Architectural Testing

TEST REPORT

Report No.: A6303.08-250-44

Rendered to:

DEALERS SUPPLY AND LUMBER CO., LLC
Greenville, South Carolina

PRODUCT TYPE: Double Hung Window
SERIES/MODEL: VictorBilt Palmetto Series Double Hung

SPECIFICATION: AAMA/WDMA/CSA 101/I.S.2/A440-08, *NAFS - North American Fenestration Standard/Specification for Windows, Doors, and Skylights*

Test Dates:	01/25/11
Through:	01/28/11
Report Date:	03/26/12
Test Record Retention Date:	01/28/15

Architectural Testing

Summary of Results

	Summary of Results	
Title	**Test Specimen #1**	**Test Specimen #2**
Primary Product Designator	Class LC-PG25 1219 x 2032 (48 x 80)-H	Class LC-PG35 1219 x 2032 (48 x 80)-H
Design Pressure	±1200 Pa (±25.06 psf)	±1680 Pa (±35.09 psf)
Air Infiltration	0.8 L/s/m^2 (0.16 cfm/ft^2)	N/A
Water Penetration Resistance Test Pressure	290 Pa (6.06 psf)	N/A

	Summary of Results	
Title	**Test Specimen #3**	**Test Specimen #4**
Primary Product Designator	Class LC-PG50 1118* x 1600 (44 x 63*)-H	Class LC-PG40 965 x 1981* (38 x 78*)-H
Design Pressure	±2400 Pa (±50.13 psf)	±1920 Pa (±40.10 psf)
Air Infiltration	N/A	N/A
Water Penetration Resistance Test Pressure	440 Pa (9.19 psf)	N/A

	Summary of Results
Title	**Test Specimen #5**
Primary Product Designator	Class LC-PG50 965 x 1981* (38 x 78*)-H
Design Pressure	±2400 Pa (±50.13 psf)
Air Infiltration	N/A
Water Penetration Resistance Test Pressure	360 Pa (7.52 psf)

Test Completion Date: 01/28/2011

Reference must be made to Report No. A6303.08-250-44, dated 03/26/12 for complete test specimen description and detailed test results.

1.0 Report Issued To: Dealers Supply and Lumber Co., LLC
105 Airport Drive
Greenville, South Carolina 29607

2.0 Test Laboratory: Architectural Testing, Inc.
10 Tracy Road
Chelmsford, Massachusetts 01824
978-244-9300

3.0 Project Summary:

3.1 Product Type: Double Hung Window

3.2 Series/Model: VictorBilt Palmetto Series Double Hung

3.3 Compliance Statement: Results obtained are tested values and were secured by using the designated test method(s). The specimens tested successfully met the performance requirements for the following ratings: Test Specimen #1: Class LC-PG25 1219 x 2032 (48 x 80)-H; Test Specimen #2: Class LC-PG35 1219 x 2032 (48 x 80)-H; Test Specimen #3: Class LC-PG50 1118 x 1600* (44 x 63*)-H; Test Specimen #4: Class LC-PG40 965 x 1981* (38 x 78*)-H; Test Specimen #5: Class LC-PG50 965 x 1981* (38 x 78*)-H.

This product was originally tested as the Series/Model Noah Merrill Double Hung and is a reissue of the original Report No. A6303.03-250-44. This report is reissued in the name of Dealers Supply and Lumber Co., LLC through written authorization by Mathews Brothers Company.

***General Note**: An asterisk (*) next to the size designation indicates that the size tested for optional performance was smaller than the Gateway test size for the product type and class.*

3.4 Test Dates: 01/25/2011 - 01/28/2011

3.5 Test Location: Architectural Testing, Inc. test facility in Chelmsford, Massachusetts. Calibration of test equipment was performed by Architectural Testing in accordance with AAMA 205-01 "In-Plant Testing Guidelines for Manufacturers and Independent Laboratories".

3.6 Test Sample Source: The test specimens were provided by the client. Representative samples of the test specimens will be retained by Architectural Testing for a minimum of four years from the test completion date.

3.7 Drawing Reference: The test specimen drawings have been reviewed by Architectural Testing and are representative of the test specimens reported herein. Test specimen construction was verified by Architectural Testing per the drawings located in Appendix C. Any deviations are documented herein or on the drawings.

3.8 List of Official Observers:

Name	Company
Steve Hart	Mathews Brothers Company
Rob Schrader	Mikron Industries, Inc.
J.P. McDonald	Architectural Testing, Inc.
Dan Carroll	Architectural Testing, Inc.
Rob Meegan	Architectural Testing, Inc.

4.0 Test Specification(s):

AAMA/WDMA/CSA 101/I.S.2/A440-08, *NAFS - North American Fenestration Standard/Specification for Windows, Doors, and Skylights*

5.0 Test Specimen Description:

5.1 Product Sizes:

Test Specimen #1:

Overall Area: 2.5 m^2 (26.7 ft^2)	**Width**		**Height**	
	millimeters	**inches**	**millimeters**	**inches**
Overall size	1219	48	2032	80
Exterior sash	1127	44-3/8	991	39
Interior sash	1140	44-7/8	1010	39-3/4
Screen	1165	45-7/8	1981	78

Test Specimen #2:

Overall Area: 2.5 m^2 (26.7 ft^2)	**Width**		**Height**	
	millimeters	**inches**	**millimeters**	**inches**
Overall size	1219	48	2032	80
Exterior sash	1127	44-3/8	991	39
Interior sash	1140	44-7/8	1010	39-3/4
Screen	1165	45-7/8	1981	78

5.0 Test Specimen Description: Continued

Test Specimen #3:

Overall Area: 1.8 m^2 (19.3 ft^2)	**Width**		**Height**	
	millimeters	**inches**	**millimeters**	**inches**
Overall size	1118	44	1600	63
Exterior sash	1026	40-3/8	775	30-1/2
Interior sash	1038	40-7/8	784	30-7/8
Screen	1067	42	1549	61

Test Specimen #4:

Overall Area: 1.9 m^2 (20.6 ft^2)	**Width**		**Height**	
	millimeters	**inches**	**millimeters**	**inches**
Overall size	965	38	1981	78
Exterior sash	873	34-3/8	965	38
Interior sash	889	35	975	38-3/8
Screen	889	35	1930	76

Test Specimen #5:

Overall Area: 1.9 m^2 (20.6 ft^2)	**Width**		**Height**	
	millimeters	**inches**	**millimeters**	**inches**
Overall size	965	38	1981	78
Exterior sash	873	34-3/8	965	38
Interior sash	889	35	975	38-3/8
Screen	889	35	1930	76

The following descriptions apply to all specimens.

5.2 Frame Construction:

Frame Member	**Material**	**Description**
Head, sill, jambs	PVC wood clad	Extruded

	Joinery Type	**Detail**
All corners	Mitered and welded	Thermally welded

5.0 Test Specimen Description: (Continued)

5.3 Sash Construction:

Sash Member	Species/Material/ Alloy	Other
All rails and stiles	PVC wood clad	Extruded

	Joinery Type	Detail
All corners	Coped, butted and sealed	#6 x 2" pan head screw; one at each corner

5.4 Weatherstripping:

Description	Quantity	Location
0.187" backed by 0.250" high polypile	2 Rows	Jamb liners
Foam bulb gasket	2 Rows	Top rail
Hollow bulb gasket	1 Row	Exterior meeting rail
Foam bulb gasket	1 Row	Bottom rail
Foam bulb gasket	1 Row	Sill

5.5 Glazing:

Glass Type	Spacer Type	Interior Lite	Exterior Lite	Glazing Method
7/8" IG	Structural foam	1/8" annealed	1/8" annealed	The glass was set from the exterior onto a bead of silicone and secured with PVC snap-in glazing beads.

Test Specimen #1

Location	Quantity	Daylight Opening		Glass Bite
		millimeters	inches	
Interior and exterior sash	1	1041 x 889	41 x 35	1/2"

Test Specimen #2

Location	Quantity	Daylight Opening		Glass Bite
		millimeters	inches	
Interior and exterior sash	1	1041 x 889	41 x 35	1/2"

5.0 Test Specimen Description: (Continued)

5.5 Glazing: Continued

Test Specimen #3

Location	Quantity	Daylight Opening		Glass Bite
		millimeters	inches	
Interior and exterior sash	1	940 x 673	37 x 26-1/2	1/2"

Test Specimen #4

Location	Quantity	Daylight Opening		Glass Bite
		millimeters	inches	
Interior and exterior sash	1	787 x 864	31 x 34	1/2"

Test Specimen #5

Location	Quantity	Daylight Opening		Glass Bite
		millimeters	Inches	
Interior and exterior sash	1	787 x 864	31 x 34	1/2"

5.6 Drainage: A sloped sill was utilized.

Drainage Method	Size	Quantity	Location
Weep hole	1/4"	2	Bottom and exterior meeting rails, 2-1/2" from ends

5.7 Hardware:

Description	Quantity	Location
Metal sweep lock with keeper	2	Meeting rail 10-1/2" from each end
Plastic tilt latch	2	Interior meeting rail and top rail ends
Metal pivot bar	2	Exterior meeting rail and bottom rail ends
Constant force balance	4	Two per jamb

5.0 Test Specimen Description: (Continued)

5.8 Reinforcement:

Test Specimen #1: No reinforcement was utilized.

Test Specimen #2

Drawing Number	Location	Material
MathewsRebar	All sash rails	Aluminum

Test Specimen #3

Drawing Number	Location	Material
MathewsRebar	All sash rails	Aluminum

Test Specimen #4

Drawing Number	Location	Material
MathewsRebar	All sash rails	Aluminum

Test Specimen #5

Drawing Number	Location	Material
MathewsRebar	All sash rails and stiles	Aluminum

5.9 Screen Construction:

Frame Material	Corner Construction	Mesh Type	Mesh Attachment Method
Aluminum	Mitered and keyed	Fiberglass	Flexible vinyl spline

6.0 Installation:

The specimens were installed into a Spruce-Pine-Fir wood buck. The rough openings allowed for a 1/4" shim space. The exterior perimeter of the windows were sealed with caulking.

