Architectural Testing

TEST REPORT

Report No.: B7807.01-501-47

Rendered to:

Deceuninck North America, LLC
Monroe, Ohio

PRODUCT TYPE: PVC Single Hung Window
SERIES/MODEL: 143.095 SH-016
(Modified)

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

	Summary of Results	
Title	**Test Specimen #1**	**Test Specimen #2**
AAMA/WDMA/CSA 101/I.S.2/A440-08 Rating	H-LC30 1422 x 2311 (56 x 91)	H-LC50 1016 x 1600* (40 x 63*)
Design Pressure	±1440 Pa (±30.08 psf)	±2880 Pa (±60.15 psf)
Air Infiltration	0.4 L/s/m^2 (0.08 cfm/ft^2)	N/A
Water Penetration Resistance Test Pressure	290 Pa (6.06 psf)	360 Pa (7.52 psf)

Test Completion Date: 02/16/2012

Reference must be made to Report No. B7807.01-501-47, dated 03/26/12 for complete test specimen description and detailed test results.

1.0 Report Issued To: Deceuninck North America, LLC
351 North Garver Road
Monroe, Ohio 45050

2.0 Test Laboratory: Architectural Testing, Inc.
1140 Lincoln Avenue
Springdale, Pennsylvania 15144
724 275-7100

3.0 Project Summary:

3.1 Product Type: PVC Single Hung Window

3.2 Series/Model: 143.095 SH-016

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: AAMA/WDMA/CSA 101/I.S.2/A440-08, **H-LC30 1422 x 2311 (56 x 91)** rating. Test Specimen #2: AAMA/WDMA/CSA 101/I.S.2/A440-08, **H-LC50 1016 x 1600* (40 x 63*)** rating.

***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: 02/14/2012 - 02/16/2012

3.5 Test Record Retention End Date: All test records for this report will be retained until March 26, 2016.

3.6 Test Location: Deceuninck North America, LLC test facility in Monroe, Ohio. Calibration of test equipment was performed by Architectural Testing in accordance with AAMA 205-01 "In-Plant Testing Guidelines for Manufacturers and Independent Laboratories".

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

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

3.0 Project Summary: (Continued)

3.9 List of Official Observers:

Name	Company
Dean Erbaugh	Deceuninck North America, LLC
James Grippo	Architectural Testing, Inc.

4.0 Test Specification:

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: 3.3 m^2 (35.4 ft^2)	**Width**		**Height**	
	millimeters	**inches**	**millimeters**	**inches**
Overall size	1422	56	2311	91
Bottom sash size	1341	52-13/16	1132	44-9/16
Screen size	1308	51-1/2	1106	43-9/16

Test Specimen #2:

Overall Area: 1.6 m^2 (17.5 ft^2)	**Width**		**Height**	
	millimeters	**inches**	**millimeters**	**inches**
Overall size	1016	40	1600	63
Bottom sash size	935	36-13/16	766	30-9/16
Screen size	902	35-1/2	751	29-9/16

5.0 Test Specimen Description: (Continued)

The following descriptions apply to all specimens.

5.2 Frame Construction:

Frame Member	Material	Description
Head, sill and jambs	PVC	Extruded
Fixed meeting rail	PVC	Extruded

	Joinery Type	Detail
All corners	Mitered	Thermally welded, Each sill/jamb intersection was also fastened with one #8 x 1" long screw at the exterior side.
Fixed meeting rail	Coped and butted	Secured to the jambs using two composite shear blocks, one at each end. Each shear block was secured to the frame with two #8 x 3/4" long screws, and to the fixed rail reinforcement with one #8 x 2-1/2" long screw.. Each intersection was sealed with a silicone sealant.

5.3 Sash Construction:

Sash Member	Material	Description
All rails and stiles	PVC	Extruded

	Joinery Type	Detail
All corners	Mitered	Thermally welded

5.4 Weatherstripping:

Description	Quantity	Location
0.187" backed with 0.290" high center fin pile	2 Rows	Stiles
0.187" backed with 0.290" high center fin pile	1 Row	Lock rail
0.325" diameter foam-filled vinyl bulb with flexible fin and offset base	1 Row	Bottom rail

5.0 Test Specimen Description: (Continued)

5.5 Glazing: *No conclusions of any kind regarding the adequacy or inadequacy of the glass in any glazed test specimen(s) can be made.*

Glass Type	Spacer Type	Interior Lite	Exterior Lite	Glazing Method
3/4" IG	"U" shaped steel/ butyl spacer, single sealed	1/8" annealed	1/8" annealed	Set against a bead of a silicone sealant and secured with rigid vinyl glazing beads. The sash was glazed from the exterior and the fixed lite was glazed from the interior.

Location	Quantity	Daylight Opening		Glass Bite
		millimeters	inches	
Specimen #1 sash	1	1278 x 1068	50-5/16 x 42-1/16	1/2"
Specimen #1 fixed lite	1	1295 x 1076	51 x 42-3/8	1/2"
Specimen #2;sash	1	870 x 713	34-1/4 x 28-1/16	1/2"
Specimen #2;fixed lite	1	892 x 721	35-1/8 x 28-3/8	1/2"

5.6 Drainage: A sloped sill was utilized

Drainage Method	Size	Quantity	Location
Weep notch	2' wide by leg height	4	Sill screen retainer legs, two at each end.
Weepslot	3/8" wide by 3/16" deep	4	Bottom rail glazing pocket through bottom surface, two at each end.
Weephole	3/16" diameter	4	Fixed meeting rail glazing pocket through bottom surface, two at each end.

5.0 Test Specimen Description: (Continued)

5.7 Hardware:

Description	Quantity	Location
Metal cam lock with keeper (Vision #611/9331)	2	Lock rail, with mating keeper on the fixed meeting rail, one 6-1/2" from each end.
Block and tackle balance system with tilt locking shoe	2	One per jamb
Metal pivot bar	2	Bottom rail, one at each end
Plastic tilt latch	2	Lock rail, one at each end
Metal jamb support clip	2	One per jamb at the tilt latch of bottom sash. Each clip was secured with one #8 x 3/4" long screw.

5.8 Reinforcement:

Drawing Number	Location	Material
10300084	Fixed meeting rail	Extruded aluminum
10300082	All sash members	Extruded aluminum

5.9 Screen Construction:

Frame Material	Corner Construction	Mesh Type	Mesh Attachment Method
Roll-formed aluminum	Square cut with plastic corner keys	Fiber	Flexible vinyl spline

6.0 Installation:

Each specimen was installed into a Spruce-Pine-Fir wood buck. The rough opening allowed for a 3/6" shim space. The nail fin perimeter of the window was sealed with sealant.

Location	Anchor Description	Anchor Location
Integral nail fin	#8 x 5/8" pan head fastener	Nominally spaced 12" on center, starting at each corner.

7.0 Test Results: The temperature during testing was 19.4°C (67°F). The results are tabulated as follows:

Test Specimen #1:

Title of Test	Results	Allowed	Note
Operating Force, per ASTM E 2068	Initiate motion: 178 N (40 lbf) Maintain motion: 155 N (35 lbf) Locks: 9 N (2 lbf)	Report Only 180 N (40 lbf) max. 100 N (22.5 lbf) max.	
Air Leakage, Infiltration per ASTM E 283 at 75 Pa (1.57 psf)	0.4 L/s/m^2 (0.08 cfm/ft^2)	1.5 L/s/m^2 (0.3 cfm/ft^2) max.	1
Water Penetration, per ASTM E 547	N/A	N/A	3
Uniform Load Deflection, per ASTM E 330	N/A	N/A	3
Uniform Load Structural, per ASTM E 330	N/A	N/A	3
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 (72 lbf) Remaining direction, 230 N (52 lbf)	Pass Pass	Meets as stated Meets as stated	

7.0 Test Results: (Continued)

Test Specimen #1: (Continued)

Title of Test	Results	Allowed	Note
Optional Performance			
Water Penetration, per ASTM E 547 at 290 Pa (6.06 psf)	Pass	No leakage	2
Uniform Load Deflection, per ASTM E 330 taken at the fixed meeting rail +1440Pa (+30.08 psf) -1440 Pa (-30.08 psf)	 17.8 mm (0.70") 17.8 mm (0.70")	 Report Only	 4, 6, 7
Uniform Load Structural, per ASTM E 330 taken at the fixed meeting rail +2160 Pa (+45.11 psf) -2160 Pa (-45.11 psf)	 1.3 mm (0.05") 0.8 mm (0.03")	 5.3 mm (0.21") max. 5.3mm (0.21") max.	 5, 6

Test Specimen #2:

Title of Test	Results	Allowed	Note
Optional Performance			
Water Penetration, per ASTM E 547 at 360 Pa (7.52 psf)	Pass	No leakage	2
Uniform Load Deflection, per ASTM E 330 taken at the fixed meeting rail +2880 Pa (+60.15 psf) -2880 Pa (-60.15 psf)	 5.8 mm (0.23") 5.8 mm (0.23")	 Report Only	 4, 6, 7
Uniform Load Structural, per ASTM E 330 taken at the fixed meeting rail +4320 Pa (+90.23 psf) -4320 Pa (-90.23 psf)	 0.8 mm (0.03") 0.8 mm (0.03")	 3.5 mm (0.14") max. 3.5 mm (0.14") max.	 5, 6

7.0 Test Results: (Continued)

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: With and without insect screen.

