



MIAMI-DADE COUNTY
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 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 Renewal stamp with the Notice of Acceptance number and expiration date by Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and 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 # 09-0923.04 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
06/02/2011

NOA No. 11-0421.07
Expiration Date: 08/09/2012
Approval Date: 06/02/2011

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.
BNC, Product Control Unit Supervisor
NOA No. 11-0421.07
Expiration Date: 08/09/2012
Approval Date: 06/02/2011

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 #06-0531.13

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. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #09-0923.04

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

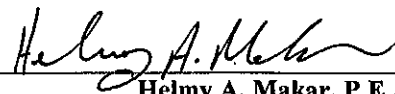
1. *None.*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. *None.*



Helmy A. Makar, P.E., M.S.
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Mitsubishi Plastics Composites America, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

5. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *None.*

B. TESTS

1. *None.*

C. CALCULATIONS

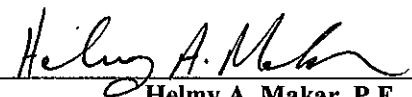
1. *None.*

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. 11-0421.07
Expiration Date: 08/09/2012
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ALPOLIC and ALPOLIC/FR (FIRE RATED) COMPOSITE WALL PANEL SYSTEMS FOR FLORIDA BUILDING CODE

GENERAL NOTES

- 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
- THE WALL DESIGN ALLOWABLE PRESSURES FOR THESE WALL PANEL SYSTEMS ARE + 70 PSF/ -90 PSF.

- 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.

PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No 11-0421.07
Expiration Date 08/09/2012
By Helmy A. Nelson
Miami Data Product Control

MATERIAL SPECIFICATIONS:

ALUMINUM EXTRUSIONS

- MATERIAL: M2, F2, A2, HS, and HR ARE EXTRUDED ALUMINUM ALLOY 6063 WITH A T6 TEMPER. (By Kistler McDougall)
- 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)
- FINISH: MILL FINISH

COMPOSITE PANEL

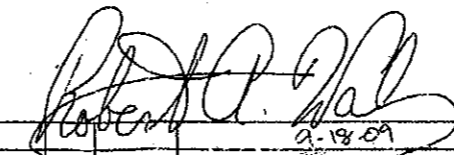
- ALPOLIC ALUMINUM COMPOSITE METAL PANEL 4MM THICK (0.157") AND 6MM THICK (0.236") AS MANUFACTURED BY MITSUBISHI CHEMICAL AMERICA, INC., CHESAPEAKE, VA
- ALPOLIC/FR (FIRE RATED) ALUMINUM COMPOSITE METAL PANEL 4MM THICK (0.157") AS MANUFACTURED BY MITSUBISHI CHEMICAL FUNCTIONAL PRODUCTS, INC., UEDA, JAPAN
- CORE: THERMOPLASTIC MATERIAL WHICH IN COMPOSITE ASSEMBLY MEETS PERFORMANCE CHARACTERISTICS SPECIFIED.
- FACE SHEET: 0.020" ALUMINUM 3105-H14 ALLOY
- FINISH: LUMIFLON-BASE FLUROPOLYMER RESIN COATING.
- MAXIMUM DIMENSIONS: 82" WIDE X 288" LONG
- TECHNICAL DATA

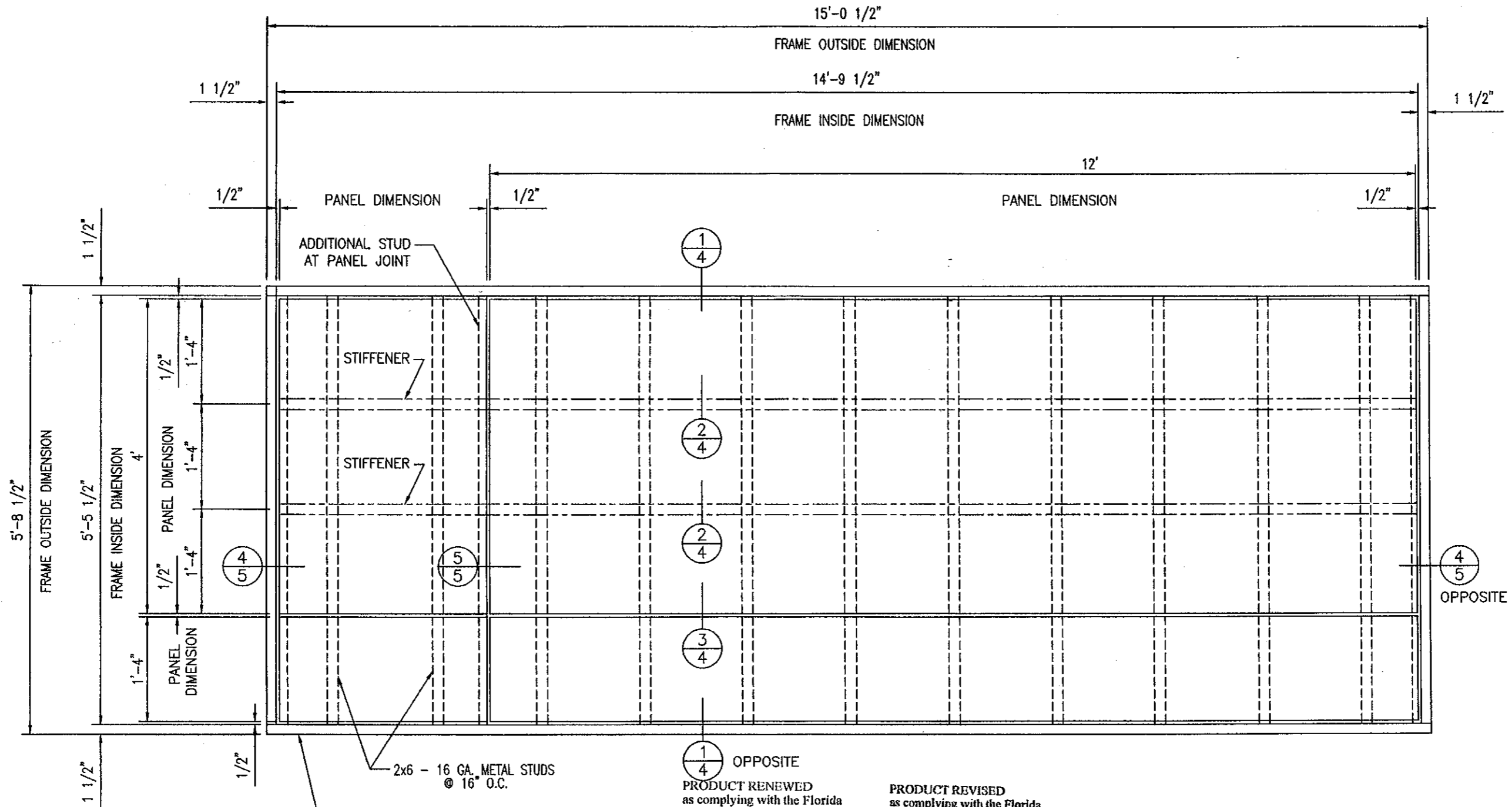
DESCRIPTION	TEST	4MM ALPOLIC RESULTS	4MM ALPOLIC/FR RESULTS
SPECIFIC GRAVITY		1.38	1.90
WEIGHT		1.12 LB/SQ.FT	1.56 LB/SQ.FT
TENSILE STRENGTH	ASTM E-8	7452 PSI	5693 PSI
YIELD STRENGTH	ASTM E-8	NDY	NDY
ELONGATION	ASTM E-8	18%	8%
PUNCHING SHEAR RESISTANCE (1"DIA.)	ASTM D-732	4025 PSI	4637 PSI
PUNCHING SHEAR MAX LOAD	ASTM D-732	1920 PSI	2259 PSI
BOND INTEGRITY VERTICAL PULL	ASTM C-297	1808 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-835	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