Location	Anchor Description	Anchor Location
Head, jambs, sill	1" drywall screw	4" on center through mounting fin

7.0 Test Results: The temperature during testing was 14°C (57°F). The results are tabulated as follows:

Test Specimen #1:

Title of Test	Results	Allowed	Note
Operating Force, per ASTM E 2068	Initiate motion: 180 N (40 lbf) Maintain motion: 133 N (30 lbf) Locks: 22 N (5 lbf)	Report Only 180 N (40 lbf) max. 100 N (22.5 lbf) max.	
Air Leakage, Infiltration per ASTM E 283 at 75 Pa (1.6 psf)	0.8 L/s/m^2 (0.16 cfm/ft^2)	1.5 L/s/m^2 (0.3 cfm/ft^2) max.	1
Water Penetration	N/A	N/A	2
Uniform Load Deflection, per ASTM E 330 taken at meeting rail +1200 Pa (+25.06 psf) -1200 Pa (-25.06 psf)	 10.4 mm (0.41") 13.2 mm (0.52")	 Report Only	3, 4, 5
Uniform Load Structural, per ASTM E 330 taken at meeting rail +1800 Pa (+37.59 psf) -1800 Pa (-37.59 psf)	 0.5 mm (0.02") 0.3 mm (0.01")	 4.6 mm (0.18") max. 4.6 mm (0.18") max.	4, 5
Forced Entry Resistance, per ASTM F 588, Type: A - Grade: 10	Pass	No entry	
Thermoplastic Corner Weld	Pass	Meets as stated	
Deglazing, per ASTM E 987 Operating direction, 320 N (70 lbf) Remaining direction, 230 N (50 lbf)	 Pass Pass	 Meets as stated Meets as stated	
Optional Performance			
Water Penetration, per ASTM E 547 at 290 Pa (6.06 psf)	Pass	No leakage	6

7.0 Test Results: (Continued)

Test Specimen #2:

Optional Performance			
Title of Test	**Results**	**Allowed**	**Note**
Uniform Load Deflection, per ASTM E 330 taken at meeting rail +1680 Pa (+35.09 psf) -1680 Pa (-35.09 psf)	 25.4 mm (1.00") 34.5 mm (1.36")	 Report Only	 3, 4, 5
Uniform Load Structural, per ASTM E 330 taken at meeting rail +2520 Pa (+52.63 psf) -2520 Pa (-52.63 psf)	 1.3 mm (0.05") 0.3 mm (0.01")	 4.6 mm (0.18") max. 4.6 mm (0.18") max.	 4, 5

Test Specimen #3:

Optional Performance			
Title of Test	**Results**	**Allowed**	**Note**
Water Penetration, per ASTM E 547 at 440 Pa (9.19 psf)	Pass	No leakage	6
Uniform Load Deflection, per ASTM E 330 taken at meeting rail +2400 Pa (+50.13 psf) -2400 Pa (-50.13 psf)	 16.3 mm (0.64") 19.3 mm (0.76")	 Report Only	 3, 4, 5
Uniform Load Structural, per ASTM E 330 taken at meeting rail +3600 Pa (+75.19 psf) -3600 Pa (-75.19 psf)	 0.3 mm (0.01") 1.0 mm (0.04")	 4.1 mm (0.16") max. 4.1 mm (0.16") max.	 4, 5

7.0 Test Results: (Continued)

Test Specimen #4:

Optional Performance			
Title of Test	**Results**	**Allowed**	**Note**
Uniform Load Deflection, per ASTM E 330 taken at right stile; lower sash			
+1920 Pa (+40.10 psf)	16.3 mm (0.64")		
-1920 Pa (-40.10 psf)	1.3 mm (0.05")	Report Only	3, 4, 5
Uniform Load Structural, per ASTM E 330 taken at right stile; lower sash			
+2880 Pa (+60.15 psf)	1.3 mm (0.05")	3.8 mm (0.15") max.	
-2880 Pa (-60.15 psf)	1.0 mm (0.02")	3.8 mm (0.15") max.	4, 5

Test Specimen #5:

Optional Performance			
Title of Test	**Results**	**Allowed**	**Note**
Water Penetration, per ASTM E 547 at 360 Pa (7.52 psf)	Pass	No leakage	6
Uniform Load Deflection, per ASTM E 330 taken at right stile; lower sash			
+2400 Pa (+50.13 psf)	12.2 mm (0.48")		
-2400 Pa (-50.13 psf)	2.5 mm (0.10")	Report Only	3, 4, 5
Uniform Load Structural, per ASTM E 330 taken at right stile; lower sash			
+3600 Pa (+75.19 psf)	0.8 mm (0.03")	3.8 mm (0.15") max.	
-3600 Pa (-75.19 psf)	<0.3 mm (<0.01")	3.8 mm (0.15") max.	4, 5

Note 1: The tested specimen meets (or exceeds) the performance levels specified in AAMA/WDMA/CSA 101/I.S.2/A440 for air leakage resistance.

Note 2: The client opted to start at a pressure higher than the minimum required. Test results are reported under Optional Performance.

Note 3: The deflections reported are not limited by AAMA/WDMA/CSA 101/I.S.2/A440 for this product designation. The deflection data is recorded in this report for special code compliance and information only.

7.0 Test Results: (Continued)

Note 4: Loads were held for 10 seconds.

Note 5: Tape and film were used to seal against air leakage during structural testing. In our opinion, the tape and film did not influence the results of the test.

Note 6: With and without insect screen.

This report is reissued in the name of Dealers Supply and Lumber Co., LLC, through written authorization of Mathews Brothers Company to whom the original report was rendered. The original Mathews Brothers Report No. is A6303.03-250-44.

The service life of this report will expire on the stated Test Record Retention End Date, at which time such materials as drawings, data sheets, samples of test specimens, copies of this report, and any other pertinent project documentation, shall be discarded without notice.

If test specimen contains glazing, no conclusions of any kind regarding the adequacy or inadequacy of the glass in any glazed test specimen(s) can be made. This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. It is the exclusive property of the client so named herein and relates only to the specimen(s) tested. This report may not be reproduced, except in full, without the written approval of Architectural Testing, Inc.

For ARCHITECTURAL TESTING, Inc.

Dan Carroll /dr
Digitally Signed by: Diane Robitaille for Dan Carroll

Dan Carroll
Technician

Digitally Signed by: JP McDonald

J.P. McDonald
Director – Regional Operations

DJC:dr

Attachments (pages): This report is complete only when all attachments listed are included.
Appendix-A: Alteration Addendum (1)
Appendix-B: Photographs (1)
Appendix-B: Drawings (18)

Appendix A

Alteration Addendum

***Note**: No alterations were required.*

Appendix B

Photographs

Photo No. 1
Test Specimen #1
Exterior View of Specimen

Photo No. 2
Test Specimen #1
Interior View of Specimen

Appendix C

Drawings

PARTS LIST 1700 SERIES TILT DOUBLE HUNG

2/25/2011

PART NO.	DESCRIPTION	COMPANY	REMARKS
8336	SASH BOTTOM RAIL	MIKRON IND. INC.	
8337	GLAZING BEAD	MIKRON IND. INC.	
8338	SASH LOCK RAIL	MIKRON IND. INC.	
8339	SASH KEEPER RAIL	MIKRON IND. INC.	
8340	SASH STILE	MIKRON IND. INC.	
8654	SILL NOSE	MIKRON IND. INC.	
8655	BRICKMOLD	MIKRON IND. INC.	
~~8801~~	~~SASH STILE (OFFSET LINER, EQUAL LITE)~~	~~MIKRON IND. INC.~~	
8866	FRAME HEAD AND JAMB	MIKRON IND. INC.	
8867	FRAME SILL	MIKRON IND. INC.	
8384	SASH TOP RAIL	MIKRON IND. INC.	
~~8871~~	~~SASH LIFT RAIL~~	~~MIKRON IND. INC.~~	
6633	SETTING BLOCK	MIKRON IND. INC.	
9237	BALANCE COVER	MIKRON IND. INC.	
PP1712	NAILING FIN	AMESBURY/PPI	PP1989 LONG
PP1963	HEAD PARTING STOP	AMESBURY/PPI	
12246	SASH TOP & BOTTOM RAIL WEATHERSTRIP	AMESBURY/FOAM-TITE	
45WHGS	JAMB LINER WEATHERSTRIP	AMESBURY	.250 X .187 PILE
PP1727	CHECK RAIL WEATHERSTRIP	AMESBURY/FOAM-TITE	
32007	FRAME SILL WEATHERSTRIP	AMESBURY/FOAM-TITE	
PP1965	JAMB LINERS	AMESBURY/BS	EZ-TILT
PP1964	STEP LINERS	AMESBURY/BS	
716/765/523	BALANCE	AMESBURY/BS	
261000WHAF0375S	DUST PLUG	AMESBURY/TEXTILE	
	FRAME ASSEMBLY SCREW		#8 X 1-1/2"
	SASH ASSEMBLY SCREW		#6 X 1-1/4"
10123-RIGHT 10124-LEFT	SASH LOCK	AMESBURY	
10129	SASH KEEPER	AMESBURY	#6 SCREW W/ #4 HEAD
10004 RIGHT 10179 LEFT	SASH TILT LATCH	AMESBURY	#4 NOSE
10130	SASH LIFT HANDLE	AMESBURY	
23148	SASH PIVOT BAR INLINE LINER	AMESBURY	
FP1001	SASH PIVOT BAR OFFSET LINER	AMESBURY	
10-24 X 5/8	JAMB ADJUSTER	UNEEDA	

A9702

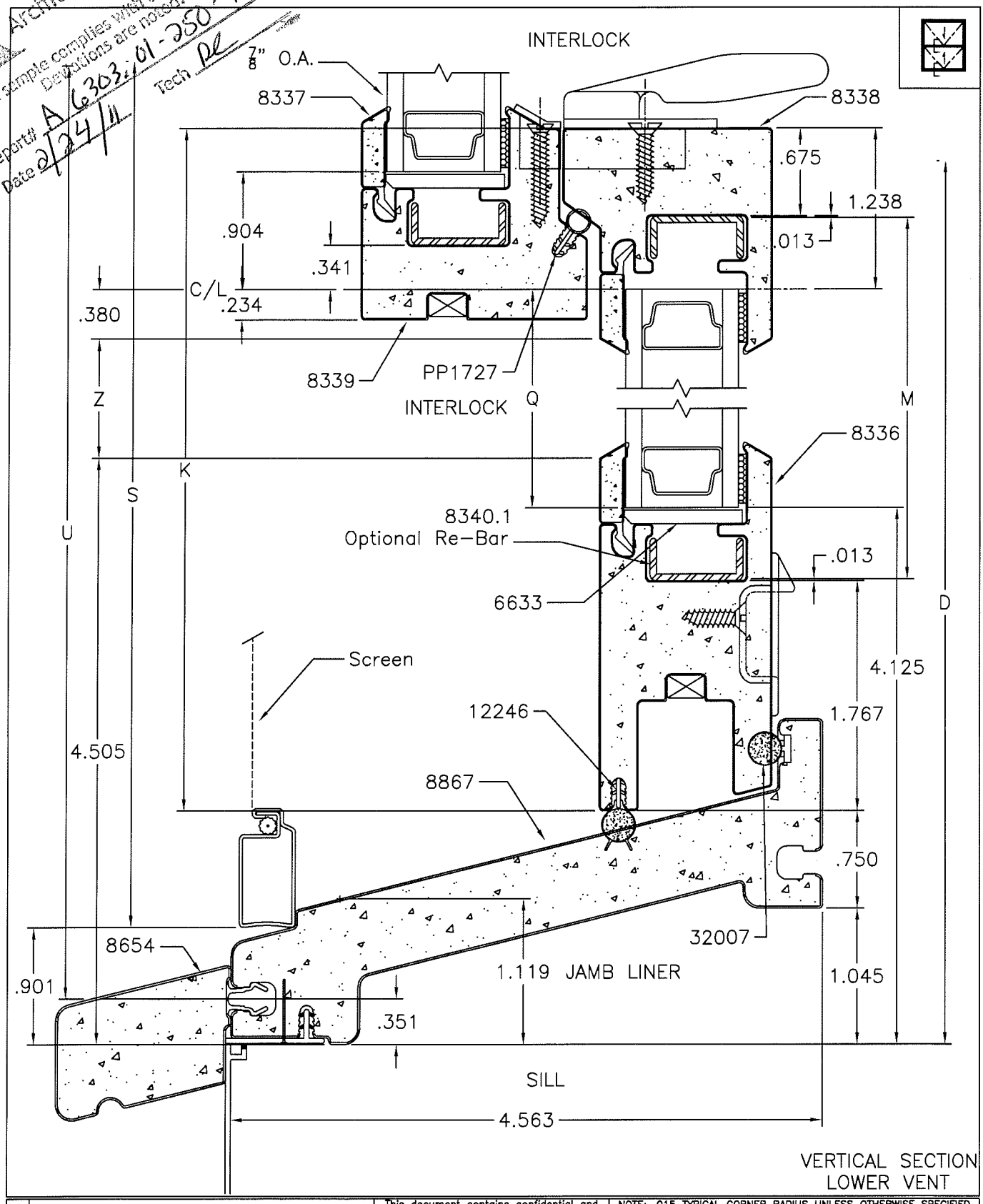
Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# A6303.01-250-44