Note 3: The client opted to start at a pressure higher than the minimum required. Test results are reported under Optional Performance.

Note 4: 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.

Note 5: Loads were held for 10 seconds.

Note 6: 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 7: Loads were held for 52 seconds

Architectural Testing will service this report for the entire test record retention period. Test records that are retained such as detailed drawings, datasheets, representative samples of test specimens, or other pertinent project documentation will be retained by Architectural Testing, Inc. for the entire test record retention period.

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.

Digitally Signed by: James P. Grippo

James P. Grippo
Technician

Digitally Signed by: Lynn George

Lynn George
Director- Regional Operations

JPG:sld

Attachments (pages): This report is complete only when all attachments listed are included.
Appendix-A: Alteration Addendum (1)
Appendix-B: Drawings (12)

Appendix A

Alteration Addendum

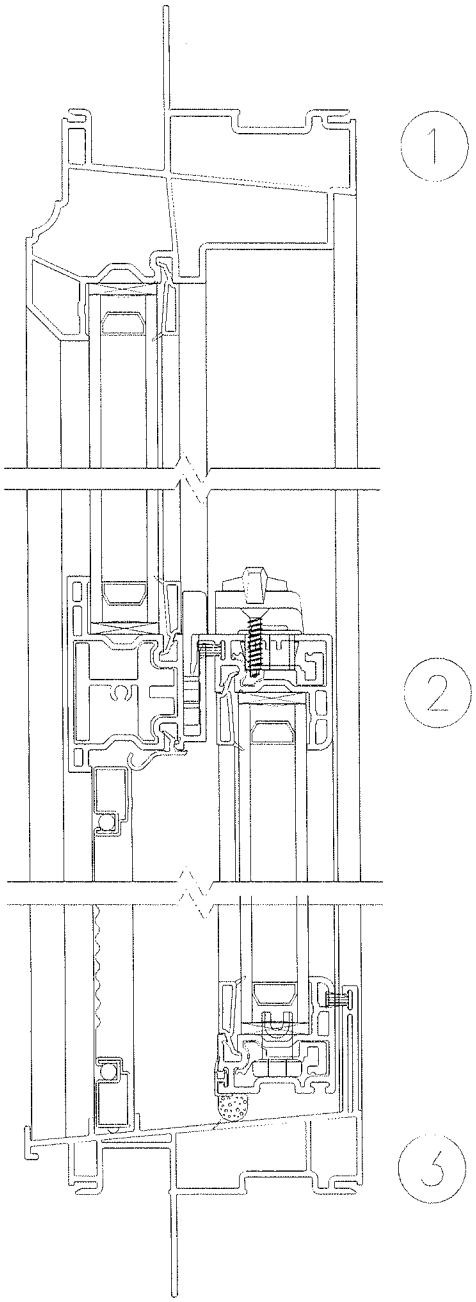
***Note**: No alterations were required.*

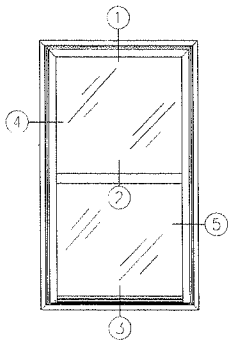
Appendix B

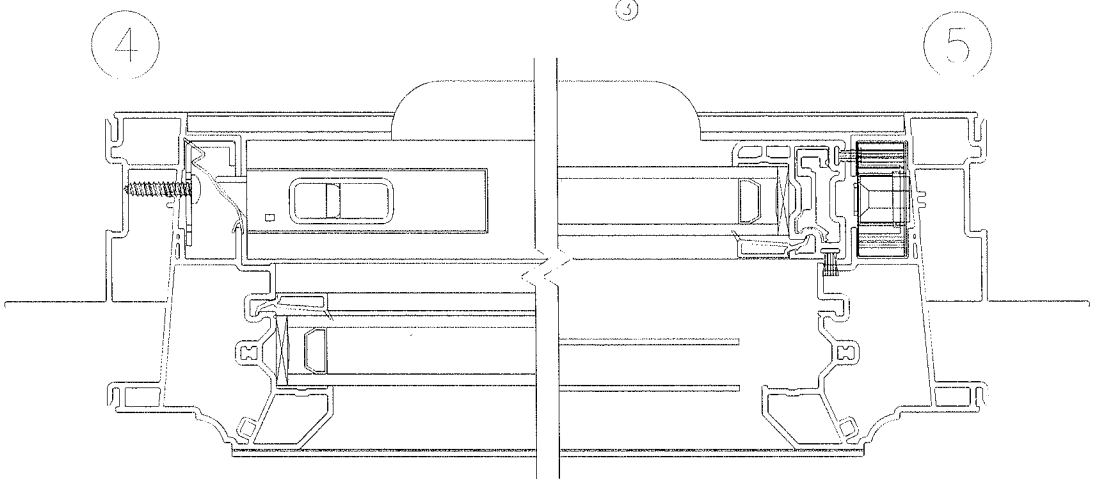
Drawings

CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.

REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
-	DESCRIPTION	DATE	APPROVED







Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# 27809-01

Date 2/10/12 Tech JB

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Architectural Testing

143.095 C rated SH (LC-CC)

DECEUNINCK MODEL NO.

Test sample complies with these details. Deviations are noted.
Report# B7907.01
Date 3/10/12 Tech JL

deceuninck

					Fastener				
				Material	Type	Qty	Size	Length	Head
		Part No.	Vendor	ex. Vinyl, Alum, Composite	ex. Rivot / Screw		ex. #4, #6, #8, etc.		ex. Pan, Flat, Oval, etc.
Frame									
	Head	10008687	DNA	Vinyl					
	Frame Adapter - Head (if applicable)								
	Jamb	10008686	DNA	Vinyl					
	Sill	10008672	DNA	Vinyl					
	Meeting Rail	10008511	DNA	Vinyl					
	Meeting Rail Reinf	10300084	DNA	Alum					
	Meeting Rail Anchor	121	Lawrence	Composite					
	Balance Cover	10005104	DNA	Vinyl					
Sash									
	Lock Rail	10008845	DNA	Vinyl					
	Stiles	10008842	DNA	Vinyl					
	Sash Reinf	10300082	DNA	Alum					
	Glazing Bead	10005470	DNA	Vinyl					
	Interlock Glazing Bead (if applicable)								
	Applied Interlocks (if applicable)								
Hardware									
	Glass Thickness	DS							
	Lock - Single or Multi	Multi							
	Keeper (if applicable)	8281	Vision						
	Lock	171832101	Truth						
	Tilt Latch	78655	Ashland						
	Jamb Clips	CB970S	FOUR-Jaks	Gal. Steel	Screw	1 ea.	8	1-1/4"	Pan
Reinforcement	(if applicable)								
	Frame	None							
	Rails	10300082	DNA	Alum					
	Stiles	10300082	DNA	Alum					
	Interlock Stiles								

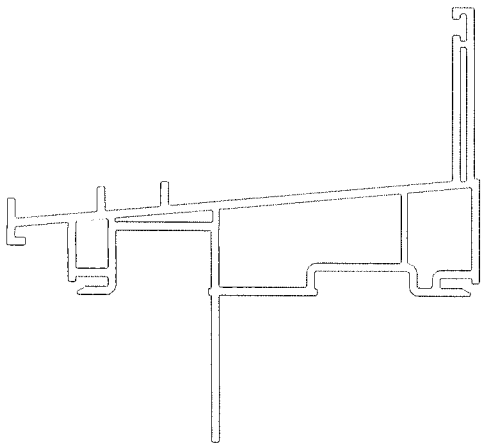
A print and CAD (dxf) drawing for any non-Deceuninck parts (i.e. glazing beads, reinforcements, bulb seals, balance covers, screen adapters, etc.), except glass and hardware components must be emailed along with a copy of this completed form to Deceuninck for the testing process to begin.

