



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

[www.miamidade.gov](http://www.miamidade.gov)

**NOTICE OF ACCEPTANCE (NOA)**

**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 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:** "Alpolic and Alpolic/FR " Composite Wall Panel Systems with 5/8" Plywood Substrate

**APPROVAL DOCUMENT:** Drawing No. 1-P, 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 Revision stamp with the Notice of Acceptance number and expiration date by 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 NOA # 06-0531.13 and consists of this page 1, evidence submitted pages E-1 & E-2 as well as approval document mentioned above.

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



*Helmy A. Makar*  
12/02/2009

NOA No. 09-0923.04  
Expiration Date: 08/09/2011  
Approval Date: 12/02/2009  
Page 1

**Mitsubishi Plastics Composites America, Inc.**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 00-0315.06**

**A. DRAWINGS**

1. *Drawing No. 1, 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. 01-8361-320d, dated 09/18/97, 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 # 03-0130.07**

**A. DRAWINGS**

1. *Drawing No. 1-P, titled "Alpolic and Alpolic/fr Composite Wall Panel Systems", sheets 1 through 10 of 10, prepared by Mitsubishi Chemical America, Inc., dated November 11, 2002, signed and sealed by Christopher 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. 01-43055.01, dated January 07, 2003, signed and sealed by Joseph A. Reed, P.E.*



Helmy A. Makar, P.E., M.S.  
Senior Product Control Examiner  
NOA No. 09-0923.04

Expiration Date: 08/09/2011

Approval Date: 12/02/2009

**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 #06-0531.13**

**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. NEW EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. *Drawing No. 1-P, 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. on 09/18/09.*

**B. TESTS**

1. *None.*

**C. CALCULATIONS**

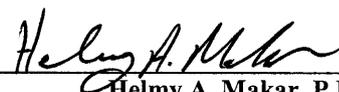
1. *None.*

**D. QUALITY ASSURANCE**

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

**E. MATERIAL CERTIFICATIONS**

1. *None.*



Helmy A. Makar, P.E., M.S.  
Senior Product Control Examiner  
NOA No. 09-0923.04  
Expiration Date: 08/09/2011  
Approval Date: 12/02/2009

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

## 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-202-94, UNIFORM STATIC AIR PRESSURE TEST  
TAS-203-94, CYCLIC WIND PRESSURE TEST  
AND THEY SHALL BE INSTALLED ON FRONT OF A 5/8" (5 PLY) PLYWOOD SUBSTRATE SUPPORTED BY STUDS AT 16" O.C. AS SHOWN IN THESE APPROVED DRAWINGS.

## 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

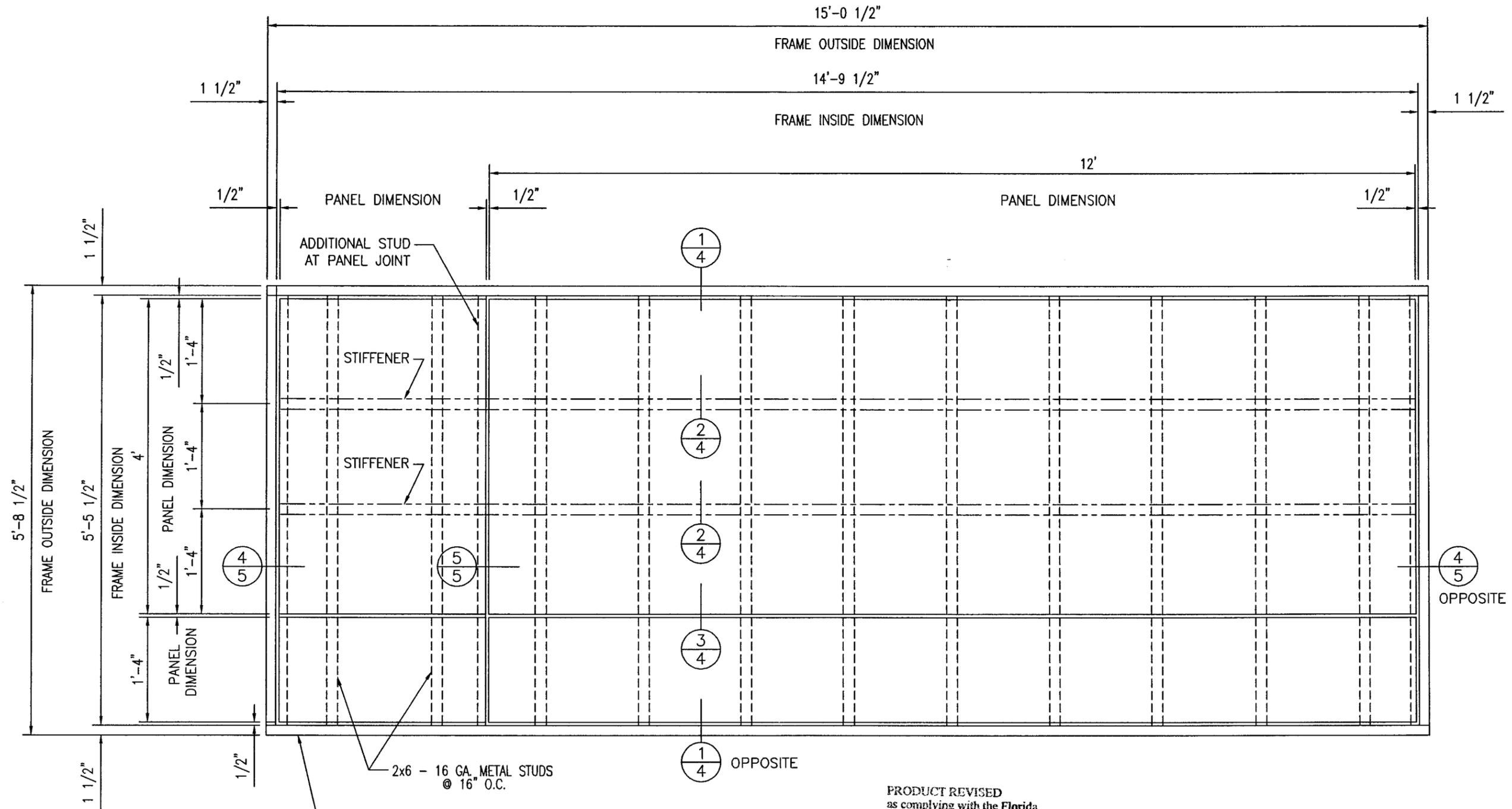
DESCRIPTION	TEST	4MM ALPOLIC RESULTS	4MM ALPOLIC/fr RESULTS
SPECIFIC GRAVITY		1.38	1.90
WEIGHT		1.12 LB/SQ.FT	1.56 LB/SQ.FT
TENSILE STRENGTH	ASTM E-8	7452 PSI	5693 PSI
YIELD STRENGTH	ASTM E-8	NDY	NDY
ELONGATION	ASTM E-8	16%	8%
PUNCHING SHEAR RESISTANCE (1"DIA.)	ASTM D-732	4025 PSI	4637 PSI
PUNCHING SHEAR MAX LOAD	ASTM D-732	1920 PSI	2259 PSI
BOND INTEGRITY VERTICAL PULL	ASTM C-297	1806 PSI	427 PSI
DRUM PEEL	ASTM D-1781-76	33.6 IN-LB/IN	27.6 IN-LB/IN
FLATWISE SHEAR	ASTM C-273	1225 PSI	949 PSI
RATE OF BURNING	ASTM D-635	CC1	-
FLAME SPREAD INDEX	ASTM E-84	00	00
SMOKE DEVELOPED INDEX	ASTM E-84	00	10
SELF IGNITION TEMPERATURE	ASTM D-1929	752°F	837°F
FLASH IGNITION TEMPERATURE	ASTM D-1929	716°F	811°F
SURFACE FLAMMABILITY	ASTM E-108-88	PASSED	PASSED
SOUND TRANSMISSION	ASTM E-413	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 BIULDEX SCREW.
3. PLYWOOD: 5/8" THICK, (5 PLY) EXTERIOR GRADE SECURED WITH #8 x 1 5/8" BIULDEX SCREWS AT 16" O.C. AROUND PERIMETER AND IN THE MIDDLE OF PLYWOOD.
4. PANEL FASTENERS: #10 x 1" HEX WASHER HEAD TEK SCREWS SPACED AT 16" O.C.
5. STIFFENER FASTENERS: #10 x 1" HEX WASHER HEAD TEK SCREWS.
6. JOINT SILICONE: DOW CORNING #795 SILICONE SEALANT.
7. STRUCTURAL SILICONE: DOW CORNING #1199 SILICONE SEALANT.
8. BACKER ROD: 3/4" DIA. DENVER FOAM OPEN CELL BACKER ROD.
9. 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 09-0923.04  
Expiration Date 08/09/2011  
By *Heather A. Nelson*  
Miami Dade Product Control  
Division