Date 2/24/11 Tech AE

Architectural Testing
Test sample complies with these details.
Deviations are noted.
Report# A6303.01-350-44
Date 2/24/11
Tech RL



VERTICAL SECTION
LOWER VENT

NOTE: .015 TYPICAL CORNER RADIUS UNLESS OTHERWISE SPECIFIED

DATE: 8/6/03	TYP. WALL:
SCALE: 1=1	DESIGNED BY:
AREA:	DRAFTED BY: RS
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DWG. NAME:	A9704.3.1

MIKRON

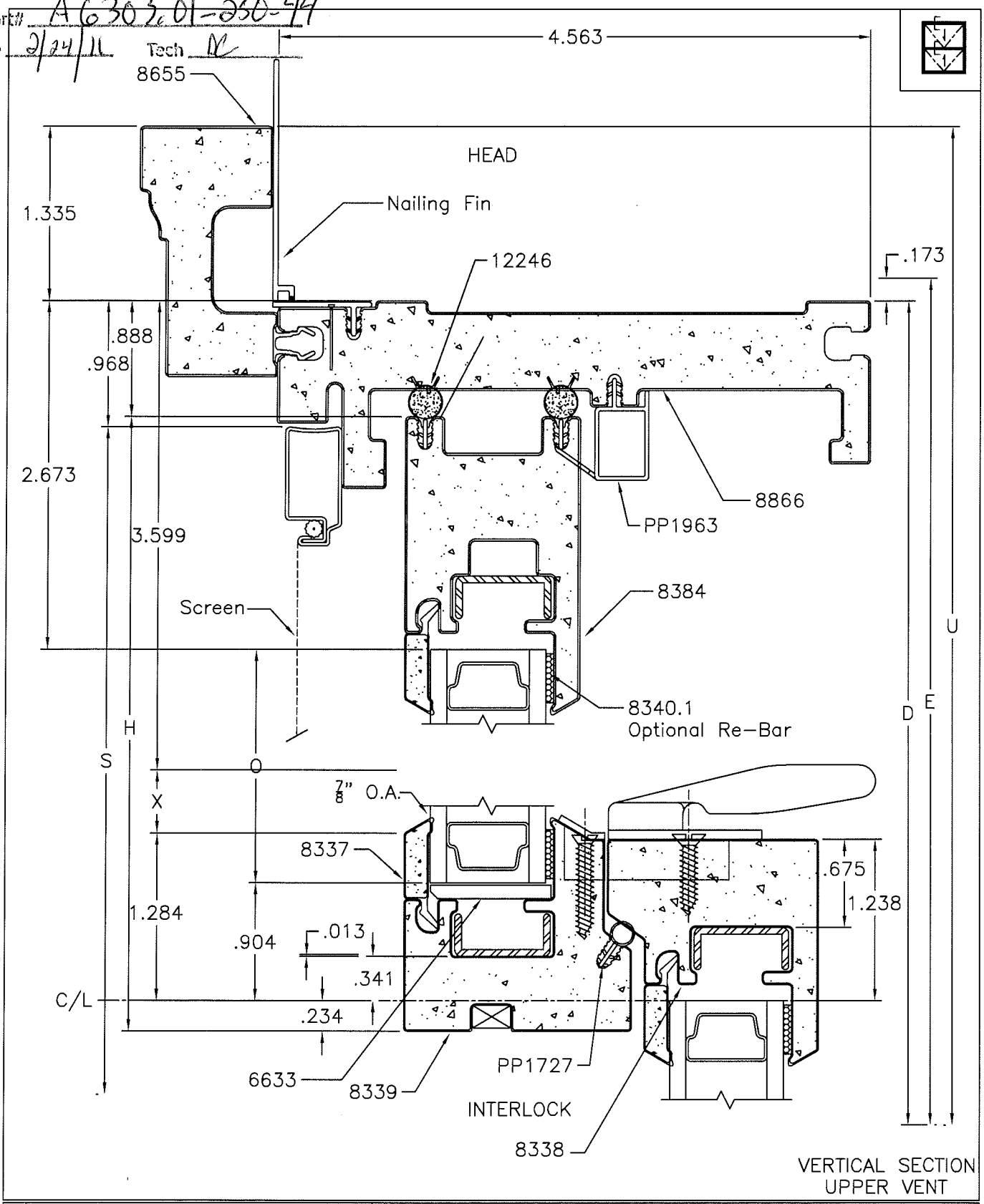
TILT DOUBLE HUNG
1700 SERIES
DETAIL DRAWING

Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# A6303.01-250-44

Date 2/24/11 Tech MC



VERTICAL SECTION
UPPER VENT

MIKRON

TILT DOUBLE HUNG
1700 SERIES
DETAIL DRAWING

NOTE: .015 TYPICAL CORNER RADIUS UNLESS OTHERWISE SPECIFIED	
DATE: 2/23/11	TYP. WALL:
SCALE: 1=1	DESIGNED BY:
AREA:	DRAFTED BY: RS
WT./FT.:	FILE NAME: A97043
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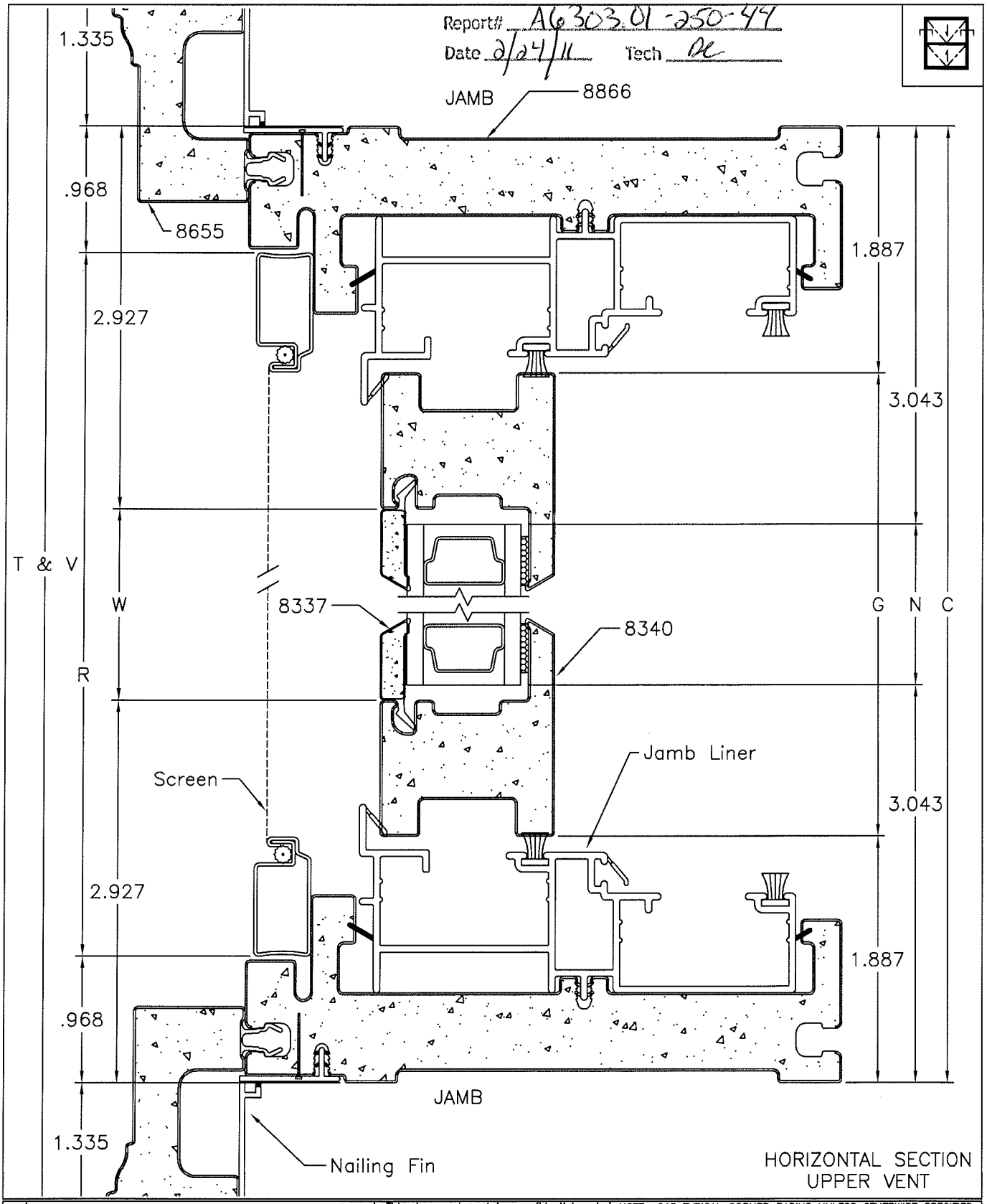
Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# A6303.01-250-44
Date 2/24/11 Tech DC



