

## AAMA/WDMA/CSA 101/I.S.2/A440-05 AND ANSI/AAMA/NWWDA 101/I.S.2-97 TEST REPORT

#### Rendered to:

#### **EARTHWISE GROUP LLC**

SERIES/MODEL: 143.095 DH PRODUCT TYPE: Double Hung Window

Report No.: 74670.03-501-47
Test Dates: 06/25/07
Through: 06/27/07
Report Date: 07/26/07
Expiration Date: 06/27/11

130 Derry Court York, PA 17406-8405 phone: 717-764-7700 fax: 717-764-4129 www.archtest.com



# Summary of Results (Continued)

	Summary of Results		
Title	Test Specimen #1	Test Specimen #2	Test Specimen #3
AAMA/WDMA/CSA 101/I.S.2/A440-05	H-R20 1220 x 1955	H-LC25 1220 x 1955	H-R20 1120 x 1600
Rating	(48 x 77)	(48 x 77)	(44 x 63)
ANSI/AAMA/NWWDA 101/I.S.2-97 Rating	H-R20 48 x 77	H-LC25 48 x 77	H-R20 44 x 63
Design Pressure	±960 Pa (±20.06 psf)	±1200 Pa (±25.08 psf)	±960 Pa (±20.06 psf)
Operating Force (in motion)	135 N (30 lbf)	N/A	135 N (30 lbf)
Air Infiltration	$0.60 \text{ L/s/m}^2$ $(0.12 \text{ cfm/ft}^2)$	N/A	$0.35 \text{ L/s/m}^2$ (0.07 cfm/ft <sup>2</sup> )
Water Penetration Resistance Test Pressure	220 Pa (4.60 psf)	260 Pa (5.43 psf)	220 Pa (4.60 psf)
Uniform Load Structural Test Pressure	±1440 Pa (±30.09 psf)	±1800 Pa (±37.62 psf)	±1440 Pa (±30.09 psf)
Forced Entry Resistance	Grade 10	N/A	Grade 10

	Summary of Results	
Title	Test Specimen #4	Test Specimen #5
AAMA/WDMA/CSA 101/I.S.2/A440-05	H-R30 1120 x 1600	H-LC35 1120 x 1600*
Rating	(44 x 63)	(44 x 63*)
ANSI/AAMA/NWWDA 101/I.S.2-97 Rating	H-R30 44 x 63	H-LC35 44 x 63*
Design Pressure	±1440 Pa (±30.09 psf)	±1680 Pa (±35.11 psf)
Operating Force (in motion)	N/A	N/A
Air Infiltration	N/A	N/A
Water Penetration Resistance Test Pressure	N/A	N/A
Uniform Load Structural Test Pressure	±2160 Pa (±45.14 psf)	±2520 Pa (±52.66 psf)
Forced Entry Resistance	N/A	N/A

**Test Completion Date:** 06/27/07

Reference must be made to Report No. 74670.03-501-47, dated 07/26/07 for complete test specimen description and data.



#### AAMA/WDMA/CSA 101/I.S.2/A440-05 and ANSI/AAMA/NWWDA 101/I.S.2-97 **TEST REPORT**

Rendered to:

EARTHWISE GROUP LLC 107 Pierce Road Clifton Park, New York 12065

> Report No.: 74670.03-501-47 Test Dates: 06/25/07 Through: 06/27/07 Report Date: 07/26/07 Expiration Date: 06/27/11

**Project Summary:** Architectural Testing, Inc. was contracted by Deceuninck North America, LLC. to witness testing on five Series/Model 143.095 DH, double hung windows at the Deceuninck North America, LLC test facility in Monroe, Ohio. This report is a reissue of the original Report No. 74670.01-501-47. This report is reissued in the name of Earthwise Group LLC through written authorization of Deceuninck North America, LLC. description and results are reported herein. The samples were provided by the client. The samples tested successfully met the performance requirements for the following ratings:

Test	AAMA/WDMA/CSA	ANSI/AAMA/NWWDA
Specimen No.	101/I.S.2/A440-05 Rating	101/I.S.2-97 Rating
1	H-R20 1220 x 1955 (48 x 77)	H-R20 48 x 77
2	H-LC25 1220 x 1955 (48 x 77)	H-LC25 48 x 77
3	H-R20 1120 x 1600 (44 x 63)	H-R20 44 x 63
4	H-R30 1120 x 1600 (44 x 63)	H-R30 44 x 63
5	H-LC35 1120 x 1600* (44 x 63*)	H-LC35 44 x 63*

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

**Test Specifications**: The test specimens were evaluated in accordance with the following:

AAMA/WDMA/CSA 101/I.S.2/A440-05, Standard/Specification for Windows, Doors, and Unit Skylights.

ANSI/AAMA/NWWDA 101/I.S.2-97, Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors.

> 130 Derry Court York, PA 17406-8405 phone: 717-764-7700

fax: 717-764-4129 www.archtest.com



#### **Test Specimen Description:**

Series/Model: 143.095 DH

**Product Type**: Double Hung Window

#### **Test Specimen #1**:

Overall Size: 1220 mm (48") wide by 1955 mm (77") high

**Interior Sash Size**: 1140 mm (44-7/8") wide by 960 mm (37-3/4") high

Exterior Sash Size: 1115 mm (43-7/8") wide by 960 mm (37-3/4") high

**Full Screen Size**: 1120 mm (44") wide by 1885 mm (74-1/8") high

Half Screen Size: 1120 mm (44") wide by 960 mm (37-3/4") high

**Overall Area**: 2.39 m<sup>2</sup> (25.7 ft<sup>2</sup>)

**Reinforcement**: Reinforcement was utilized in both meeting rails and bottom rails (Refer to Deceuninck Drawing #A6202).

#### **Test Specimen #2:**

**Overall Size**: 1220 mm (48") wide by 1955 mm (77") high

**Interior Sash Size**: 1140 mm (44-7/8") wide by 960 mm (37-3/4") high

**Exterior Sash Size**: 1115 mm (43-7/8") wide by 960 mm (37-3/4") high

**Full Screen Size**: 1120 mm (44") wide by 1885 mm (74-1/8") high

**Half Screen Size**: 1120 mm (44") wide by 960 mm (37-3/4") high

**Overall Area**: 2.39 m<sup>2</sup> (25.7 ft<sup>2</sup>)

**Reinforcement**: Reinforcement was utilized in all sash members (Refer to Deceuninck Drawing #A6202).



**Test Specimen Description**: (Continued)

#### **Test Specimen #3**:

**Overall Size**: 1120 mm (44") wide by 1600 mm (63") high

**Interior Sash Size**: 1040 mm (40-7/8") wide by 780 mm (30-3/4") high

Exterior Sash Size: 1015 mm (39-7/8") wide by 780 mm (30-3/4") high

**Full Screen Size**: 1015 mm (40") wide by 1525 mm (60-1/8") high

**Half Screen Size**: 1015 mm (40") wide by 785 mm (30-7/8") high

**Overall Area**:  $1.79 \text{ m}^2 (19.25 \text{ ft}^2)$ 

**Reinforcement**: There was no reinforcement utilized.

#### Test Specimen #4:

Overall Size: 1120 mm (44") wide by 1600 mm (63") high

**Interior Sash Size**: 1040 mm (40-7/8") wide by 780 mm (30-3/4") high

**Exterior Sash Size**: 1015 mm (39-7/8") wide by 780 mm (30-3/4") high

**Full Screen Size**: 1015 mm (40") wide by 1525 mm (60-1/8") high

**Half Screen Size**: 1015 mm (40") wide by 785 mm (30-7/8") high

**Overall Area**:  $1.79 \text{ m}^2 (19.25 \text{ ft}^2)$ 

**Reinforcement**: Reinforcement was utilized in both meeting rails and bottom rails (Refer to Deceuninck Drawing #A6202).