- STEEL STUDS AND TRACKS: 16 GA. MIN. GALVANIZED STEEL WITH MIN. PROPERTIES OF 50 KSI YIELD, 65 KSI ULTIMATE.
- STUD & TRACK FASTENERS: #12 x 1-1/2" HEX WASHER HEAD TRAXX 3 BUILDEX SCREW.
- 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.
- PANEL FASTENERS: #10 x 1" HEX WASHER HEAD TEK SCREWS SPACED AT 16" O.C.
- STIFFENER FASTENERS: #10 x 1" HEX WASHER HEAD TEK SCREWS.
- JOINT SILICONE: DOW CORNING #795 SILICONE SEALANT.
- STRUCTURAL SILICONE: DOW CORNING #1199 SILICONE SEALANT.
- BACKER ROD: 3/4" DIA. DENVER FOAM OPEN CELL BACKER ROD.
- 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 Helmy A. Nelson
Miami Data Product Control
Division

 2-18-09		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		CONTRACT NO.		MITSUBISHI CHEMICAL AMERICA, INC.						
		FRACTIONS 1/16	DECIMALS XXX ± .01	ANGLES 1/2	APPROVALS	DATE	ALPOLIC and ALPOLIC/FR COMPOSITE WALL PANEL SYSTEMS					
MATERIAL	FINISH	PROJ MGMT	ENGINEERING	MS	11/11/02	SIZE	B	CAGE CODE	DWG NO.	1-P	REV	1
1	TH	9/01/09	EXPL NOTE 1 WAS FOR WALL CONSTRUCTION ONLY		DO NOT SCALE DRAWING	PRODUCTION	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.

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

1/4 OPPOSITE

PRODUCT RENEWED as complying with the Florida Building Code
 Acceptance No 11-0421.07
 Expiration Date 08/09/2012
 By *Helmut A. Mohr*
 Miami Dade Product Control

PRODUCT REVISED as complying with the Florida Building Code
 Acceptance No 09-0923.04
 Expiration Date 08/09/2011
 By *Robert A. Hall*
 Miami Dade 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 .XX ± .01	ANGLES .XXX ± .005	± 1/2	APPROVALS	DATE
MATERIAL 4MM & 6MM ALPOLIC & 4MM ALPOLIC/ir	FINISH	DO NOT SCALE DRAWING	PRODUCTION	ENGINEERING MS	11/11/02
				SIZE B	CAGE CODE
				DWG. NO.	1-P
				SCALE SHOWN	SHEET 2 OF

MITSUBISHI CHEMICAL AMERICA, INC.

ALPOLIC and ALPOLIC/ir COMPOSITE WALL PANEL SYSTEM

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"

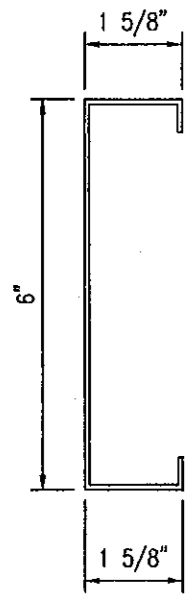
CENTERLINE DIM. (TYP.)

2'-7 3/4"

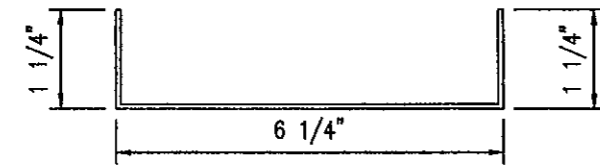
PRODUCT RENEWED as complying with the Florida Building Code
 Acceptance No 11-0421.07
 Expiration Date 08/09/2012
 By Helmy A. Matar
 Miami Dade Product Control

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

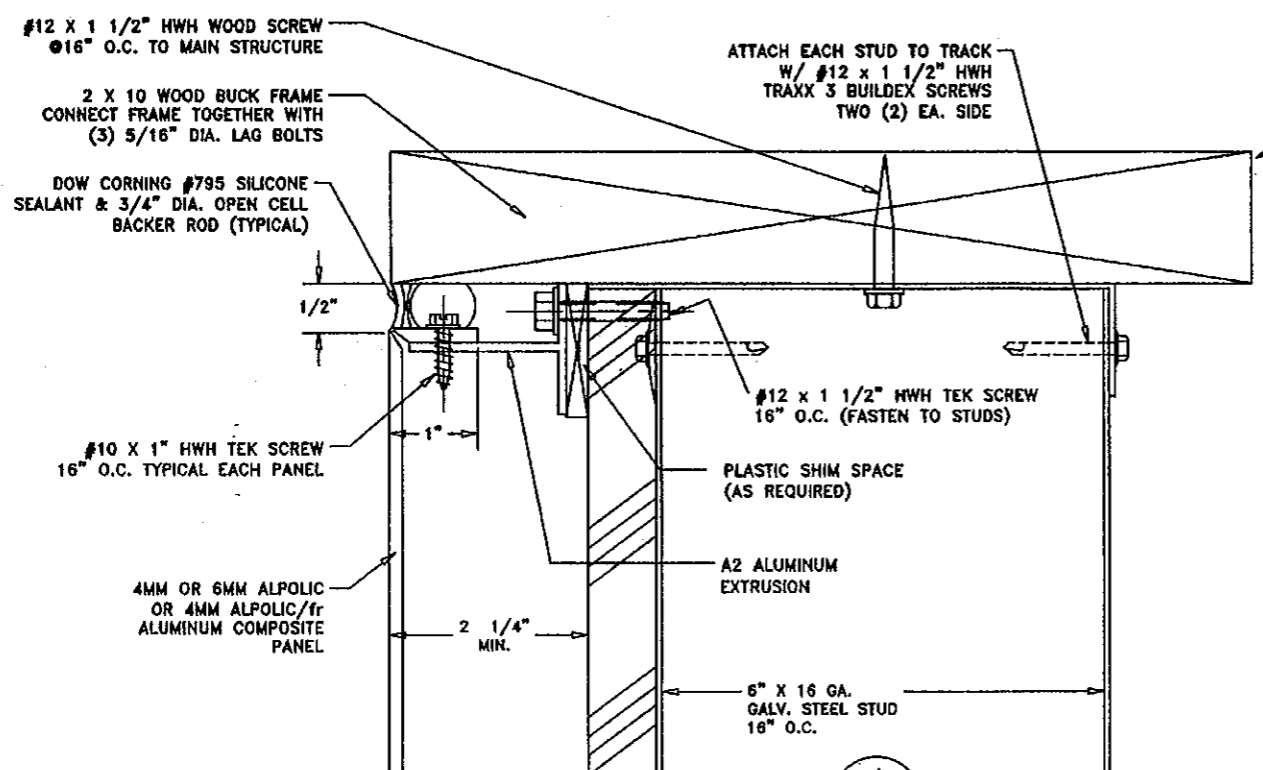
3/4" = 1'-0"