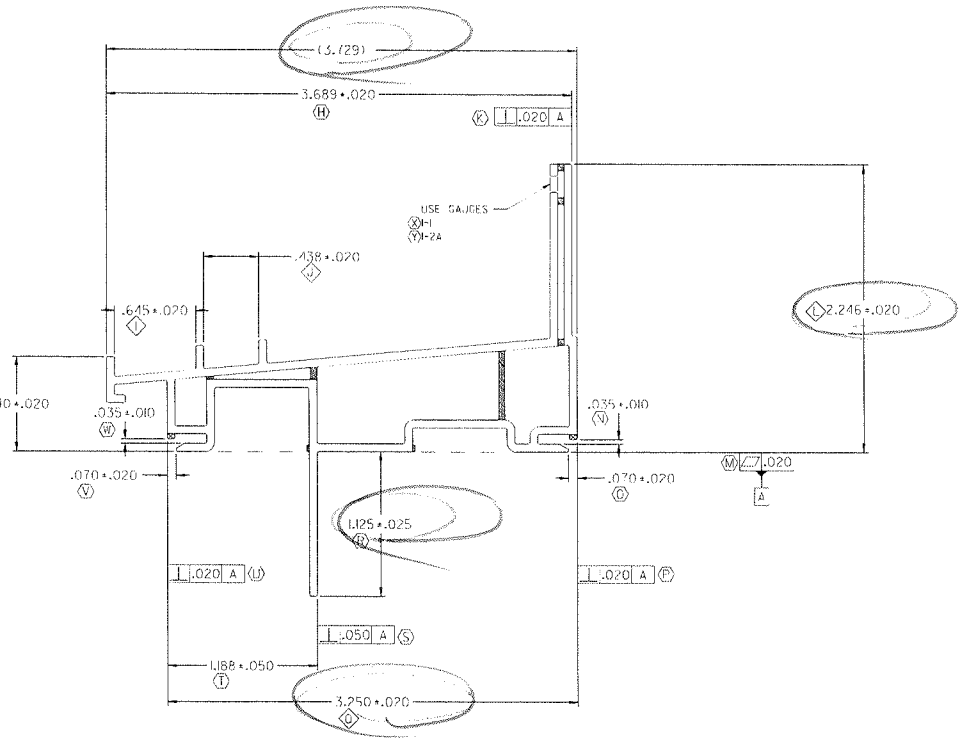
CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.

REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
F	ADDED KPC DIMENSIONS	09/04/09	BWB

KEY PRODUCT CHARACTERISTICS

- G FRAME DIMENSION .720 - .760
- I FRAME DIMENSION .625 - .665
- J FRAME DIMENSION .418 - .458
- L FRAME DIMENSION 2.226 - 2.266
- O FRAME DIMENSION 3.230 - 3.270





Architectural Testing

Test sample complies with these details. Deviations are noted.

Report# B7807.01

Date 3/10/12 Tech JG

WALL THICKNESS

.062 -

.060 -

.050 -

NOTES:

1. 'STD00013' STRAIGHTNESS CLASS A AND LENGTH TOLERANCES APPLY Ⓐ
2. INTERPRET ALL TOLERANCE APPLICATIONS PER STD00013 Ⓑ
3. UNSPECIFIED EXTERNAL RADII = .XXX +.010 / -.005 Ⓒ
4. UNSPECIFIED INTERNAL RADII = .XXX +.020 / -.005 Ⓓ
5. UNSPECIFIED EXTERNAL WALL THICKNESS = .XXX +/- 10% Ⓔ
6. UNSPECIFIED INTERNAL WALL THICKNESS = .XXX +/- 20% Ⓕ

UNLESS OTHERWISE SPECIFIED
DIM ARE IN INCHES
TOL ON ANGLES ± IF
2 PL: ± 0.010° 3 PL: ± 0.005°
INTERPRET DIM AND TOL PER
ASME Y14.5M - 1994

THIRD ANGLE PROJECTION

DESIGN BY:	CRB	
DATE:	02/06/18	
DRAWN BY:	CRB	
DATE:	02/06/18	
AUTH:	DATE:	
AUTH:	DATE:	
AUTH:	DATE:	
FILENAME:	$FILE NAME$	

deceuninck NORTH AMERICA
351 NORTH GARVER ROAD
MONROE, OHIO 45050

NAME: SILL FRAME SH/DH (R50)

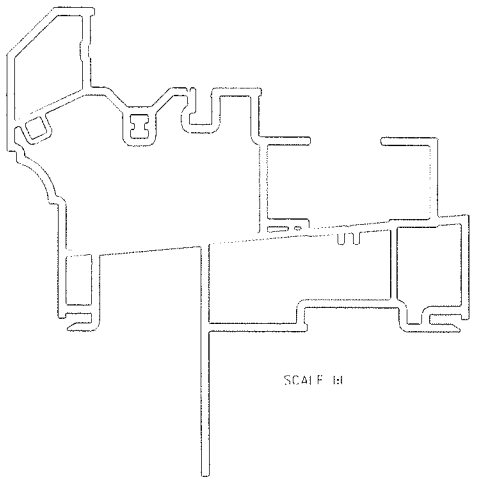
SIZE	DWG. NO:	REV.
B	10008672_SH	F

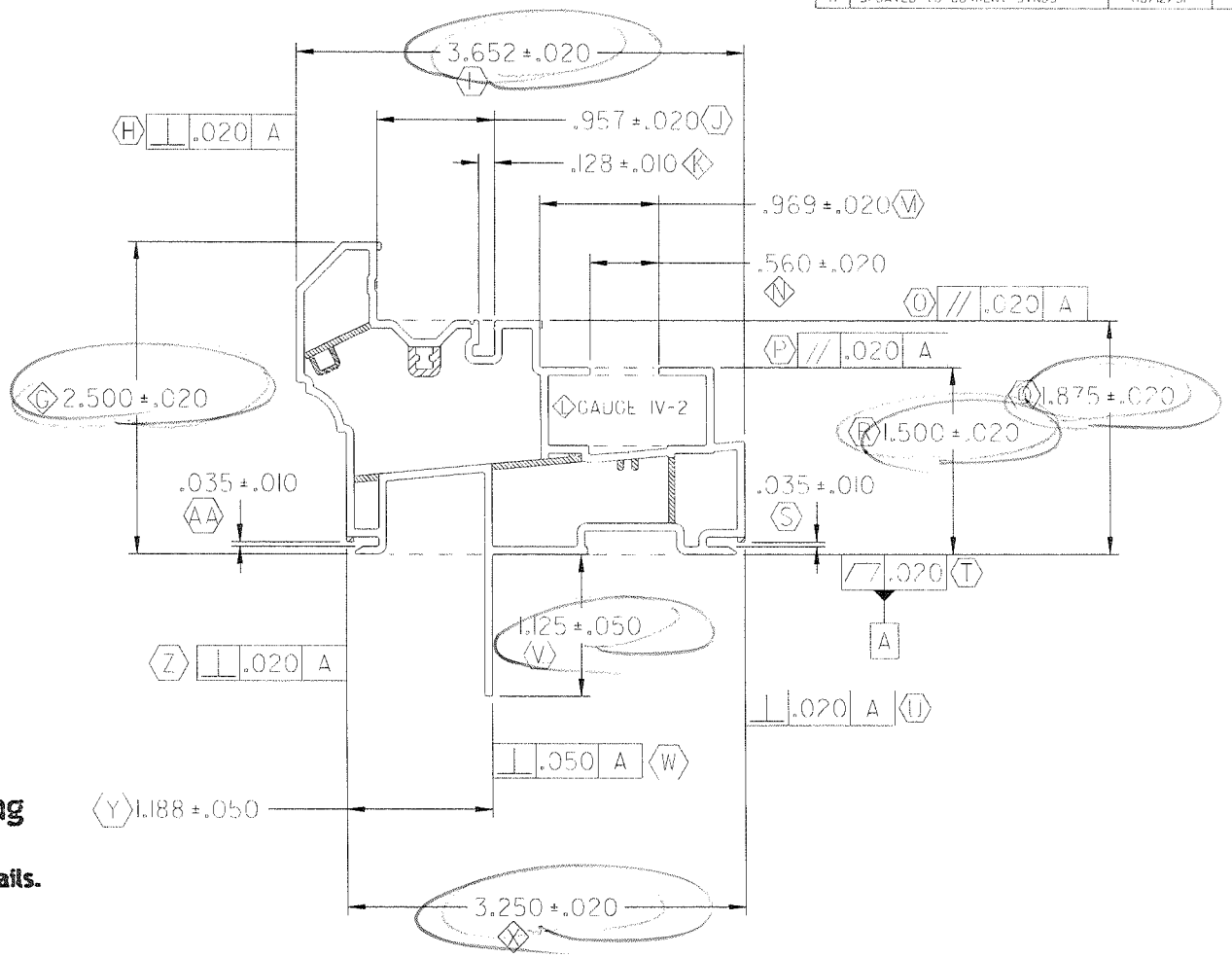
SCALE:	LBS/FT.:	SHEET:
1:1	.601	1 OF 1

$FILE$

CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.