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± 1/32 .XX ± .01 ± 1/2 XXX ± .005		CONTRACT NO.	MITSUBISHI CHEMICAL AMERICA, INC.	
APPROVALS		DATE	ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEMS	
DRAWN		ENGINEERING MS	11/11/02	SIZE CAGE CODE DWG NO. 1-P REV 1
MATERIAL		PROJ MGMT	PRODUCTION	SCALE SHEET 1 OF 10
FINISH		DO NOT SCALE DRAWING		
1	TH	9/01/09	GEN. NOTE 1 WAS FOR WALL CONSTRUCTION ONLY	
REV.	BY	DATE	CHANGE	



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

PRODUCT REVISED  
 as complying with the Florida  
 Building Code  
 Acceptance No 09-0923.04  
 Expiration Date 08/09/2011  
 By *Robert A. Miller*  
 Miami Date Product Control  
 Division

**PANEL ELEVATION**  
 3/4" = 1'-0"

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		CONTRACT NO. 9-18-09		Kistler McDougall	
FRACTIONS ± 1/32	DECIMALS ± .01	ANGLES ± 1/2	APPROVALS	DATE	MITSUBISHI CHEMICAL AMERICA, INC.
MATERIAL 4MM & 6MM ALPOLIC & 4MM ALPOLIC/fr			DRAWN	ENGINEER/IC MS	11/11/02
FINISH			PROJ. MGMT.	PRODUCTION	SIZE B
DO NOT SCALE DRAWING			SCALE SHOWN		DWG NO. 1-P
					SHEET 2 OF

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"

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

3'-10 1/2" PLYWOOD

1'-5 1/2" PLYWOOD

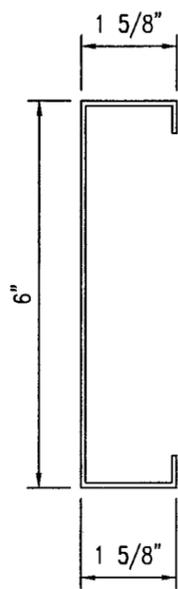
EDGE OF PLYWOOD

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

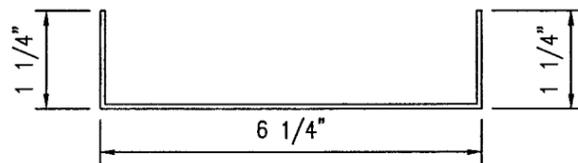
CENTERLINE DIM. (TYP.)

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.



METAL STUD



STEEL TRACK

# STUD FRAMING ELEVATION

3/4" = 1'-0"

PRODUCT REVISED as complying with the Florida Building Code  
 Acceptance No 09-0923.04  
 Expiration Date 08/09/2011  
 By *Heather A. Walker*  
 Miami Dade Product Control  
 Division

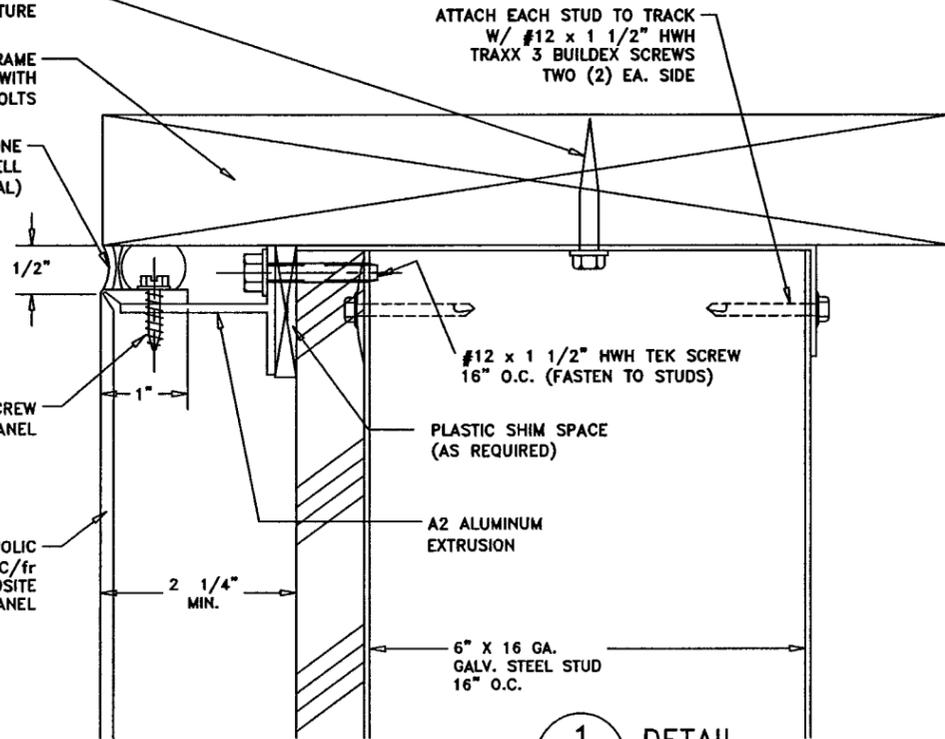
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:			CONTRACT NO. 9-18-09	
FRACTIONS ± 1/32	DECIMALS XX ± .01 XXX ± .005	ANGLES ± 1/2	APPROVALS	DATE
MATERIAL 4MM & 6MM ALPOLIC & 4MM ALPOLIC/fr	FINISH		ENGINEERING MS	11/11/02
DO NOT SCALE DRAWING			PRODUCTION	

Kistler McDougall	
MITSUBISHI CHEMICAL AMERICA, INC.	
ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEMS	
SIZE B	REV 1
CAGE CODE	DWG NO. 1-P
SCALE	SHEET 3 OF 10

#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)



