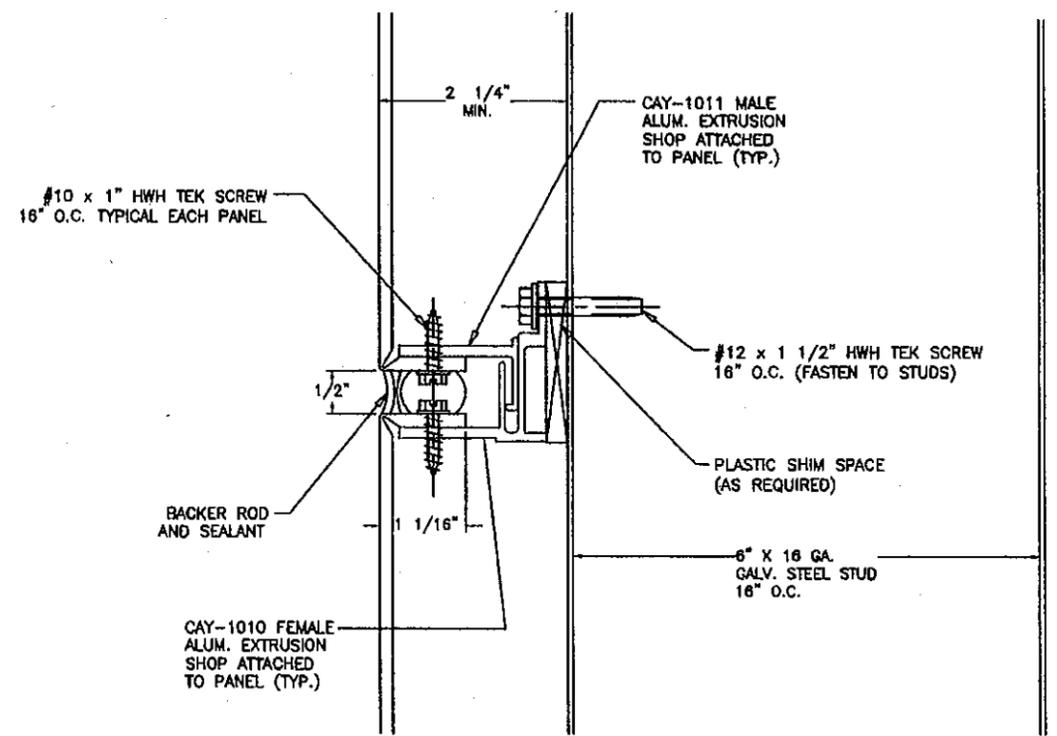


1  
9  
DETAIL  
SCALE: 6" = 1'



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'

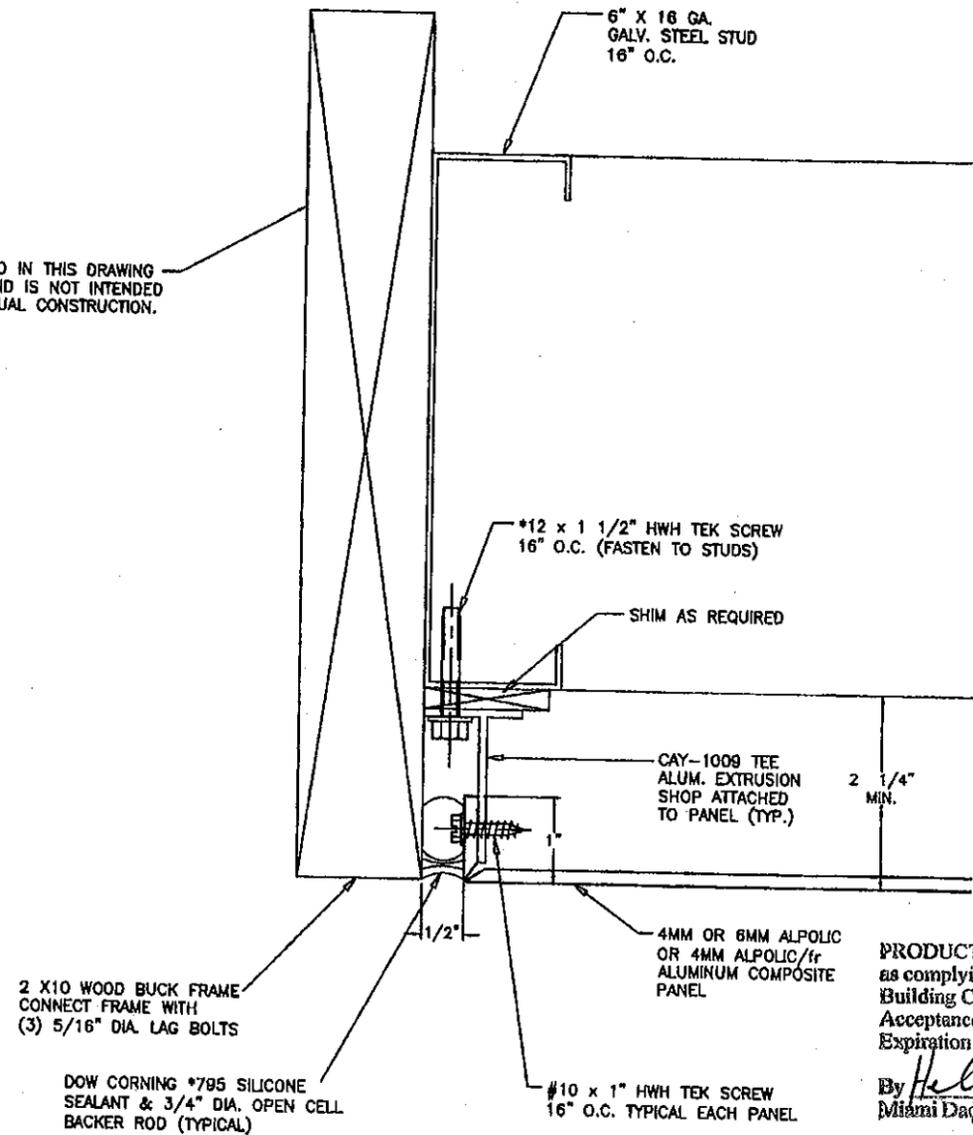
PRODUCT RENEWED as complying with the Florida Building Code  
Acceptance No 11-0421.08  
Expiration Date 08/09/2012  
By *Halley A. Miller*  
Miami Dade Product Control