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

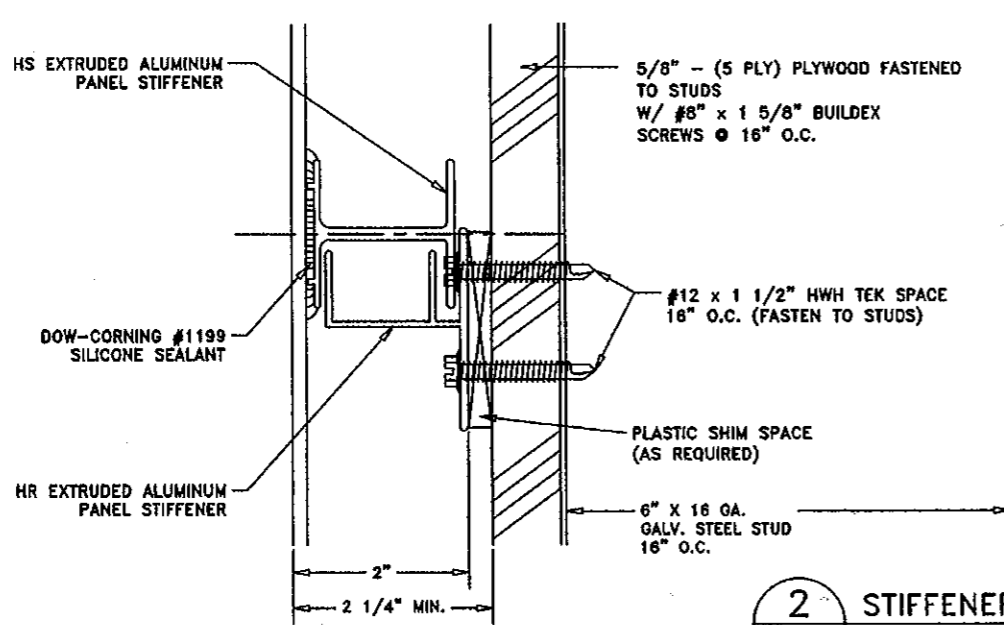
Robert A. Hall
 9-18-09

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

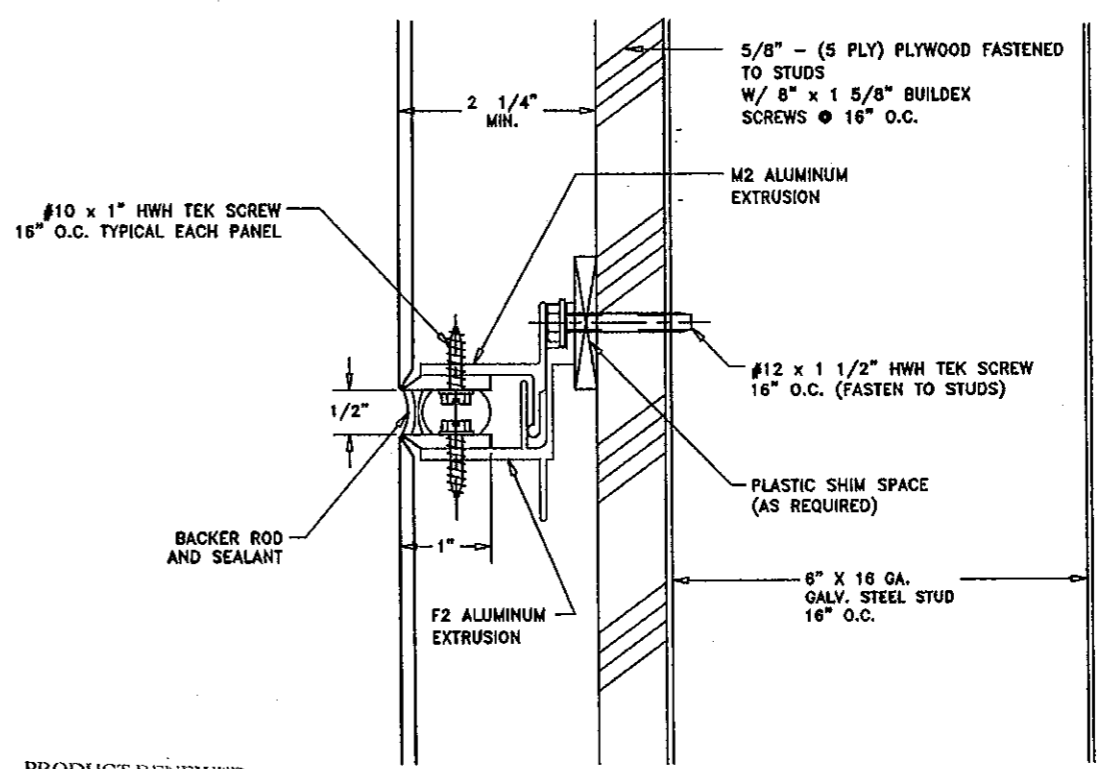


1
4
DETAIL
SCALE: 6" = 1'



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.



3
4
JOINT DETAIL
SCALE: 6" = 1'

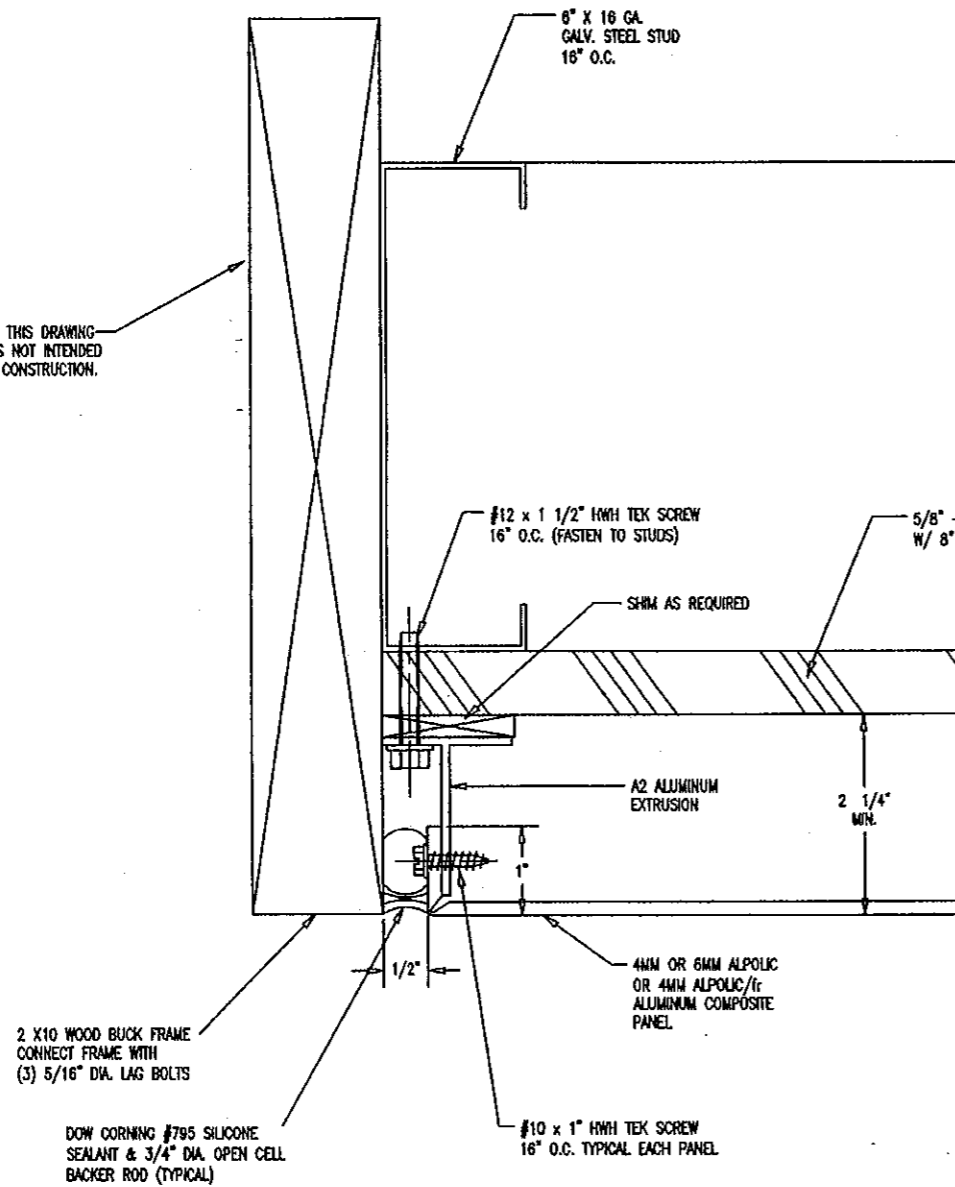
PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No 11-0421.07
Expiration Date 08/09/2012
By Helmut A. Weber
Miami Dade Product Control