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

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

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

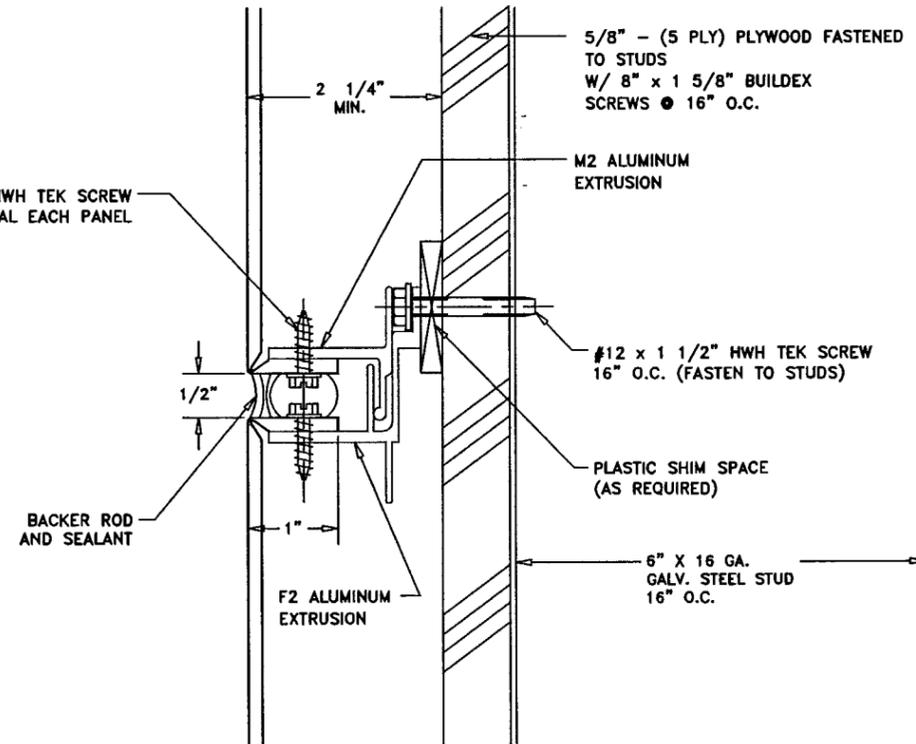
#12 X 1 1/2" HWH TEK SCREW  
 16" O.C. (FASTEN TO STUDS)

PLASTIC SHIM SPACE  
 (AS REQUIRED)

A2 ALUMINUM  
 EXTRUSION

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

1  
 4  
 DETAIL  
 SCALE: 6" = 1'



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

BACKER ROD  
 AND SEALANT

5/8" - (5 PLY) PLYWOOD FASTENED  
 TO STUDS  
 W/ 8" X 1 5/8" BUILDDEX  
 SCREWS @ 16" O.C.

M2 ALUMINUM  
 EXTRUSION

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

PLASTIC SHIM SPACE  
 (AS REQUIRED)

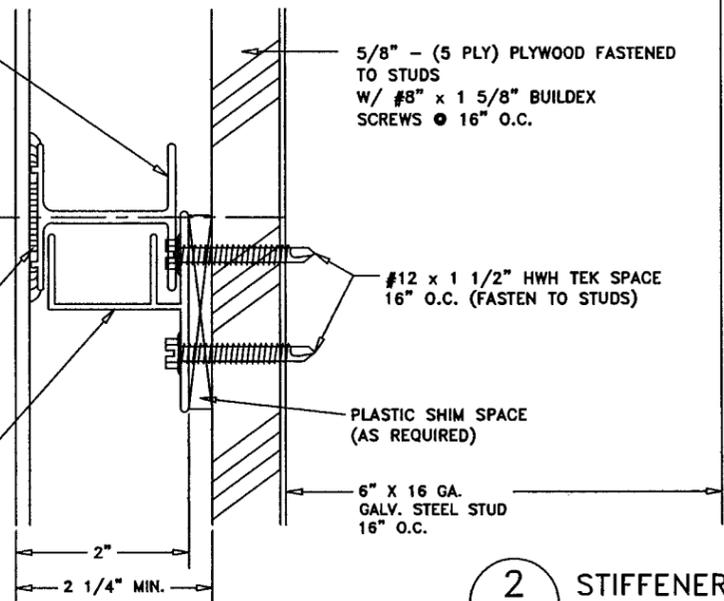
6" X 16 GA.  
 GALV. STEEL STUD  
 16" O.C.

3  
 4  
 JOINT DETAIL  
 SCALE: 6" = 1'

HS EXTRUDED ALUMINUM  
 PANEL STIFFENER

DOW-CORNING #1199  
 SILICONE SEALANT

HR EXTRUDED ALUMINUM  
 PANEL STIFFENER



5/8" - (5 PLY) PLYWOOD FASTENED  
 TO STUDS  
 W/ 8" X 1 5/8" BUILDDEX  
 SCREWS @ 16" O.C.

#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.

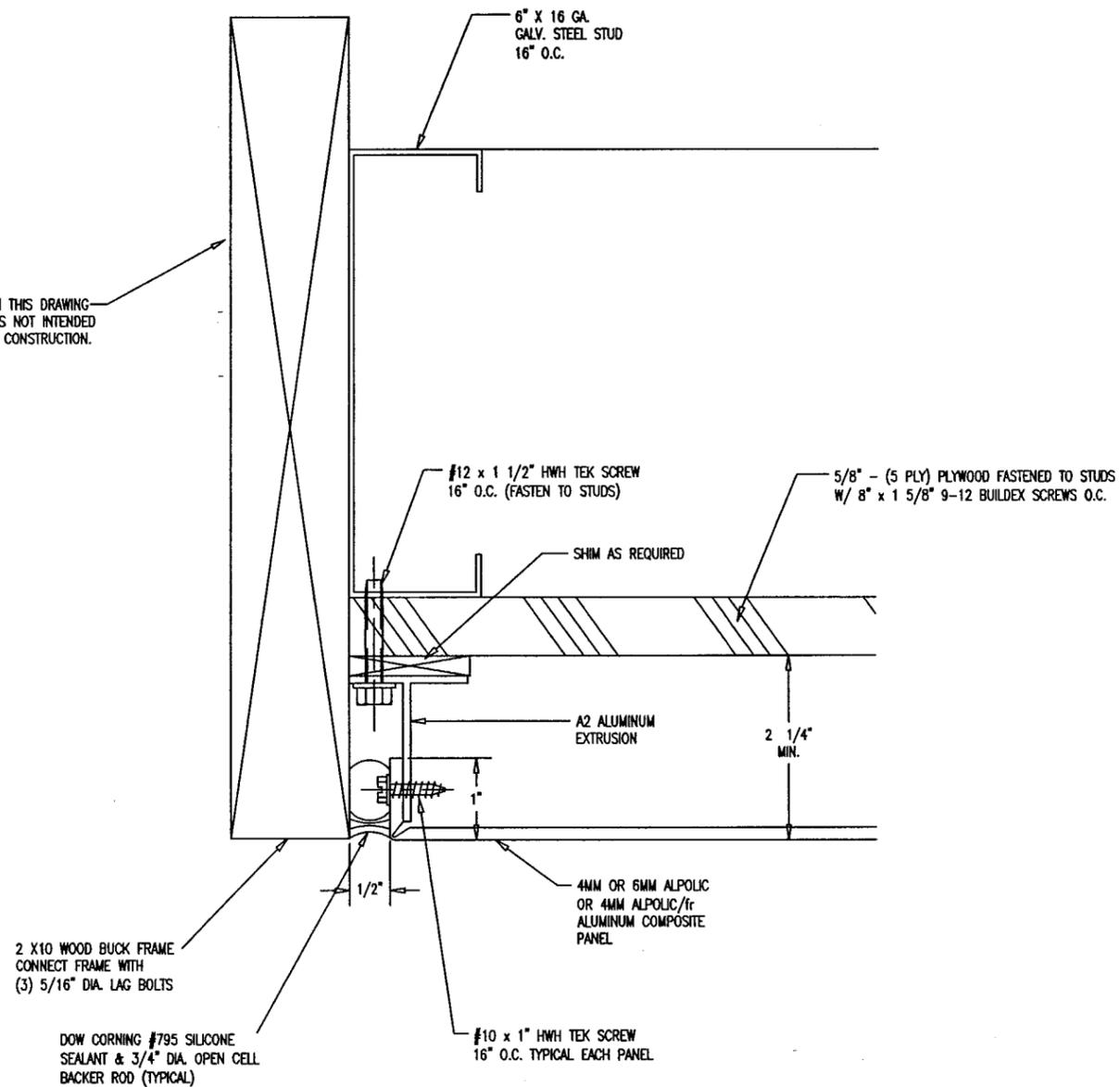
2  
 4  
 STIFFENER DETAIL  
 SCALE: 6" = 1'