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	
MATERIAL: 4MM & 6MM ALPOLIC & 4MM ALPOLIC/fr		DATE: 11/11/02	
DESIGNER: MG		SCALE: SHOWN	
PRODUCTION		SHEET 9 OF 10	

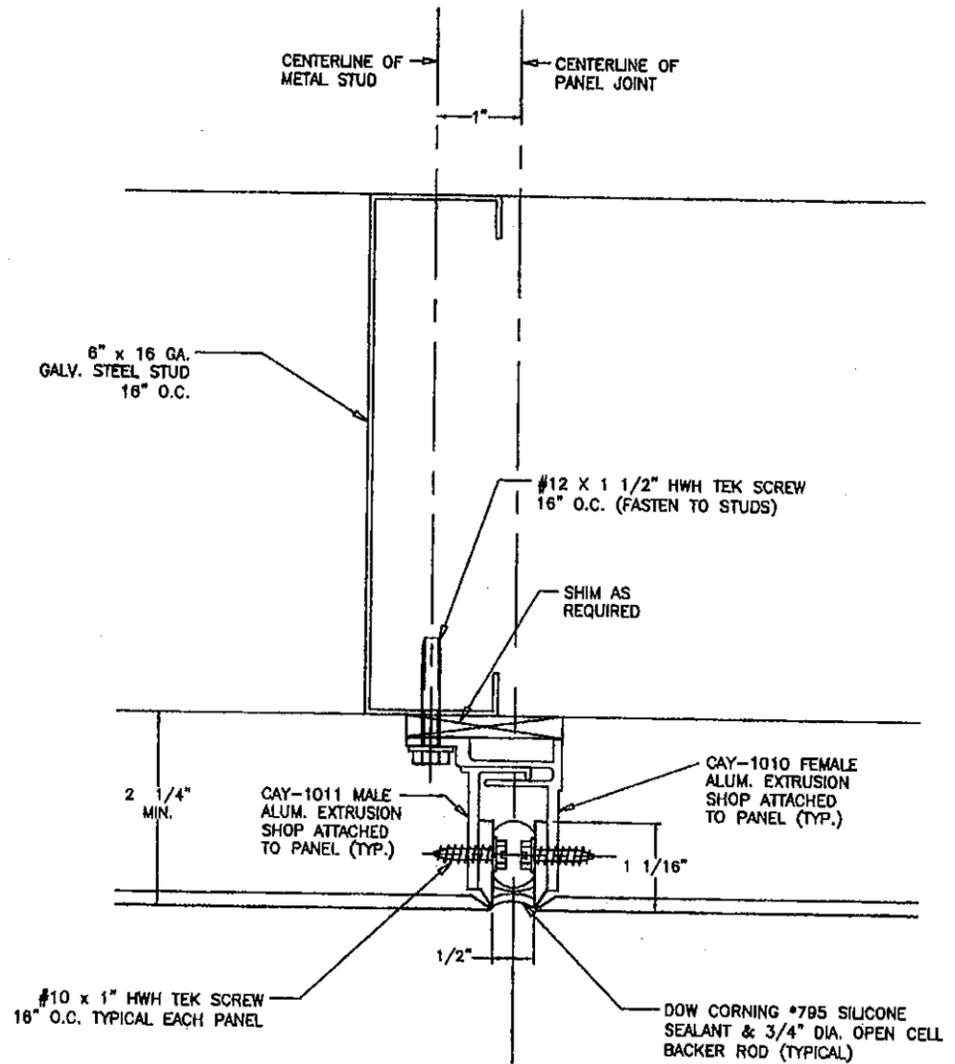
THE WOOD BUCK FRAME DETAILED IN THIS DRAWING IS FOR TEST PURPOSES ONLY AND IS NOT INTENDED AS A RECOMMENDATION FOR ACTUAL CONSTRUCTION.



4  
10  
DETAIL  
SCALE: 8" = 1"

PRODUCT RENEWED  
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By Helmut A. Miller  
Miami Dade Product Control

PRODUCT REVISED  
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Expiration Date 08/09/2011  
By Helmut A. Miller  
Miami Dade Product Control  
Division



5  
10  
DETAIL  
SCALE: 8" = 1"

FUNCTIONS	DECIMALS	ANGLES	APPROVAL	DATE
1 0/2	3/32 & 1/2	1/2		
ARTIST	4MM & 6MM ALPOLIC & 4MM ALPOLIC/ir		MS	11/1/02
FINISH				
DO NOT SCALE DRAWING				

CAY ARCHITECTURAL PRODUCTS	
MITSUBISHI CHEMICAL AMERICA, INC.	
ALPOLIC and ALPOLIC/ir COMPOSITE WALL PANEL SYSTEMS	
SIZE	CODE CODE
B	
DWG. NO.	1
REV	1
SCALE SHOWN	SHEET 10 OF 10