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

Robert A. Kistler

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		CONTRACT NO. 476-09		Kistler McDougall	
FRACTIONS	DECIMALS	APPROX.	DATE	MITSUBISHI CHEMICAL AMERICA, INC.	
1/8"	0.125"				
1/16"	0.0625"				
3/16"	0.1875"				
1/4"	0.25"				
5/16"	0.3125"				
3/8"	0.375"				
1/2"	0.5"				
5/8"	0.625"				
3/4"	0.75"				
7/8"	0.875"				
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"				
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28"	28.0"				
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28 1/4"	28.25"				

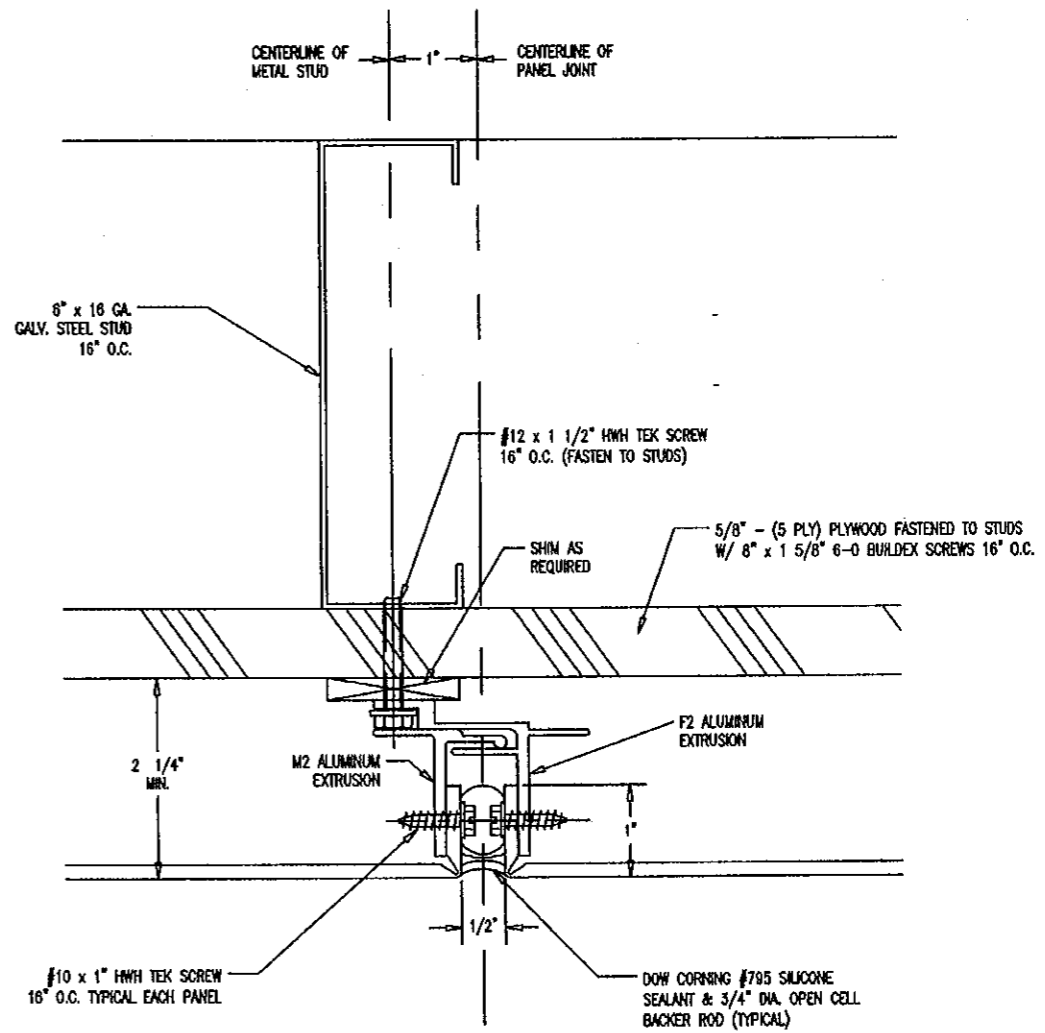
THE WOOD BUCK FRAME DETAILED IN THIS DRAWING IS FOR TEST PURPOSES ONLY AND IS NOT INTENDED AS A RECOMMENDATION FOR ACTUAL CONSTRUCTION.



4
5
DETAIL
SCALE: 6" = 1'

PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No 11-0421.07
Expiration Date 08/09/2012
By *Helmut H. Mehn*
Miami Dade Product Control

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

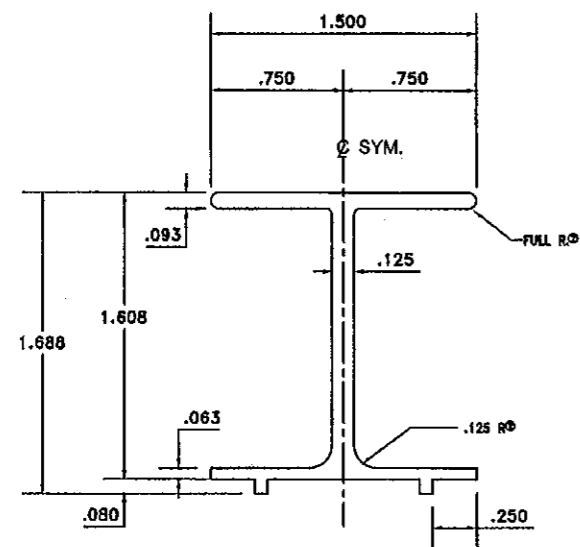


5
5
DETAIL
SCALE: 6" = 1'

Robert A. Gal
9-18-09

Kistler McDougall MITSUBISHI CHEMICAL AMERICA, INC.	
ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEMS	
APPROVALS DATE 11/11/02	SHEET 5 OF 10