#### **Test Specimen #5**:

Overall Size: 1120 mm (44") wide by 1600 mm (63") high

**Interior Sash Size**: 1040 mm (40-7/8") wide by 780 mm (30-3/4") high

Exterior Sash Size: 1015 mm (39-7/8") wide by 780 mm (30-3/4") high



**Test Specimen Description**: (Continued)

**Test Specimen #5**: (Continued)

**Full Screen Size**: 1015 mm (40") wide by 1525 mm (60-1/8") high

**Half Screen Size**: 1015 mm (40") wide by 785 mm (30-7/8") high

**Overall Area**:  $1.79 \text{ m}^2 (19.25 \text{ ft}^2)$ 

**Reinforcement**: Reinforcement was utilized in all sash members (Refer to Deceuninck

Drawing #A6202).

The following descriptions apply to all specimens.

Finish: All vinyl was white.

Frame Construction: All frame members were mitered and welded.

**Sash Construction**: All sash members were mitered and welded.

#### Weatherstripping:

<u>Description</u>	<b>Quantity</b>	Location
Polypile with center fin 0.290" high by 0.187" backed	1 Row	Top and interior meeting rail and sill leg
Polypile with center fin 0.290" high by 0.187" backed	2 Rows	All stiles
Offset foam-filled bulb with leaf (Drawing #10008206)	1 Row	Bottom rail
Foam-filled bulb (Q-LON Drawing #Q375T190)	1 Row	Head

**Glazing Details**: The units were exterior glazed with nominal 19 mm (3/4") thick, sealed insulating glass fabricated from two sheets of single-strength clear annealed glass and a metal U-shaped spacer system. All insulating glass was set against 25 mm (1/2") tape and secured with a vinyl durameter glazing beads.



## **Test Specimen Description**: (Continued)

#### **Drainage**:

<u>Description</u>	<b>Quantity</b>	Location
Weepslot 1" wide by 1/8" high	2	3-1/2" in from outside corners of sill
Weepslot 3/8" wide by 1/8" high	n 4	3-1/4" in from outside corners of bottom rails of both sash
Weep notch 2" wide by 3/16" his	gh 4	Corners of screen track legs of sill

#### Hardware:

<u>Description</u>	<b>Quantity</b>	Location
Metal cam lock	2	11" in from outside corners of interior sash meeting rail
Metal keeper	2	11" in from inside corners of exterior meeting rail
Flush mounted plastic tilt latch	4	Top corners of both sash
Metal pivot bars	4	Bottom corners of both sash
Constant force balance with sho	e 4	Sash tracks in both jambs

**Screen Construction**: Screen was constructed utilizing extruded aluminum that was mitered and held together with an inserted metal corner key. The fiberglass mesh screen cloth was secured with a flexible vinyl spline.

**Installation**: The units were installed into a wood buck using #8 x 5/8" pan head screws spaced every 6-1/2" on center and in corners through nail fin. The nail fin was bedded and sealed in silicone caulking.



**Test Results**: The temperature during testing was 25°C (78°F). The results are tabulated as follows:

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	Allowed
Test Specin	<u>nen #1</u> :		
5.3.1	Operating Force per ASTM E 20	068	
2.2.1.6.1	Initiate motion	135 N (30 lbf)	Report Only
	Maintain motion	135 N (30 lbf)	135 N (30 lbf)
	Latches	18 N (4 lbf)	100 N (22.5 lbf)
5.3.2.1	Air Leakage Resistance per AST	M E 283	
2.1.2	75 Pa (1.6 psf)	$0.60 \text{ L/s/m}^2$	$1.5 \text{ L/s/m}^2$
	-	$(0.12 \text{ cfm/ft}^2)$	$(0.3 \text{ cfm/ft}^2) \text{ max}.$

**Note #1**: The tested specimen meets (or exceeds) the performance levels specified in AAMA/WDMA/CSA 101/I.S.2/A440-05 and ANSI/AAMA/NWWDA 101/I.S.2-97 for air leakage resistance.

5.3.3.2 Water Penetration Resistance per ASTM E 547 See Note #2 2.1.3

Note #2: The client opted to start at a pressure higher than the minimum required. Those results are listed under "Optional Performance".

5.3.4.2 2.1.4.1	Uniform Load Deflection per A (Deflections were taken on the		
	(Loads were held for 52 seconds)		
	720 Pa (15.05 psf) (positive)	9.4 mm (0.37")	See Note #3
	720 Pa (15.05 psf) (negative)	11.2 mm (0.44")	See Note #3

Note #3: The deflections reported are not limited by AAMA/WDMA/CSA 101/I.S.2/A440-05 and ANSI/AAMA/NWWDA 101/I.S.2-97 for this product designation. The deflection data is recorded in this report for special code compliance and information only.

5.3.4.3	Uniform Load Structural per AST	ΓM E 330	
2.1.4.2	(Permanent sets were taken on the exterior meeting rail)		
	(Loads were held for 10 seconds)		
	1080 Pa (22.57 psf) (positive)	0.76 mm (0.03")	4.3 mm (0.17") max.
	1080 Pa (22.57 psf) (negative)	0.51 mm (0.02")	4.3 mm (0.17") max.



**Test Results**: (Continued)

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	Results	Allowed		
Test Specim	<u>Test Specimen #1</u> : (Continued)				
5.3.5 2.1.8	Forced Entry Resistance per ASTI	M F 588			
2.1.0	Type: A	Grade: 10			
	Disassembly Test	No entry	No entry		
	Test A1 through A7	No entry	No entry		
	Sash/Panel Manipulation Test	No entry	No entry		
	Lock Hardware Manipulation Test	No entry	No entry		
5.3.6.2 2.1.7	Thermoplastic Corner Weld Test	Meets as stated	Meets as stated		
5.3.6.3 2.2.1.1.2	Deglazing Test In operating direction - 320 N (70	lhf)			
2,2,1,1,2	Interior meeting rail Interior bottom rail Exterior meeting rail Exterior top rail	6.1 mm (0.24") 4.6 mm (0.18") 4.8 mm (0.19") 3.0 mm (0.12")	11.4 mm (0.45") 11.4 mm (0.45") 11.4 mm (0.45") 11.4 mm (0.45")		
	In remaining direction - 230 N (50	lbf)			
	Interior left stile Interior right stile Exterior left stile Exterior right stile	2.8 mm (0.11") 1.8 mm (0.07") 2.0 mm (0.08") 2.0 mm (0.08")	11.4 mm (0.45") 11.4 mm (0.45") 11.4 mm (0.45") 11.4 mm (0.45")		
Optional Per	<u>formance</u>				
4.4.2.6 4.3	Water Penetration Resistance per A (with and without insect screen) 220 Pa (4.60 psf)	ASTM E 547 No leakage	No leakage		
	220 I a (7.00 psi)	110 Icakage	140 leakage		



Test Results: (Continued)

Paragraph Title of Test - Test Method Results Allowed

<u>Test Specimen #1</u>: (Continued)

Optional Performance: (Continued)

4.4.2.6 Uniform Load Deflection per ASTM E 330

4.4.1 (Deflections were taken on the exterior meeting rail)

(Loads were held for 52 seconds)

960 Pa (20.06 psf) (positive) 11.9 mm (0.47") See Note #3 960 Pa (20.06 psf) (negative) 15.7 mm (0.62") See Note #3

4.4.2.6 Uniform Load Structural per ASTM E 330

4.4.2 (Permanent sets were taken on the exterior meeting rail)

(Loads were held for 10 seconds)

1440 Pa (30.09 psf) (positive) 0.51 mm (0.02") 4.3 mm (0.17") max. 1440 Pa (30.09 psf) (negative) 0.76 mm (0.03") 4.3 mm (0.17") max.

