

ALPOLIC and ALPOLIC/FR (FIRE RESISTIVE) COMPOSITE WALL PANEL SYSTEMS LARGE AND 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 PER THE CURRENT EDITION OF THE FLORIDA BUILDING CODE:

TAS-201-94, IMPACT TEST, LARGE MISSILE
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: 37893 (CAY-1009) TEE, 37894 (CAY-1010) FEMALE, 37899 (CAY-1011) MALE, 38500B (CAY-1012) STIFFENER AND 38499A (CAY-1013) RETAINER ARE EXTRUDED ALUMINUM ALLOY 6063 WITH A T6 TEMPER By SAF Metal Fabrication (FORMALLY 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 HEAVY DUTY TEKS 4, 4.5, OR 5 BY ITW BUILDEX SCREW OR STUD & TRACK FASTENERS: #12 x 1-1/2" HEX WASHER HEAD TEKS SELECT BY ITW BUILDEX SCREW.
3. PLYWOOD: 5/8" THICK, (5 PLY) EXTERIOR GRADE SECURED WITH #8 x 1 5/8" ITW BUILDEX TEK SCREWS AT 16" O.C. AROUND PERIMETER AND IN THE MIDDLE OF PLYWOOD.
4. PANEL FASTENERS: #10 x 1" HEX WASHER HEAD ITW BUILDEX TEK SCREWS SPACED AT 16" O.C.
5. STIFFENER FASTENERS: #10 x 1" HEX WASHER HEAD ITW BUILDEX 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 APPROVAL DOCUMENT AND IT SHALL BE REVIEWED BY THE PLANS EXAMINER OF THE CORRESPONDING BUILDING DEPARTMENT.

COMPOSITE PANEL

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

DESCRIPTION	TEST	4MM ALPOLIC RESULTS	4MM ALPOLIC/fr RESULTS	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	4637 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 J. Amoruso, P.E.
FL P.E. No. 49752

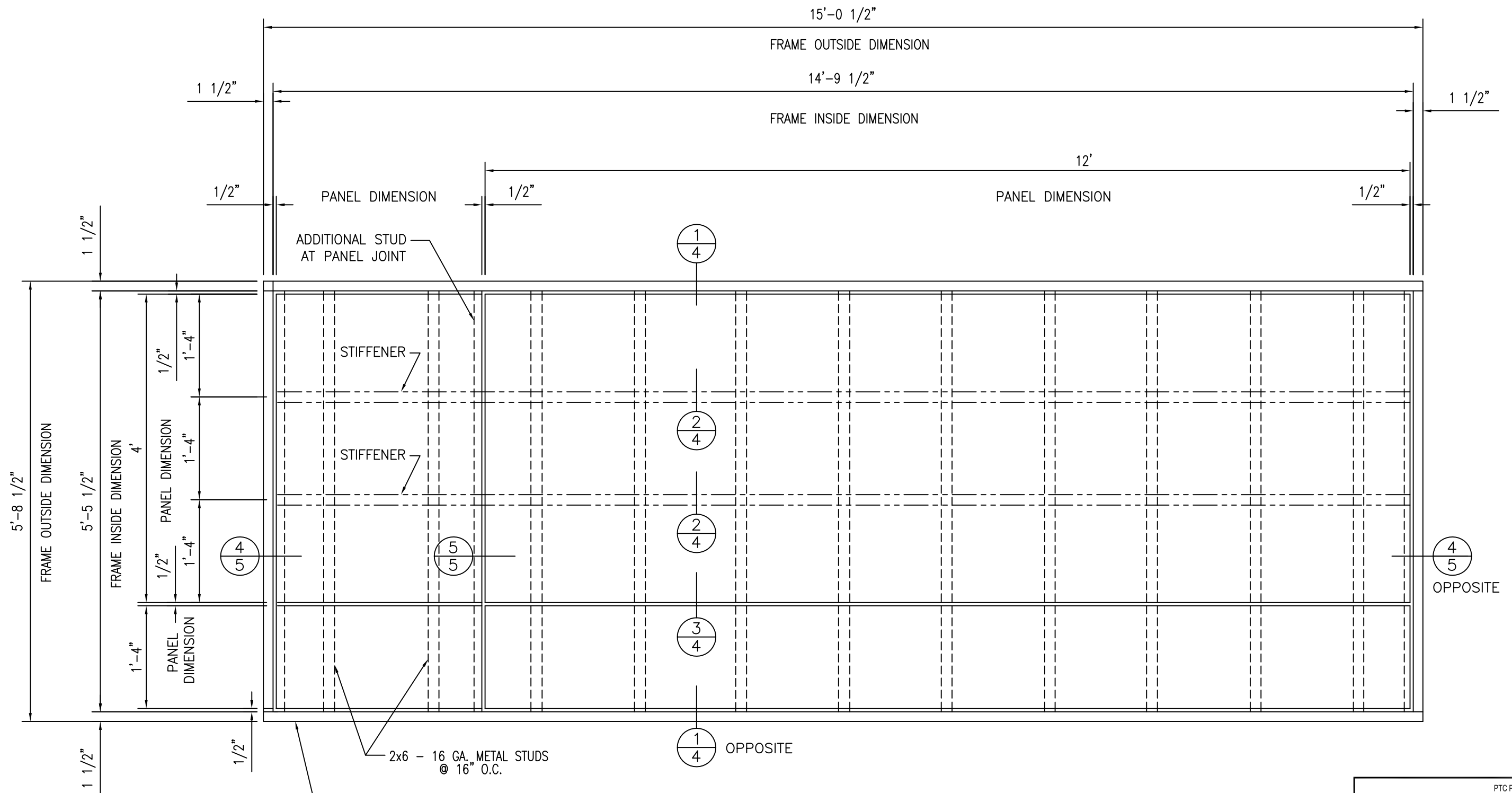
REV.	BY	DATE	CHANGE
7	RJA	4/14/17	NAME CHANGE TO MITSUBISHI CHEMICAL COMPOSITES AMERICA
6	RJA	4/24/14	UPDATE TO CURRENT EDITION OF THE FBC
5	RJA	6/10/12	UPDATE TO 2010 FBC
4	TH	1/09/12	MITSUBISHI PLASTICS COMPOSITES WAS RENAMED TO MITSUBISHI CHEMICAL
3	TH	9/04/09	REMOVED THE SIGNATURE BLOCK & SAF WAS CAY ARCHITECTURAL PRODUCTS

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:			CONTRACT NO.	
FRACTIONS ± 1/32	DECIMALS .XX ± .01 .XXX ± .005	ANGLES ± 1/2	APPROVALS	DATE
MATERIAL 4MM & 6MM ALPOLIC & 4MM ALPOLIC/fr			DRAWN	
FINISH			ENGINEERING	MS 11/11/02
DO NOT SCALE DRAWING			PROJ MGMT	
			PRODUCTION	
SIZE B	CAGE CODE	DWG NO. MPCA0001	REV 7	
SCALE SHOWN			SHEET	1 OF 11

PTC PTC PRODUCT DESIGN GROUP, LLC
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MITSUBISHI CHEMICAL COMPOSITES AMERICA, INC.

**ALPOLIC and ALPOLIC/fr
COMPOSITE WALL PANEL SYSTEMS**



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"

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7	RJA	4/14/17	NAME CHANGE TO MITSUBISHI CHEMICAL COMPOSITES AMERICA
6	RJA	4/24/14	UPDATE TO CURRENT EDITION OF THE FBC
5	RJA	6/10/12	UPDATE TO 2010 FBC
4	TH	1/09/12	MITSUBISHI PLASTICS COMPOSITES AND MITSUBISHI CHEMICAL
3	TH	9/04/09	REVISION FOR SIGNATURE BLOCK & BY USE OF ARCHITECTURAL PRODUCTS

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		
FRACTIONS	DECIMALS	ANGLES
± 1/32	.XX ± .01	± 1/2
	.XXX ± .005	