HORIZONTAL SECTION
UPPER VENT

MIKRON

TILT DOUBLE HUNG
1700 SERIES (OFFSET JAMBLINER)
DETAIL DRAWING

NOTE: .015 TYPICAL CORNER RADIUS UNLESS OTHERWISE SPECIFIED	
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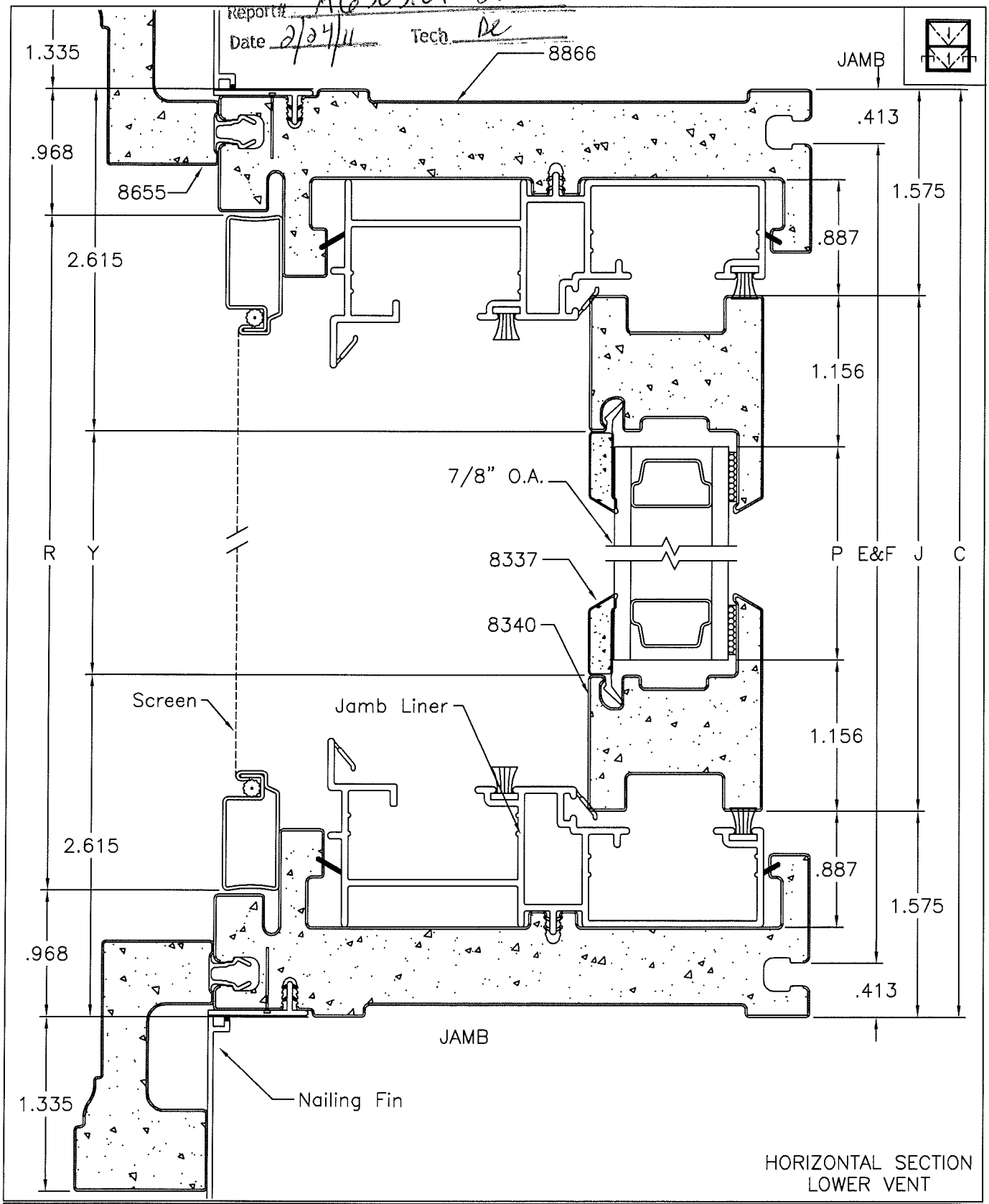
Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# A6303.01-250-44

Date 2/24/11 Tech DE



HORIZONTAL SECTION
LOWER VENT

MIKRON

TILT DOUBLE HUNG
1700 SERIES (OFFSET JAMBLINER)
DETAIL DRAWING

NOTE: .015 TYPICAL CORNER RADIUS UNLESS OTHERWISE SPECIFIED	
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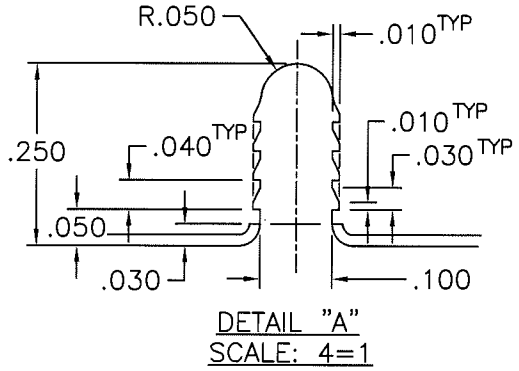
DWG. NAME:	A9704.1.1



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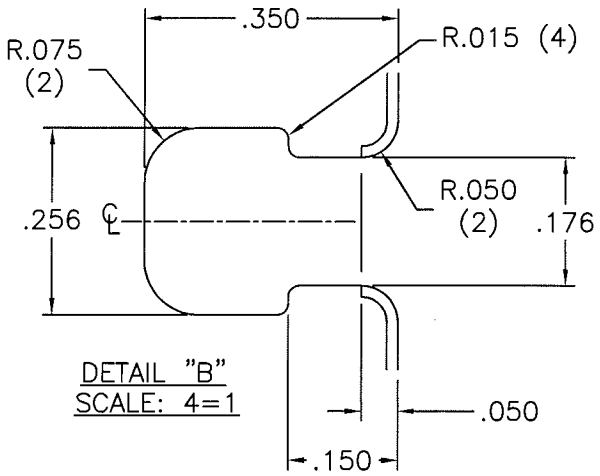

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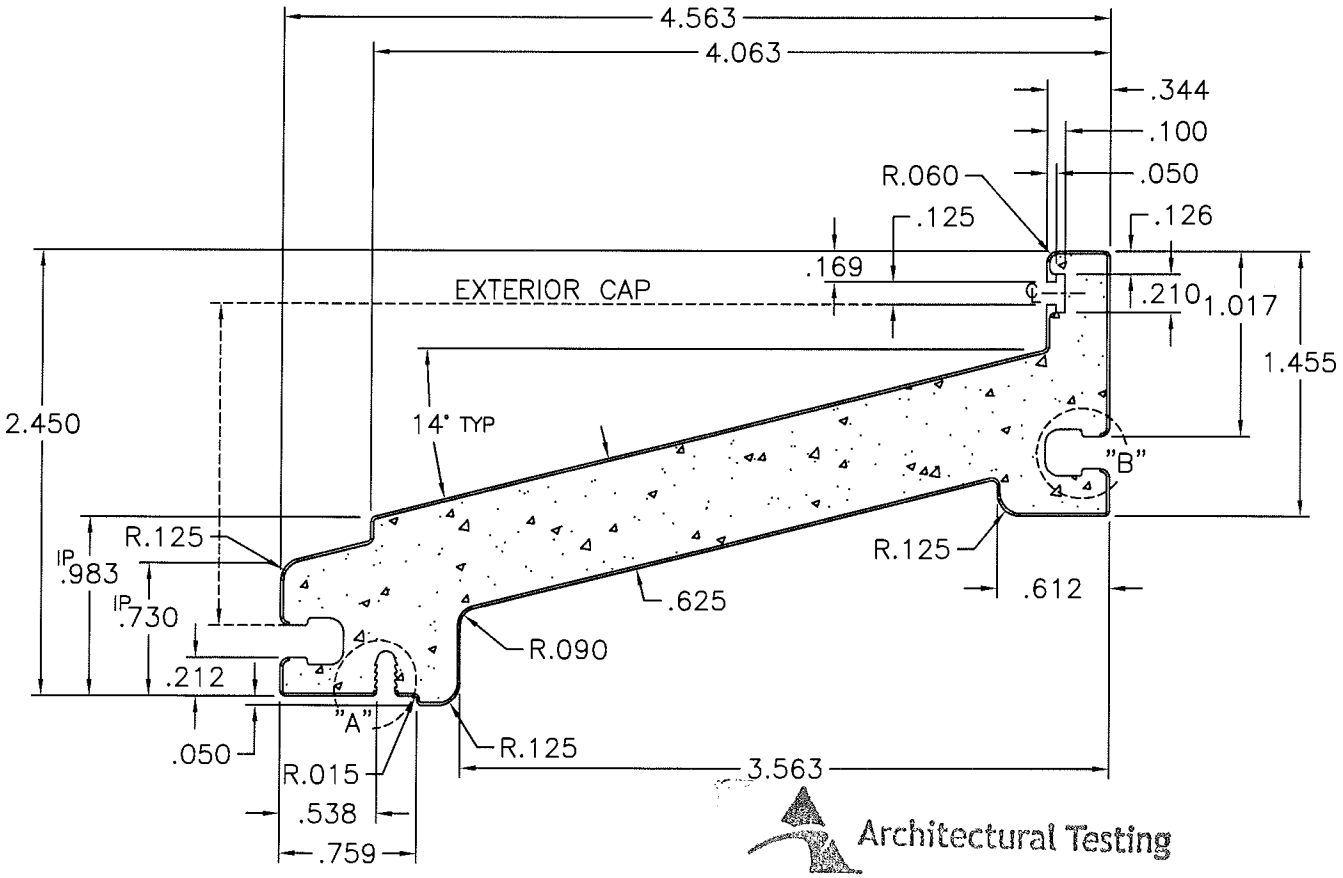

Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# A6303.01-258-44

Date 2/24/11 Tech DR

NOTE: 1) .030 TYP. RADIUS UNLESS OTHERWISE SPECIFIED.
2) IP = INTERSECTION POINT
3) CP = CENTER POINT
4) CORE (FOAM–XTD) AREA = 3.179, WT/FT = .855
CAP (SUPERCAP–EXTERIOR) AREA = .077, WT/FT = .049
CAP (SUPERCAP–INTERIOR) AREA = .108, WT/FT .068
5) CAP TYPICAL WALL = .015
6) PART WITH COLOR CAP = 9181

= FOAM

DH SILL

A	UPDATED XTD S.G. 8/15/05 RJC	

MIKRON

DIE DRAWING

NOTE: .015 TYPICAL CORNER RADIUS UNLESS OTHERWISE SPECIFIED	
DATE: 5/5/03	TYP. WALL:
SCALE: 1=1	DESIGNED BY: D.C.
AREA: 3.365	DRAFTED BY: W.D.
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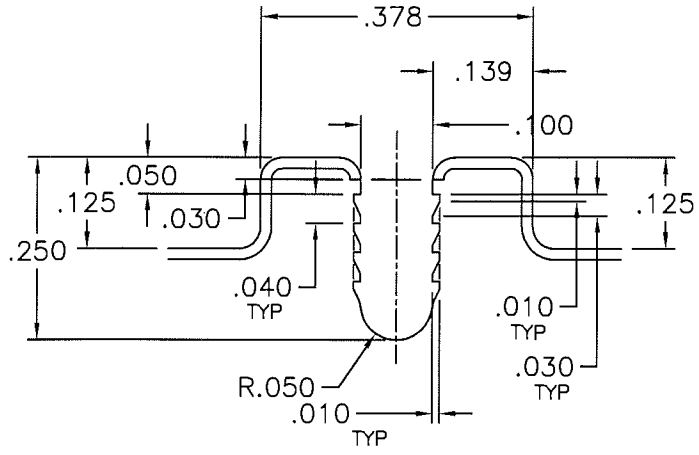
DWG. NAME:	8867



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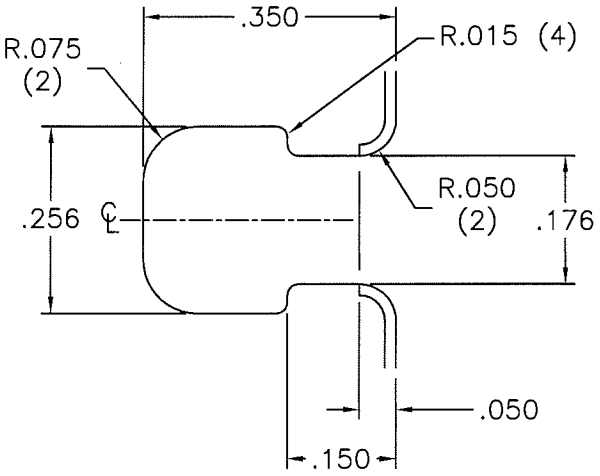