#### Test Specimen #2:

#### **Optional Performance**

4.4.2.6 4.3	Water Penetration Resistance per ASTM E 547 (with and without insect screen)			
	260 Pa (5.43 psf)	No leakage	No leakage	
4.4.2.6	Uniform Load Deflection per AS	TM E 330		
4.4.1	(Deflections were taken on the ex	terior meeting rail)		
	(Loads were held for 52 seconds)			
	1200 Pa (25.08 psf) (positive)	18.3 mm (0.72")	See Note #3	
	1200 Pa (25.08 psf) (negative)	20.0 mm (0.79")	See Note #3	
4.4.2.6	Uniform Load Structural per AS7	ГМ Е 330		
4.4.2	(Permanent sets were taken on the	e exterior meeting ra	ail)	
	(Loads were held for 10 seconds)	_		
	1800 Pa (37.62 psf) (positive)	2.0 mm (0.08")	4.3 mm (0.17") max.	
1800 Pa (37.62 psf) (negative) 2.8 mm (0.11") 4.3 mm (0.17") n				



Test Results: (Continued)

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	Results	Allowed		
Test Specim	Test Specimen #3:				
5.3.1 2.2.1.6.1	Operating Force per ASTM E 206 Initiate motion Maintain motion Latches	135 N (30 lbf) 135 N (30 lbf) 135 N (4 lbf)	Report Only 135 N (30 lbf) 100 N (22.5 lbf)		
5.3.2.1 2.1.2	Air Leakage Resistance per ASTN 75 Pa (1.6 psf)	M E 283 $0.35 \text{ L/s/m}^2$ $(0.07 \text{ cfm/ft}^2)$	$1.5 \text{ L/s/m}^2$ (0.3 cfm/ft <sup>2</sup> ) max.		
	The tested specimen meets (or ex IA/CSA 101/I.S.2/A440-05 and A stance.				
5.3.3.2 2.1.3	Water Penetration Resistance per	ASTM E 547	See Note #2		
5.3.4.2 2.1.4.1	Uniform Load Deflection per AST (Deflections were taken on the ex (Loads were held for 52 seconds) 720 Pa (15.05 psf) (positive) 720 Pa (15.05 psf) (negative)	terior meeting rail) 14.5 mm (0.57")	See Note #3 See Note #3		
5.3.4.3 2.1.4.2	Uniform Load Structural per AST (Permanent sets were taken on the (Loads were held for 10 seconds) 1080 Pa (22.57 psf) (positive) 1080 Pa (22.57 psf) (negative)	e exterior meeting ra 1.0 mm (0.04")	uil) 4.1 mm (0.16") max. 4.1 mm (0.16") max.		
5.3.5	Forced Entry Resistance per AST	M F 588			
2.1.8	Type: A	Grade: 10			
	Disassembly Test	No entry	No entry		
	Test A1 through A7	No entry	No entry		
	Sash/Panel Manipulation Test	No entry	No entry		
	Lock Hardware Manipulation Tes	st No entry	No entry		



**Test Results**: (Continued)

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	Allowed
Test Specim	en #3: (Continued)		
5.3.6.2 2.1.7	Thermoplastic Corner Weld Test	Meets as stated	Meets as stated
5.3.6.3 2.2.1.1.2	Deglazing Test In operating direction - 320 N (70 Interior meeting rail Interior bottom rail Exterior meeting rail Exterior top rail	5.3 mm (0.21") 5.1 mm (0.20") 2.5 mm (0.10") 2.3 mm (0.09")	11.4 mm (0.45") 11.4 mm (0.45") 11.4 mm (0.45") 11.4 mm (0.45")
	In remaining direction - 230 N (50 Interior left stile Interior right stile Exterior left stile Exterior right stile	0 lbf) 3.0 mm (0.12") 2.8 mm (0.11") 1.5 mm (0.06") 1.5 mm (0.06")	11.4 mm (0.45") 11.4 mm (0.45") 11.4 mm (0.45") 11.4 mm (0.45")
Optional Per	<u>formance</u>		
4.4.2.6 4.3	Water Penetration Resistance per (with and without insect screen) 220 Pa (4.60 psf)	ASTM E 547 No leakage	No leakage
4.4.2.6 4.4.1	Uniform Load Deflection per AS' (Deflections were taken on the ex (Loads were held for 52 seconds) 960 Pa (20.06 psf) (positive) 960 Pa (20.06 psf) (negative)	terior meeting rail)	See Note #3 See Note #3
4.4.2.6 4.4.2	Uniform Load Structural per AST (Permanent sets were taken on the (Loads were held for 10 seconds) 1440 Pa (30.09 psf) (positive) 1440 Pa (30.09 psf) (negative)		il) 4.1 mm (0.16") max. 4.1 mm (0.16") max.



**Test Results**: (Continued)

<u>Paragraph</u> <u>Title of Test - Test Method</u> <u>Results</u> <u>Allowed</u>

#### **Test Specimen #4**:

#### **Optional Performance**

4.4.2.6 4.4.1	Uniform Load Deflection per AS (Deflections were taken on the ex (Loads were held for 52 seconds)	xterior meeting rail)	
	1440 Pa (30.09 psf) (positive)	10.7 mm (0.42")	See Note #3
	1440 Pa (30.09 psf) (negative)	13.2 mm (0.52")	See Note #3
4.4.2.6 4.4.2	Uniform Load Structural per AS' (Permanent sets were taken on the (Loads were held for 10 seconds) 2160 Pa (45.14 psf) (positive)	ne exterior meeting ra	ail) 4.1 mm (0.16") max.
	2160 Pa (45.14 psf) (pestave)	0.51 mm (0.02")	4.1 mm (0.16") max.

#### **Test Specimen #5**:

## Optional Performance

4.4.2.6 4.4.1	Uniform Load Deflection per AS (Deflections were taken on the ex (Loads were held for 52 seconds)	terior meeting rail)	
	1680 Pa (35.11 psf) (positive)	18.5 mm (0.73")	See Note #3
	1680 Pa (35.11 psf) (negative)	17.8 mm (0.70")	See Note #3
4.4.2.6	Uniform Load Structural per AS7	ГМ E 330	
4.4.2	(Permanent sets were taken on the	e exterior meeting ra	ail)
	(Loads were held for 10 seconds)		
	2520 Pa (52.66 psf) (positive)	3.8 mm (0.15")	4.1 mm (0.16") max.
	2520 Pa (52.66 psf) (negative)	1.5 mm (0.06")	4.1 mm (0.16") max.

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.

**Drawing Reference**: The test specimen drawings have been reviewed by Architectural Testing, Inc. and are representative of the test specimen reported herein.



#### **List of Official Observers:**

<u>Name</u> <u>Company</u>

Dean Erbaugh Deceuninck North America, LLC Corey A. Eisenhuth Architectural Testing, Inc.

Detailed drawings, data sheets, representative samples of test specimens, a copy of this report, or other pertinent project documentation will be retained by Architectural Testing, Inc. for a period of four years from the original test date. At the end of this retention period, such materials shall be discarded without notice and the service life of this report will expire.

This report is reissued in the name of Earthwise Group LLC through written authorization of Deceuninck North America, LLC to whom the original report was rendered. The original Deceuninck North America, LLC Report No. is 74670.01-501-47.

Results obtained are tested values and were secured by using the designated test methods. No conclusions of any kind regarding the adequacy or inadequacy of the glass in the test specimen 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.