CONTRACT NO.	
APPROVALS	DATE
DRAWN	
ENGINEERING	MS 11/11/02
PROJ MGMT	
PRODUCTION	

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Kistler McDougall

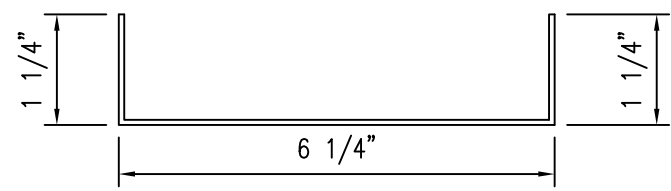
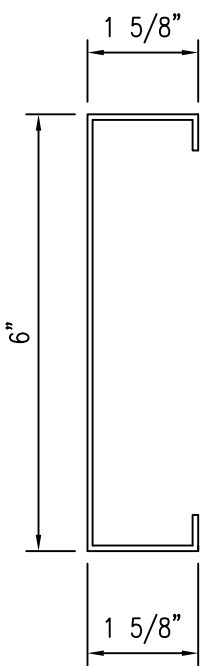
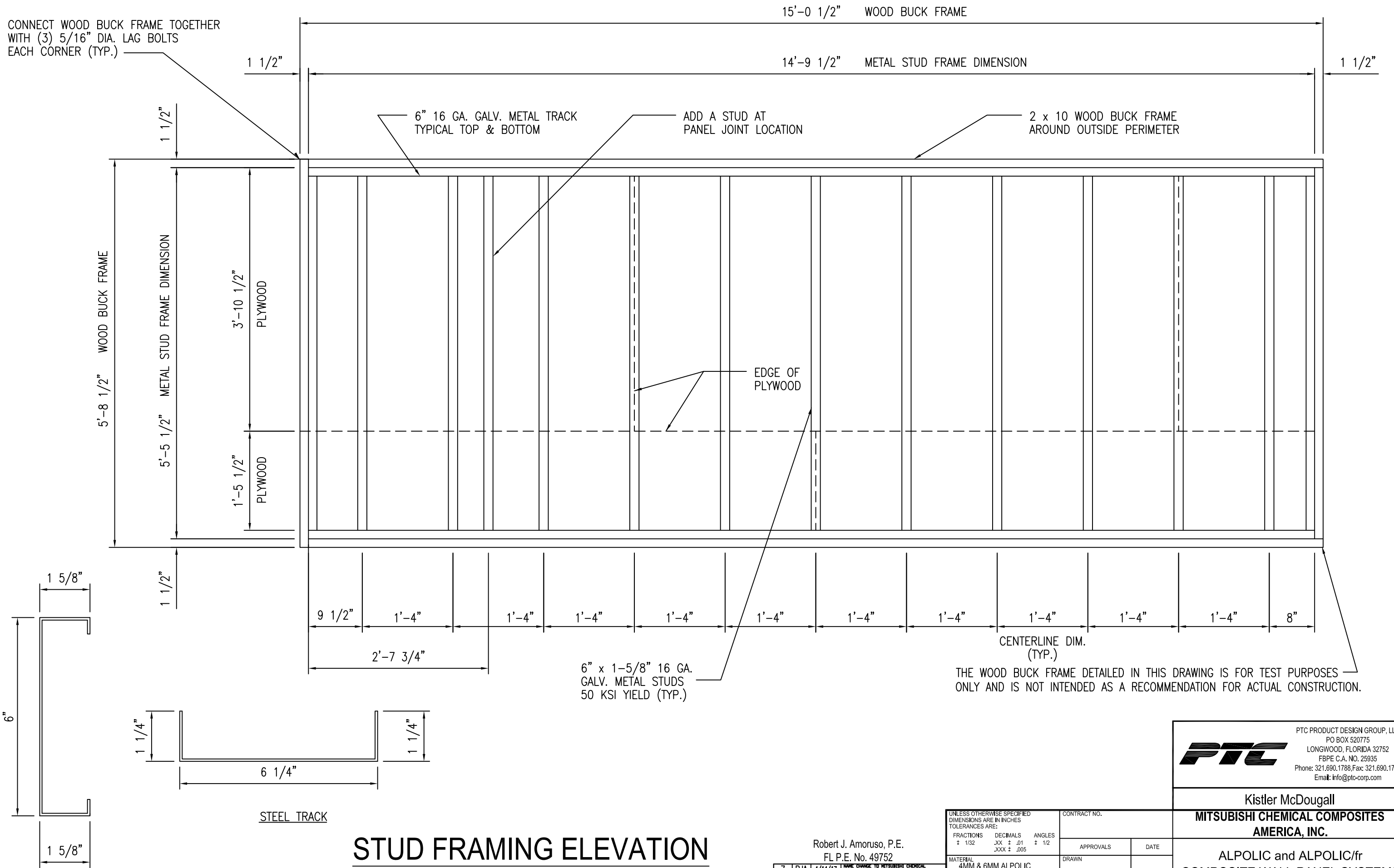
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ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEMS

SIZE	CAGE CODE	DWG NO.	REV
B		MPCA001	7
SCALE SHOWN	SHEET		2 OF 11

DO NOT SCALE DRAWING

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



STEEL TRACK

STUD FRAMING ELEVATION

3/4" = 1'-0"

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6	RJA	4/24/14	UPDATE TO CURRENT EDITION OF THE FBC
5	RJA	6/10/12	UPDATE TO 2010 FBC
4	TH	1/09/12	MITSUBISHI PLASTICS COMPOSITES AND MITSUBISHI CHEMICAL
3	TH	9/04/09	REVISION TO SHOW WOOD BUCK & STUDS OF ARCHITECTURAL PRODUCTS

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

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Kistler McDougall
MITSUBISHI CHEMICAL COMPOSITES AMERICA, INC.

ALPOLIC and ALPOLIC/fr
COMPOSITE WALL PANEL SYSTEMS

SIZE	CAGE CODE	DWG NO.	REV
B		MPCA0001	7
SCALE	SHOWN	SHEET	3 OF 11

#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
 ITW BUILDEX TEK SCREWS
 TWO (2) EA. SIDE

THE WOOD BUCK FRAME DETAILED IN THIS DRAWING
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#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

F2 ALUMINUM
 EXTRUSION

5/8" - (5 PLY) PLYWOOD FASTENED
 TO STUDS
 W/ 8" x 1 5/8" BUILDEX
 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

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

DOW-CORNING #1199
 SILICONE SEALANT

#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.

HR EXTRUDED ALUMINUM
 PANEL STIFFENER

2
 4
 STIFFENER DETAIL
 SCALE: 6" = 1'

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6	RJA	4/24/14	UPDATE TO CURRENT EDITION OF THE FBC
5	RJA	6/10/12	UPDATE TO 2010 FBC
4	TH	1/09/12	REVISION PLASTIC COMPOSITES WAS MITSUBISHI CHEMICAL
3	TH	9/04/09	REVISION FOR SHIMMING BLOCK & SIP WAS CRY ARCHITECTURAL PRODUCTS

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		
FRACTIONS	DECIMALS	ANGLES
± 1/32	.XX ± .01	± 1/2
	.XXX ± .005	
MATERIAL	4MM & 6MM ALPOLIC & 4MM ALPOLIC/fr	
FINISH		