PRODUCT REVISED  
 as complying with the Florida  
 Building Code  
 Acceptance No 09-0923.04  
 Expiration Date 08/09/2011  
 By Helmut A. Weber  
 Miami Dade Product Control  
 Division

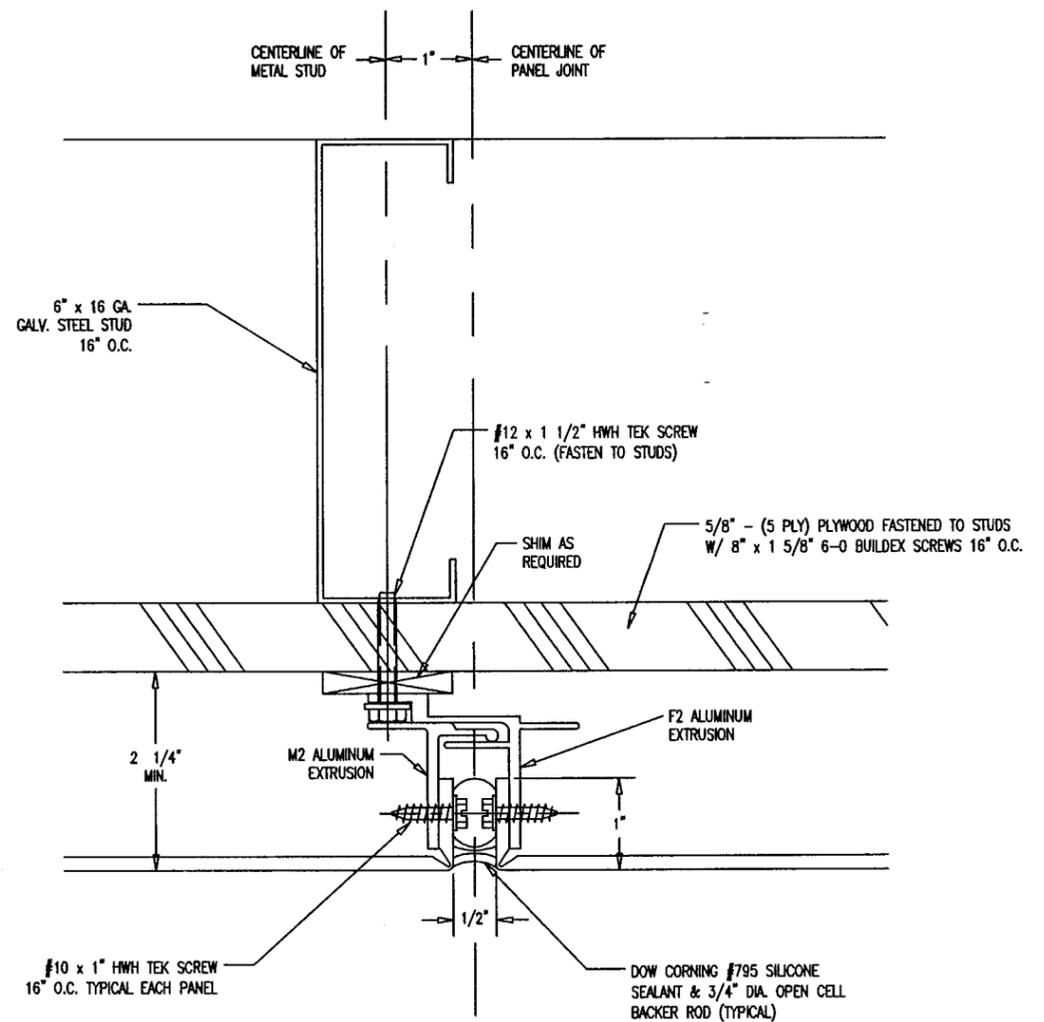
*Robert A. Hall*  
 2-18-09

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		CONTRACT NO. 2-18-09		Kistler McDougall	
FRACTIONS ± 1/32	DIMENALS XX ± .01 XXX ± .006	APPROVALS	DATE	MITSUBISHI CHEMICAL AMERICA, INC.	
MATERIAL 4MM & 6MM ALPOLIC & 4MM ALPOLIC/fr		DESIGNED	11/11/02	ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEMS	
FINISH		ENGINEERING	MS	SIZE B	CAGE CODE DWG NO. 1-P
DO NOT SCALE DRAWING		FRJ MGMT	PRODUCTION	SCALE SHOWN	REV 1
				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'

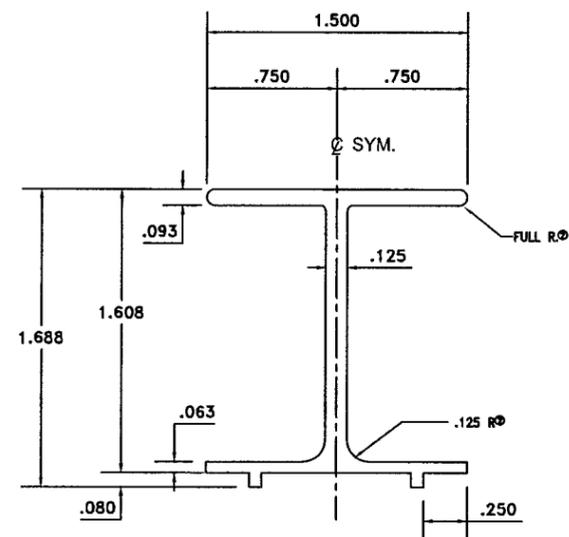


5  
5  
DETAIL  
SCALE: 6" = 1'

PRODUCT REVISED as complying with the Florida Building Code  
 Acceptance No 09-0923.04  
 Expiration Date 08/09/2011  
 By Helmut A. Mehn  
 Miami Dade Product Control Division