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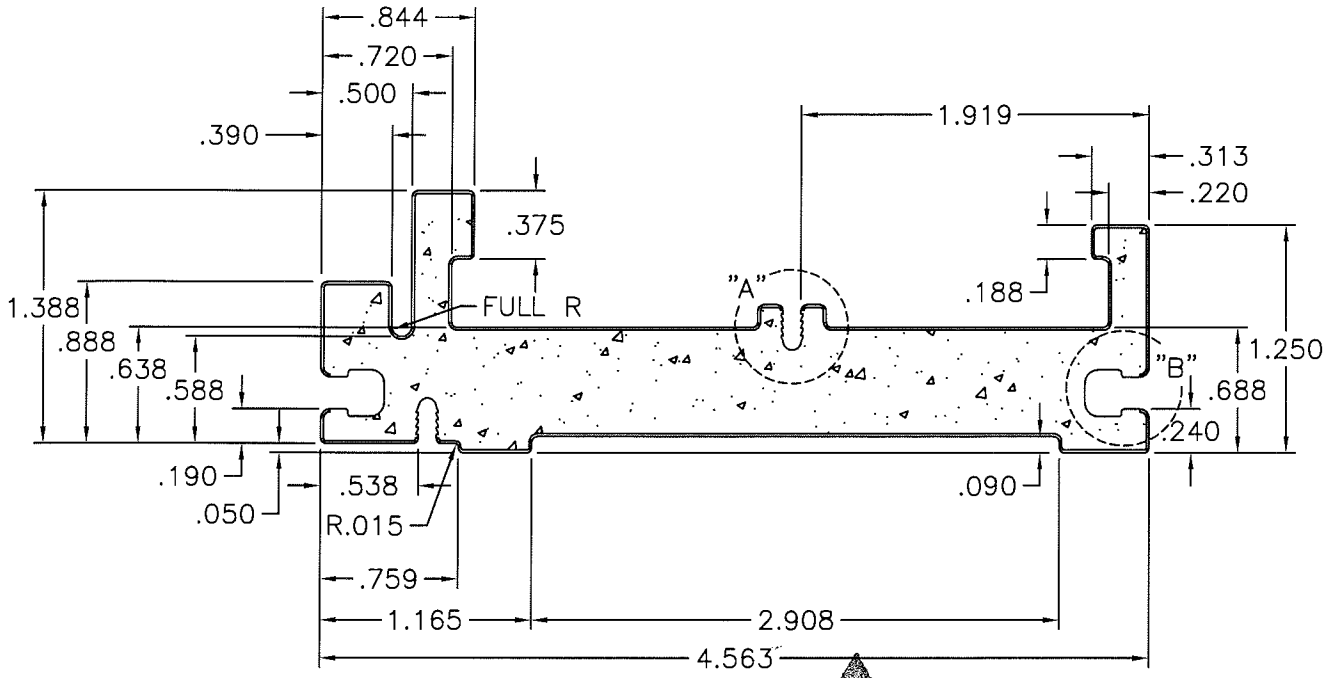


Architectural Testing

NOTE: 1) .030 TYP. RADIUS UNLESS OTHERWISE SPECIFIED.
2) IP = INTERSECTION POINT
3) CP = CENTER POINT
4) CORE (FOAM–XTD) AREA = 2.921, WT/FT = .786
CAP (SUPERCAP) AREA = .206, WT/FT = .130
5) CAP TYPICAL WALL = .015
6) PART WITH COLOR CAP = 9180

Test sample complies with these details.
Deviations are noted.

Report# A6303.01-250-44

Date 2/24/11 Tech RA

= FOAM

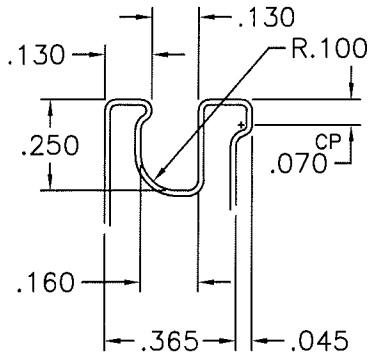
DH JAMB

B	Core has always been XTD, on 7/21/05 XTD S.G. was updated, 10/12/05 W.D.	This document contains confidential and proprietary information. Do not copy or disclose without consent of Mikron Ind. Inc. ©2003 Mikron Ind. Inc. All rights reserved.
A	Core Material was XTR, 7/21/05 W.D.	

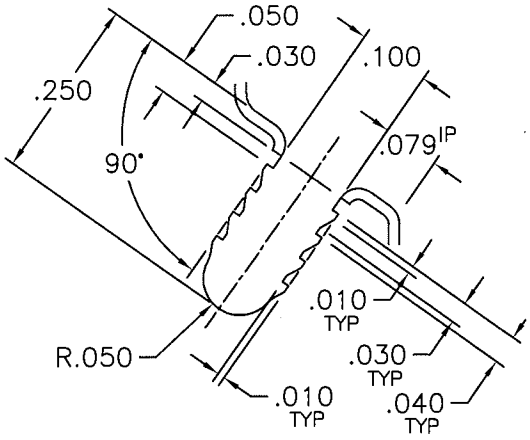
MIKRON

DIE DRAWING

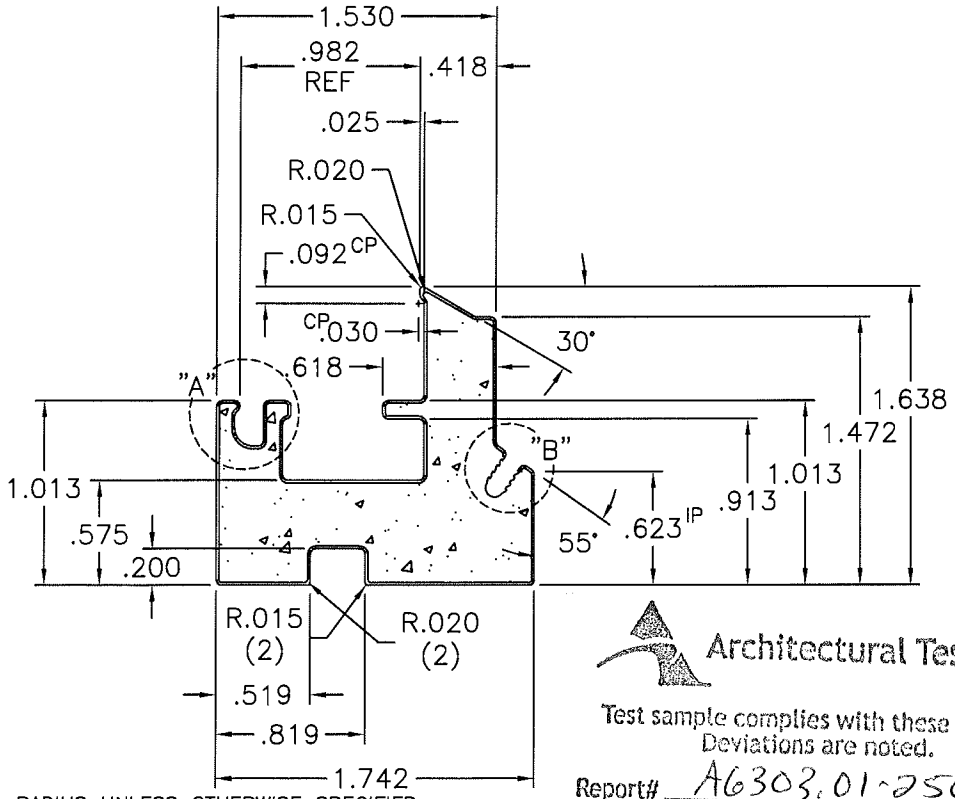
NOTE: .015 TYPICAL CORNER RADIUS UNLESS OTHERWISE SPECIFIED	
DATE: 5/5/03	TYP. WALL:
SCALE: 1=1	DESIGNED BY: D.C.
AREA: 3.127	DRAFTED BY: W.D.
WT./FT.: .916	FILE NAME: 8866
DWG. NAME:	8866



DETAIL "A"
SCALE: 2=1



DETAIL "B"
SCALE: 4=1



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# A6303.01-250-44

Date 2/24/11 Tech DO

NOTE: 1) .030 TYP. RADIUS UNLESS OTHERWISE SPECIFIED.
2) IP = INTERSECTION POINT
3) CP = CENTER POINT
4) CORE (FOAM–XTD) AREA = 1.341, WT/FT = .361
CAP (SUPERCAP) AREA = .128, WT/FT = .081
5) CAP TYPICAL WALL = .015
6) PART WITH COLOR CAP = 9175

= FOAM

KEEPER RAIL

C	Core Material was XTR, 11/7/05 W.D.
B	Updated XTR S.G., 8/10/05 W.D.
A	Cap thickness was .010", Wt/Ft was .354, 12/10/01 W.D.

MIKRON

DIE DRAWING

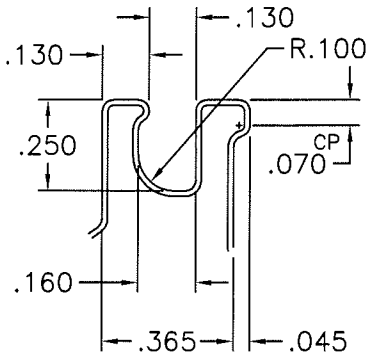
NOTE: .015 TYPICAL CORNER RADIUS UNLESS OTHERWISE SPECIFIED	
DATE: 1/3/01	TYP. WALL:
SCALE: 1=1	DESIGNED BY:
AREA: 1.469	DRAFTED BY: W.D.
WT./FT.: .442	FILE NAME: 8339
DWG. NAME:	8339

Architectural Testing

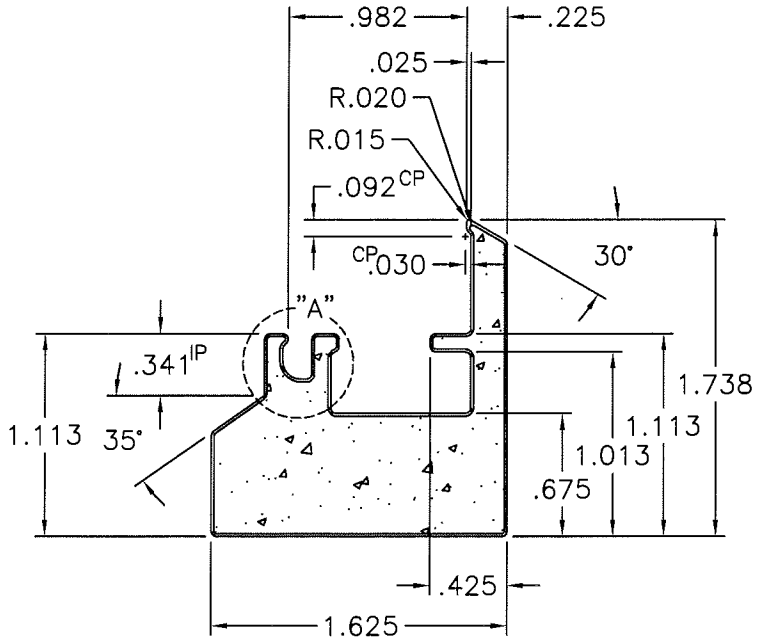
Test sample complies with these details.
Deviations are noted.