CONTRACT NO.	
APPROVALS	DATE
DRAWN	
ENGINEERING	MS 11/11/02
PROJ MGMT	
PRODUCTION	

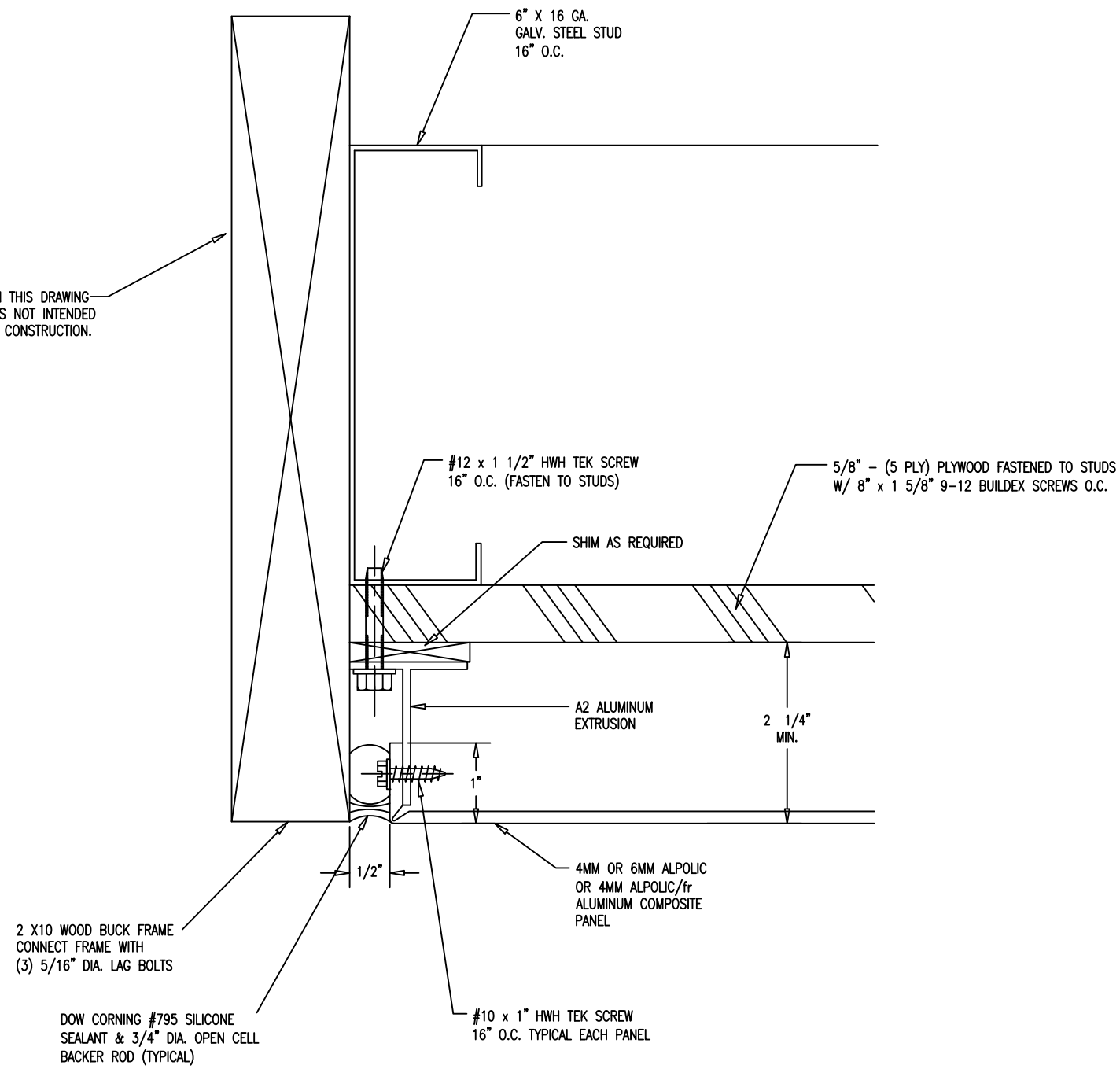
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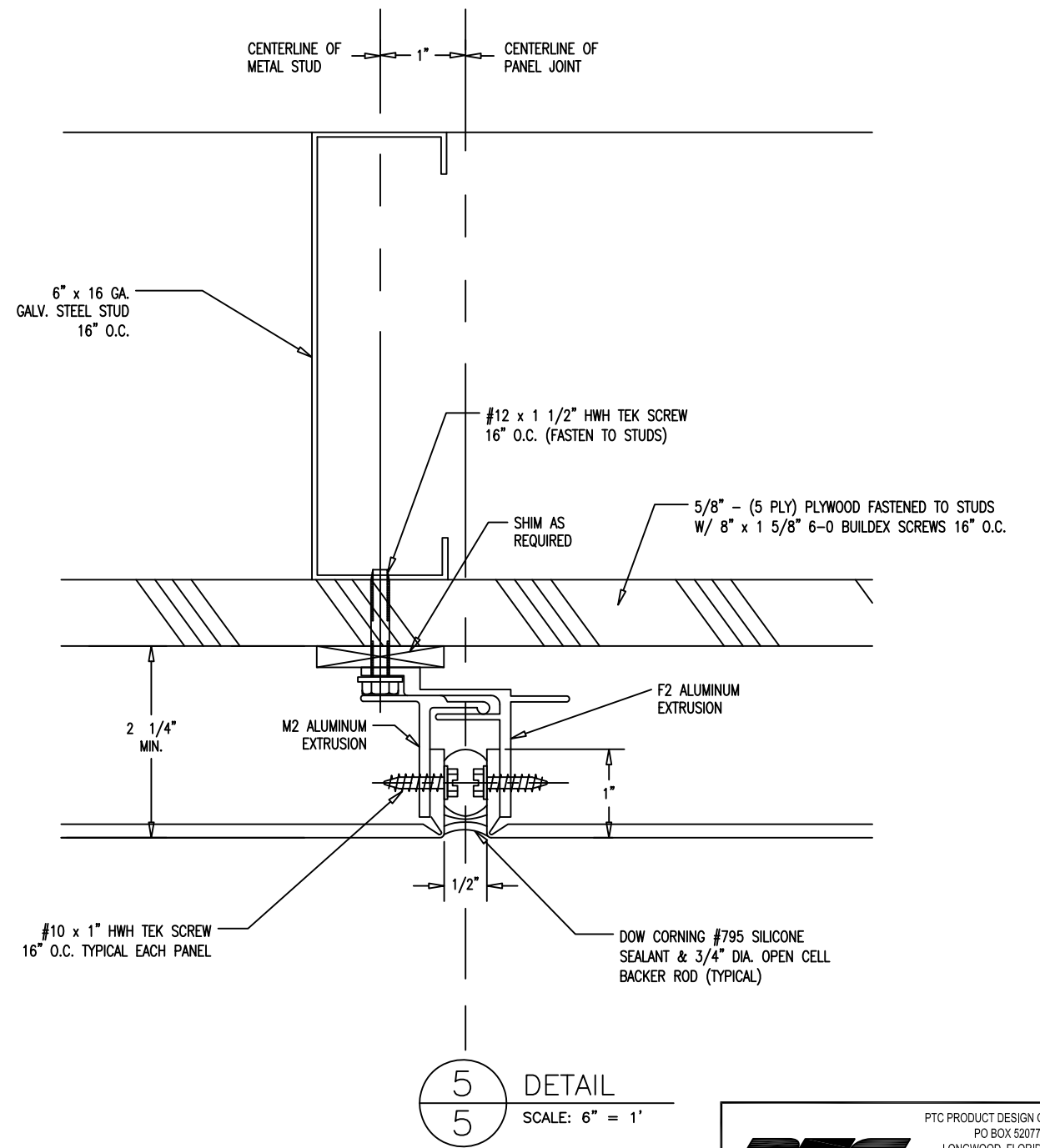
ALPOLIC and ALPOLIC/fr
 COMPOSITE WALL PANEL SYSTEMS

SIZE	CAGE CODE	DWG NO.	REV
B		MPCA0001	7
SCALE SHOWN			SHEET 4 OF 11

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4
5
DETAIL
SCALE: 6" = 1'



5
5
DETAIL
SCALE: 6" = 1'

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REV.	BY	DATE	CHANGE
7	RJA	4/14/17	ISSUE CHANGE TO MITSUBISHI CHEMICAL COMPOSITES AMERICA
6	RJA	4/24/14	UPDATE TO CURRENT EDITION OF THE PDC
5	RJA	6/10/12	UPDATE TO 2010 PDC
4	TH	1/09/12	MITSUBISHI PLASTICS COMPOSITES AND MITSUBISHI CHEMICAL
3	TH	9/04/09	REVISION PER SIGNATURE BLOCK & SET AND CIV ARCHITECTURAL PRODUCTS

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		
FRACTIONS	DECIMALS	ANGLES
± 1/32	XX ± .01	± 1/2
	XXX ± .005	
MATERIAL	4MM & 6MM ALPOLIC & 4MM ALPOLIC/fr	
FINISH		

CONTRACT NO.	
APPROVALS	DATE
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PROJ MGMT	
PRODUCTION	

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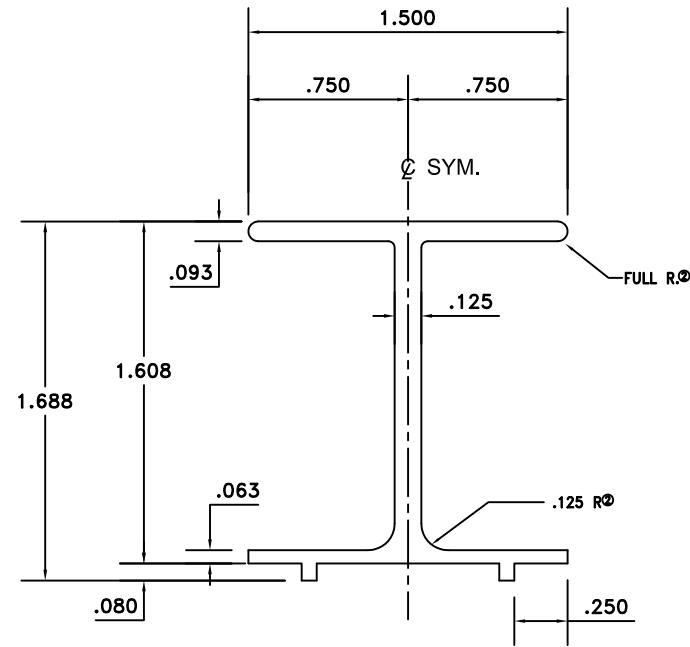
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ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEMS