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TO NEAREST 1/16"		CONTRACT NO. <u>9-18-09</u>		Kistler McDougall	
FRACTIONS ± 1/32	DECIMALS .005	ANGLES ± 1/2	APPROVALS	DATE	MITSUBISHI CHEMICAL AMERICA, INC.
MATERIAL 4MM & 6MM ALPOLIC & 4MM ALPOLIC/fr	FINISH	DO NOT SCALE DRAWING	ENGINEERING MS	11/11/02	ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEMS
SIZE B	CAGE CODE	DWG NO. 1-P	REV 1	SHEET 5 OF 10	

HS

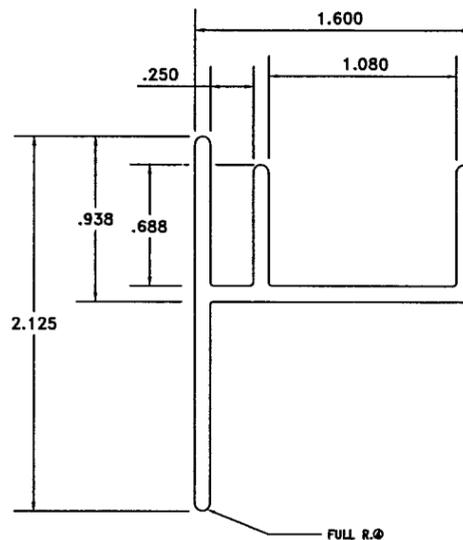


BREAK CORNERS .015 R  
EXCEPT AS NOTED  
ACTUAL SIZE

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

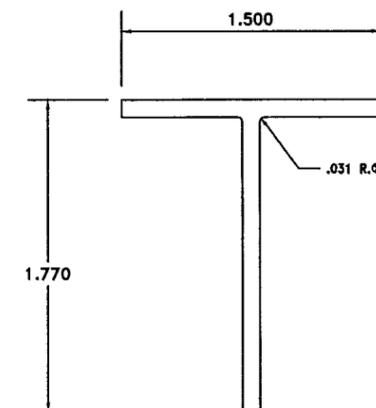


BREAK CORNERS .015 R  
.090 TYPICAL METAL THICKNESS  
ACTUAL SIZE

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.: 8.5A      EXT. LENGTH:  
FACTOR: 17            R/R: 5 1/8" = 1 @ 53'

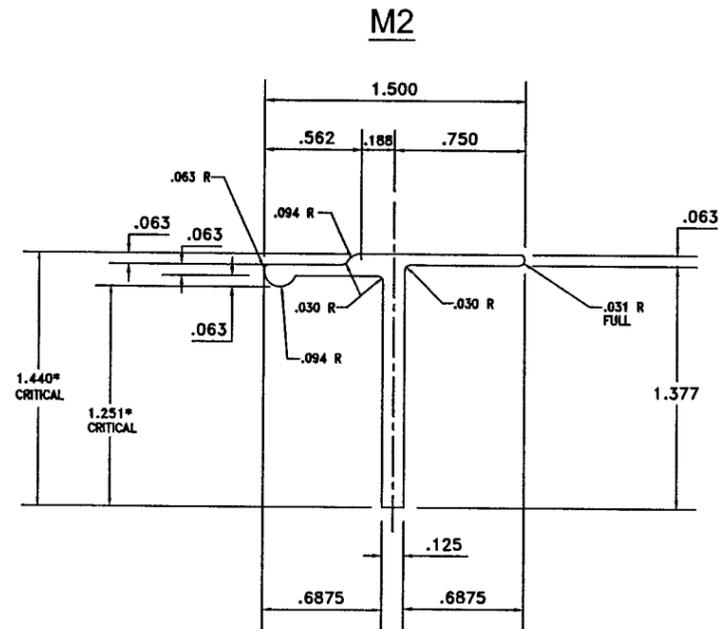
PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No 09-0923.04  
Expiration Date 08/09/2011

By *Helmut A. Keller*  
Miami Dade Product Control  
Division

Kistler McDougall

MITSUBISHI CHEMICAL AMERICA, INC.

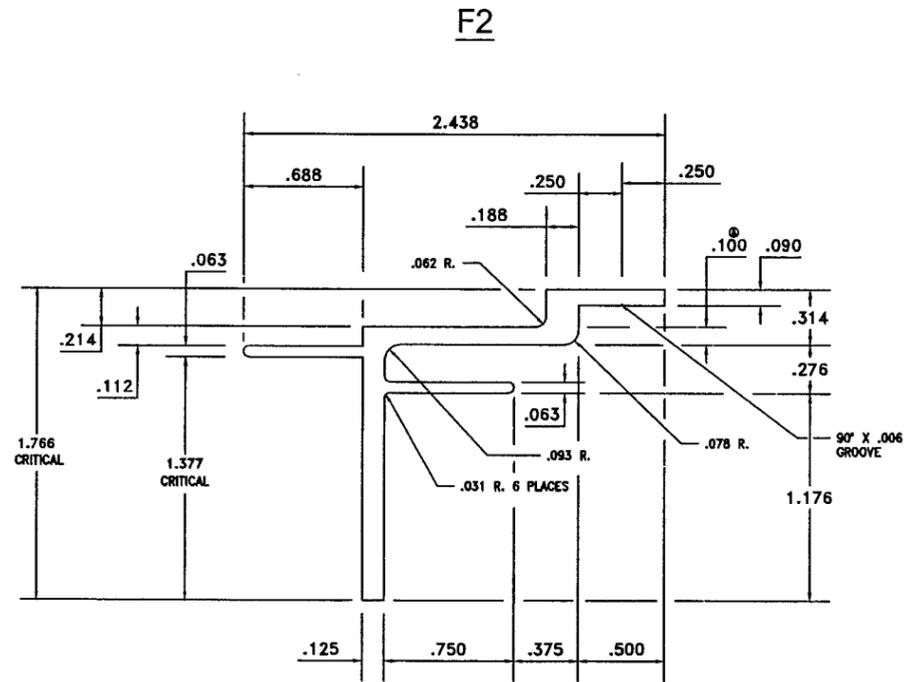
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		CONTRACT NO. 918-01		MITSUBISHI CHEMICAL AMERICA, INC.	
FRACTIONS ± 1/32	DIMENSIONS ± .01	APPROVALS	DATE	ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEMS	
MATERIAL 4MM & 6MM ALPOLIC & 4MM ALPOLIC/fr		DESIGN	ENGINEERING MS	11/11/02	SIZE B
FINISH		PROJ MGR	PRODUCTION	SCALE	DWG NO. 1 REV 0
DO NOT SCALE DRAWING		PRODUCTION		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- 34'  
FACTOR: 17          R/R