Report# AG303.01-250-44

Date 2/24/11 Tech DL



DETAIL "A"
SCALE: 2=1



NOTE: 1) .030 TYP. RADIUS UNLESS OTHERWISE SPECIFIED.
2) IP = INTERSECTION POINT
3) CP = CENTER POINT
4) CORE (FOAM-XTD) AREA = 1.325, WT/FT = .356
CAP (SUPERCAP) AREA = .123, WT/FT = .077
5) CAP TYPICAL WALL = .015
6) PART WITH COLOR CAP = 9174

= FOAM

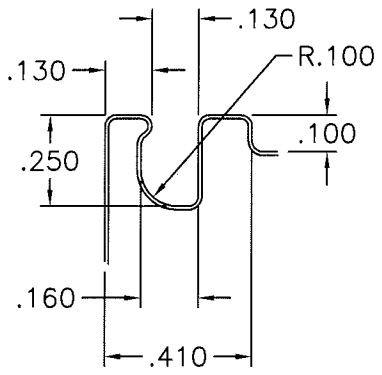
LOCK RAIL

C	Core Material was XTR, 10/1/05 W.D.	
B	Revised XTR S.G., 11/19/04 W.D.	
A	Cap thickness was .010", Wt/Ft was .348, 12/10/01 W.D.	

MIKRON

DIE DRAWING

NOTE: .015 TYPICAL CORNER RADIUS UNLESS OTHERWISE SPECIFIED	
DATE: 1/3/01	TYP. WALL:
SCALE: 1=1	DESIGNED BY:
AREA: 1.448	DRAFTED BY: W.D.
WT./FT.: .433	FILE NAME: 8338
DWG. NAME:	8338



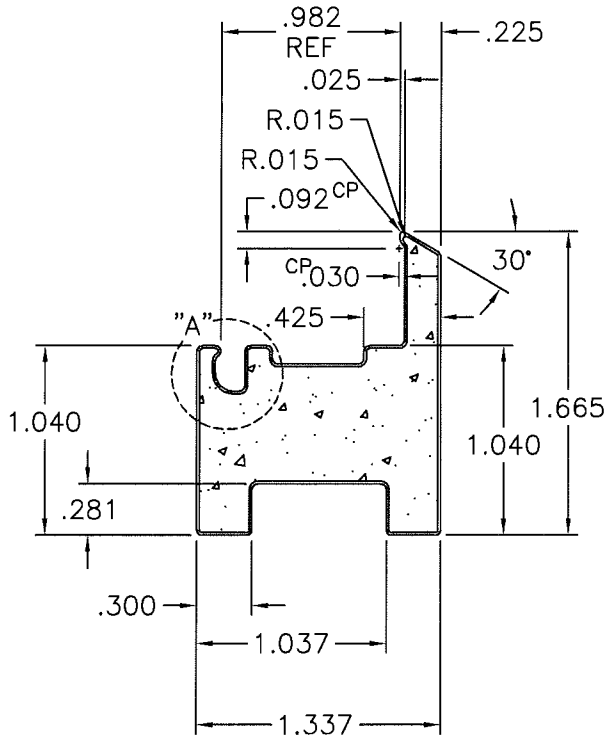
DETAIL "A"
SCALE: 2=1

Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# A6303.01-250-44

Date 2/24/11 Tech DE



NOTE: 1) .030 TYP. RADIUS UNLESS OTHERWISE SPECIFIED.
2) IP = INTERSECTION POINT
3) CP = CENTER POINT
4) CORE (FOAM-XTD) AREA = 1.106, WT/FT = .298
CAP (SUPERCAP) AREA = .105, WT/FT = .066
5) CAP TYPICAL WALL = .015
6) PART WITH COLOR CAP = 9176

= FOAM

SASH STILE

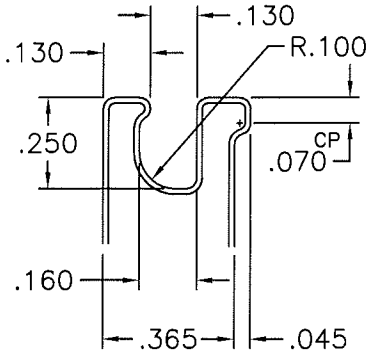
C	Core Material was XTR, 07/05/05 W.D.	
B	Revised Wt/Ft, 11/23/04 W.D.	
A	Removed Kerfs from legs, Wt/Ft was .280, 6/28/01 W.D.	

NOTE: .015 TYPICAL CORNER RADIUS UNLESS OTHERWISE SPECIFIED

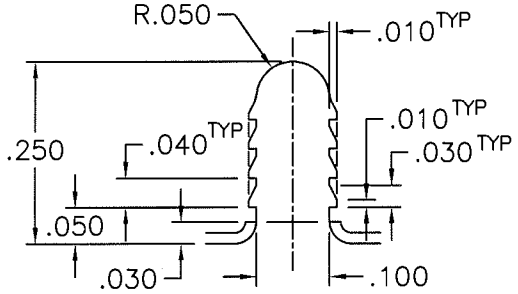
DATE: 1/4/01	TYP. WALL:
SCALE: 1=1	DESIGNED BY:
AREA: 1.211	DRAFTED BY: W.D.
WT./FT.: .364	FILE NAME: 8340
DWG. NAME:	8340

MIKRON.

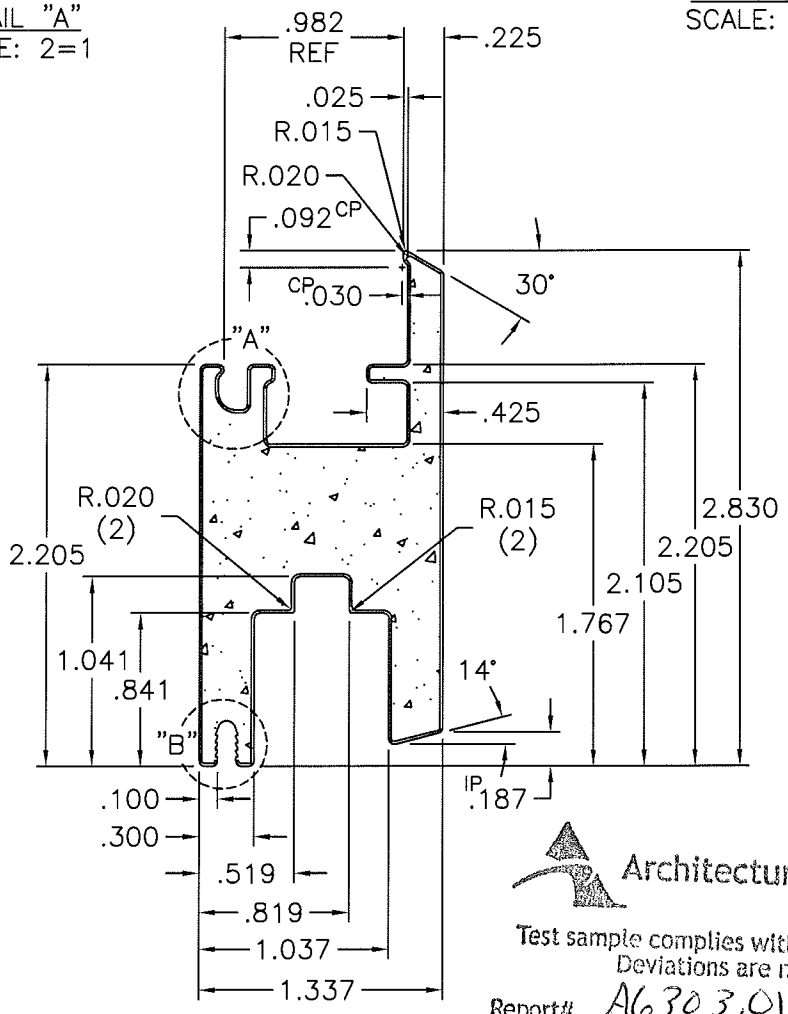
DIE DRAWING



DETAIL "A"
SCALE: 2=1



DETAIL "B"
SCALE: 4=1



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# A6303.01-050-44

Date 2/24/11 Tech DE

NOTE: 1) .030 TYP. RADIUS UNLESS OTHERWISE SPECIFIED.
2) IP = INTERSECTION POINT
3) CP = CENTER POINT
4) CORE (FOAM-XTD) AREA = 1.790, WT/FT = .482
CAP (SUPERCAP) AREA = .174, WT/FT = .110
5) CAP TYPICAL WALL = .015
6) PART WITH COLOR CAP = 9172

= FOAM

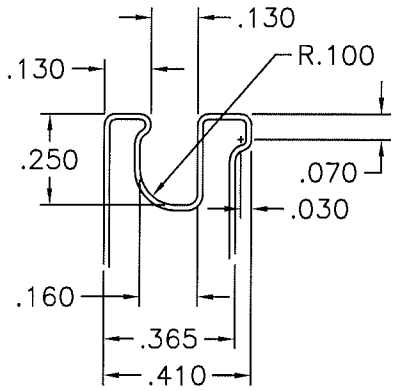
SASH LIFT RAIL

C	Core Material was XTR, 12/5/05 W.D.
B	Revised XTR S.G., 2/21/05 W.D.
A	Cap thickness was .010", Wt/Ft was .474, 12/10/01 W.D.

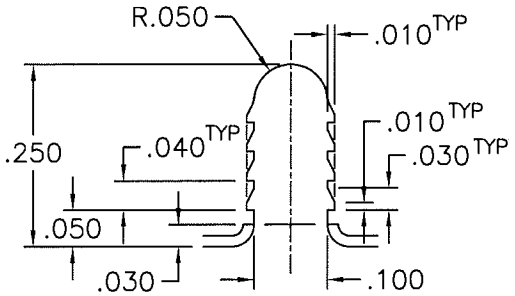
MIKRON

DIE DRAWING

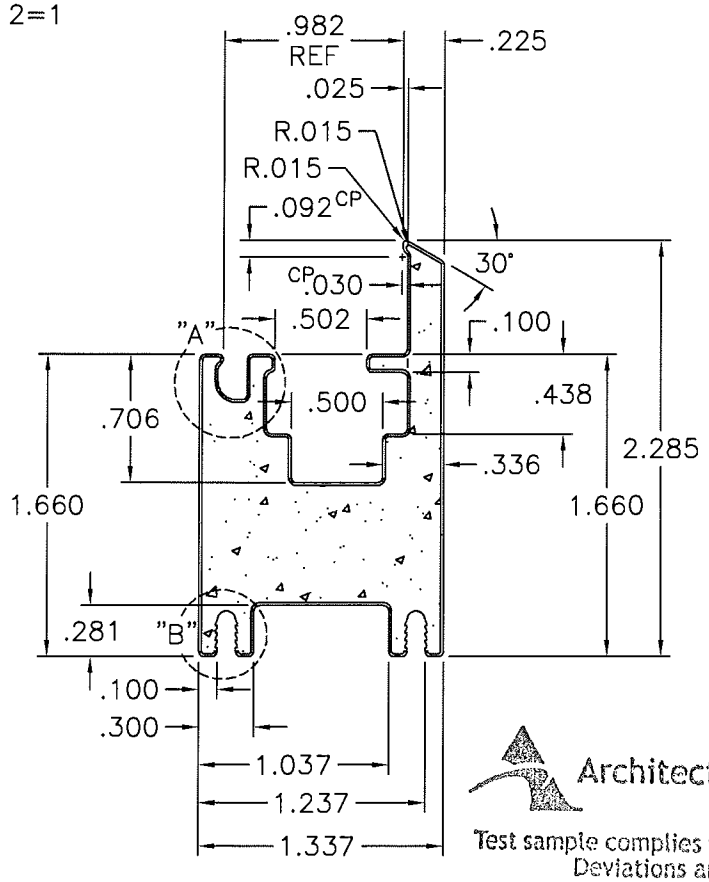
NOTE: .015 TYPICAL CORNER RADIUS UNLESS OTHERWISE SPECIFIED	
DATE: 1/3/01	TYP. WALL:
SCALE: 1=1	DESIGNED BY:
AREA: 1.964	DRAFTED BY: W.D.
WT./FT.: .592	FILE NAME: 8336
DWG. NAME:	8336