SIZE	CAGE CODE	DWG NO.	REV
B		MPCA0001	7
SCALE SHOWN	SHEET 5 OF 11		

DO NOT SCALE DRAWING

HS

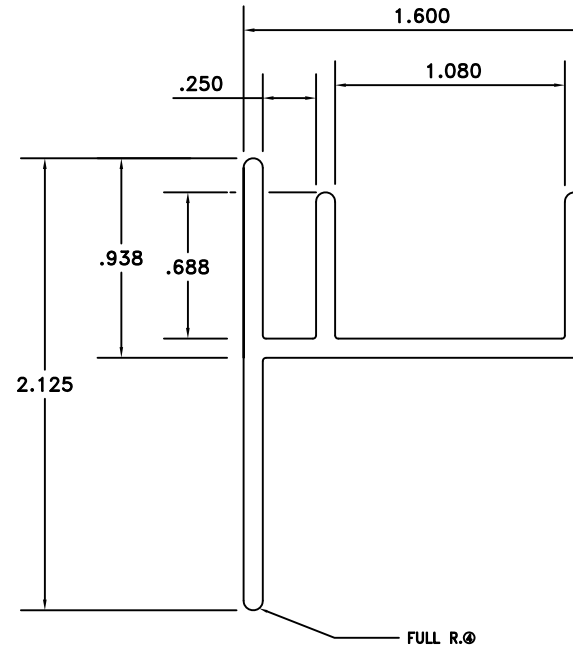


BREAK CORNERS .015 R
EXCEPT AS NOTED
ACTUAL SIZE

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

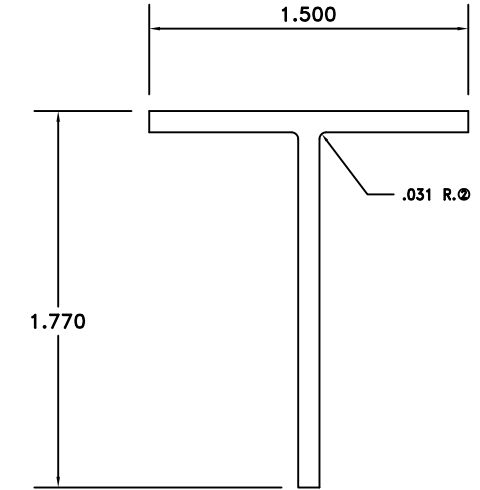


BREAK CORNERS .015 R
.090 TYPICAL METAL THICKNESS
ACTUAL SIZE

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

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7	RJA	4/14/17	NAME CHANGE TO MITSUBISHI CHEMICAL COMPOSITES AMERICA
6	RJA	4/24/14	UPDATE TO CURRENT EDITION OF THE FIC
5	RJA	6/10/12	UPDATE TO 2010 FIC
4	TH	1/09/12	MITSUBISHI PLASTICS COMPOSITES WAS MITSUBISHI CHEMICAL
3	TH	9/04/09	REMOVED PE SIGNATURE BLOCK & SAF WAS CAY ARCHITECTURAL PRODUCTS

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		
FRACTIONS	DECIMALS	ANGLES
± 1/32	.XX ± .01 .XXX ± .005	± 1/2

CONTRACT NO.	
APPROVALS	DATE
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PROJ MGMT	
PRODUCTION	

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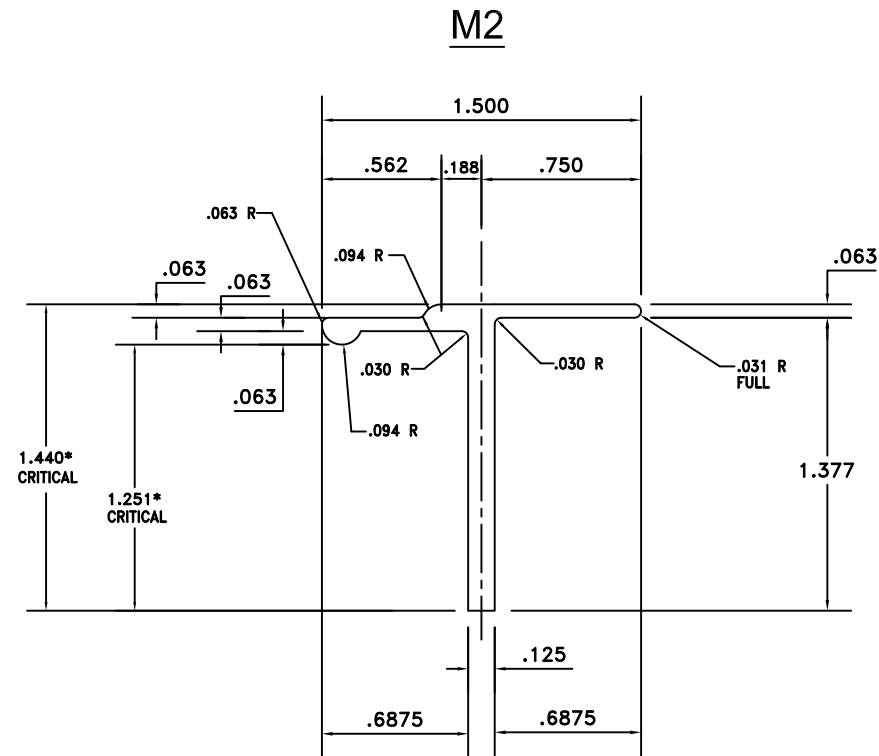
Kistler McDougall

MITSUBISHI CHEMICAL COMPOSITES AMERICA, INC.

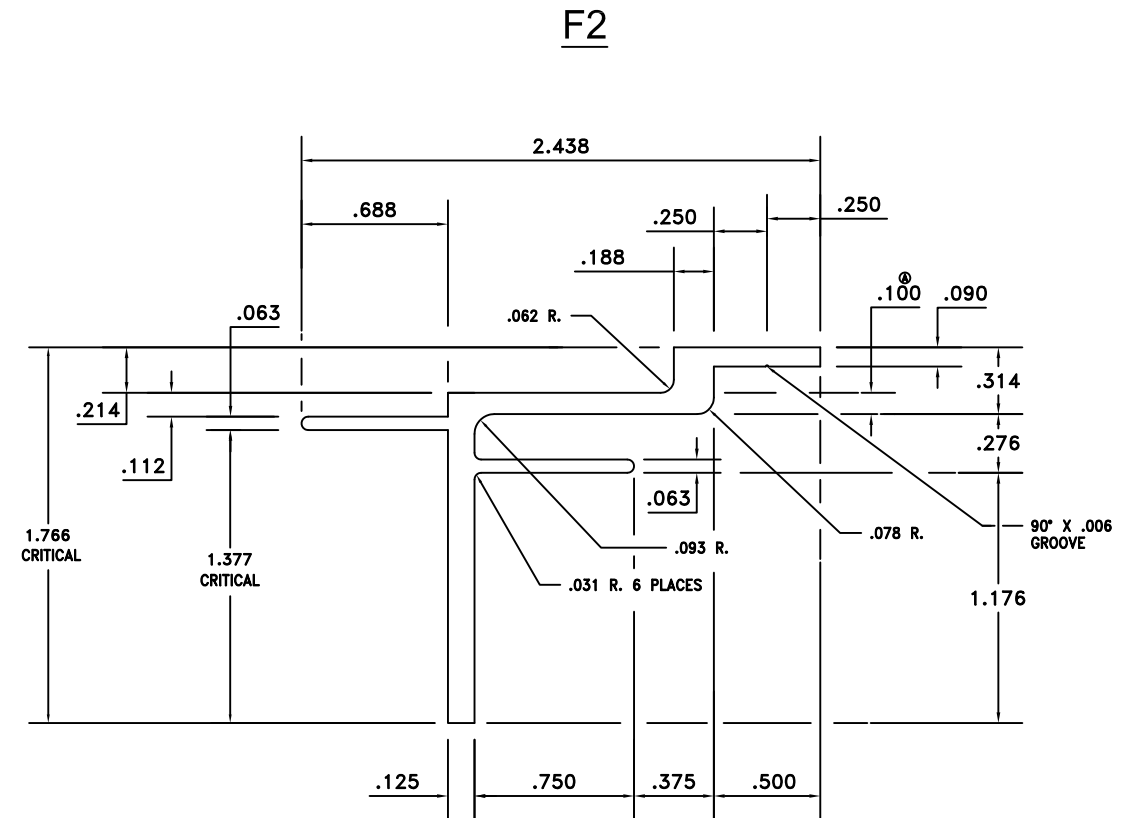
ALPOLIC and ALPOLIC/fr
COMPOSITE WALL PANEL SYSTEMS

SIZE	CAGE CODE	DWG NO.	REV
B		MPCA0001	7
SCALE SHOWN			SHEET 6 OF 11

DO NOT SCALE DRAWING



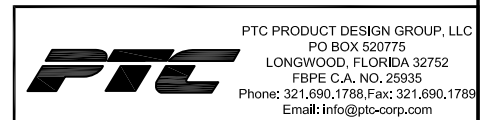
ACTUAL SIZE
BREAK SHARP CORNERS. 005 R.