Corey A. Eisenhuth Michael L. Mackereth

Senior Technician

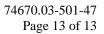
Director - Operations

CAE:vlm/clw

Attachments (pages): This report is complete only when all attachments listed are included.

Appendix-A: Alteration Addendum (1)

Appendix-B: Drawings (14)





## **Revision Log**

<u>Rev. #</u>	<b>Date</b>	Page(s)	Revision(s)
0	07/26/07	N/A	Original report issue – Reissued Report No.
			74670.01-501-47-r0 in the name of
			Earthwise Group LLC



## Appendix A

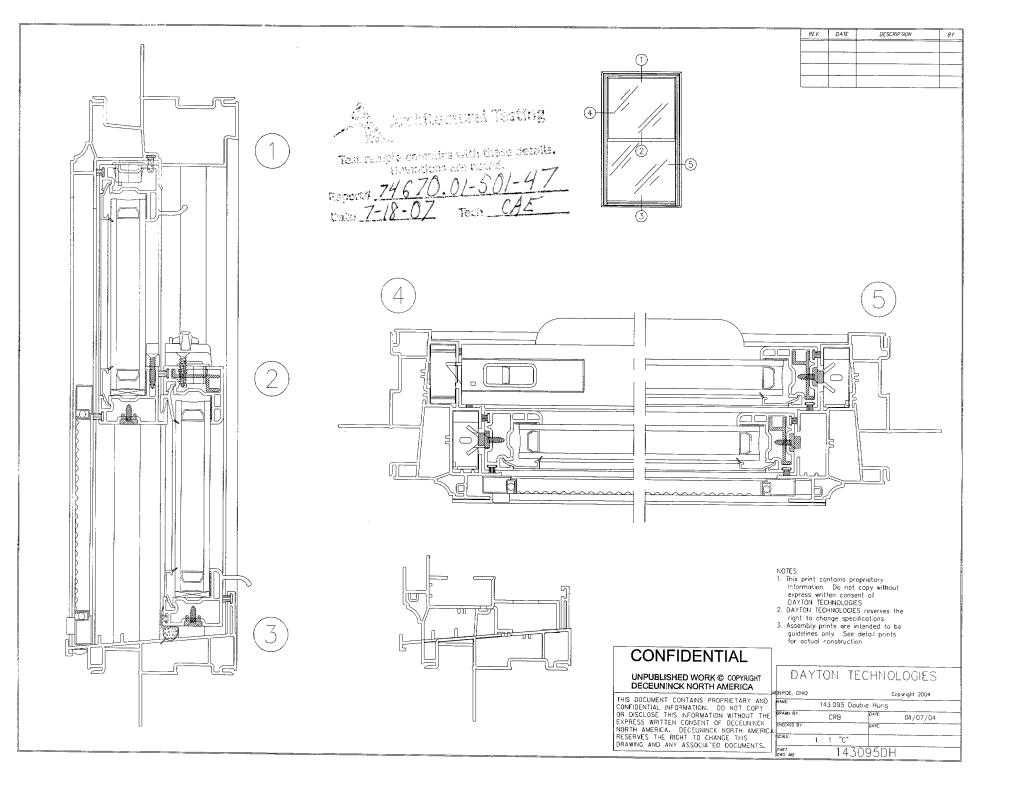
#### **Alteration Addendum**

Note: No alterations were required.



Appendix B

**Drawings** 

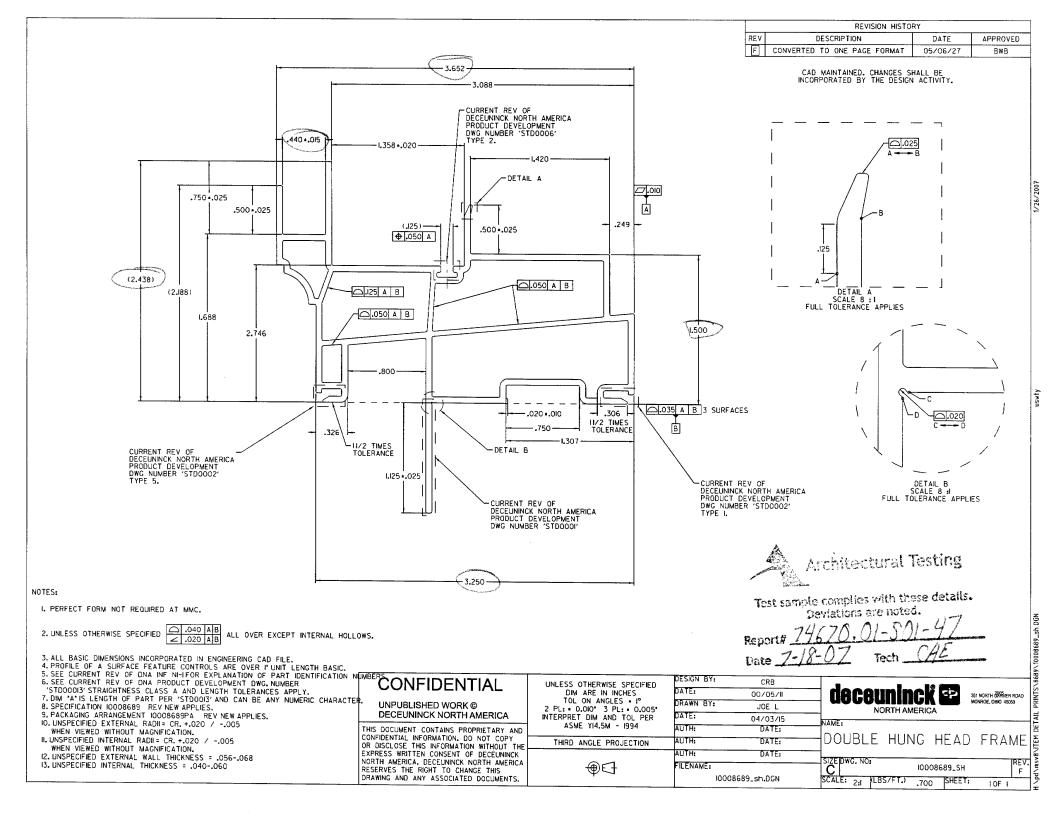


TEM NO.	DESCRIPTION	QUANTITY	PART NO.	FAB DWG, NO	
1 1	HEAD	1	P8689	P8689F01	
2	SILL		P8673 / P8693 / P8674 Egress	P8673F03	A
3	JAMB	2	P8688	P8688F01	A
4			F0000	Poboorul	Α
5					
6	CENTER FIN WEATHERSTRIPPING	AS REQ"D	.187 BK. X .290 HT.		F
7	SCREEN ASSEMBLY	AS KEQ B	SCREEN - 13		
8	WEATHER SEAL - AT HEAD (P8689)	AS REQ"D	Q-LON - #Q375T190		GGG
9		/O ILLQ D	Q-EON - #Q5/51190		
10					
11	BALANCE SYSTEM - CROSSBOW		36" and Less / Over 36" Wide		-
12	BALANCE	4	1000 / 10001		BBB
13		4	1200 / 1201		BBB
14		4	1400 / 1401		BBB
15		4	1600 / 1601		BBB
16	A Comment	4	1800 / 1801		BBB
17	Architectural Testing	4	2000 / 2001		BBB
18	<u> </u>	4	2200 / 2201		BBB
19		5. 4	2400 / 2401		BBB
20	Test sample complies with these details  Deviations are noted.	4	2600 / 2601		BBB
21	Resports 14670,01-501-47	7 4	2500 / 2801		BBB
22	14(7(),01-301-41	4	3000 / 3001		BBB
23	Kapora To AT	4	3200 / 3201		BBB
24	Date 7-18-07 Tech_C/16	4	3400 / 3401		BBB
25		4	3600 / 3601		BBB
26		4	3800 / 3801		BBB
27		4	4000 / 4001		BBB
28	1/2" REAR BRAKE SHOE	4	81020		D
29					
30					
31					
32					
33					
34					·
35	BALANCE SCREW ANCHOR	2	9637		D
36	BALANCE SCREW	2	#8 x 1 1/4" PFH		B, Z
37					
38					
39	FRAME SCREWS AT SCREEN TRACK	2	#8 x 3/4" PPH		B, Z
40					5, 2
Rev	Date Description	Ву	7	DAYTON TECHNOLOG	IEC
Α	1/29/2001 ADDED Q-LON PART #	CRB	╣		
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	— CRB	4	MONROE, OH COPYRIO	3HT 2000

1	Kev	Date	Description	Bv	
	Α	1/29/2001	ADDED Q-LON PART #	CRB	
					CONFIDENTIAL
					UNPUBLISHED WO
I					DECELININGK NOB.