DETAIL "A"
SCALE: 2=1



DETAIL "B"
SCALE: 4=1



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# A6303.01-250-44

Date 2/24/11 Tech RR

NOTE: 1) .030 TYP. RADIUS UNLESS OTHERWISE SPECIFIED.
2) IP = INTERSECTION POINT
3) CP = CENTER POINT
**** 4) CORE (FOAM–XTD) AREA = 1.448, WT/FT = .434
CAP (SUPERCAP) AREA = .145, WT/FT = .091
5) CAP TYPICAL WALL = .015
6) PART WITH COLOR CAP = 9177

D	Revised XTD Wt/Ft, 8/25/05 W.D.
C	Updated XTD S.G., 8/15/05 W.D.
B	Revised Wt/Ft, 11/19/04 W.D.
A	Core was XTR, Wt/Ft was .405, 5/30/02 W.D.

= FOAM

SASH STILE

MIKRON

DIE DRAWING

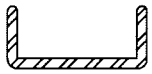
NOTE: .015 TYPICAL CORNER RADIUS UNLESS OTHERWISE SPECIFIED	
DATE: 1/23/01	TYP. WALL:
SCALE: 1=1	DESIGNED BY:
AREA: 1.593	DRAFTED BY: W.D.
WT./FT.: .525	FILE NAME: 8384
DWG. NAME:	8384

Architectural Testing

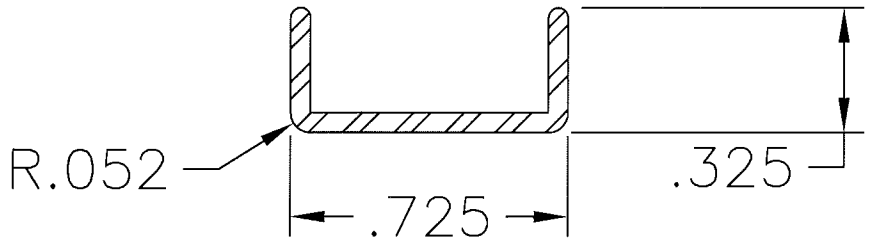
Test sample complies with these details.
Deviations are noted.

Report# A6303.01-250-44

Date 2/24/11 Tech DL



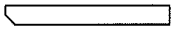
Actual Size



MIKRON.
Quality Extruded Products
a Quanex company

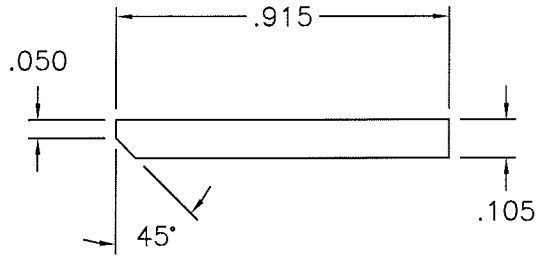
Die Drawing

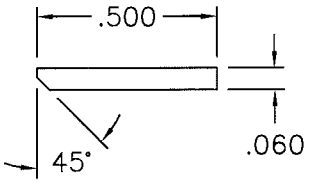
NOTE: .015 TYPICAL CORNER RADIUS UNLESS OTHERWISE SPECIFIED	
DATE: 1/31/11	TYP. WALL: .052
SCALE: 2=1	DESIGNED BY:
AREA:	DRAFTED BY: RS
WT./FT.:	FILE NAME:
DWG. NAME:	MathewsRebar



ACTUAL SIZE
SCALE: 1=1

ACTUAL SIZE
SCALE: 1=1
(FOR VIKING)





SHIM FOR VIKING ONLY

Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# A6303.01-250-44

Date 2/24/11 Tech DC

7/8" SETTING BLOCK

B	Revised title block/format 2/7/95 VB
A	Revised 11/16/94

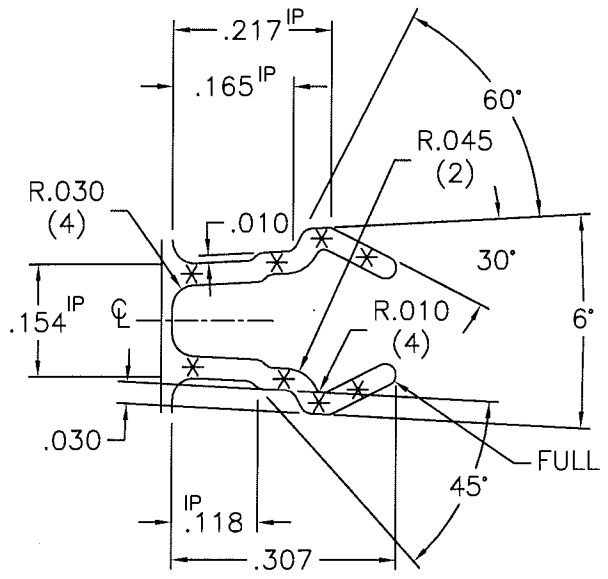
NOTE: .015 TYPICAL CORNER RADIUS UNLESS OTHERWISE SPECIFIED

MIKRON iND. iNC.

DIE DRAWING

SCALE: 2=1
AREA: .095
WT.\FT.: .060

PART NO.: 6633
DATE: 9/11/92
TYP. WALL: .105
DRAFTED BY: SH
DWG. NO.:6633



Architectural Testing

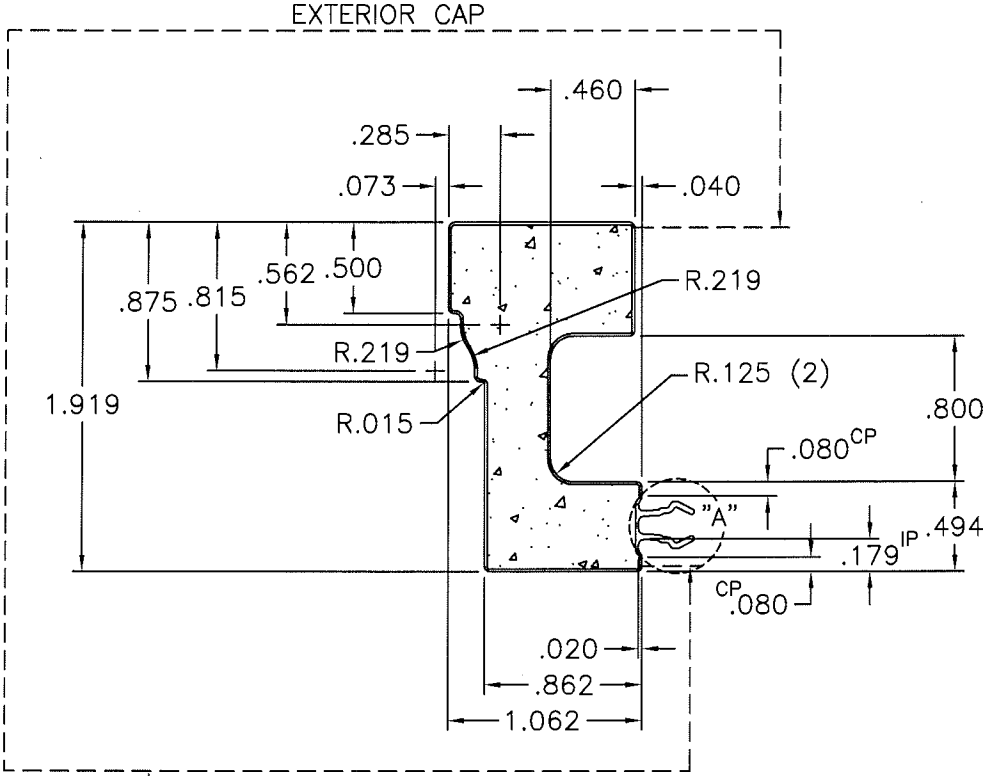
Test sample complies with these details.
Deviations are noted.

Report# A6303.01-250-44

Date 2/24/11 Tech DE

DETAIL "A"
SCALE: 4=1

EXTERIOR CAP



NOTE: 1) .030 TYP. RADIUS UNLESS OTHERWISE SPECIFIED.
2) DETAIL "A" TYP. RADIUS = .015 UNLESS OTHERWISE SPECIFIED.
3) * = .030 WALL THICKNESS
4) IP = INTERSECTION POINT
5) CP = CENTER POINT
6) CORE (FOAM-XTD) AREA = 1.266, WT/FT = .341
CAP (SUPERCAP-EXTERIOR) AREA = .058, WT/FT = .037
CAP (SUPERCAP-INTERIOR) AREA = .061, WT/FT = .038
7) CAP TYPICAL WALL = .015
8) PART WITH COLOR CAP = 8912

= FOAM

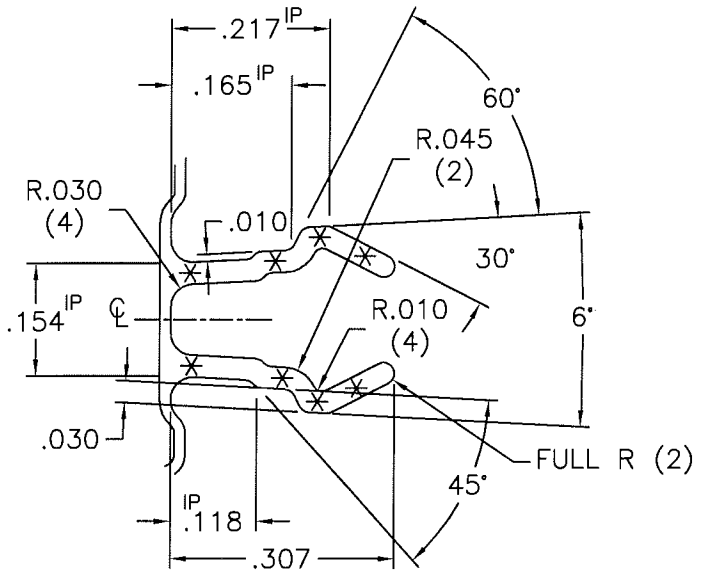
BRICKMOLD

A	UPDATED XTD S.G., 8/15/05 TCP	This document contains confidential and proprietary information. Do not copy or disclose without consent of Mikron Ind. Inc. ©2005 Mikron Ind. Inc. All rights reserved.	