ACTUAL SIZE
BREAK SHARP CORNERS. 010R.

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'

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



Kistler McDougall

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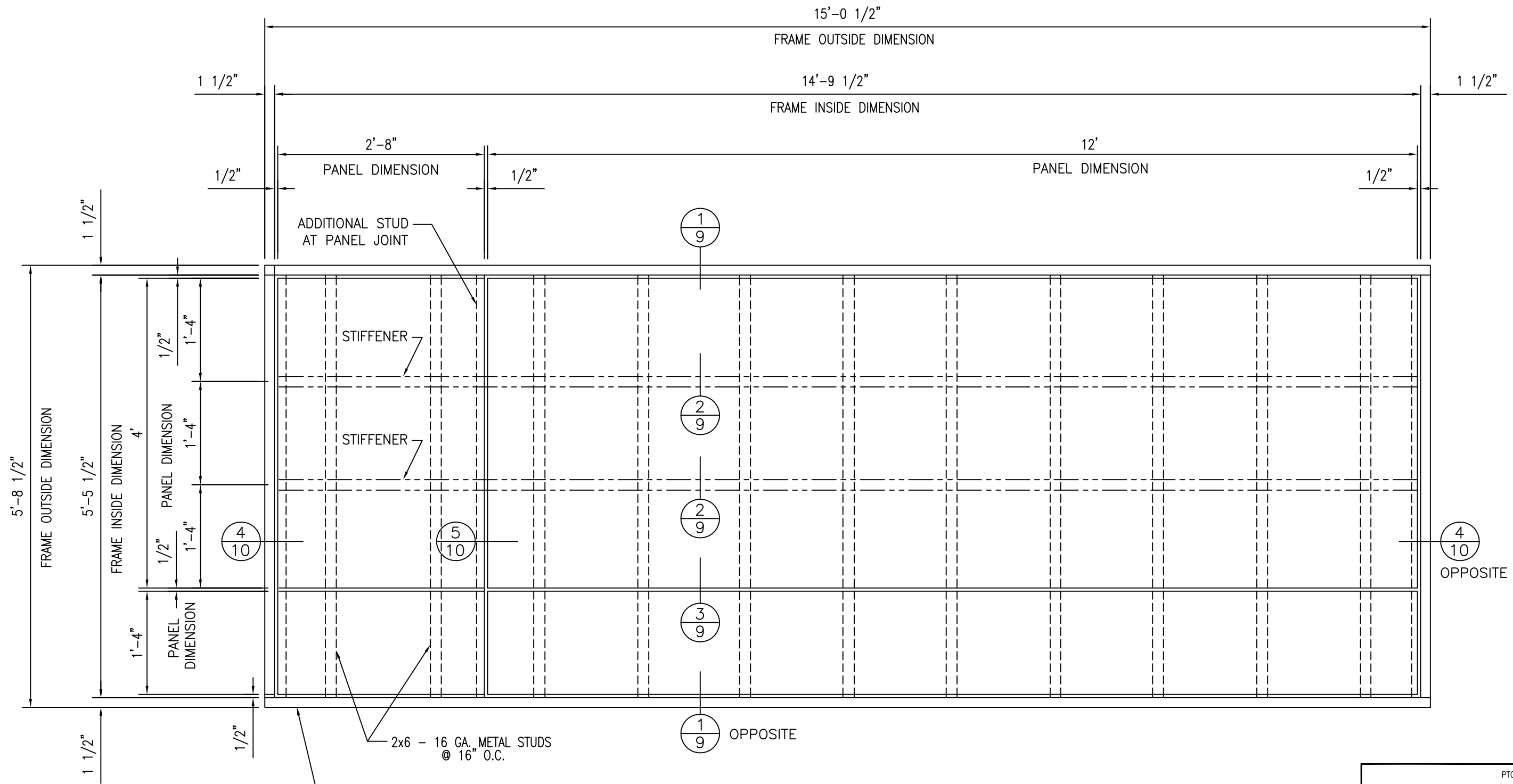
REV.	BY	DATE	CHANGE
7	RJA	4/14/17	NAME CHANGE TO MITSUBISHI CHEMICAL COMPOSITES AMERICA
6	RJA	4/24/14	UPDATE TO CURRENT EDITION OF THE FBC
5	RJA	6/10/12	UPDATE TO 2010 FBC
4	TH	1/09/12	MITSUBISHI PLASTICS COMPOSITES WAS MITSUBISHI CHEMICAL
3	TH	9/04/09	REMOVED PE SIGNATURE BLOCK & S&P WAS CAY ARCHITECTURAL PRODUCTS

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS DECIMALS ANGLES
± 1/32 .XX ± .01 ± 1/2
 .XXX ± .005

CONTRACT NO.	
APPROVALS	DATE
DRAWN	
ENGINEERING	MS 11/11/02
PROJ MGMT	
PRODUCTION	

MATERIAL
4MM & 6MM ALPOLIC
& 4MM ALPOLIC/fr
FINISH
DO NOT SCALE DRAWING

SIZE	CAGE CODE	DWG NO.	REV
B		MPCA0001	7
SCALE SHOWN		SHEET	7 OF 11



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PANEL ELEVATION

3/4" = 1'-0"

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5	RJA	6/10/12	UPDATE TO 2010 FBC
4	TH	1/09/12	MITSUBISHI PLASTICS COMPOSITES HAS MITSUBISHI CHEMICAL
3	TH	9/04/09	REVISION FOR SIGNATURE BLOCK & BY USE OF INSTRUCTIONAL PRODUCTS

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		
FRACTIONS ± 1/32	DECIMALS .XX ± .01 .XXX ± .005	ANGLES ± 1/2
MATERIAL 4MM & 6MM ALPOLIC & 4MM ALPOLIC/fr	FINISH	
DO NOT SCALE DRAWING		