HS

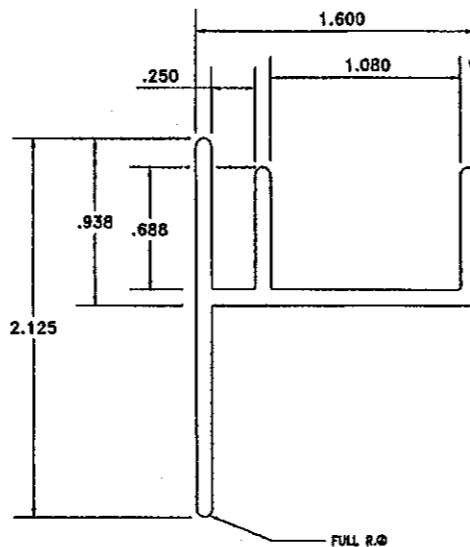


BREAK CORNERS .015 R
EXCEPT AS NOTED
ACTUAL SIZE

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

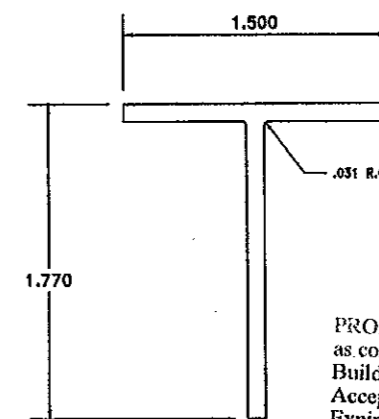


BREAK CORNERS .015 R
.090 TYPICAL METAL THICKNESS
ACTUAL SIZE

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

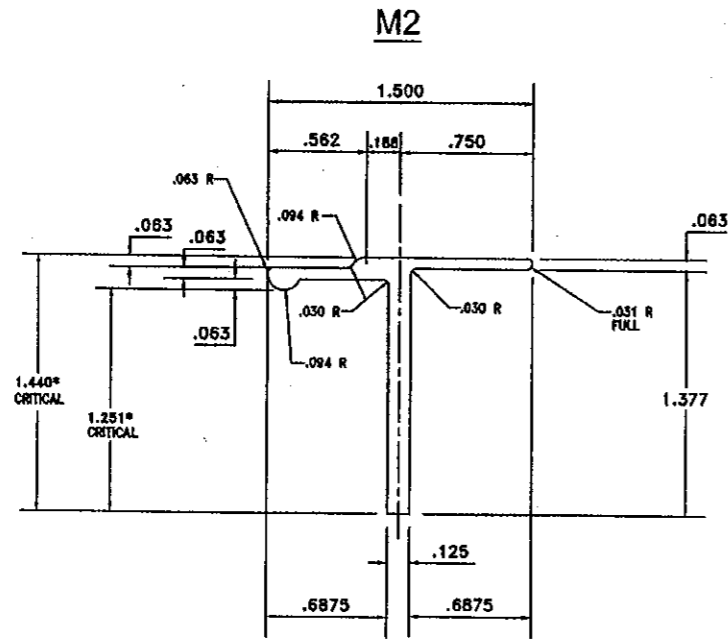
DIE DATA

EST. AREA: .317 DIE SIZE: 6
EST. WEIGHT: .380 NO. HOLES: 1
EST. PERI.: 6.5" EXT. LENGTH:
FACTOR: 17 R/R: 5 1/8" = 1 @ 53'

PRODUCT RENEWED
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Building Code
Acceptance No. 11-0421.07
Expiration Date 08/09/2012
By *Helmut A. Nahr*
Miami Dade Product Control

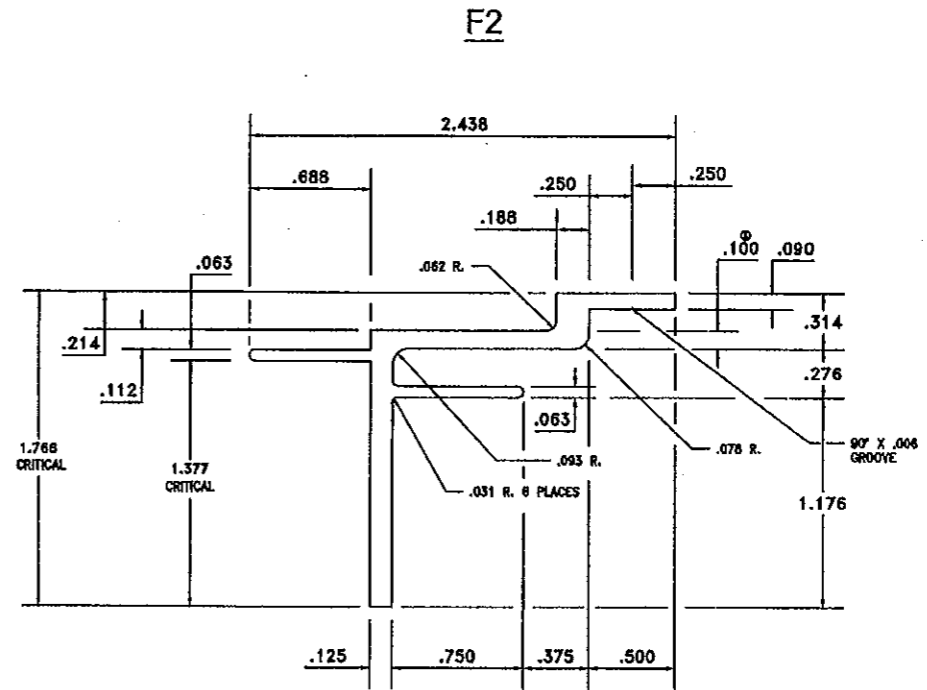
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 09-0923.04
Expiration Date 08/09/2011
By *Helmut A. Nahr*
Miami Dade Product Control
Division

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		CONTRACT NO. 918-09		Kistler McDougall	
FRACTIONS	DECIMALS	ANGLES	APPROVALS	DATE	MITSUBISHI CHEMICAL AMERICA, INC.
1/16	.001	1/2			
MATERIAL 4MM & 6MM ALPOLIC & 4MM ALPOLIC/FR			ENGINEER	HS	11/11/02
FINISH			PRODUCTION		
DO NOT SCALE DRAWING			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