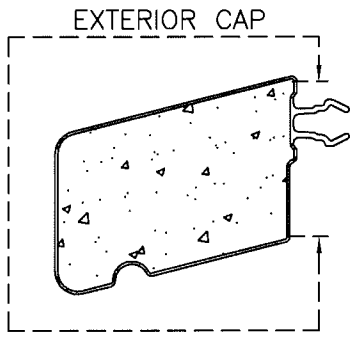
MIKRON.

DIE DRAWING

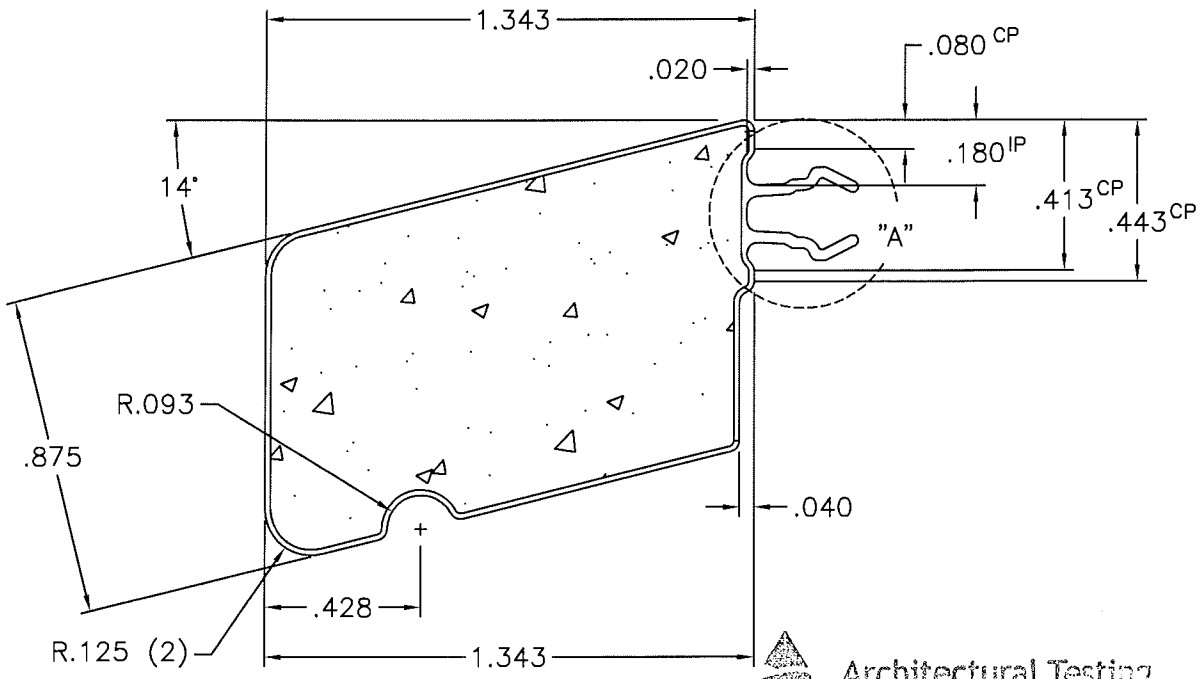
NOTE: .015 TYPICAL CORNER RADIUS UNLESS OTHERWISE SPECIFIED	
DATE: 7/10/02	TYP. WALL:
SCALE: 1=1	DESIGNED BY: D.C.
AREA: 1.385	DRAFTED BY: W.D.
WT./FT.: .416	FILE NAME: 8655
DWG. NAME:	8655



DETAIL "A"
SCALE: 4=1



ACTUAL SIZE
SCALE: 1=1



NOTE: 1) .030 TYP. RADIUS UNLESS OTHERWISE SPECIFIED.
2) DETAIL "A" TYP. RADIUS = .015 UNLESS OTHERWISE SPECIFIED.
3) * = .030 WALL THICKNESS
4) IP = INTERSECTION POINT
5) CP = CENTER POINT
6) CORE (FOAM–XTD) AREA = 1.099, WT/FT = .296
CAP (SUPERCAP–EXTERIOR) AREA = .054, WT/FT = .034
CAP (SUPERCAP–INTERIOR) AREA = .034, WT/FT = .021
7) CAP TYPICAL WALL = .015
8) PART WITH COLOR CAP = 8911

Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# A6303.01-250-14

Date 2/24/11 Tech DR

= FOAM

SILL NOSE

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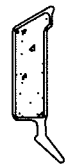
A	UPDATED XTD S.G., 8/15/05 TCP		DATE: 7/9/02 / TYP. WALL:
MIKRON.			SCALE: 2=1 / DESIGNED BY: D.C.
			AREA: 1.187 / DRAFTED BY: W.D.
			WT./FT.: .351 / FILE NAME: 8654
	DIE DRAWING		DWG. NAME: 8654

Architectural Testing

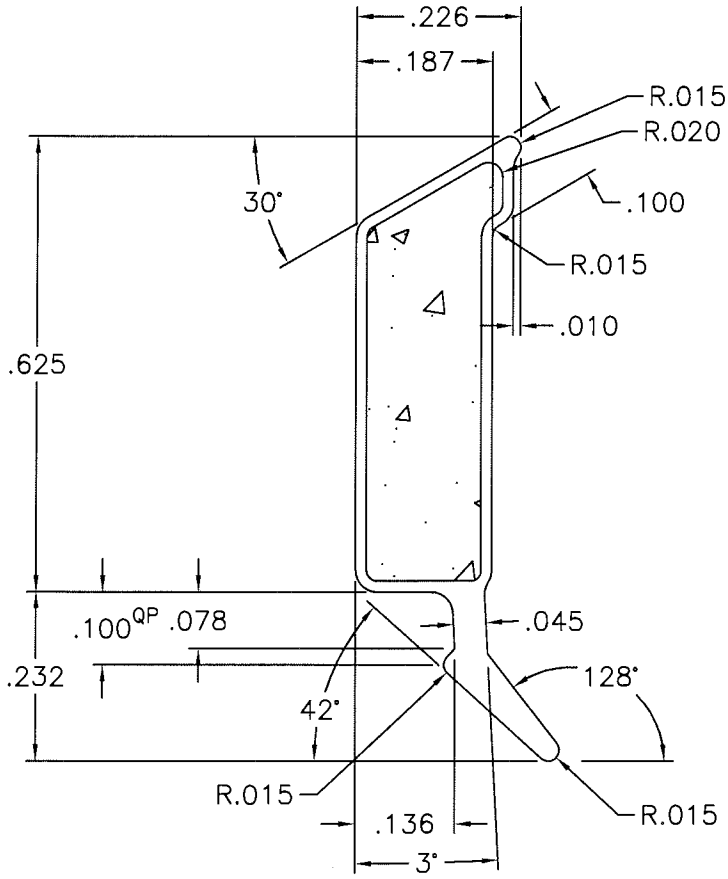
Test sample complies with these details.
Deviations are noted.

Report# A6303.01-250-44

Date 2/24/11 Tech DC



ACTUAL SIZE
SCALE: 1=1



NOTE: 1) .030 TYP. RADIUS UNLESS OTHERWISE SPECIFIED.
2) IP = INTERSECTION POINT
3) CP = CENTER POINT
4) CORE (FOAM-XTD) AREA = .085, WT/FT = .023
CAP (SUPERCAP) AREA = .035, WT/FT = .022
5) CAP TYPICAL WALL = .015
6) PART WITH COLOR CAP = 9173

= FOAM

D	Updated XTD S.G., 8/10/05 W.D.
C	DIM .232 was .225, 2/9/04 W.D.
B	Core Material was XTR, Wt/Ft was .040, 11/18/02 W.D.
A	Cap thickness was .010", Wt/Ft was .038, 12/10/01 W.D.

GLAZING BEAD

NOTE: .015 TYPICAL CORNER RADIUS UNLESS OTHERWISE SPECIFIED

DATE: 1/4/01	TYP. WALL:
SCALE: 4=1	DESIGNED BY:
AREA: .120	DRAFTED BY: W.D.
WT./FT.: .045	FILE NAME: 8337
DWG. NAME:	8337

MIKRON

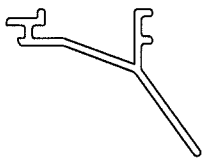
DIE DRAWING

Architectural Testing

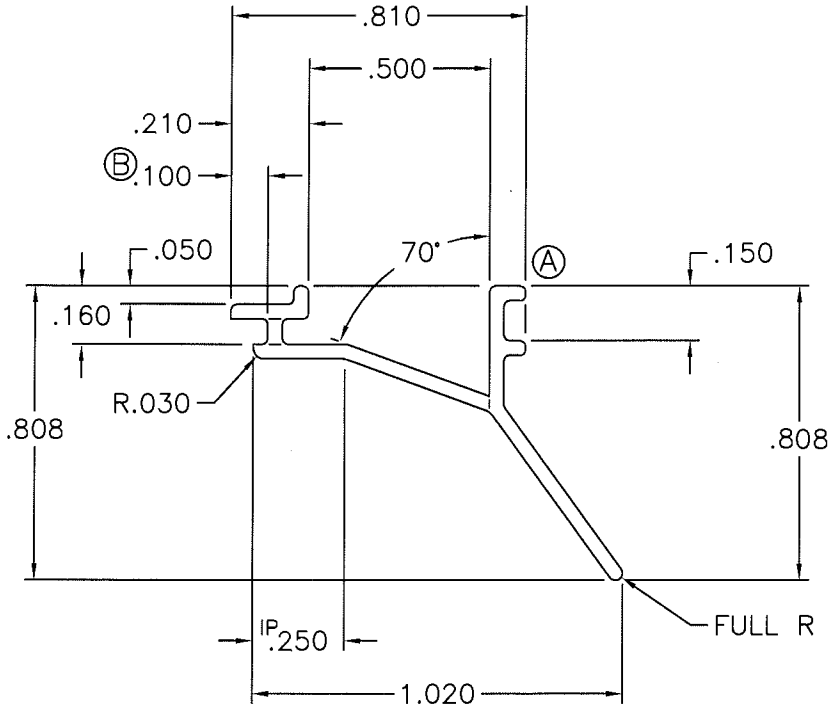
Test sample complies with these details.
Deviations are noted.

Report# A6303.01-250-44

Date 2/24/11 Tech DC



ACTUAL SIZE
SCALE: 1=1



NOTE: 1) IP = INTERSECTION POINT

BALANCE COVER

B	Dim .100 was .039, Wt/Ft was .050, 6/9/04 W.D.	This document contains confidential and proprietary information. Do not copy or disclose without consent of Mikron Ind. Inc. ©2004 Mikron Ind. Inc. All rights reserved.
A	Added Nub, Wt/Ft was .048, 5/3/04 W.D.	

MIKRON

DIE DRAWING

NOTE: .015 TYPICAL CORNER RADIUS UNLESS OTHERWISE SPECIFIED	
DATE: 3/4/04	TYP. WALL: .040
SCALE: 2=1	DESIGNED BY: D.C.
AREA: .081	DRAFTED BY: W.D.
WT./FT.: .051	FILE NAME: 9237
DWG. NAME:	9237