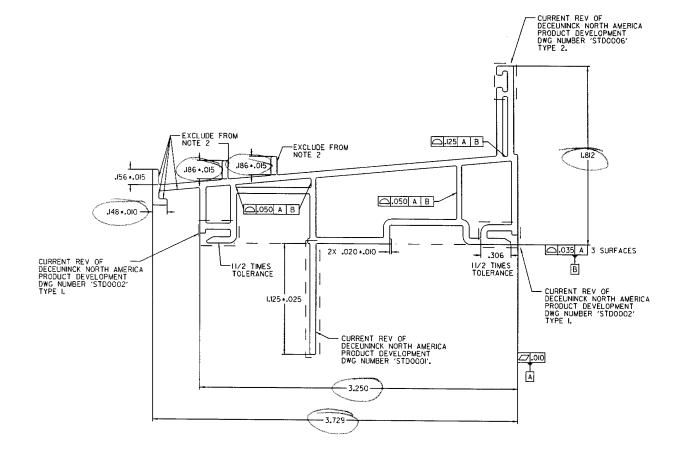
CONFIDENTIAL	
UNPUBLISHED WORK © 2006	
DECEUNINCK NORTH AMERIC	CA

DAYTON TECHNOLOGIES				
MONROE, OH COPYRIGHT 2000				
NAME: 143.000 D		DH		
DWN BY:	CRB	8/9/2000		
CHKD BY:				
DWG NO:	143000DH-NC.xls			



REVISION HISTORY REV DESCRIPTION APPROVED DATE CHANGE TO SINGLE SHEET FORMAT 05/06/30 JGM

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





Architectural Testing

Test sample complies with these details.
Deviations are noted.

NOTES:

I. PERFECT FORM NOT REQUIRED AT MMC.

∴ .040 A B∠ .020 A B 2. UNLESS OTHERWISE SPECIFIED ALL OVER EXCEPT INTERNAL HOLLOWS.

3. ALL BASIC DIMENSIONS INCORPORATED IN ENGINEERING CAD FILE.

4. PROFILE OF A SURFACE FEATURE CONTROLS ARE OVER I UNIT LENGTH BASIC.

5. SEE CURRENT REV OF DNA INF NI-IFOR EXPLANATION OF PART IDENTIFICATION NUMBERS

(SEE CURRENT REV OF DNA PRODUCT DEVELOPMENT DWG. NUMBER

(STD00013' STRAIGHTNESS CLASS A AND LENGTH TOLERANCES APPLY.

7. DIM "A" IS LENGTH OF PART PER "STD0013' AND CAN BE ANY NUMERIC CHARACTER.

8. SPECIFICATION 10008673 REV NEW APPLIES.

8. PACKAGNIG ARRANGEMENT 10008673PA REV NEW APPLIES. 10. UNSPECIFIED EXTERNAL RADII = CR .015 +.010 / -.005

WHEN VIEWED WITHOUT MAGNIFICATION.

II. UNSPECIFIED INTERNAL RADII = CR .015 +.020 / -.005

WHEN VIEWED WITHOUT MAGNIFICATION.

12. UNSPECIFIED EXTERNAL WALL THICKNESS = .052 - .072

13. UNSPECIFIED INTERNAL THICKNESS = .040-.060

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

THIRD ANGLE PROJECTION

DATE: DRAWN BY: DATE: AUTH: AUTH: AUTH:

DESIGN BY:

351 NORTH GARVER ROAD NORTH AMERICA

SILL FRAME - SH/DH

⊕€

DATE: FILENAME: 10008673\_SH.DGN

JOE L

99/06/04

JOE L

02/07/22

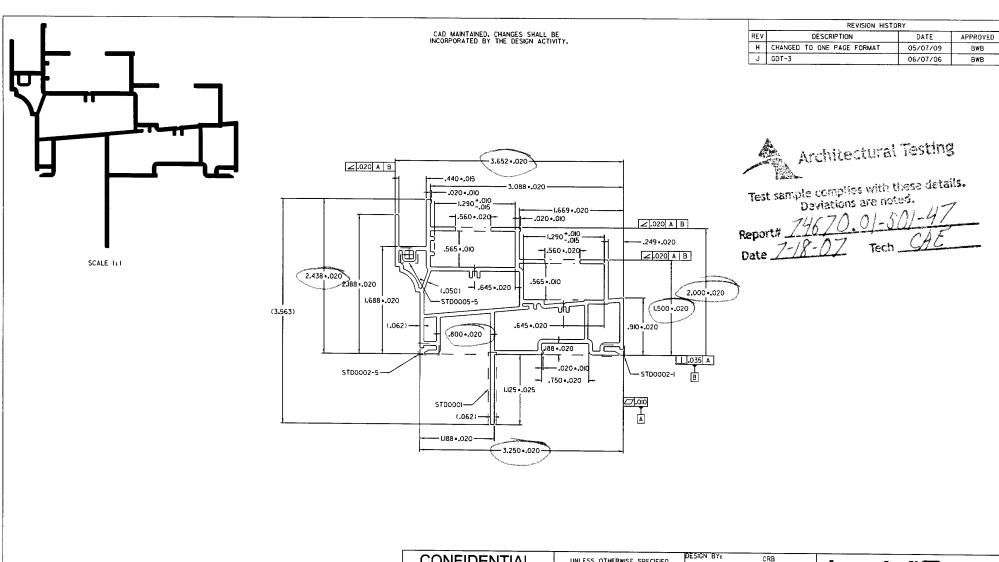
DATE:

DATE:

SIZEIDWG. NO: C | SCALE: 2:1 (LBS/FT.)

10008673\_SH G SHEET: .579 IOF I

PRINTS\8673\10008673\_SH.DGN DET .A.