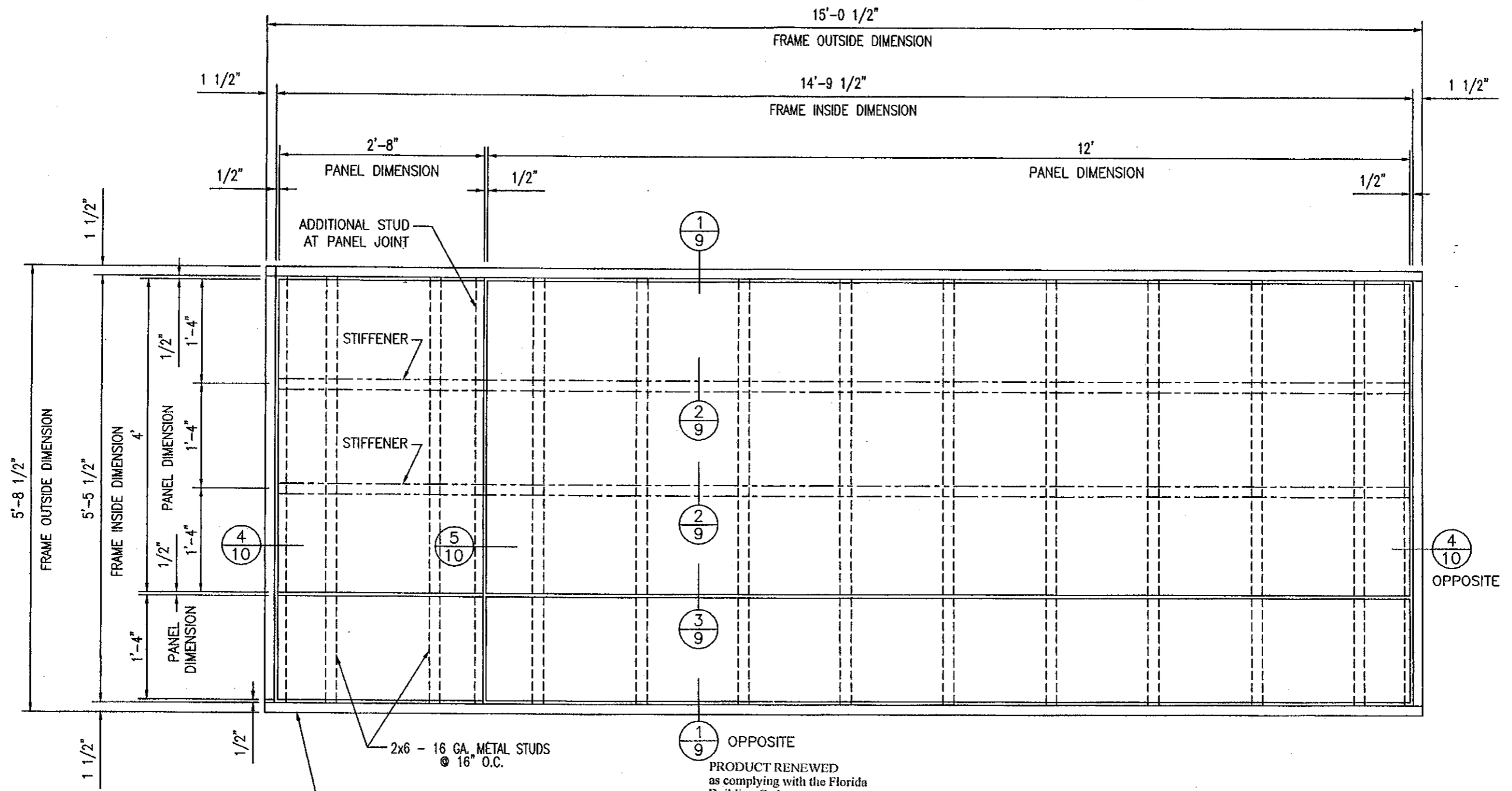
DIE DATA
 EST. AREA: .484 DIE SIZE: 6
 EST. WEIGHT: .581 NO. HOLES: 1
 EST. PERI.: 9.900 EXT. LENGTH: 5 1/8 = 1- 34'
 FACTOR: 17 R/R

PRODUCT RENEWED
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Building Code
Acceptance No 11-0421-07
Expiration Date 08/09/2012
By *Helmut A. Meier*
Miami Dade Product Control

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 09-0923-04
Expiration Date 08/09/2011
By *Helmut A. Meier*
Miami Dade Product Control
Division

Robert A. Galt

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES FRACTIONS ARE		CONTRACT NO. 418-01		Kistler McDougall	
FRACTIONS	DECIMALS	APPROVALS	DATE	MITSUBISHI CHEMICAL AMERICA, INC.	
1/32	.001	DESIGNER		ALPOLIC and ALPOLIC/fr	
		DRAWN		COMPOSITE WALL PANEL SYSTEMS	
		ENGINEER	11/11/02	SIZE / CHG CODE	UNWHD.
		PROD. S. DIV.		B	1
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.

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

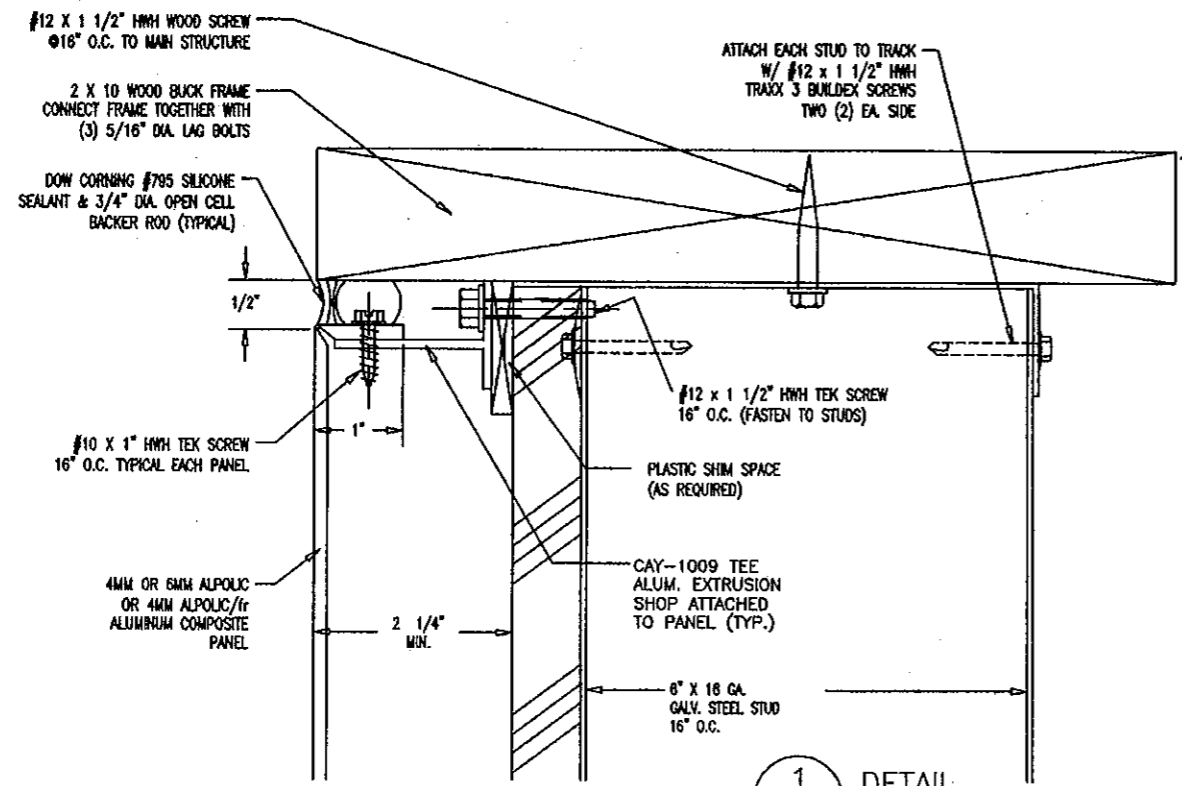
PRODUCT RENEWED as complying with the Florida Building Code
 Acceptance No 11-0421.07
 Expiration Date 08/09/2012
 By Helmut A. Huber
 Miami Dade Product Control