CONTRACT NO.	
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DRAWN	
ENGINEERING	MS 11/11/02
PROJ MGMT	
PRODUCTION	

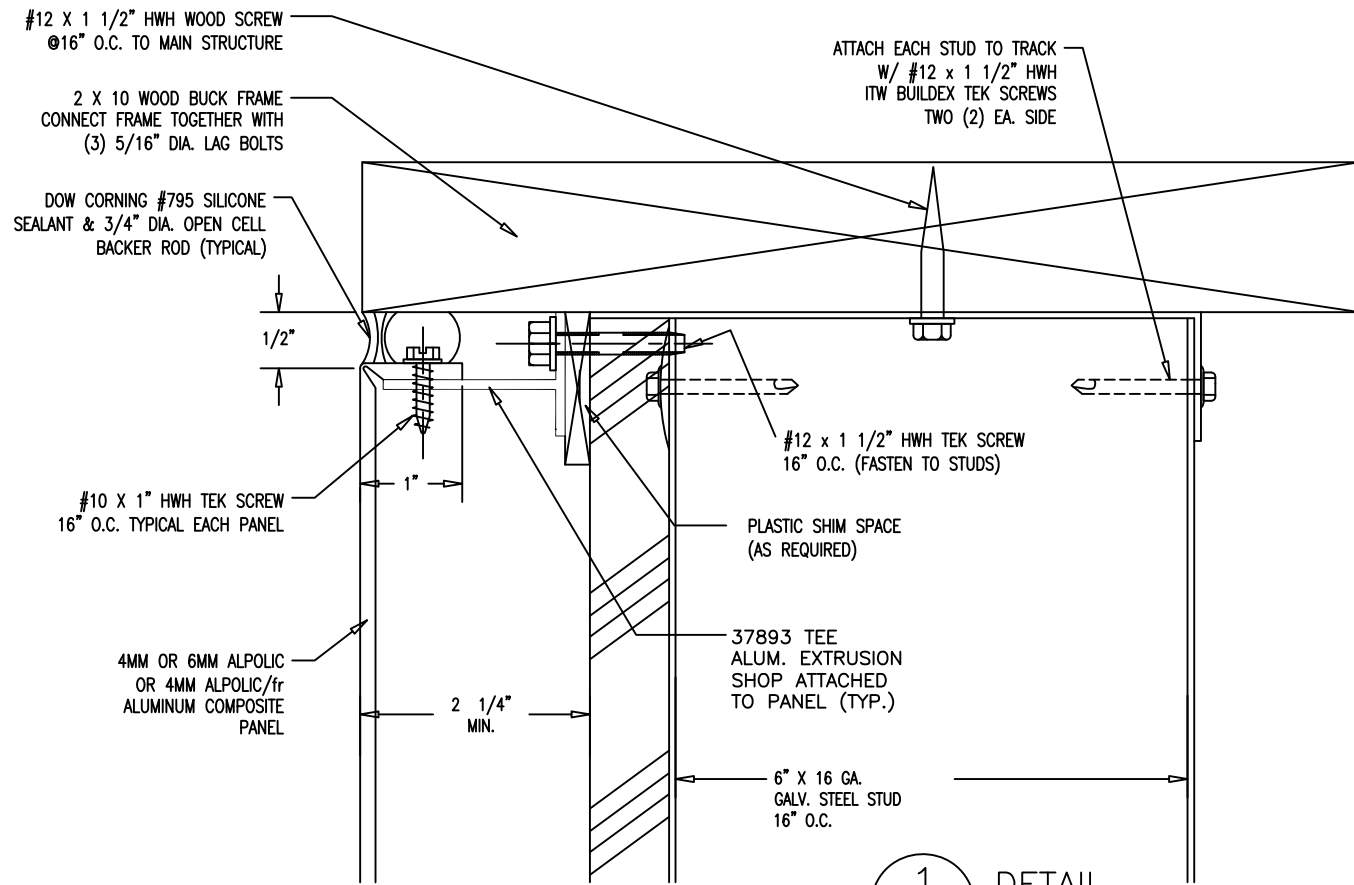
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SAF METAL FABRICATION

MITSUBISHI CHEMICAL COMPOSITES AMERICA, INC.

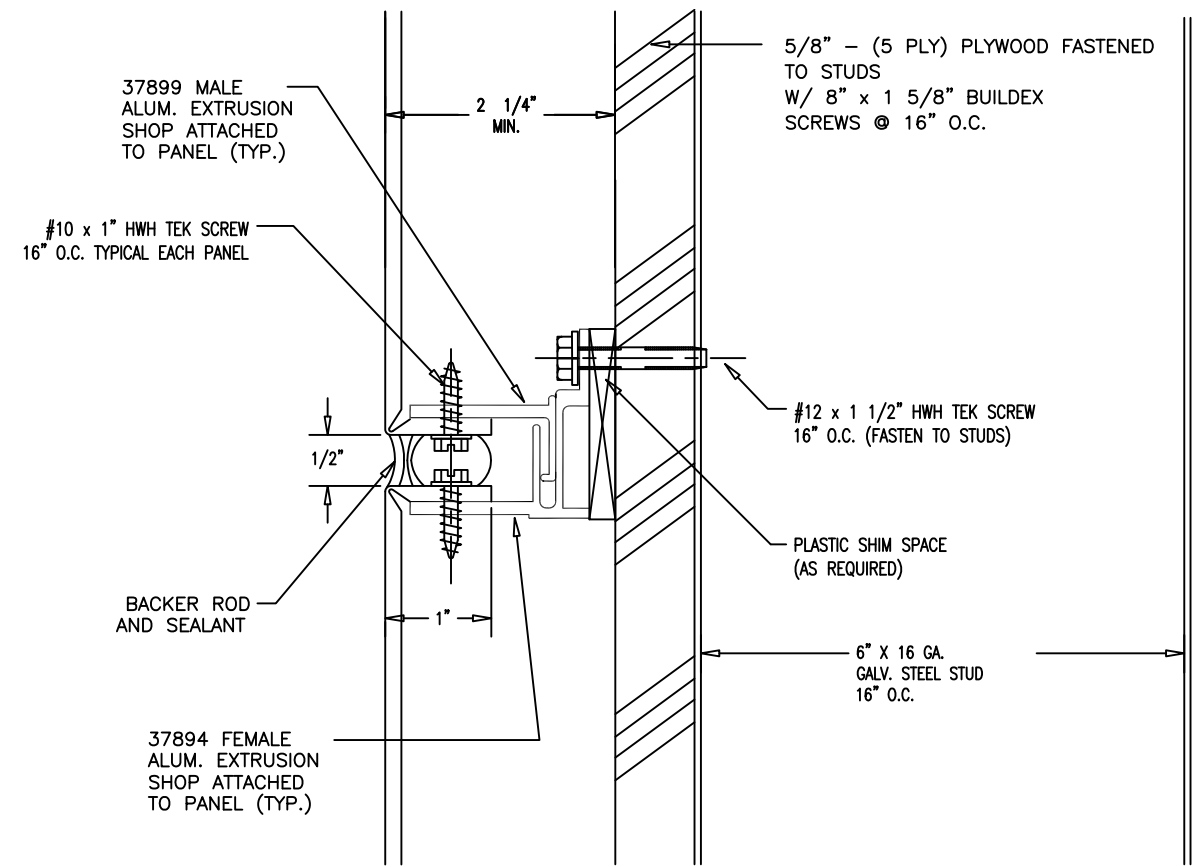
ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEMS

SIZE B	CAGE CODE	DWG NO. MPCA0001	REV 7
SCALE SHOWN		SHEET 8 OF 11	

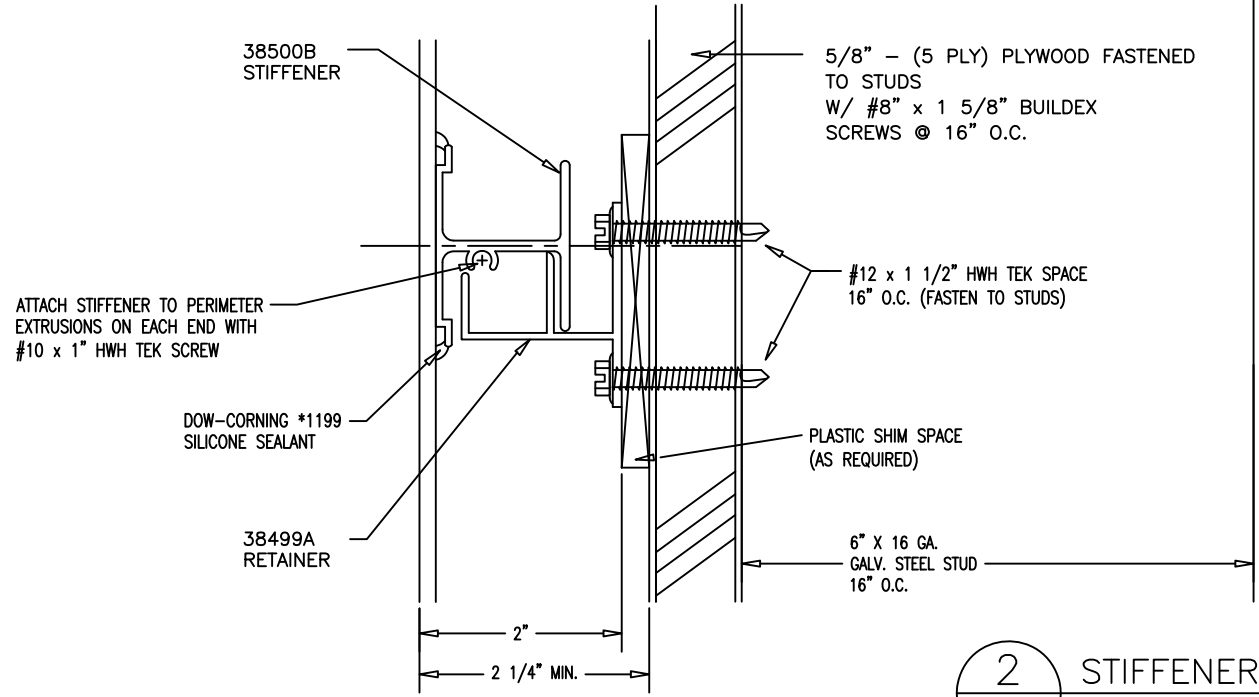


1
9
DETAIL
SCALE: 6" = 1'

