

NORTH EAST WINDOWS USA, INC. TEST REPORT

SCOPE OF WORK

AAMA/WDMA/CSA 101/I.S.2/A440 TESTING ON PW4015, FIXED VINYL WINDOW

REPORT NUMBER

I1273.01-525-44 R0

TEST DATE(S)

03/21/18

ISSUE DATE

07/19/18

RECORD RETENTION END DATE

07/16/23

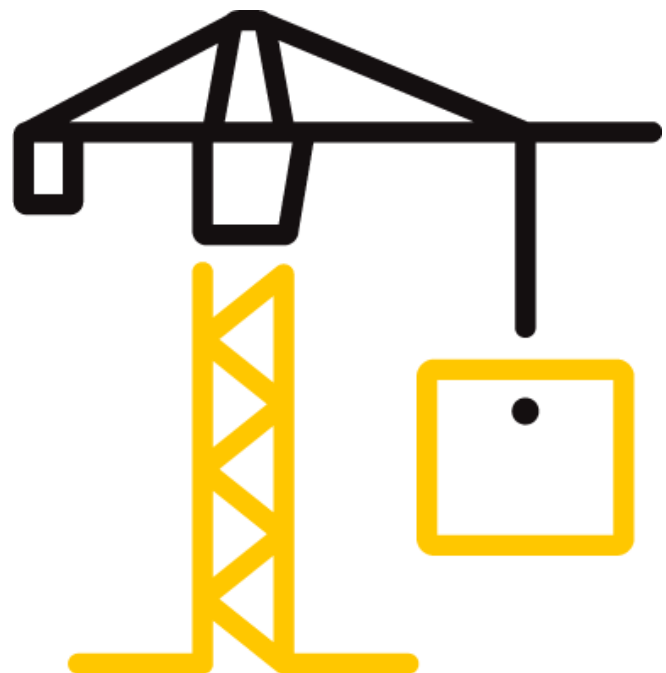
PAGES

15

DOCUMENT CONTROL NUMBER

RT-R-AMER-Test-2804 (04/17/18)

© 2017 INTERTEK



TEST REPORT FOR NORTH EAST WINDOWS USA, INC.

Report No.: I1273.01-525-44 R0

Date: 07/19/18

REPORT ISSUED TO

NORTH EAST WINDOWS USA, INC.

Once Kees Place
P.O. Box 159
Merrick, NY 11566

SECTION 1

SCOPE

Intertek Building & Construction (B&C) was contracted by North East Windows USA, Inc., to perform testing in accordance with AAMA/WDMA/CSA 101/I.S.2/A440 on their PW4015, Fixed Vinyl Window. Results obtained are tested values and were secured by using the designated test method(s). Testing was conducted at the Intertek test facility in Farmingdale, NY. This report does not constitute certification of this product nor an opinion or endorsement by this laboratory.

SECTION 2

SUMMARY OF TEST RESULTS

TITLE	RESULTS
AAMA/WDMA/CSA 101/I.S.2/A440-17	R-PG60-FW
Design Pressure	±2880 Pa (±60.00 psf)
Air Infiltration	0.15 L/s/m ² (0.03 cfm/ft ²)
Water Penetration Resistance Test Pressure	575 Pa (12 psf)

For INTERTEK B&C:

COMPLETED BY:	Craig Ginsberg	REVIEWED BY:	Frank Pennisi
TITLE:	Mockup Manager	TITLE:	Director of Fenestration
SIGNATURE:		SIGNATURE:	
DATE:	07/19/18	DATE:	07/19/18

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample(s) tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

TEST REPORT FOR NORTH EAST WINDOWS USA, INC.

Report No.: I1273.01-525-44 R0

Date: 07/19/18

SECTION 3

TEST SPECIFICATION(S)/METHOD(S)

The specimens were evaluated in accordance with the following:

AAMA/WDMA/CSA 101/I.S.2/A440-17- *North American Fenestration Standard/Specification for Windows, Doors, and Skylights*

The following test methods were used during testing:

ASTM E283-04(2012), *Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen*

ASTM E330/E330M-14, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

ASTM E547-00(2016), *Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Cyclic Static Air Pressure Difference*

ASTM F588-17, *Standard Test Methods for Measuring the Forced Entry Resistance of Window Assemblies, Excluding Glazing Impact*

TEST REPORT FOR NORTH EAST WINDOWS USA, INC.

Report No.: I1273.01-525-44 R0

Date: 07/19/18

SECTION 4

MATERIAL SOURCE/INSTALLATION

Test specimen was provided by the client. Representative samples of the test specimen(s) will be retained by Intertek B&C for a minimum of four years from the test completion date.

The specimen was installed into a Douglas-Fir or Spruce-Pine-Fir wood buck. The rough opening allowed for a 1/2" shim space and the exterior perimeter of the specimen was sealed to the test buck. Installation of the tested product was performed by the Intertek.

LOCATION	ANCHOR DESCRIPTION	ANCHOR SPACING
Inside of Jambs	3" dry wall screws	5" from corners of unit

SECTION 5

EQUIPMENT

Calibration of test equipment is available at 130 Derry Court York, PA.

SECTION 6

LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Craig Ginsberg	Intertek B&C

TEST REPORT FOR NORTH EAST WINDOWS USA, INC.