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

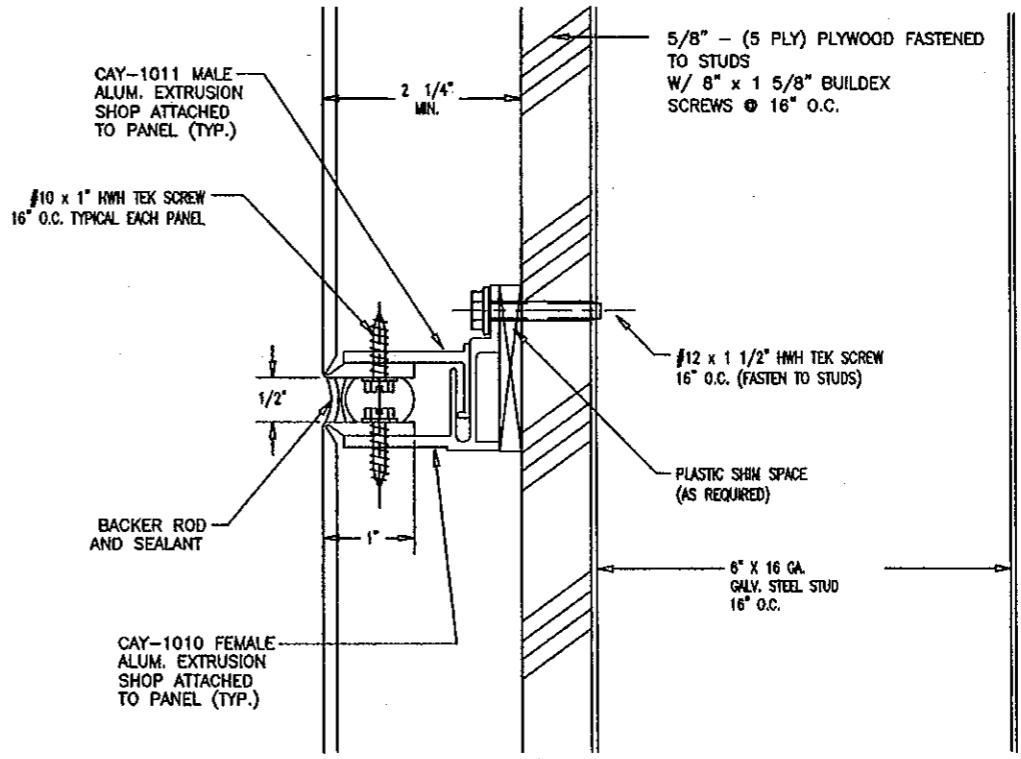
PANEL ELEVATION

3/4" = 1'-0"

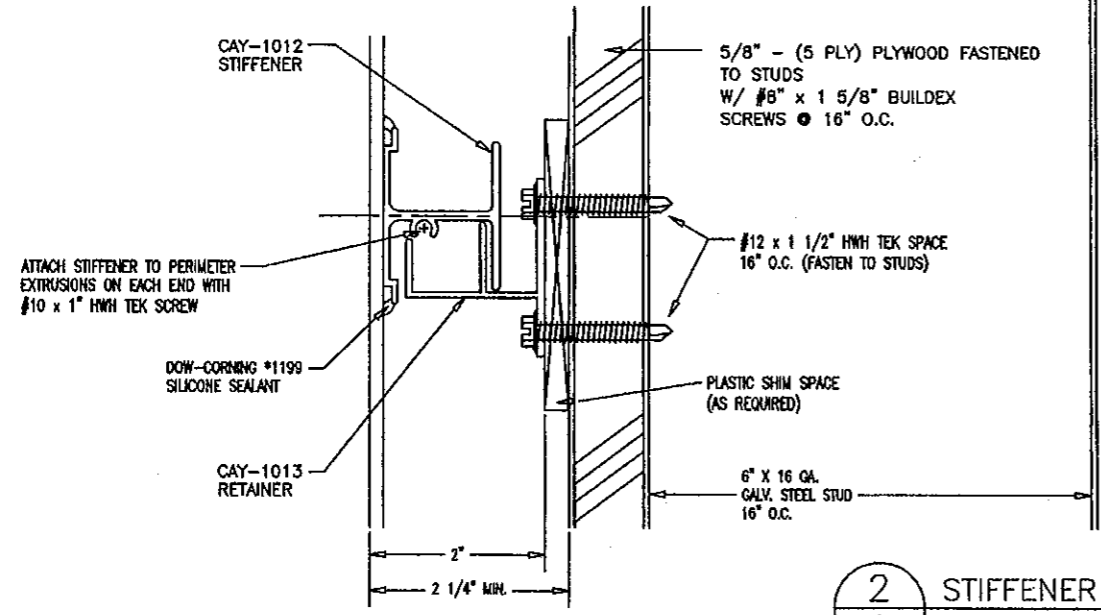
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES ARE:		CONTRACT NO. <u>91809</u>		MITSUBISHI ARCHITECTURAL PRODUCTS	
FRACTIONS + 1/32	DECIMALS XX ± .01 XXX ± .005	ANGLES ± 1/2	APPROVALS	DATE	MITSUBISHI CHEMICAL AMERICA, INC.
MATERIAL 4MM & 6MM ALPOLIC & 4MM ALPOLIC/fr	FINISH	DO NOT SCALE DRAWING	APPROVALS	DATE 11/11/02	ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEM
			PROJ MGMT	SCALE SHOWN	SIZE B
			PRODUCTION		CAGE CODE DWO NO. 1-P
					SHEET 8 OF



1
9
DETAIL
SCALE: 6" = 1'



3
9
JOINT DETAIL
SCALE: 6" = 1'



2
9
STIFFENER DETAIL
SCALE: 6" = 1'