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'



2
9
STIFFENER DETAIL
SCALE: 6" = 1'

Robert J. Amoruso, P.E.
FL P.E. No. 49752

REV.	BY	DATE	CHANGE
7	RJA	4/14/17	NAME CHANGE TO MITSUBISHI CHEMICAL COMPOSITES AMERICA
6	RJA	4/24/14	UPDATE TO CURRENT EDITION OF THE PDC
5	RJA	6/10/12	UPDATE TO 2010 PDC
4	TH	1/09/12	REVISIONS PER MITSUBISHI CHEMICAL COMPOSITES
3	TH	9/04/09	REVISIONS PER MITSUBISHI CHEMICAL COMPOSITES

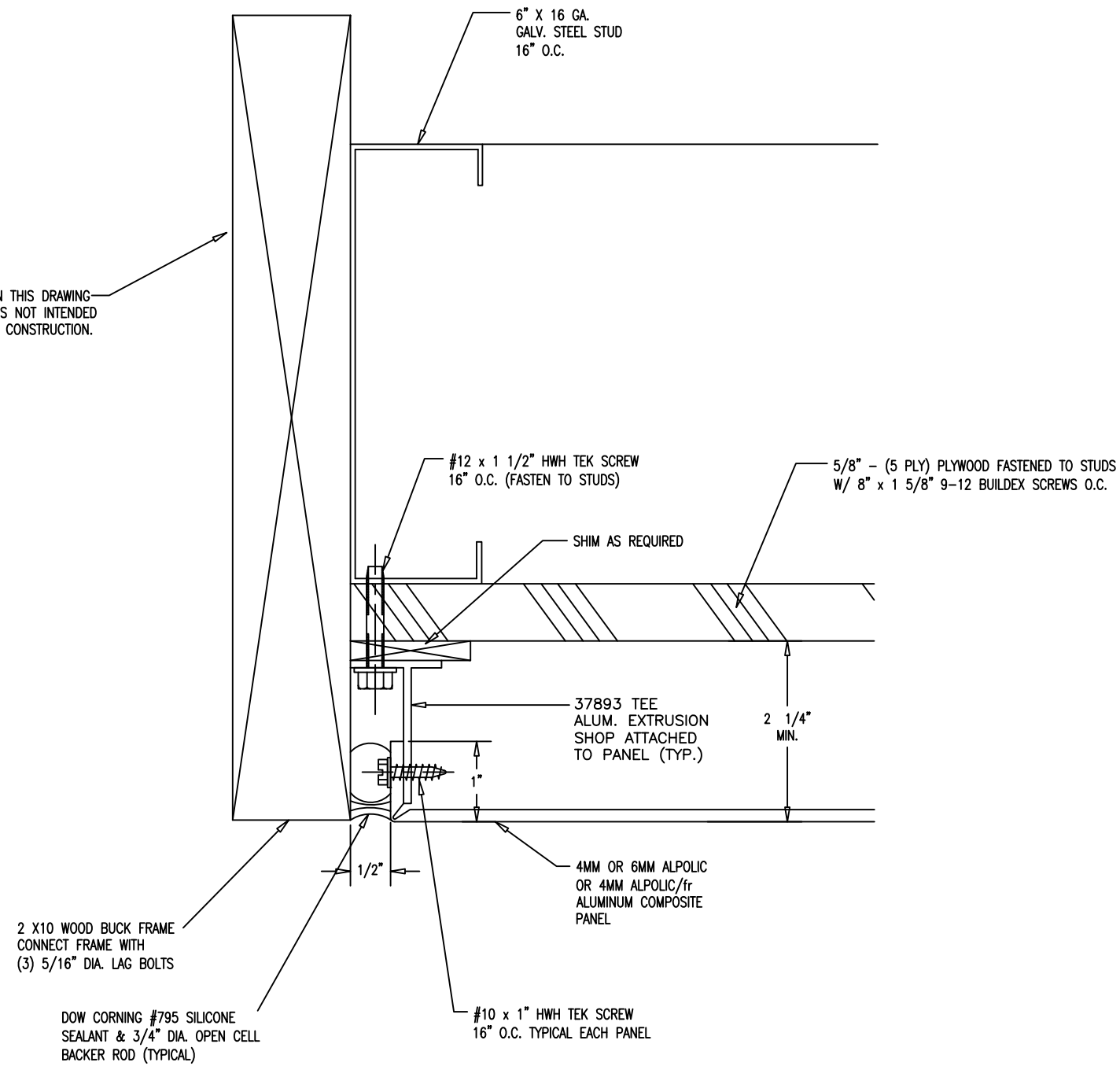
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		
FRACTIONS	DECIMALS	ANGLES
± 1/32	.XX ± .01	± 1/2
	.XXX ± .005	

CONTRACT NO.	
APPROVALS	DATE
DRAWN	
ENGINEERING	MS 11/11/02
PROJ MGMT	
PRODUCTION	

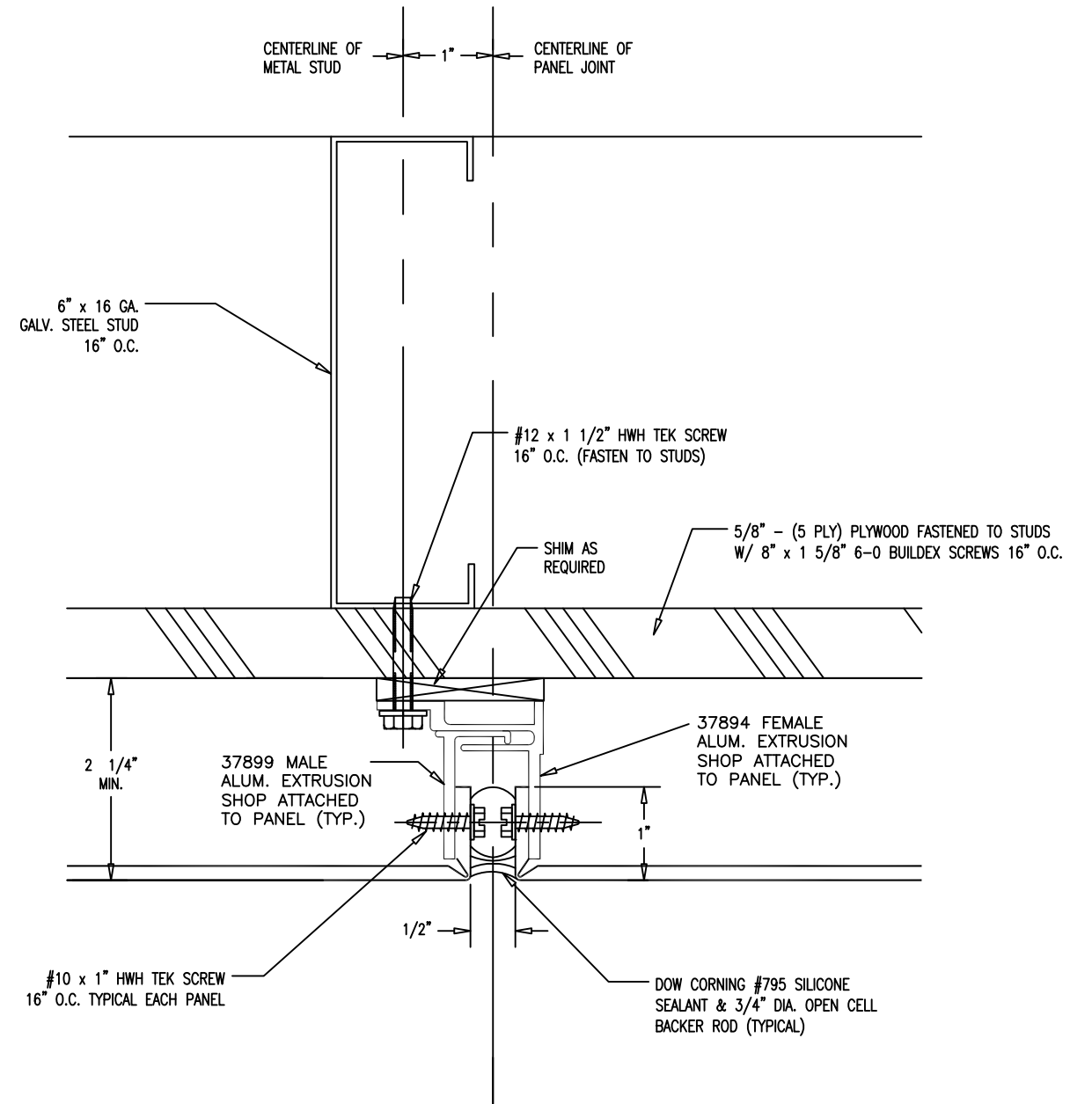
PTC PRODUCT DESIGN GROUP, LLC
PO BOX 520775
LONGWOOD, FLORIDA 32752
FBPE C.A. NO. 25935
Phone: 321.690.1788, Fax: 321.690.1789
Email: info@ptc-corp.com