NOTES:

1. 'STD00013' STRAIGHTNESS CLASS A AND LENGTH TOLERANCES APPLY 2. NITERPRET ALL TOLERANCE APPLICATIONS PER STD0013 3. UNSPECIFED EXTERNAL RADII = .XXX + .000 / -.005 4. UNSPECIFED INTERNAL RADII = .XXX + .020 / -.005 5. UNSPECIFED EXTERNAL WALL THICKNESS = .XXX +/- 10% 6. UNSPECIFIED INTERNAL WALL THICKNESS = .XXX +/- 20%

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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 YI4.5M - 1994

> THIRD ANGLE PROJECTION ₩€

DATE: 00/05/8 DRAWN BY: TJH DATE: 03/07/30 IAME: AUTH: DATE: AUTH: DATE: AUTH: DATE: FILENAME: 10008688\_sh.DGN

deceuninck 🖾 NORTH AMERICA

351 NORTH GORVER ROAD MONROE, OHIO 45050 \pd\msv8\ITEM

PRINTS\8688\10008688\_sh.DGN

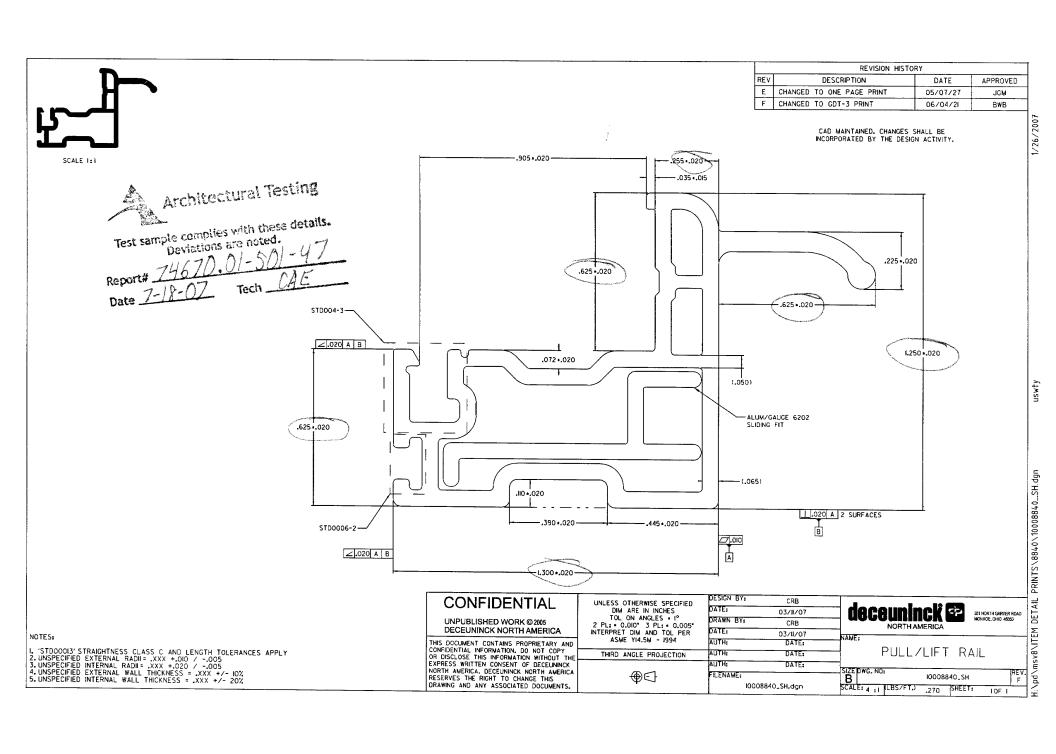
MAIN FRAME - DH

SIZE DWG. NO:

B

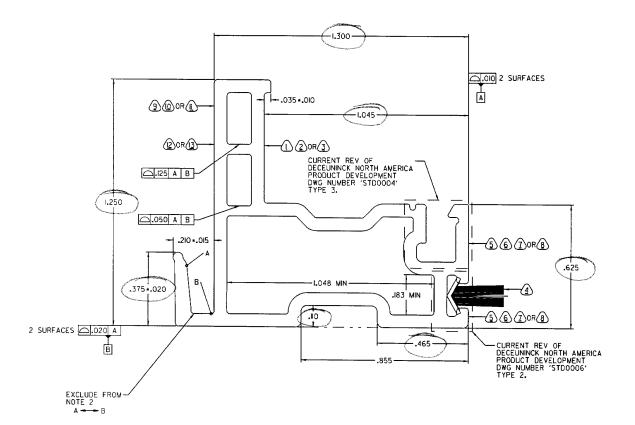
SCALE: 1:1 (LBS/FT.) 10008688\_SH .775 SHEET: I OF I

		000.095 DH SASH - BILL OF M	ATERIAL	S			
ITEM NO.		DESCRIPTION	QUANTITY	PART NO.		FAB DWG. NO	SOURCE
26		TOP LIFT RAIL	1	10008840		10008840FO1	Α
27		KEEPER RAIL	1	10008890		P8890-F-01	Α
28		LOCK RAIL	1	10008844		P8854-F-01	Α
29		BOTTOM LIFT RAIL	1	10008840		P8850-F-02	Α
30		STILE	4	10008842		P8852-F-09	Α
31		TOP LIFT RAIL - EGRESS TOP LIFT RAIL	1	10008884		10008884F01	Α
32		BULB SEAL	1	P8206 / P8202		P8206-F-01 / P8202-F-01	Α
33		INTERLOCK GLAZING BEAD	1	P5551		P5551-F-01	Α
34		GLAZING BEAD	7	- <del>P8127</del> 1000547	$\mathcal{O}$	P8127-F-01	Α
35						7.111	
36		SASH REINFORCEMENT (ALUM.)	AS REQ'D	A6202		A6202-F-01	
37		CENTER FIN WEATHERSTRIPPING	AS REQ'D	.187 BK. X .290 HT.		AT DT	
38		LOCK/CAM - NO NIBS	1 OR 2	L20010001R01			D
39		LOCK/CAM - NESTING NIBS	1 OR 2	L20110001R01			D
40		KEEPER	1 OR 2	12912		2 188	D
41		TILT LATCH ASSEMBLY	4	78045 / 78145	0 6	\$ AY	D
42		PIVOT BAR - "L" SHAPED LOCK IN	4	13036	O Re Co	2 1	D
43		OPTIONAL PIVOT BAR - STRAIGHT LOCK IN	4	12310 (WILL REQ. DIFFERENT FAB)			D
44		3/4" INSULATED GLASS	2		1		
45		SETTING BLOCKS (REFER TO IG SUPPLIER GUIDELINES)	AS REQ'D	1/8" x 3/4"	7	18 68 PR	W
46		GLAZING COMPOUND	AS REQ'D			3 88 TU	
47	w	LOCK SCREW	2 OR 4	#8 x 3/4 PAINTED PFH		1 1 2 2	B,Z
48		KEEPER SCREW	2 OR 4	#6 x 3/4 PAINTED PFH		4 3 3 4 3	В В
49		PIVOT BAR SCREW	8	#8 x 3/8 PPH			
50		NIGHT LATCH / VENT STOP - DELUXE	2			10 P : 00	B,Z D
51		OPTIONAL SASH STOP	4	10008489		12/2	A
52		OPTIONAL BALANCE COVER	2	P5109		FITTY OF STREET	Ā
Rev	Date	Description	Dv	1		DAYTON TECHNI	21.00/50
,		Description	Ву	4		DAYTON TECHNO	
				4			PYRIGHT 2004
				CONFIDENTIAL	NAME:	000.095 CRB	
				UNPUBLISHED WORK © 2006	DWN BY: CHKD BY:	CKB	5/2/2004
				DECEUNINCK NORTH AMERICA	DWG NO:	000095D	-l xls



	REVISION HISTO	RY	
REV	DESCRIPTION	DATE	APPROVED
K	CHANGE TO SINGLE SHEET FORMAT	05/07/27	JGM

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





Test sample complies with these details. Deviations are noted.

Report# 14670

NOTES:

I. PERFECT FORM NOT REQUIRED AT MMC.

2. UNLESS OTHERWISE SPECIFIED 

.040 AB

.020 AB

ALL OVER EXCEPT INTERNAL HOLLOWS.

3. ALL BASIC DIMENSIONS INCORPORATED IN ENGINEERING CAD FILE.

4. PROFILE OF A SURFACE FEATURE CONTROLS ARE OVER I UNIT LENGTH BASIC. 5. SEE CURRENT REV OF DNA INF NI-IFOR EXPLANATION OF PART IDENTIFICATION NUMBERS.