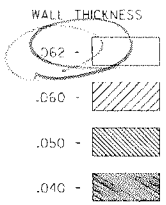
REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
G	GDT-3	07/08/23	BWB
H	UPDATED TO CURRENT STNDS	08/12/31	BWB





KEY PRODUCT CHARACTERISTICS
G DIMENSION 2.480 - 2.520
K DIMENSION .118 - .138
N DIMENSION .540 - .580
X DIMENSION 3.230 - 3.270
L GAUGE IV-2

WALL THICKNESS



Architectural Testing

Test sample complies with these details. Deviations are noted.

Report# B7907.01

Date 3/10/12 Tech JG

NOTES:

1. 'STD00013' STRAIGHTNESS CLASS A AND LENGTH TOLERANCES APPLY (A)
2. INTERPRET ALL TOLERANCE APPLICATIONS PER STD00013 (B)
3. UNSPECIFIED EXTERNAL RADII = .XXX +.010 / -.005 (C)
4. UNSPECIFIED INTERNAL RADII = .XXX +.020 / -.005 (D)
5. UNSPECIFIED EXTERNAL WALL THICKNESS = .XXX +/- 10% (E)
6. UNSPECIFIED INTERNAL WALL THICKNESS = .XXX +/- 20% (F)

UNLESS OTHERWISE SPECIFIED
DIM ARE IN INCHES
TOL ON ANGLES ± 1°
2 PL: ± 0.010" 3 PL: ± 0.005"
INTERPRET DIM AND TOL PER
ASME Y14.5M - 1994

THIRD ANGLE PROJECTION

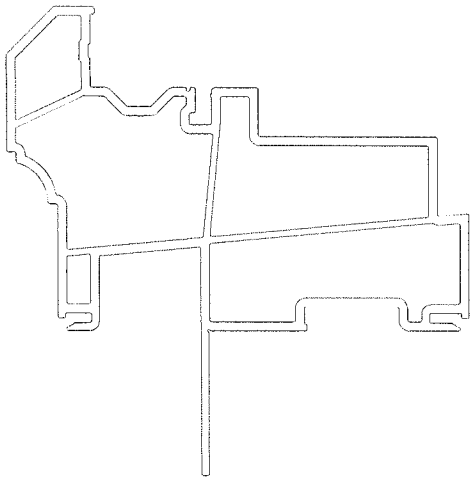
DESIGN BY:	CRB	
DATE:	00/05/22	
DRAWN BY:	CRB	
DATE:	00/08/22	
AUTH:	DATE:	
AUTH:	DATE:	
AUTH:	DATE:	
FILENAME:	78829	

deceuninck NORTH AMERICA
351 NORTH GARVER ROAD
MONROE, OHIO 45050

NAME: MAIN FRAME - SH

SIZE	DWG. NO:	REV.
B	10008686_SH	H

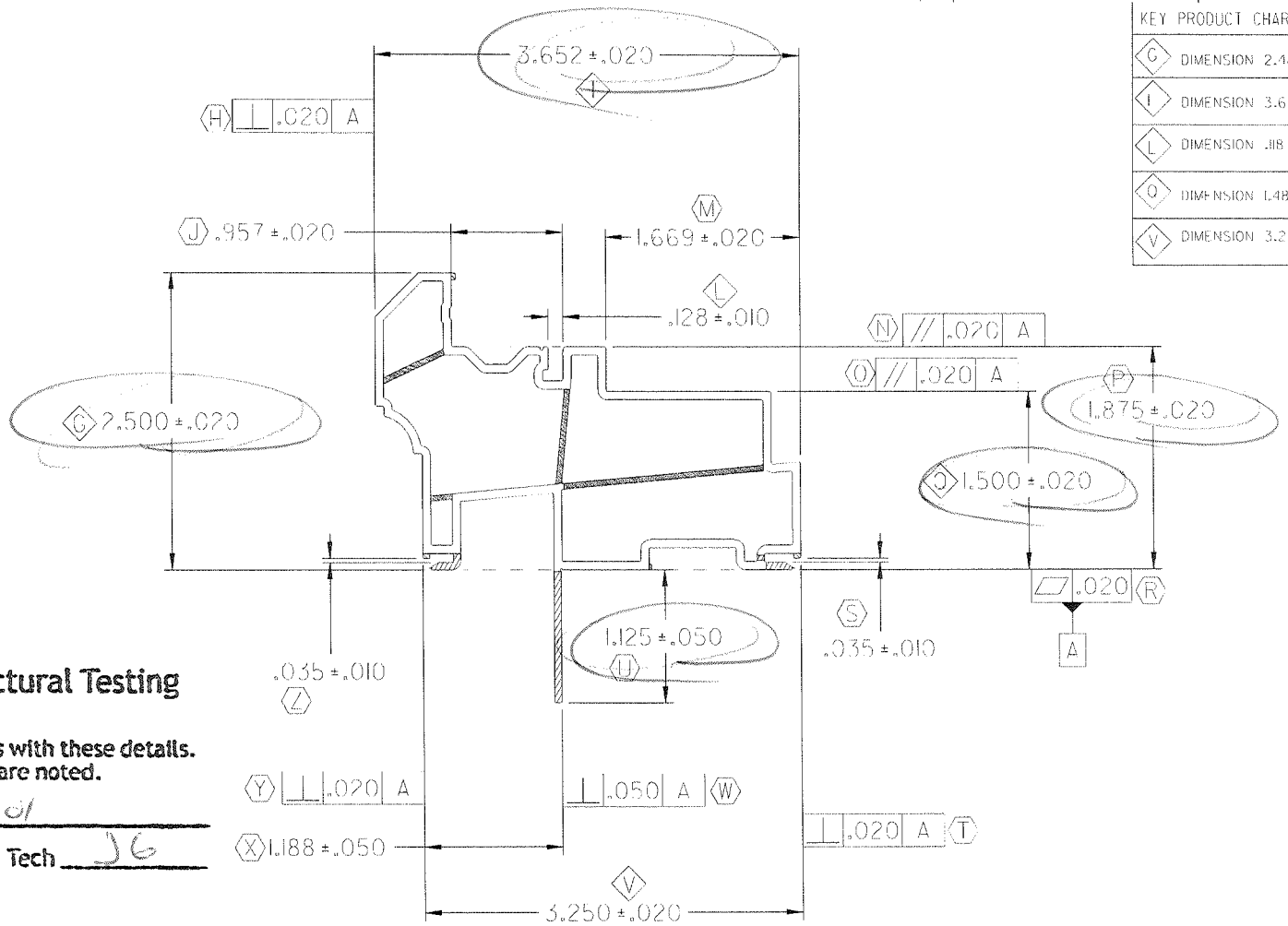
SCALE: 1:1 | LBS/FT.: .775 | SHEET: 1 OF 1



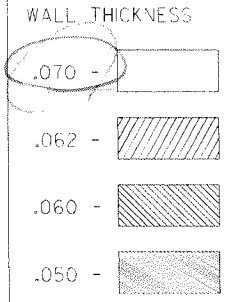
CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.

REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
H	ADDED KPC DIMENSIONS	09/01/09	BWB

KEY PRODUCT CHARACTERISTICS
(G) DIMENSION 2.480 - 2.520
(I) DIMENSION 3.632 - 3.672
(L) DIMENSION .118 - .138
(Q) DIMENSION 1.480 - 1.520
(V) DIMENSION 3.230 - 3.270



WALL THICKNESS



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# B7807.01

Date 3/10/12 Tech JG

NOTES:

1. 'STD0C013' STRAIGHTNESS CLASS A AND LENGTH TOLERANCES APPLY (A)
2. INTERPRET ALL TOLERANCE APPLICATIONS PER STD0013 (B)
3. UNSPECIFIED EXTERNAL RADII = .XXX +.010 / -.005 (C)
4. UNSPECIFIED INTERNAL RADII = .XXX +.020 / -.005 (D)
5. UNSPECIFIED EXTERNAL WALL THICKNESS = .XXX +/- 10% (E)
6. UNSPECIFIED INTERNAL WALL THICKNESS = .XXX +/- 20% (F)

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DECEUNINCK NORTH AMERICA

UNLESS OTHERWISE SPECIFIED
DIM ARE IN INCHES
TOL ON ANGLES ± 1°
2 PL: ± 0.010" 3 PL: ± 0.005"
INTERPRET DIM AND TOL PER
ASME Y14.5M - 1994

THIRD ANGLE PROJECTION

DESIGN BY:	CRB	
DATE:	00/05/12	
DRAWN BY:	CRB	
DATE:	00/05/12	
AUTH:	DATE:	
AUTH:	DATE:	
AUTH:	DATE:	
FILENAME:	79246	

deceuninck NORTH AMERICA
351 NORTH GARVER ROAD
MONROE, OHIO 45050

NAME: HEAD FRAME - SH (PW MF)

SIZE	DWG. NO:	REV.
B	10008687_SH	H

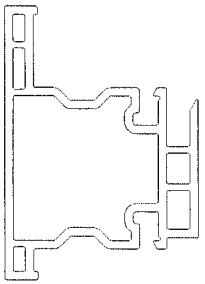
SCALE: 1:1 | LBS/FT.: .772 | SHEET: 1 OF 1

CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.