SAF METAL FABRICATION	
MITSUBISHI CHEMICAL COMPOSITES AMERICA, INC.	
ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEMS	
SIZE	CAGE CODE
B	
DWG NO.	MPCA0001
REV	7
SCALE SHOWN	SHEET 9 OF 11

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'

Robert J. Amoruso, P.E.
FL P.E. No. 49752

REV.	BY	DATE	CHANGE
7	RJA	4/14/17	DATE CHANGE TO MITSUBISHI CHEMICAL COMPOSITES AMERICA
6	RJA	4/24/14	UPDATE TO CURRENT EDITION OF THE PDC
5	RJA	6/10/12	UPDATE TO 2010 PDC
4	TH	1/09/12	MITSUBISHI PLASTICS COMPOSITES AND MITSUBISHI CHEMICAL
3	TH	9/04/09	REDESIGN THE SHIMMING BLOCK & SET THE OFF ARCHITECTURAL PRODUCTS

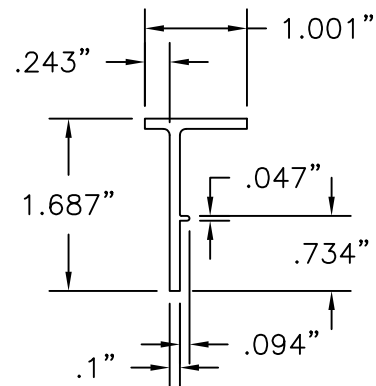
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		
FRACTIONS	DECIMALS	ANGLES
± 1/32	.XX ± .01	± 1/2
	.XXX ± .005	

CONTRACT NO.	
APPROVALS	DATE
DRAWN	
ENGINEERING	MS 11/11/02
PROJ MGMT	
PRODUCTION	

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SAF METAL FABRICATION	
MITSUBISHI CHEMICAL COMPOSITES AMERICA, INC.	
ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEMS	
SIZE	CAGE CODE
B	
DWG NO.	REV
MPCA0001	7
SCALE SHOWN	SHEET 10 OF 11

DO NOT SCALE DRAWING

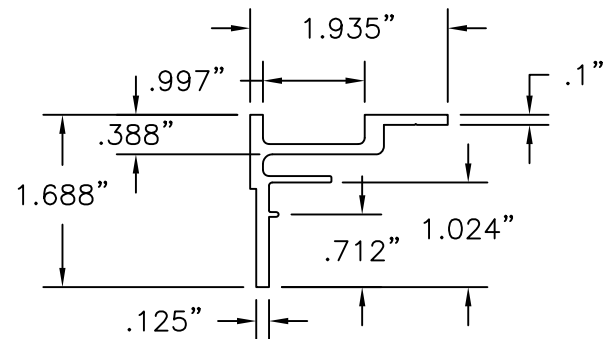


ACM TERMINATOR

EXTRUDED ALUMINUM 6063-T6

Die Data: #SAF-37893

Area = .265
 Wt./Ft. = .318
 Perim. = 5.483
 Circle Size = 0-3
 lx = .078, ly = .011
 Sx = .070, Sy = .018
 Cgy = 1.116, Cgx = .628

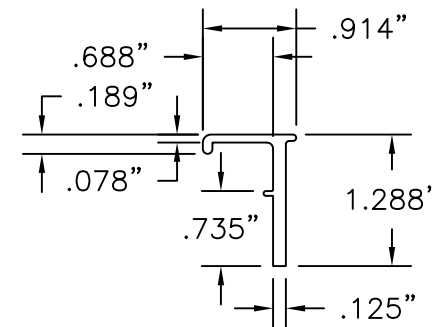


ACM FEMALE

EXTRUDED ALUMINUM 6063-T6

Die Data: #SAF-37894

Area = .499
 Wt./Ft. = .599
 Perim. = 9.154
 Circle Size = 0-3
 lx = .100, ly = .161
 Sx = .086, Sy = .120
 Cgy = 1.160, Cgx = 1.348

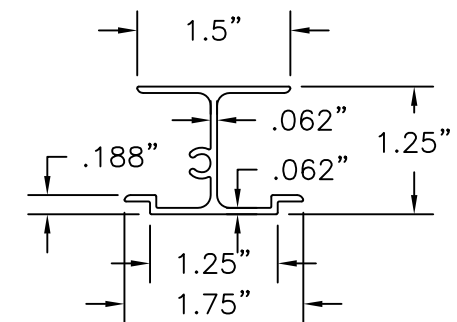


ACM MALE

EXTRUDED ALUMINUM 6063-T6

Die Data: #SAF-37899

Area = .234
 Wt./Ft. = .281
 Perim. = 4.646
 Circle Size = 0-3
 lx = .039, ly = .012
 Sx = .048, Sy = .019
 Cgy = .819, Cgx = .633

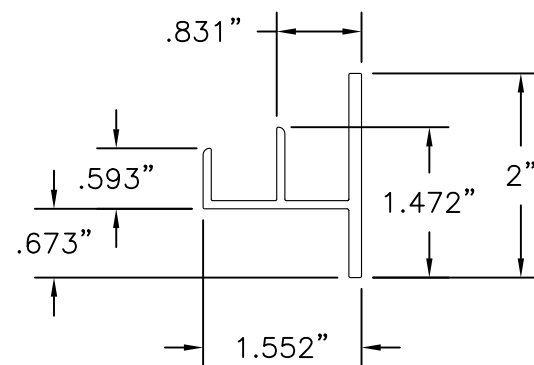


PANEL STIFFENER

EXTRUDED ALUMINUM 6063-T6

Die Data: #SAF-38500B

Area = .325
 Wt./Ft. = .390
 Perim. = 9.749
 Circle Size = 0-3
 lx = .081, ly = .049
 Sx = .120, Sy = .056
 Cgy = .676, Cgx = .886



RETAINER

EXTRUDED ALUMINUM 6063-T6

Die Data: #SAF-38499A

Area = .4610
 Wt./Ft. = .542
 Perim. = 9.4387
 Circle Size = 0-3
 lx = .095, ly = .1262
 Sx = .09, Sy = .117

Robert J. Amoruso, P.E.
 FL P.E. No. 49752

REV.	BY	DATE	CHANGE
7	RJA	4/14/17	NAME CHANGE TO MITSUBISHI CHEMICAL COMPOSITES AMERICA
6	RJA	4/24/14	UPDATE TO CURRENT EDITION OF THE FBC
5	RJA	6/10/12	UPDATE TO 2010 REG. SHEET ADDED FOR SAF EXTERIOR

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		
FRACTIONS	DECIMALS	ANGLES
± 1/32	.XX ± .01	± 1/2
	.XXX ± .005	
MATERIAL 4MM & 6MM ALPOLIC & 4MM ALPOLIC/fr		
FINISH		
DO NOT SCALE DRAWING		

CONTRACT NO.	
APPROVALS	DATE
DRAWN	
ENGINEERING	MS 11/11/02
PROJ MGMT	
PRODUCTION	

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PTC

SAF METAL FABRICATION

MITSUBISHI CHEMICAL COMPOSITES AMERICA, INC.

ALPOLIC and ALPOLIC/fr
 COMPOSITE WALL PANEL SYSTEMS

SIZE	CAGE CODE	DWG NO.	REV
B		MPCA0001	7
SCALE SHOWN		SHEET 11 OF 11	