6. SEE CURRENT REV OF DNA PRODUCT DEVELOPMENT DWG. NUMBER 'STDOODI3' STRAIGHTNESS CLASS C AND LENGTH TOLERANCES APPLY.

7. DIM "A" IS LENGTH OF PART PER 'STDOOI3' AND CAN BE ANY NUMERIC CHARACTER.

8. SPECIFICATION 10008890 REV NEW APPLIES.

9. PACKAGING ARRANGEMENT 10008890PA REV NEW APPLIES.

IO. UNSPECIFIED EXTERNAL RADII = CR .015 +.010 / -.005

WHEN VIEWED WITHOUT MAGNIFICATION.

II. UNSPECIFIED INTERNAL RADII = CR .015 +.020 / -.005

WHEN VIEWED WITHOUT MAGNIFICATION.

12. UNSPECIFIED EXTERNAL WALL THICKNESS = .055 - .075 13. UNSPECIFIED INTERNAL THICKNESS = .040 - .060

14. 
= FIND NUMBER RELATING TO THE PARTS LIST.

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UNLESS OTHERWISE SPECIFIED DIM ARE IN INCHES TOL ON ANGLES . I' 2 PL: \* 0.010" 3 PL: \* 0.005" INTERPRET DIM AND TOL PER ASME YI4.5M - 1994

₩€

THIRD ANGLE PROJECTION

DRAWN BY: CRB DATE: 03/02/24 AUTH: DATE: AUTH: DATE: AUTH: DATE: FILENAME:

10008890\_SH.dgn

RH

94/02/14

DESIGN BY:

DATE:

NORTH AMERICA NAME:

351 NORTH GARVER ROAD

KEEPER SASH

SIZE DWG. NO: 10008890\_SH SCALE: 4 :1 (LBS/FT.) SHEET: .257 I OF I

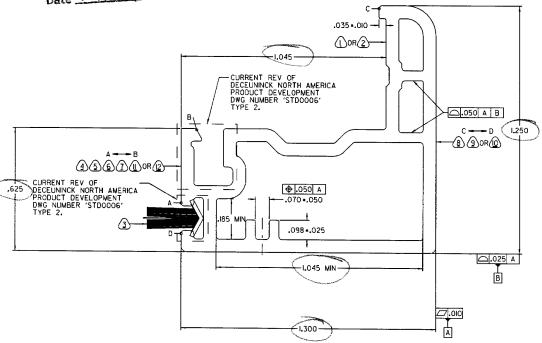
SEE SEPARATE PARTS LIST 

REVISION HISTORY DESCRIPTION DATE APPROVED CHANGE TO SINGLE SHEET FORMAT 05/09/01 JGM

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

Architectural Testing

Test sample compiles with these details. Deviations are noted.



NOTES:

I. PERFECT FORM NOT REQUIRED AT MMC.

2. UNLESS OTHERWISE SPECIFIED .040 AB

ALL OVER EXCEPT INTERNAL HOLLOWS.

3. ALL BASIC DIMENSIONS INCORPORATED IN ENGINEERING CAD FILE.

3. ALL BASIC DIMENSIONS INCORPORATED IN ENGINEERING CAD FILE.
4. PROFILE OF A SURFACE FEATURE CONTROLS ARE OVER I' UNIT LENGTH BASIC.
5. SEE CURRENT REV OF DNA INF IN-IFOR EXPLANATION OF PART IDENTIFICATION
6. SEE CURRENT REV OF DNA PRODUCT DEVELOPMENT DWG, NUMBER
7. STD00013' STRAIGHTNESS CLASS A AND LENGTH TOLERANCES APPLY.
7. DIM 'A' IS LENGTH OF PART PER 'STD0013' AND CAN BE ANY NUMERIC CHARACTER.
8. SPECIFICATION 10008844 REV NEW APPLIES.
9. SACKACTUR APPLANCEMENT 10008244DA DEV NEW ADDITIES

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DECEUNINCK NORTH AMERIC

9. PACKAGING ARRANGEMENT 10008844PA REV NEW APPLIES.

IO. UNSPECIFIED EXTERNAL RADII = CR .015 +.010 / -.005 WHEN VIEWED WITHOUT MAGNIFICATION.

II. UNSPECIFIED INTERNAL RADII = CR .015 +.020 / -.005 WHEN VIEWED WITHOUT MAGNIFICATION.

12. UNSPECIFIED EXTERNAL WALL THICKNESS = .055 - .075 13. UNSPECIFIED INTERNAL THICKNESS = .040 - .060 14. 
= FIND NUMBER RELATING TO THE PARTS LIST.

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UNLESS OTHERWISE SPECIFIED DIM ARE IN INCHES TOL ON ANGLES . I' 2 PL: • 0.010° 3 PL: • 0.005° INTERPRET DIM AND TOL PER ASME YI4.5M - 1994

THIRD ANGLE PROJECTION

DRAWN BY: CRB DATE: 03/11/06 AUTH: DATE: AUTH: DATE: AUTH: DATE: FILENAME: **⊕**€

DESIGN BY:

DATE:

CRB

03/11/06

10008844\_SH.dgn

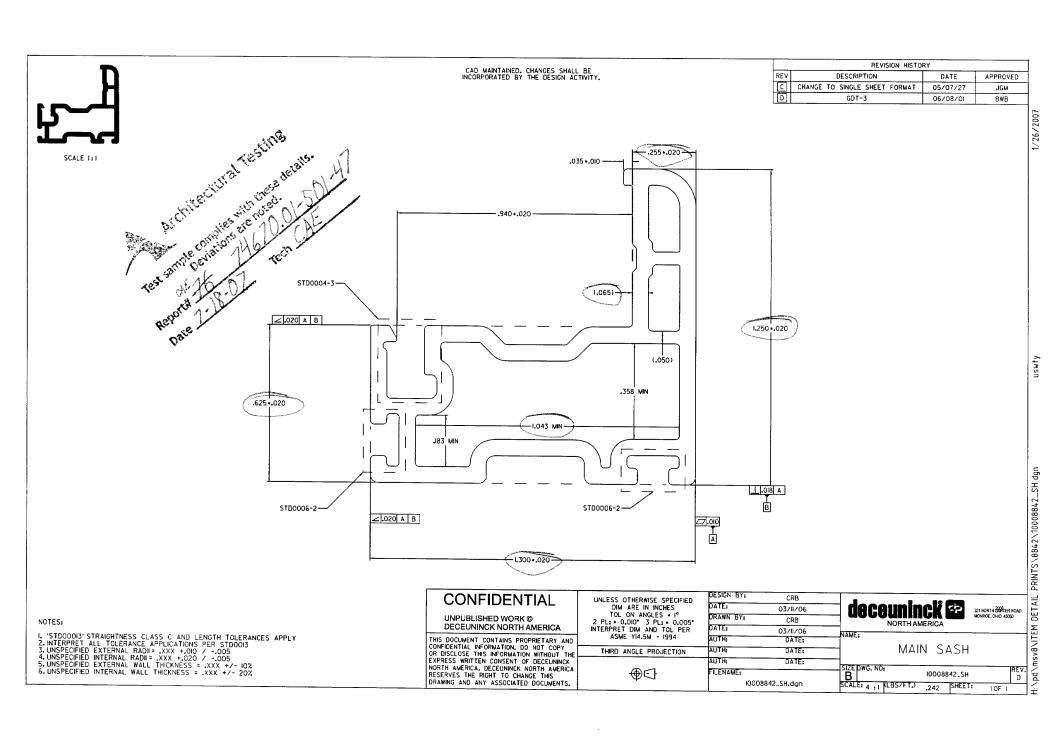
NORTH AMERICA NAME:

351 NORTH GARVER ROAD MONROE, OHIO 45050

LOCK SASH

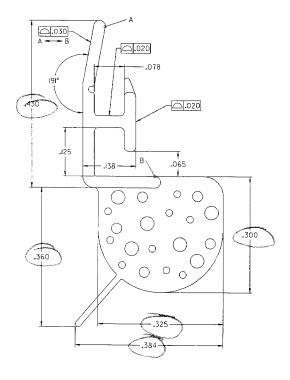
SCALE: 4 : | (LBS/FT.) I0008844\_SH .234 SHEET: I OF I

SEE SEPARATE PARTS LIST B ...