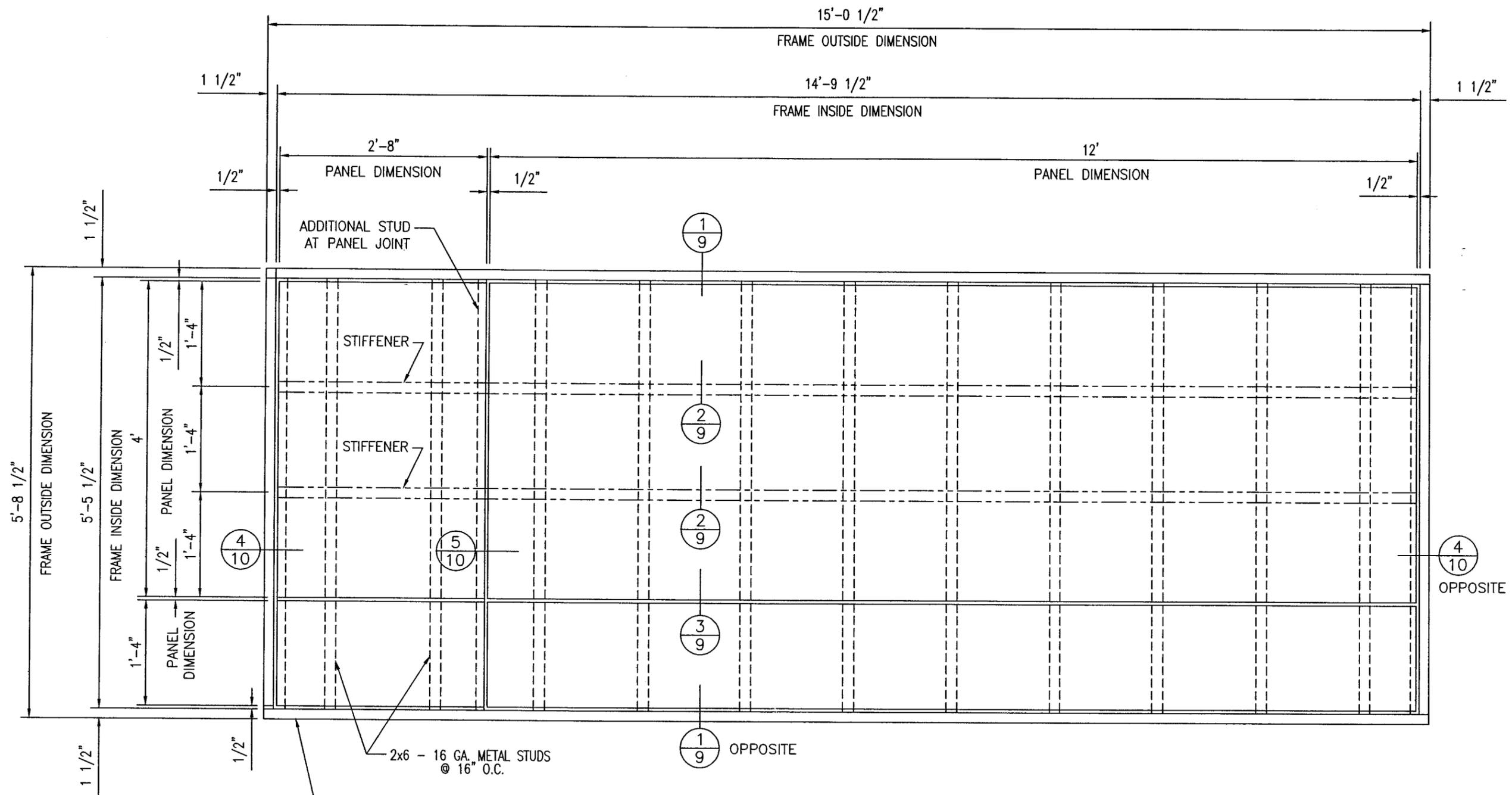
PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No 09-0923.04  
Expiration Date 08/09/2011  
By *Robert A. Hall*  
Miami Dade Product Control  
Division

*Robert A. Hall*

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		CONTRACT NO. 918.01		Kistler McDougall	
FRACTIONS ± 1/32	DECIMALS XX ± .01 ± 1/2 XXXX ± .005	ANGLES	APPROVALS	DATE	MITSUBISHI CHEMICAL AMERICA, INC.
MATERIAL 4MM & 6MM ALPOLIC & 4MM ALPOLIC/FR			ENGINEERING	MS	11/11/02
FINISH			PRODUCTION		
DO NOT SCALE DRAWING				SCALE	SHEET 7 OF 10

ALPOLIC and ALPOLIC/fr  
COMPOSITE WALL PANEL SYSTEMS

SIZE: B    CAGE CODE:    DWG NO.: 1    REV: 0



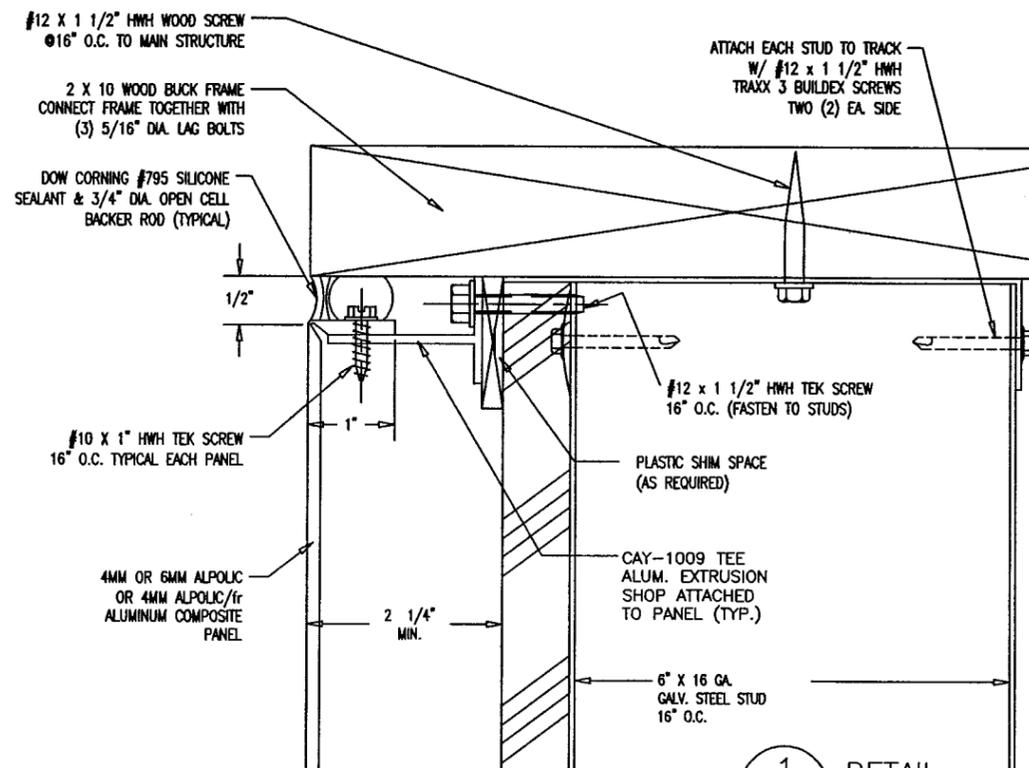
THE WOOD BUCK FRAME DETAILED IN THIS DRAWING IS FOR TEST PURPOSES ONLY AND IS NOT INTENDED AS A RECOMMENDATION FOR ACTUAL CONSTRUCTION.