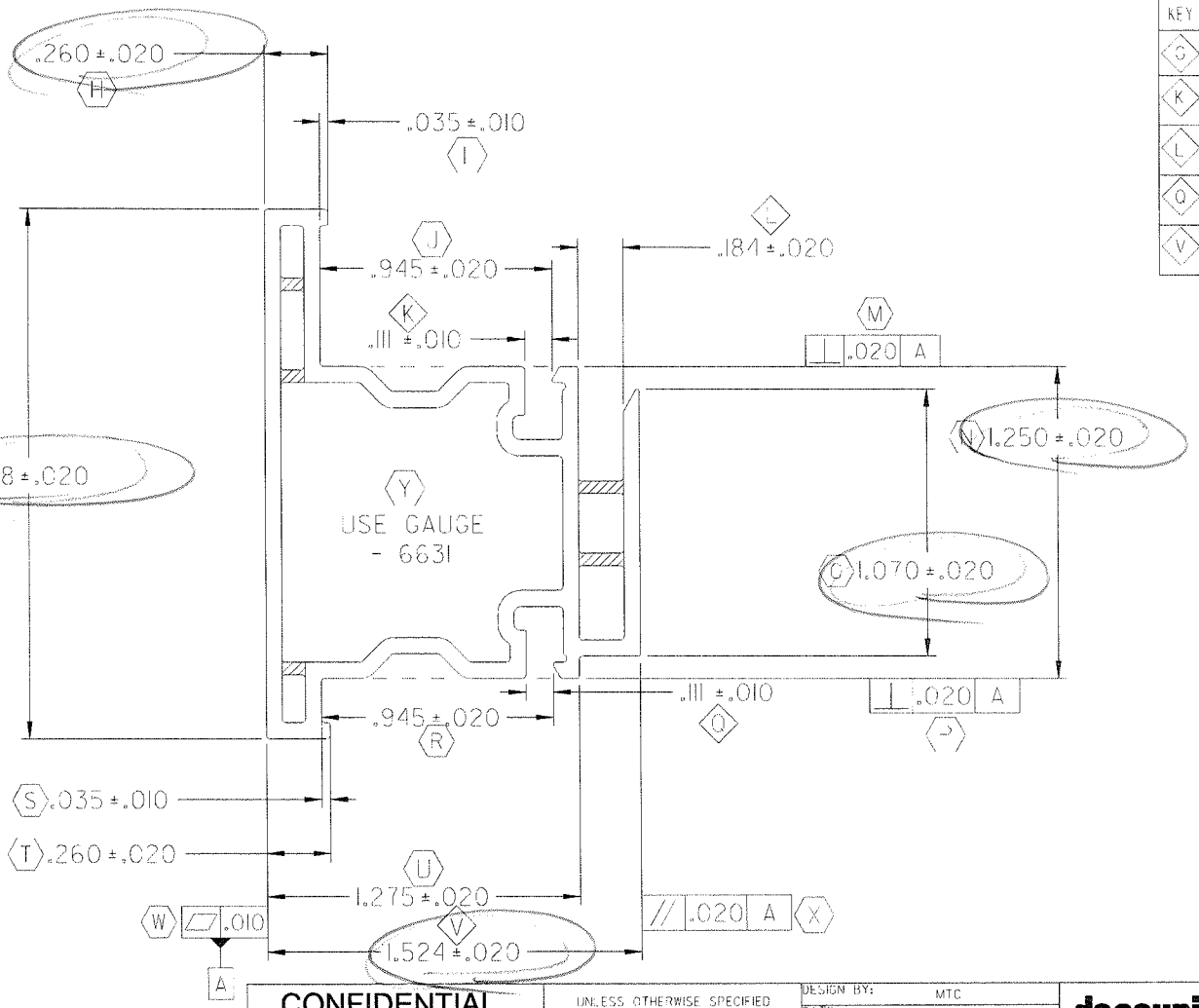
REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
P	KPC	09/07/02	BW3

KEY PRODUCT CHARACTERISTICS

C	DIMENSION 2.098 - 2.138
K	DIMENSION .101 - .121
L	DIMENSION .164 - .204
Q	DIMENSION .101 - .121
V	DIMENSION 1.504 - 1.544



SCALE 1:1



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# 97807-01

Date 3/01/12 Tech JG

WALL THICKNESS

.065 -

.050 -

NOTES:

1. STD00013 STRAIGHTNESS CLASS A AND LENGTH TOLERANCES APPLY (A)
2. INTERPRET ALL TOLERANCE APPLICATIONS PER STD00013 (B)
3. UNSPECIFIED EXTERNAL RADII = .XXX +.010 / -.005 (C)
4. UNSPECIFIED INTERNAL RADII = .XXX +.020 / -.005 (D)
5. UNSPECIFIED EXTERNAL WALL THICKNESS = .XXX +/- 10% (E)
6. UNSPECIFIED INTERNAL WALL THICKNESS = .XXX +/- 20% (F)

UNLESS OTHERWISE SPECIFIED
DIM ARE IN INCHES
TOL ON ANGLES ± 1°
2 PL: ± 0.010" 3 PL: ± 0.005"
INTERPRET DIM AND TOL PER
ASME Y14.5M - 1994

THIRD ANGLE PROJECTION

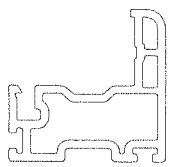
DESIGN BY:	MTC
DATE:	93/08/20
DRAWN BY:	TJH
DATE:	03/08/27
AUTH:	DATE:
AUTH:	DATE:
AUTH:	DATE:
FILENAME:	89821

deceuninck NORTH AMERICA
351 NORTH GARVER ROAD
MONROE, OHIO 45050

NAME:
EGRESS MEETING RAIL

SIZE	DWG. NO:	REV.
B	100085IL.SH	P

SCALE: 2:1	LBS/FT: .380	SHEET: 1 OF 1



SCALE 1:1

KEY PRODUCT CHARACTERISTICS	
G	DIMENSION .610 - .640
J	DIMENSION .101 - .121
M	DIMENSION 1.235 - 1.265
P	DIMENSION 1.280 - 1.320
S	PERPENDICULARITY .010
T	ALUM INSERT A6202

CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.

REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
H	REDUCED TOLERANCE ON DIM S	11/08/19	BWB