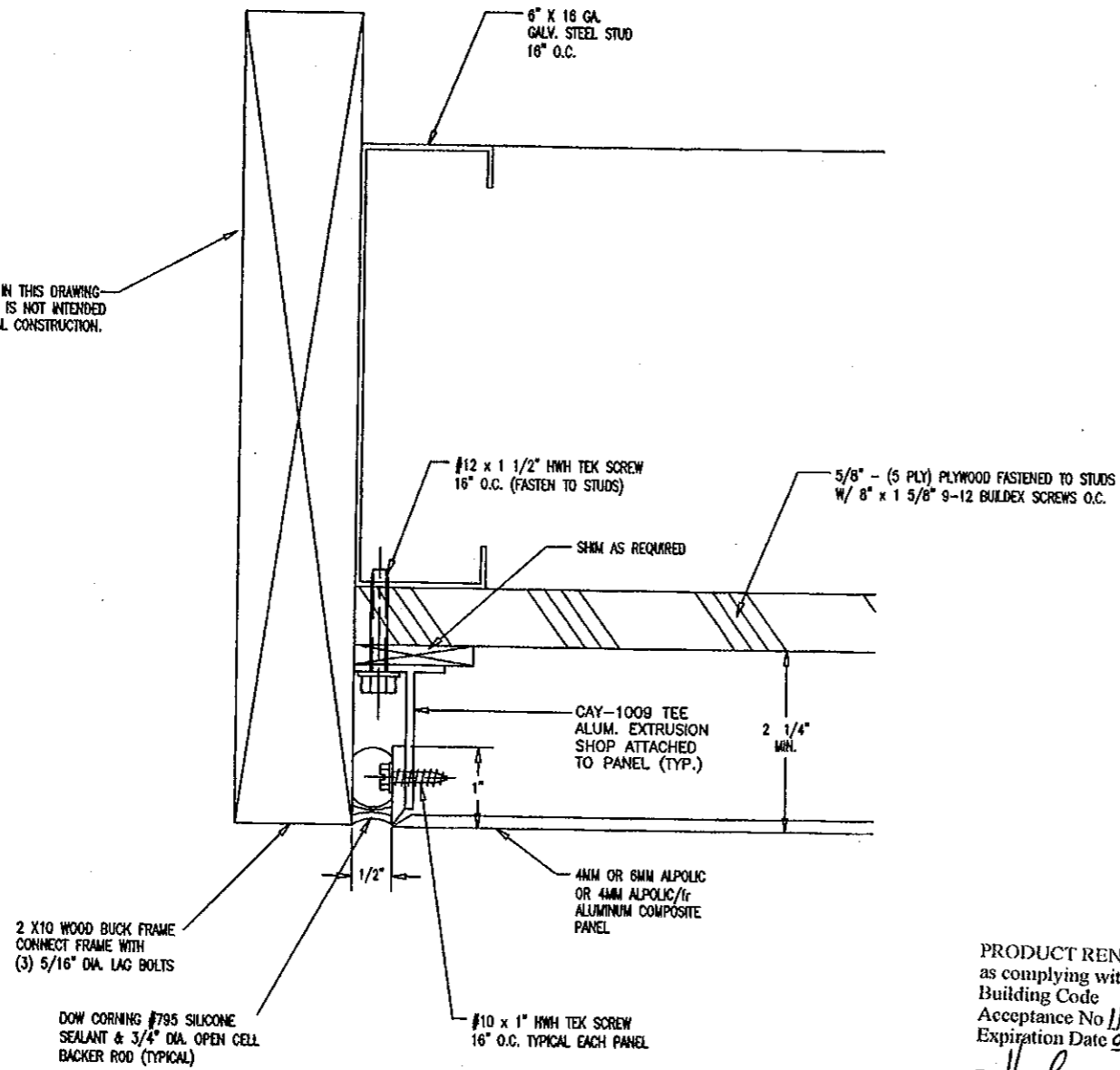
PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No 11-0421.07
Expiration Date 08/09/2012
By *Heather A. Nelson*
Miami Dade Product Control

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

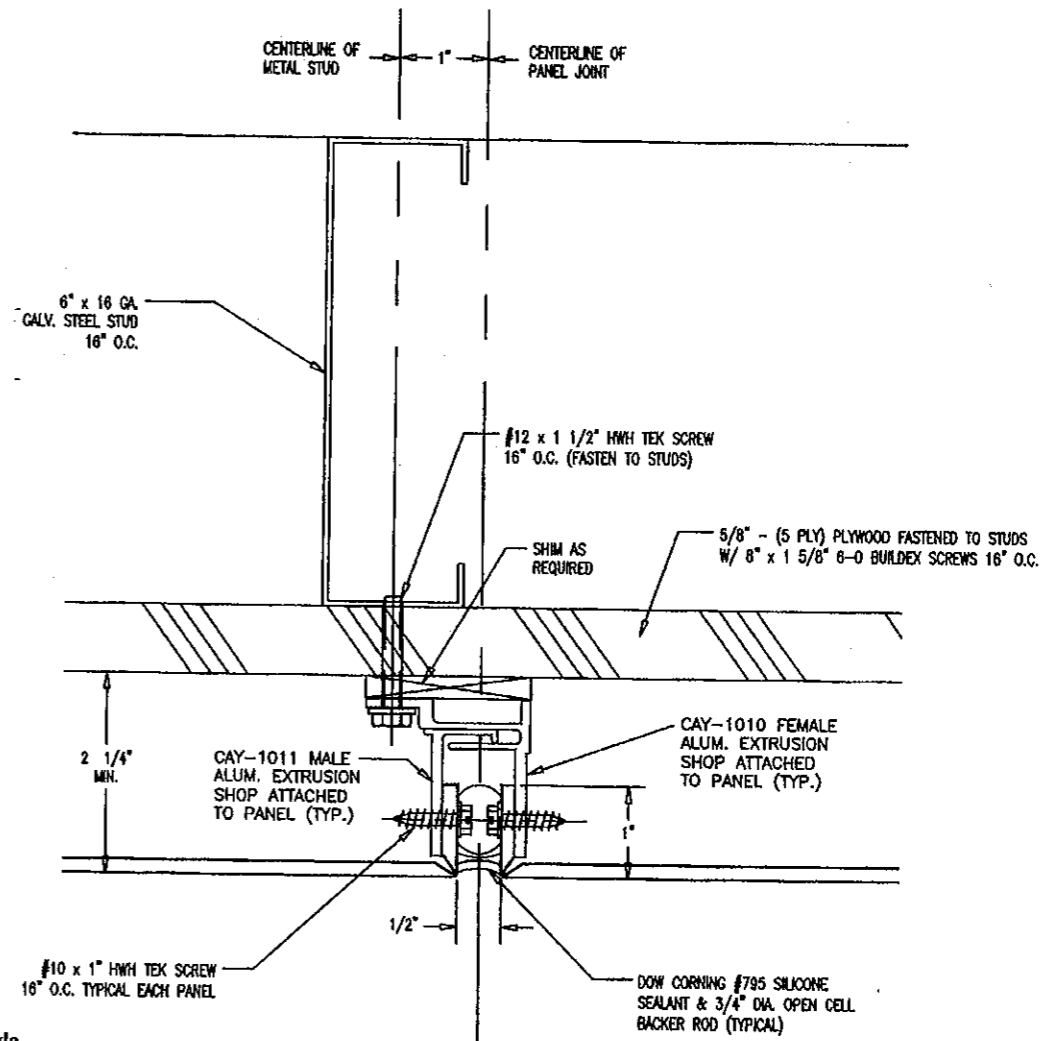
Robert A. Gal
CAY ARCHITECTURAL PRODUCTS

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES:		CONTRACT NO. 9-1809		MITSUBISHI CHEMICAL AMERICA, INC.	
FRACTIONS 1/16"	DECIMALS XX 1 .01	ANGLES 3/16"	APPROVALS	DATE	
MATERIAL 4MM & 6MM ALPOLIC & 4MM ALPOLIC/fr		DESIGNER	ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEMS		
FEET		ENGINEER	MS	11/11/02	
DO NOT SCALE DRAWING		PROJECT MGMT			
		PRODUCTION			
		SCALE SHOWN		1-P	REV 1
				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: 6" = 1'



5
10
DETAIL
SCALE: 6" = 1'

PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No 11-0421.07
Expiration Date 08/09/2012
By Heilyn A. Melton
Miami Dade Product Control

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

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		CONT'D BY: <u>9-18-09</u>		CAY ARCHITECTURAL PRODUCTS	
FRACTIONS	DECIMALS	APPROVALS	DATE	MITSUBISHI CHEMICAL AMERICA, INC.	
1/16	.001			ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEMS	
MATERIAL	4MM & 6MM ALPOLIC & 4MM ALPOLIC/fr	DESIGNER	MS	11/11/02	
PROJECT		PROJECT			
DO NOT SCALE DRAWING				SCALE SHOWN	SHEET 10 OF 10