PRODUCT REVISED  
 as complying with the Florida  
 Building Code  
 Acceptance No 09-0923.04  
 Expiration Date 08/09/2011  
 By *Heather A. Nelson*  
 Miami Dade Product Control  
 Division

*Robert A. Nelson*  
 ROBERT A. NELSON ARCHITECTURAL PRODUCTS

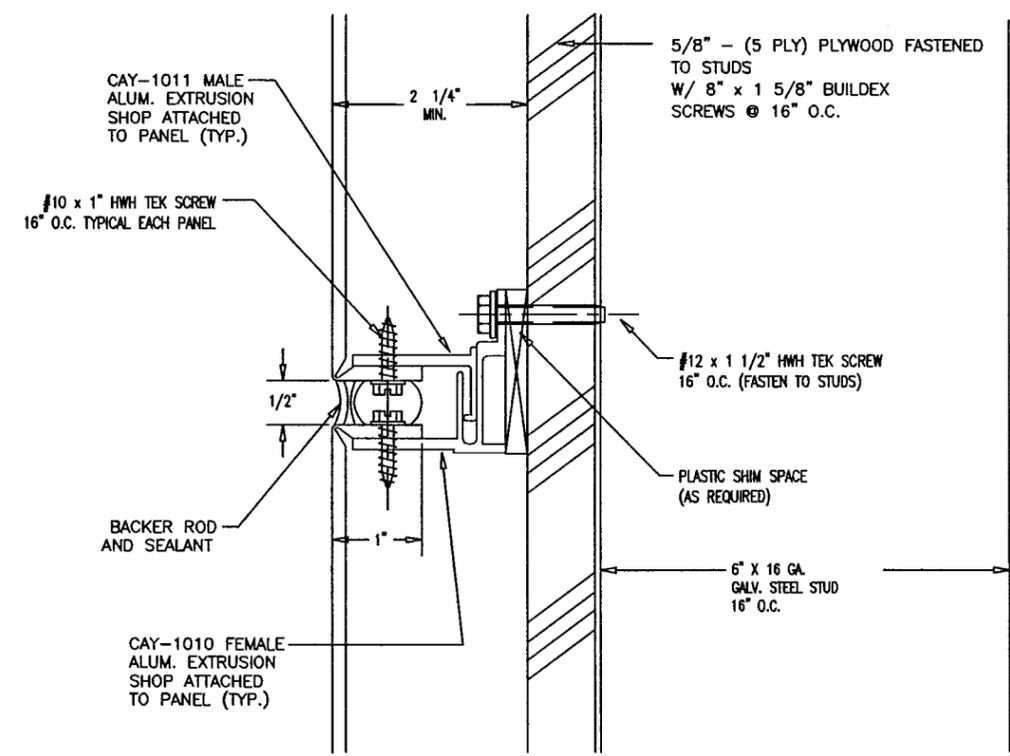
**PANEL ELEVATION**  
 3/4" = 1'-0"

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		CONTRACT NO. 9-18-09		MITSUBISHI CHEMICAL AMERICA, INC.	
FRACTIONS ± 1/32	DECIMALS .XX ± .01 .XXX ± .005	ANGLES ± 1/2	APPROVALS	DATE	ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEM
MATERIAL 4MM & 6MM ALPOLIC & 4MM ALPOLIC/fr		FINISH	ENGINEERING MS	11/11/02	SIZE CAGE CODE DWG NO. 1-P
DO NOT SCALE DRAWING		PRODUCTION	SCALE SHOWN		SHEET 8 OF

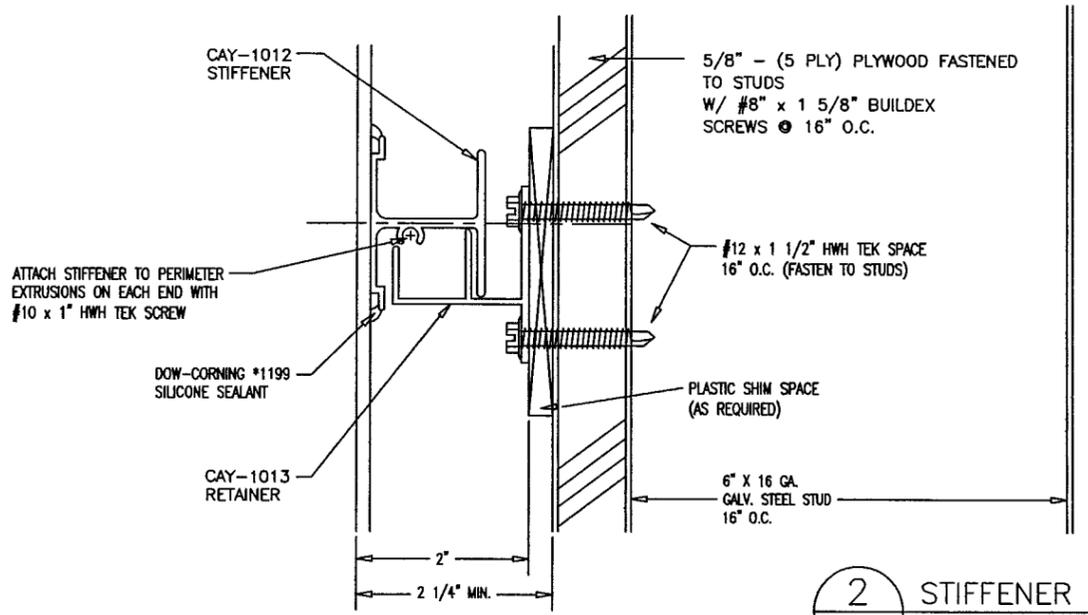


1  
9  
DETAIL  
SCALE: 6" = 1'

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3  
9  
JOINT DETAIL  
SCALE: 6" = 1'



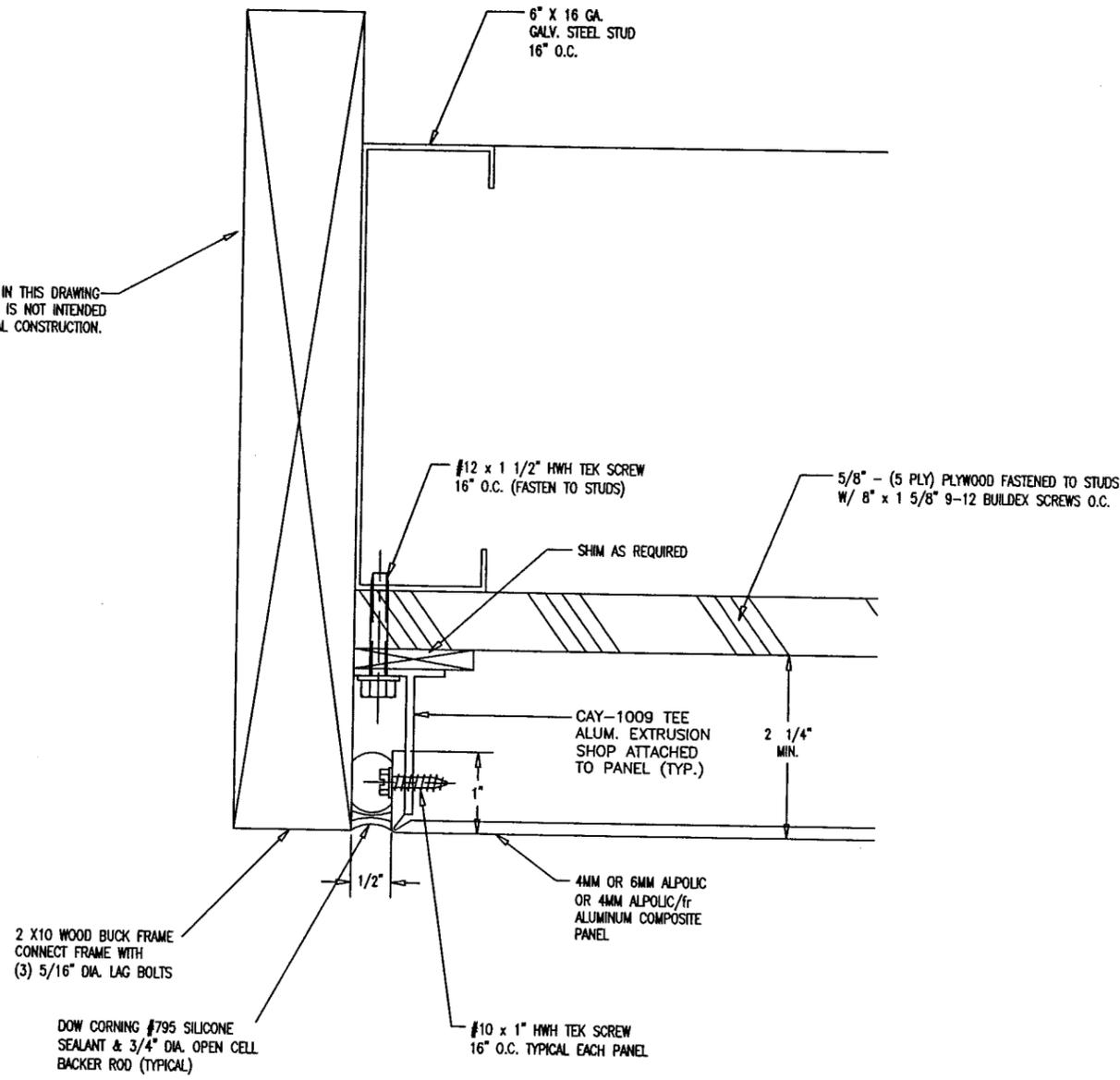
2  
9  
STIFFENER DETAIL  
SCALE: 6" = 1'