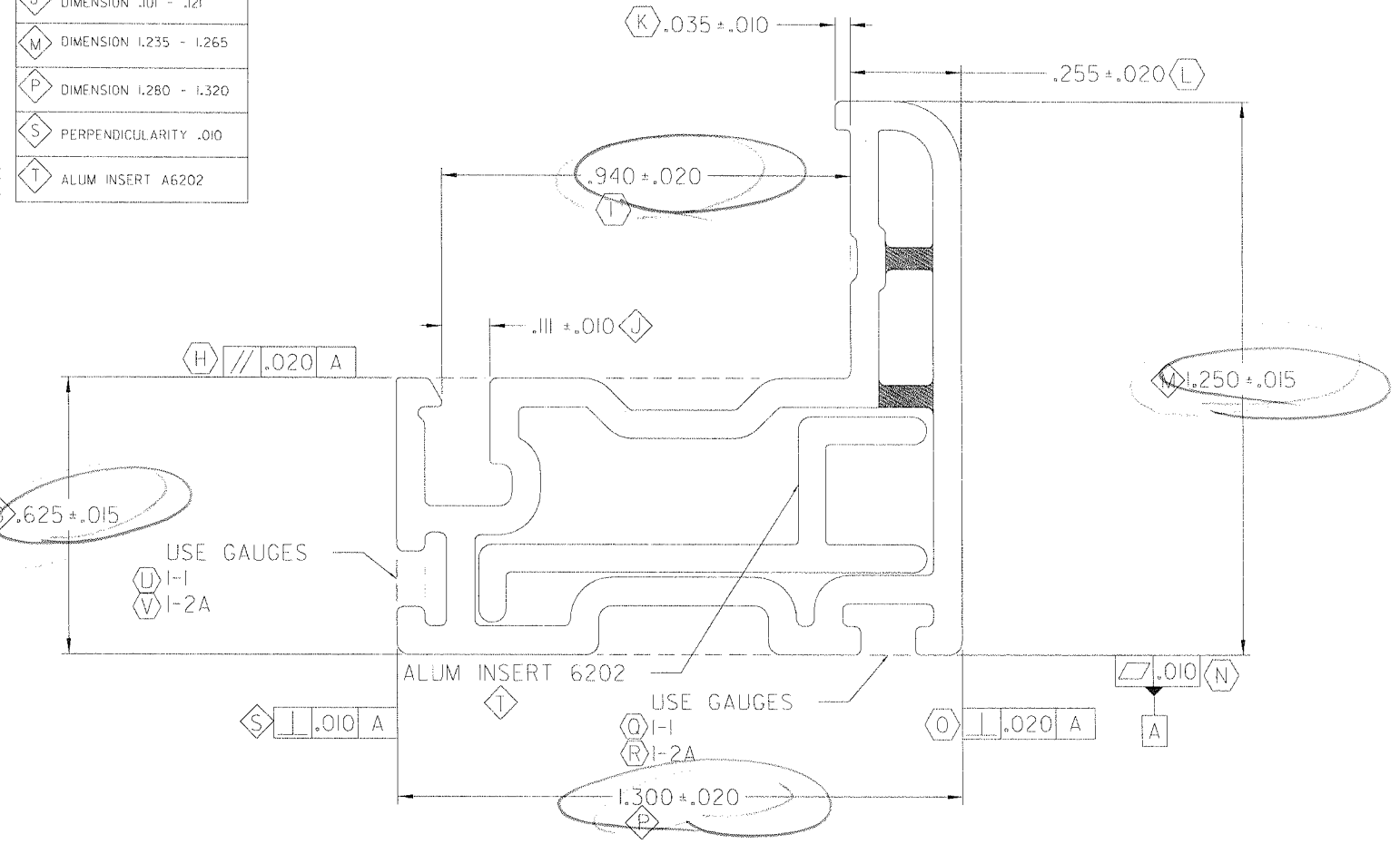
11/9/2011

Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# 378807.01 Tech JG

Date 3/6/12



WALL THICKNESS

.065 -

.050 -

NOTES:

1. 'STD00013' STRAIGHTNESS CLASS C AND LENGTH TOLERANCES APPLY (A)
2. INTERPRET ALL TOLERANCE APPLICATIONS PER STD0013 (B)
3. UNSPECIFIED EXTERNAL RADII = .XXX +.010 / -.005 (C)
4. UNSPECIFIED INTERNAL RADII = .XXX +.020 / -.005 (D)
5. UNSPECIFIED EXTERNAL WALL THICKNESS = .XXX +/- 10% (E)
6. UNSPECIFIED INTERNAL WALL THICKNESS = .XXX +/- 20% (F)

UNLESS OTHERWISE SPECIFIED
DIM ARE IN INCHES
TOL ON ANGLES ± 1°
2 PL: ± 0.010" 3 PL: ± 0.005"
INTERPRET DIM AND TOL PER
ASME Y14.5M - 1994

THIRD ANGLE PROJECTION

DESIGN BY:	CRB	
DATE:	03/11/06	
DRAWN BY:	CRB	
DATE:	03/11/06	
AUTH:	DATE:	
AUTH:	DATE:	
AUTH:	DATE:	
FILENAME:	78872	

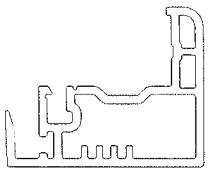
deceuninck NORTH AMERICA
351 NORTH GARVER ROAD
MONROE, OHIO 45050

NAME: MAIN SASH

SIZE	DWG. NO:	REV.
B	10008842.SH	H

SCALE: 4 : 1 | [LBS/FT.] .242 | SHEET: 1 OF 1

\\nams-fs1\decfiles\data\vgn\176609.DGN



SCALE 1:1

CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.

REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
E	KPC	10/05/13	BW3

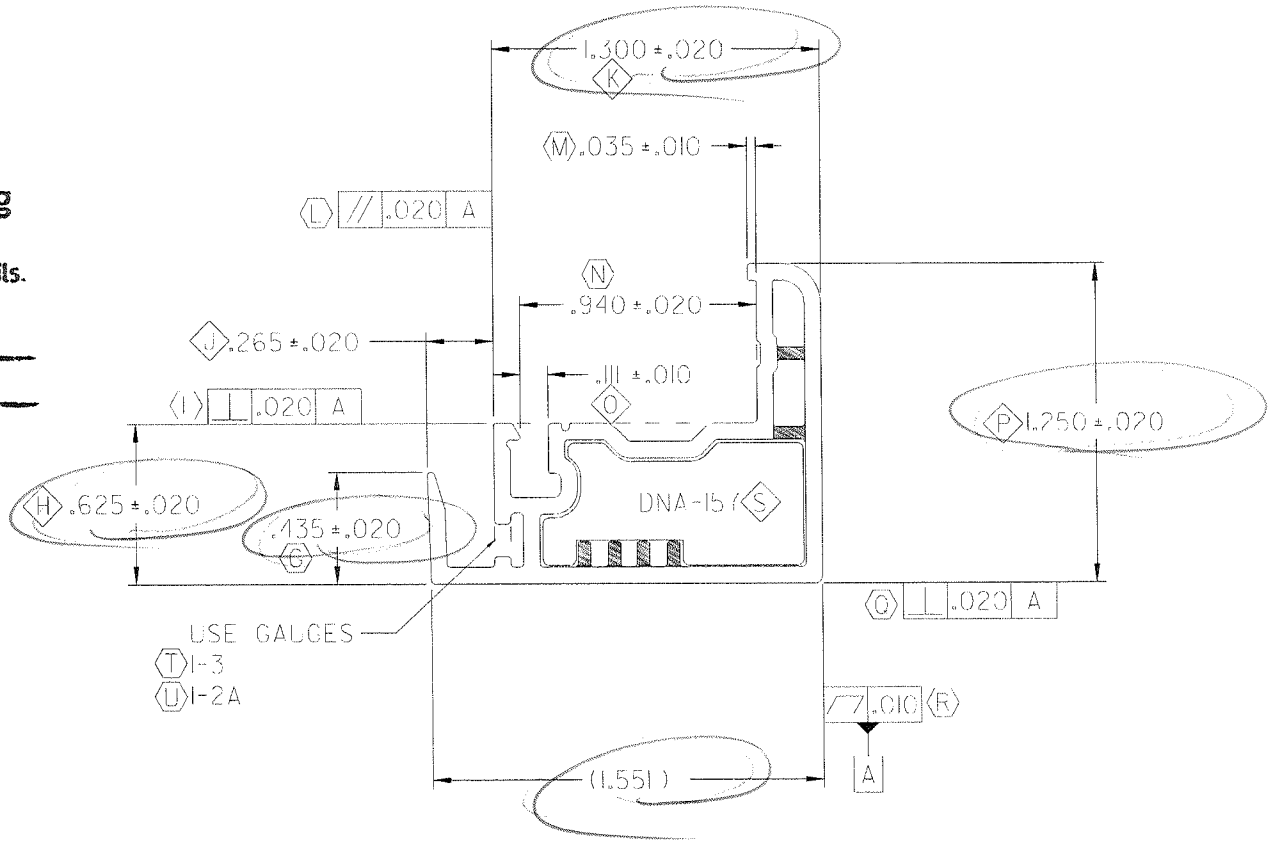
KEY PRODUCT CHARACTERISTICS
(H) DIMENSION .605 - .645
(J) DIMENSION .245 - .285
(K) DIMENSION 1.280 - 1.320
(Q) DIMENSION .101 - .121
(P) DIMENSION 1.230 - 1.270
(S) GAUGE DNA-157

Architectural Testing

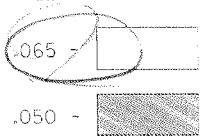
Test sample complies with these details.
Deviations are noted.