REVISION HISTORY				
REV	DESCRIPTION	STAG	APPROVED	
G	CHANGED TO SINGLE PAGE FORMAT	05/10/10	BWB	

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



Architectural Testing

Test sample compiles with these details.

Deviations are noted.

NAME:

NOTES:

1. PERFECT FORM NOT REQUIRED AT MMC.

2. UNLESS OTHERWISE SPECIFIED .040 AB ALL OVER EXCEPT INTERNAL HOLLOWS.

3. ALL BASIC DIMENSIONS INCORPORATED IN ENGINEERING CAD FILE. 4. PROFILE OF A SURFACE FEATURE CONTROLS ARE OVER I UNIT LENGTH BASIC.

5. SEE CURRENT REV OF DNA IN IN-IFOR EXPLANATION OF PART IDENTIFICATION NUMBER CONFIDENTIAL

5. SEE CURRENT REV OF DNA PRODUCT DEVELOPMENT DWG, NUMBER

5. STD0003' STRAIGHTHESS CLASS E AND LENGTH TOLERANCES APPLY.

7. DDM 'A' IS LENGTH OF PART PER 'STD003' AND CAN BE ANY NUMBER CHARACTER.

LINPIRE ISHED WORK A

8. SPECIFICATION 10008206 PEV NEW APPLIES.
9. PACKAGING ARRANGEMENT .0008206PA REV NEW APPLIES.

IO. UNSPECIFIED EXTERNAL RADII = CR .015 +.010 / -.005 WHEN VIEWED WITHOUT MAGNIFICATION.

II. UNSPECIFIED INTERNAL PADII = CR .015 +.020 / -.005 WHEN VIEWED WITHOUT MACNIFICATION.

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UNLESS OTHERWISE SPECIFIED DIM ARE IN INCHES TOL ON ANGLES : 1º 2 PL: ± 0.010" 3 PL: ± 0.005' INTERPRET DIM AND TOL PER ASME YI4.5M - 1994

THIRD ANGLE PROJECTION

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DESIGN BY: JOE L DATE: 97/06/12 DRAWN BY: J0E € DATE: 97/06/12 AUTH: DATE: AUTH: DATE: AUTH: DATE: FILENAME: 10008206\_sh.dgn

SEE SEPARATE PARTS LIST deceuninck 🖾 351 NORTH GARVER ROAD

BULB SEAL

SIZE DWG. NO: 10008206\_54 SCALE: 8 : | (LBS/FT.) SHEET: .024 LOF

6/21/2007

REVISION HISTORY REV DESCRIPTION APPROVED U GDT-3 06/09/27

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

Architectural Testing

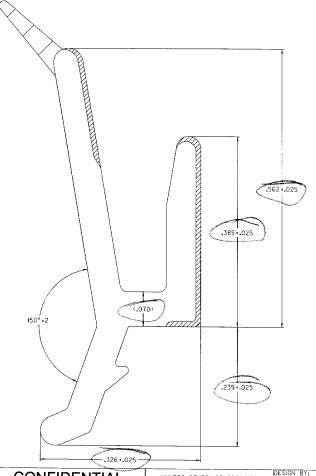
Test sample complies with these details.

Deviations are noted.

CAPSTOCK =

SCALE I:1

I. 'SIDDOOI3' STRAIGHTNESS CLASS E AND LENGTH TOLERANCES APPLY 2. INTERPRET ALL TOLERANCE APPLICATIONS PER SIDDOI3 3. UNSPECIFIED EXTERNAL RADIE: .XXX + .020 / -.005 4. UNSPECIFIED INTERNAL RADIE: .XXX +.020 / -.005 5. UNSPECIFIED EXTERNAL WALL THICKNESS = .XXX +/- 10% 6. UNSPECIFIED INTERNAL WALL THICKNESS = .XXX +/- 20%



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UNLESS OTHERWISE SPECIFIED DIM ARE IN INCHES

TOL ON ANGLES \* 1º
2 PL: \* 0.010' 3 PL: \* 0.005'
INTERPRET DIM AND TOL PER

ASME Y14.5M - 1994

THIRD ANGLE PROJECTION ⊕€

MAR DATE: 88/10/11 DRAWN BY: MAR DATE: 11/01/88 DATE: DATE: DATE:

deceuninck

INTERLOCK GLAZING BEAD

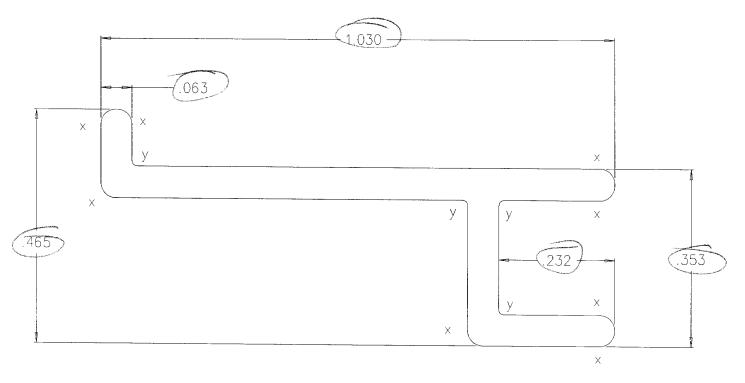
I000555f\_SH .053 SHEET: SCALE: 8 :1 (LBS/FT.) I OF I

FILENAME: 10005551\_SH.dgn

351 NORTH GARVER ROAD MONROE, OHIO 45050

REV. Pd

PRINTS\5551\10005551\_SH.dgn





## Architectural Testing

Test sample complies with these details.

Deviations are noted.

DAYTON EXTRUDED PLASTICS

ALUMINUM

DATE:

SPRINGBORO, OHIO

DRAWN BY:

Copyright 1994

3/22/94

NAME: 0093 SASH REINFORCEMENT MATERIAL(S):

Notes:

1) "x" = .030" radius 2) "y" = .010" radius

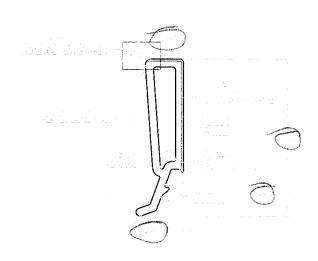
Area : .103 Sq. In. Weight : .123 Lb./Ft.

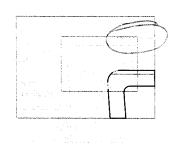
Standard Commercial Tolerances Apply Unless Otherwise Noted

DAS CHECKED BY: DATE:

SCALE: PART DWG. NO: 5 : 1 "A" A6202 DIE NO: CUST. PART NO: 6202 6202

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 28 TAV 3 4 4		A. William		
C. Maria da las de Salas escales	entry of the control of	1.1		
jugi iz il 100 il arkiteta kirilanda k	No. No. 144			







## Architectural Testing

Test sample compiles with these details. Deviations are noted.

Report# 74670.01-501-4 Date 7-18-07 Tech\_

	TT STEEL SE And Forest Steel Selection (Certical Line (1977) Steel Line (1977)
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444 361 371 486	to state	1 6 15		AZBRO ER EL	
<b>©</b>	1.3.4.6	7,43			
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