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No 09-0923.04  
Expiration Date 08/09/2011  
By *Heather A. Mahon*  
Miami Dade Product Control  
Division

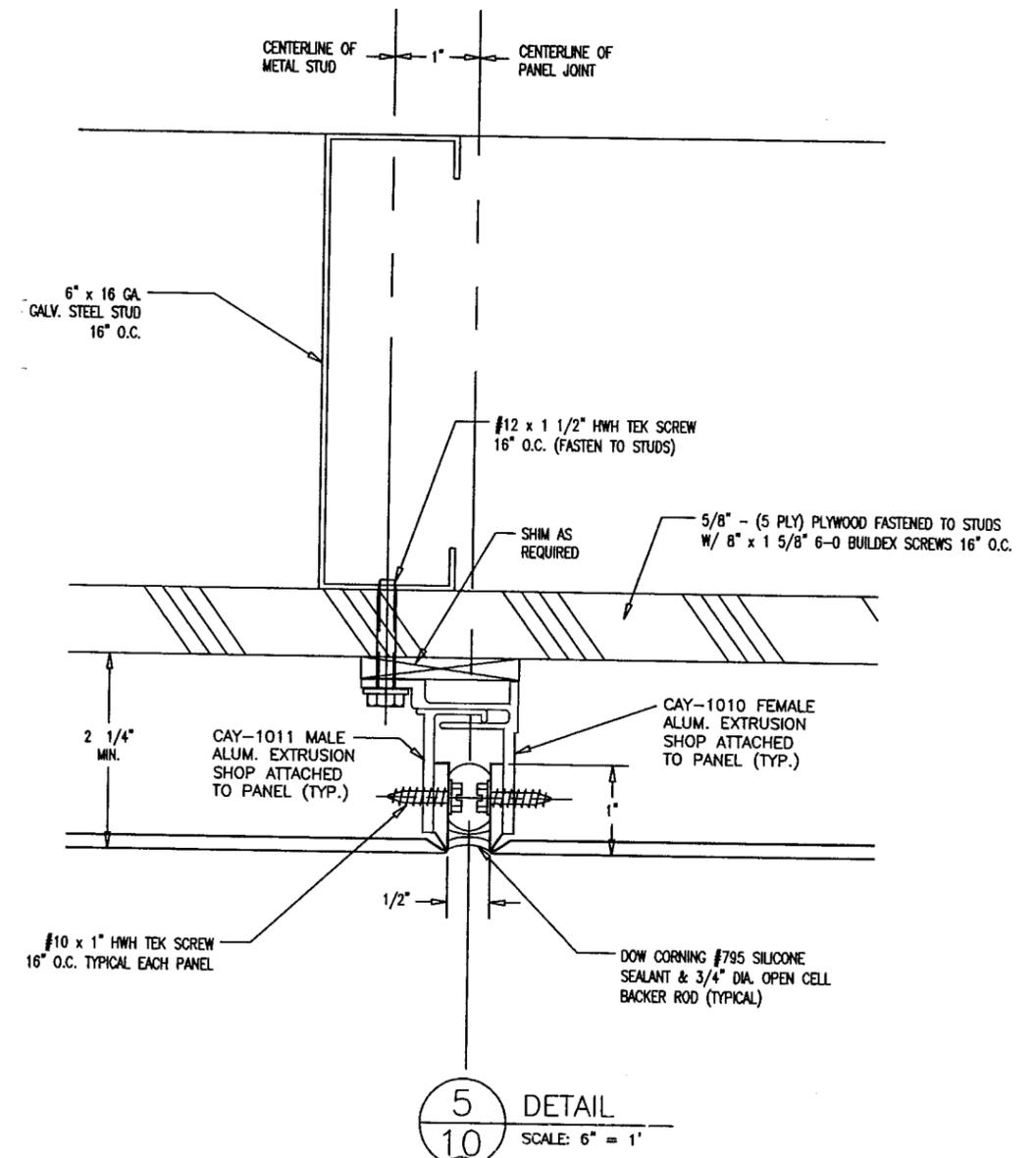
*Robert A. Pal...*

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		CONTRACT NO. 9-1809		CAY ARCHITECTURAL PRODUCTS	
FRACTIONS ± 1/32	DECIMALS XX ± .01 XXX ± .005	ANGLES ± 1/2	APPROVALS	DATE	MITSUBISHI CHEMICAL AMERICA, INC.
MATERIAL 4MM & 6MM ALPOLIC & 4MM ALPOLIC/fr			DRAWN		ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEMS
FINISH			ENGINEERING	MS	11/11/02
DO NOT SCALE DRAWING			PRODUCTION		
SIZE B	CAGE CODE	DWG NO.	1-P	REV 1	
SCALE SHOWN				SHEET 9 OF 10	

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4  
10  
DETAIL  
SCALE: 6" = 1'



5  
10  
DETAIL  
SCALE: 6" = 1'

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 09-0923.04  
Expiration Date 08/09/2011  
By *Helmut Adlman*  
Miami Data Product Control  
Division

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		CONTRACT NO. 9-18-09		CAY ARCHITECTURAL PRODUCTS	
FRACTIONS ± 1/32	DECIMALS ± .01	ANGLES ± 1/2	APPROVALS	DATE	MITSUBISHI CHEMICAL AMERICA, INC.
MATERIAL 4MM & 6MM ALPOLIC & 4MM ALPOLIC/fr	FINISH	PROJ MGMT	DATE 11/11/02	ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEMS	
DO NOT SCALE DRAWING			PRODUCTION	SCALE SHOWN	SHEET 10 OF 10