Report# B7807.01

Date 3/10/12 Tech JG



WALL THICKNESS



NOTES:

1. 'STD00013' STRAIGHTNESS CLASS C AND LENGTH TOLERANCES APPLY (A)
2. INTERPRET ALL TOLERANCE APPLICATIONS PER STD00013 (B)
3. UNSPECIFIED EXTERNAL RADII = .XXX +.010 / -.005 (C)
4. UNSPECIFIED INTERNAL RADII = .XXX +.020 / -.005 (D)
5. UNSPECIFIED EXTERNAL WALL THICKNESS = .XXX +/- 10% (E)
6. UNSPECIFIED INTERNAL WALL THICKNESS = .XXX +/- 20% (F)

UNLESS OTHERWISE SPECIFIED
DIM ARE IN INCHES
TOL ON ANGLES ± 1°
2 PL: ± 0.010" 3 PL: ± 0.005"
INTERPRET DIM AND TOL PER
ASME Y14.5M - 1994

THIRD ANGLE PROJECTION

DESIGN BY:	CRB
DATE:	03/10/10
DRAWN BY:	CRB
DATE:	03/11/10
AUTH:	DATE:
AUTH:	DATE:
AUTH:	DATE:
FILENAME:	99628

deceuninck NORTH AMERICA
351 NORTH GARVER ROAD
MONROE, OHIO 45050

NAME:

LOCK SASH

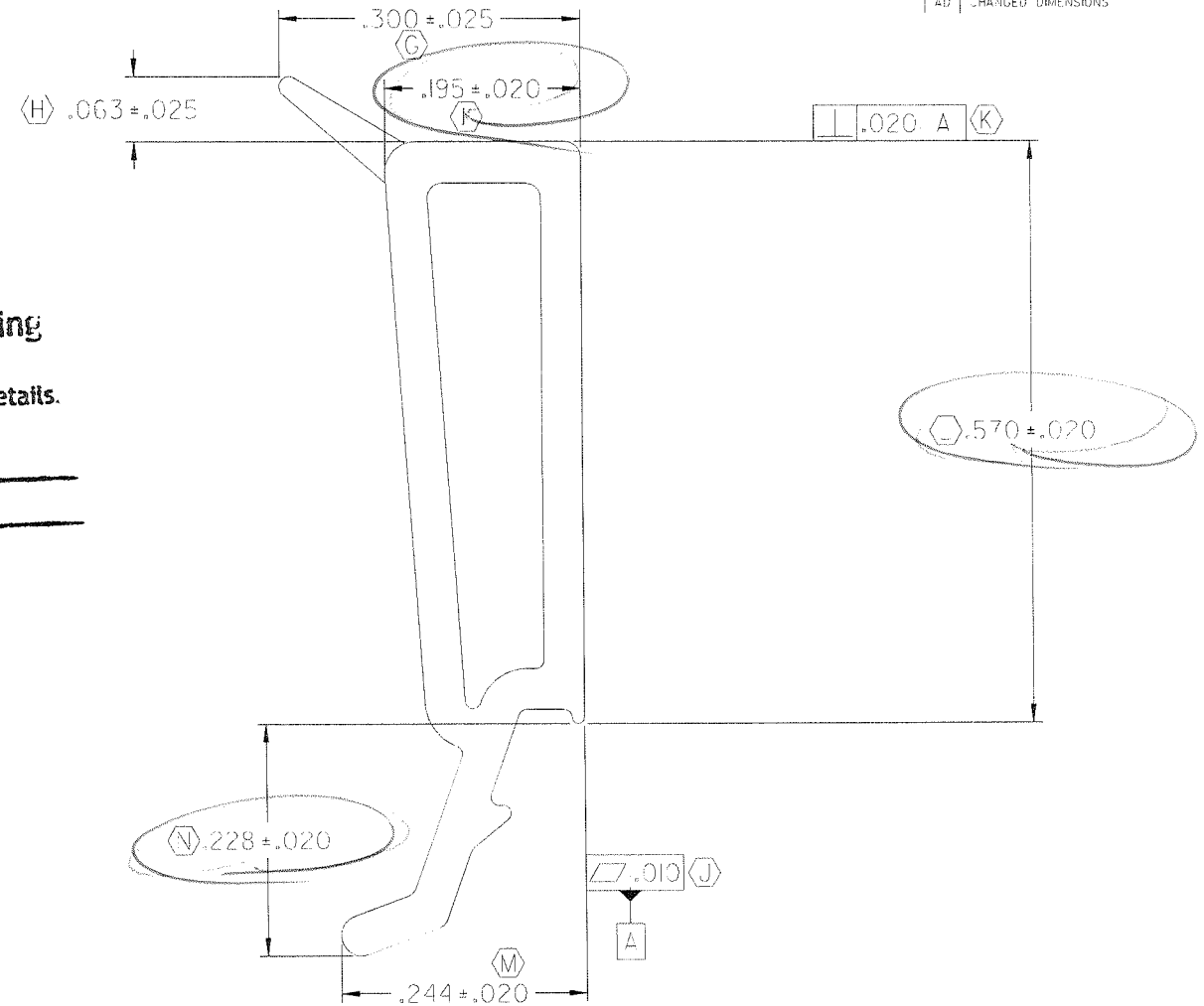
SIZE	DWG. NO:	REV:
B	IC008845_SH	E

SCALE: 2 :1	LBS/FT.: .265	SHEET: 1 OF 1

SCALE 1:1

CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.

REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
AD	CHANGED DIMENSIONS	06/09/20	BWB



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# B7807.01

Date 3/10/12 Tech JG

WALL THICKNESS

.040 -

NOTES:

1. STD00013' STRAIGHTNESS CLASS E AND LENGTH TOLERANCES APPLY (A)
2. INTERPRET ALL TOLERANCE APPLICATIONS PER STD00013 (B)
3. UNSPECIFIED EXTERNAL RADII = .XXX +.010 / -.005 (C)
4. UNSPECIFIED INTERNAL RADII = .XXX +.020 / -.005 (D)
5. UNSPECIFIED EXTERNAL WALL THICKNESS = .XXX +/- 10% (E)
6. UNSPECIFIED INTERNAL WALL THICKNESS = .XXX +/- 20% (F)

UNLESS OTHERWISE SPECIFIED
DIM ARE IN INCHES
TOL ON ANGLES ± 1°
2 PL: ± 0.010" 3 PL: ± 0.005"
INTERPRET DIM AND TOL PER
ASME Y14.5M - 1994

THIRD ANGLE PROJECTION

DESIGN BY:	MTC	
DATE:	93/06/01	
DRAWN BY:	MTC	
DATE:	93/06/01	
AUTH:	DATE:	
AUTH:	DATE:	
AUTH:	DATE:	
FILENAME:	71062	

deceuninck NORTH AMERICA
351 NORTH GARVER ROAD
MONROE, OHIO 45050

NAME: GLAZING BEAD

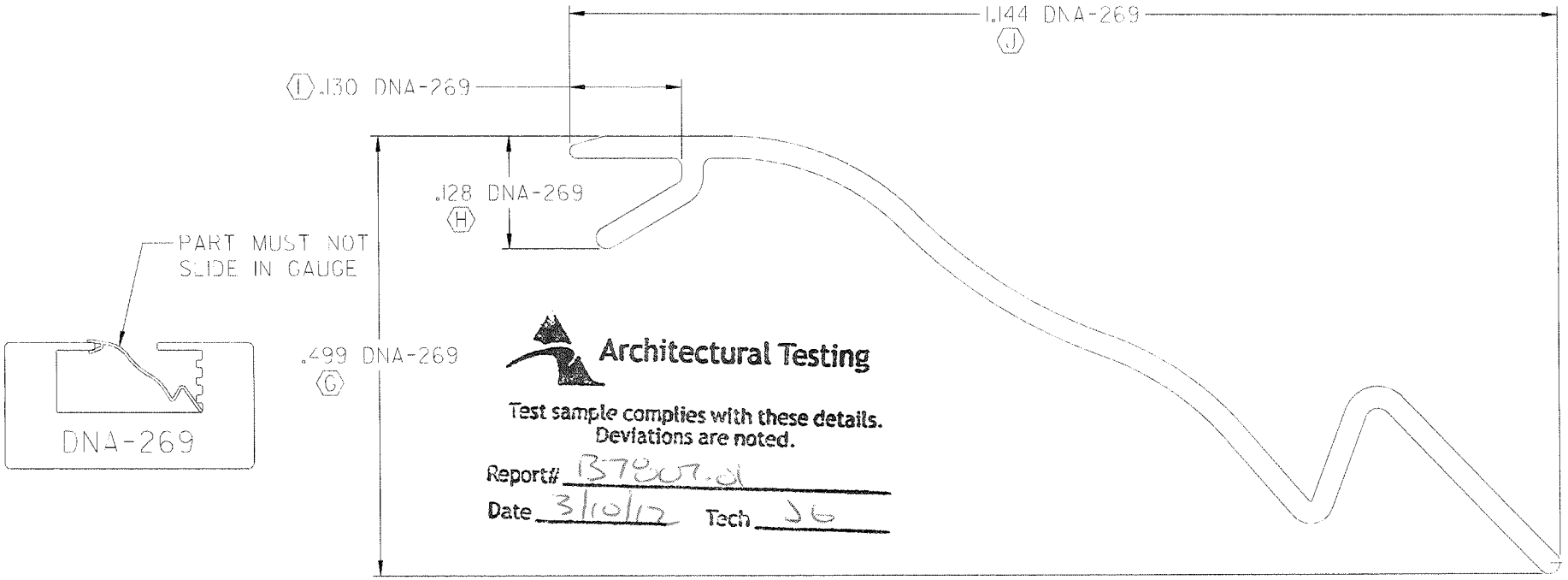
SIZE	DWG. NO:	REV.
B	10005470_SH	AD

SCALE:	LBS/FT.:	SHEET:
B :1	.043	1 OF 1

CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.

REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
C	ADDED GAUGE DNA-269	10/08/04	BWB

SCALE 1:1



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# B7807.01

Date 3/10/12 Tech JB

WALL THICKNESS

.025 - [ ]

NOTES:

1. 'STD00013' STRAIGHTNESS CLASS E AND LENGTH TOLERANCES APPLY (A)
2. INTERPRET ALL TOLERANCE APPLICATIONS PER STD00013 (B)
3. UNSPECIFIED EXTERNAL RADII = .XXX +.010 / -.005 (C)
4. UNSPECIFIED INTERNAL RADII = .XXX +.020 / -.005 (D)
5. UNSPECIFIED EXTERNAL WALL THICKNESS = .025 +/- .005 (E)
6. UNSPECIFIED INTERNAL WALL THICKNESS = .XXX +/- 20% (F)

UNLESS OTHERWISE SPECIFIED
DIM ARE IN INCHES
TOL ON ANGLES ± 1°
2 PL ± 0.010" 3 PL ± 0.005"
INTERPRET DIM AND TOL PER
ASME Y14.5M - 1994

THIRD ANGLE PROJECTION

DESIGN BY:	CRB	
DATE:	06/01/06	
DRAWN BY:	CRB	
DATE:	06/01/06	
AUTH:	DATE:	
AUTH:	DATE:	
AUTH:	DATE:	
FILENAME:	$FILE NAME$	

deceuninck NORTH AMERICA
351 NORTH GARVER ROAD
MONROE, OHIO 45050

NAME:

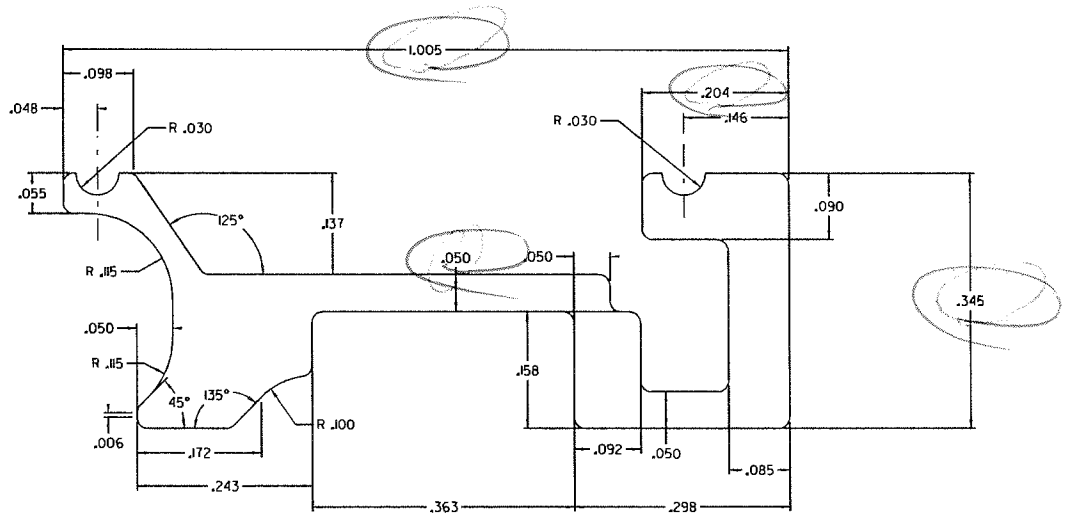
BALANCE COVER

SIZE	DWG. NO:	REV:
B	10005104_SH	C

SCALE: 8 :1 | LBS/FT.: .030 | SHEET: 1 OF 1

$PLOTDATE$
$USER$
$FILE$

CAD MAINTAINED. CHANGES SHALL BE
INCORPORATED BY THE DESIGN ACTIVITY.



ALL UNSPECIFIED RADII EQUALS.015

Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report: B7807.01

Date 3/10/12 Tech JC

6005-T5

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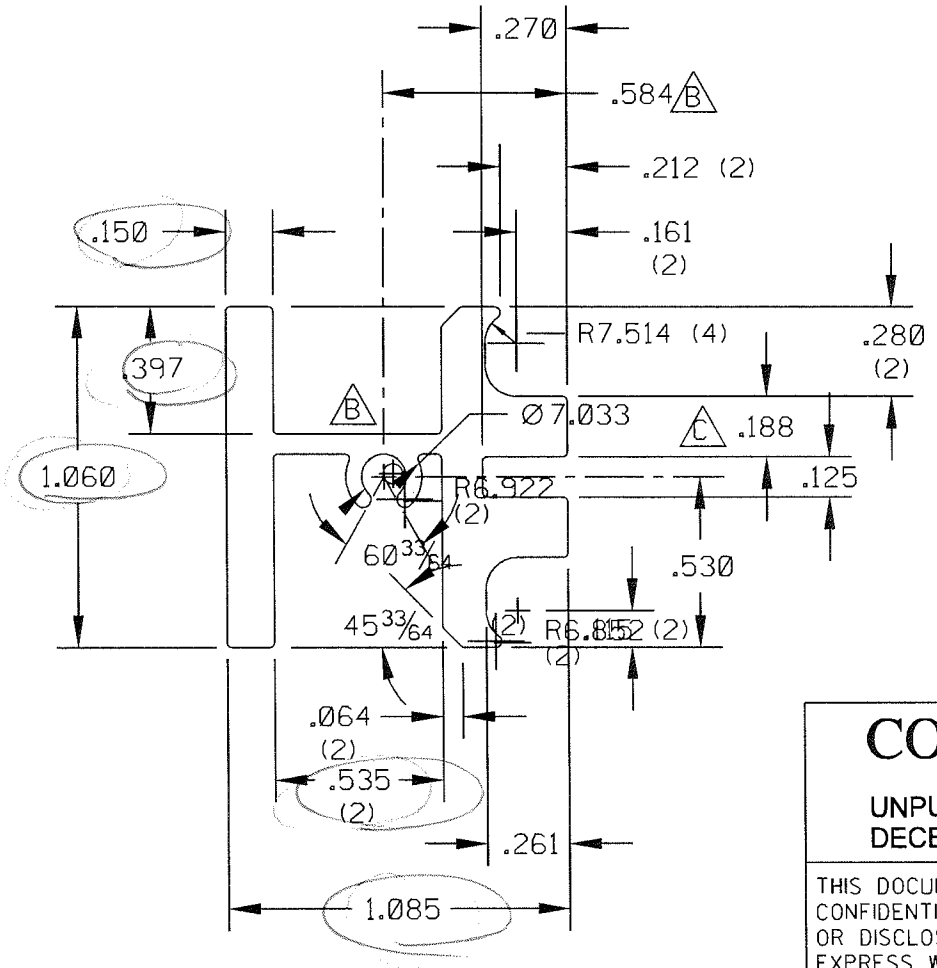
1/9/2007

H:\pdf\nsv8\ALUMINUM\10300082.dgn

10300084



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# B7807.01

Date 3/10/12 Tech JC

NOTES

1. ALLOY/TEMPER 6005-T5, 6061-T6 or 6105-T5.
2. WALL THICKNESS UNLESS OTHERWISE SHOWN: .062".
3. NO EXPOSED SURFACES.
4. BREAK SHARP CORNERS Ø.015R.
5. MOMENTS OF INERTIA: Ixx=.032; Iyy=.061.
6. ⊕ INDICATES CENTROID LOCATION. Ø6.852

REV	BY	APPV'D	DATE	CHANGE
C	RJK		6-8-05	.188 WAS .223
B	RJK		5-18-05	MOVED SCREW BOSS FOR M.R. ATTACH. BRAC
A	RJK		5-3-05	GEN. REVISIONS TO INCREASE Y-Y MOMENT

Deceuninck® NORTH AMERICA/Oakland NJ

AREA = .442 PERIMETER = 6.968 TOL: AA STDS
WT/FT = .530 FACTOR = 13

FILENAME: Alum-5C 145093SH-Mtg. Rail DP50 Reba

BY RJK | DATE 4-21-05 | MAT'L NOTE 1 | SCALE FULL

DNA IMPACT PROJECT 10300084