Report No.: I1273.01-525-44 R0

Date: 07/19/18

SECTION 7

TEST SPECIMEN DESCRIPTION

Product Type: Fixed Window

Series/Model: FW 4015

Product Size:

OVERALL AREA:	WIDTH		HEIGHT	
	millimeters	inches	millimeters	inches
1.5 m ² (16 ft ²)				
Overall size	1220	48	1200	48

Frame Construction:

MEMBER	MATERIAL	DESCRIPTION
Sill, head, jambs	Vinyl	Extrusion, 990PW frame w/o fin, white, from Quality

	JOINERY TYPE	DETAIL
All corners	Mitred	Vinyl Welded

Reinforcement: *No reinforcement was utilized.*

Weatherstripping: *No weather-stripping was utilized.*

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
22mm IG	Corrugated plastic strip 16.5 mm tick with grey duraseal	Annealed 2.3mm thick	Annealed 2.3 mm thick	Interior wet glaze three glazing blocks on sill, and two on head and jambs

QUANTITY	DAYLIGHT OPENING		GLASS BITE
	millimeters	inches	
1	1127 x 1127	44.375 x 44.375	12.5mm

TEST REPORT FOR NORTH EAST WINDOWS USA, INC.

Report No.: I1273.01-525-44 R0

Date: 07/19/18

Drainage:

METHOD	SIZE	QUANTITY	LOCATION
weeps	¼" diameter circle	4	Glazing pocket 3" away from either end and two more in the middle with equal spacing
weeps	¼" diameter circle	2	Front face of sill 5" away from either end.

Hardware: *No hardware was utilized.*

Screen Construction: No Screen

TEST REPORT FOR NORTH EAST WINDOWS USA, INC.

Report No.: I1273.01-525-44 R0

Date: 07/19/18

SECTION 8

TEST RESULTS

The temperature during testing was 21°C (70°F).The results are tabulated as follows:

TITLE OF TEST	RESULTS	ALLOWED	NOTE
Air Leakage, Infiltration per ASTM E283 at 75 Pa (1.57 psf)	0.15 L/s/m ² (0.03 cfm/ft ²)	1.5 L/s/m ² (0.3 cfm/ft ²) max.	1, 2
Water Penetration, per ASTM E547 575 Pa (12 psf)	Pass	No leakage	3
Uniform Load Deflection, per ASTM E330 Deflections taken at sill +2880 Pa (+60 psf) -2880 Pa (-60 psf)	Pass 7.4 mm (0.29") 4.6 mm (0.18")	Report only	4,5,6
Uniform Load Structural, per ASTM E330 Permanent set taken at sill +4310 Pa (+90 psf) -4310 Pa (-90 psf)	N/A 0.8 mm (0.03") 0.3 mm (0.01")	N/A 4.8 mm (0.19") max. 4.8 mm (0.19") max.	4,5,6
Forced Entry Resistance, per ASTM F588, Type: A - Grade: 10	Pass	No entry	
Thermoplastic Corner Weld	Pass	Meets as stated	

TEST REPORT FOR NORTH EAST WINDOWS USA, INC.

Report No.: I1273.01-525-44 R0

Date: 07/19/18

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: Test Date 03/21/18

Note 3: without insect screen.

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 not used to seal against air leakage during structural testing.

SECTION 9 ALTERATIONS

No alterations were required.

TEST REPORT FOR NORTH EAST WINDOWS USA, INC.

Report No.: I1273.01-525-44 R0

Date: 07/19/18

SECTION 10 CONCLUSION

The specimen tested successfully met the performance requirements for an R-PG60-FW rating.

SECTION 11 PHOTOGRAPHS

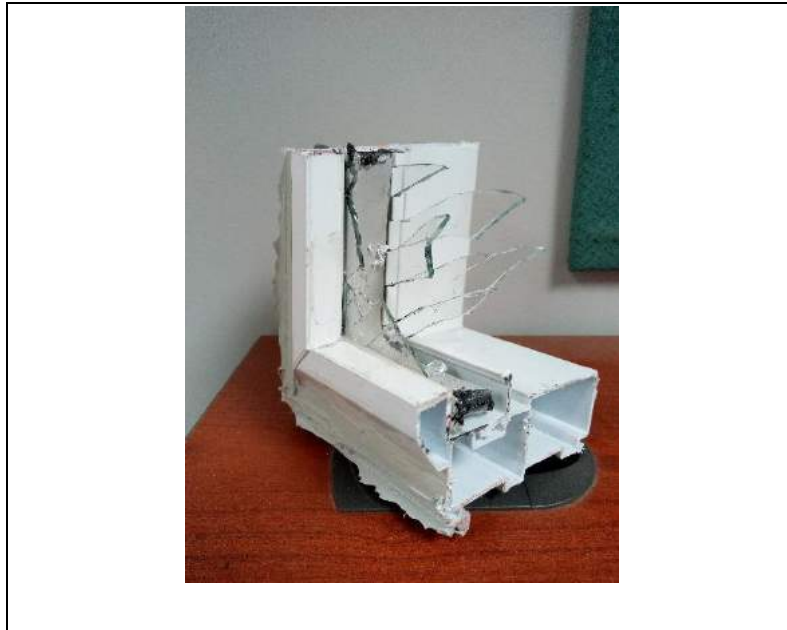


Photo No. 1
View of specimen sample



Total Quality. Assured.

TEST REPORT FOR NORTH EAST WINDOWS USA, INC.

Report No.: I1273.01-525-44 R0

Date: 07/19/18

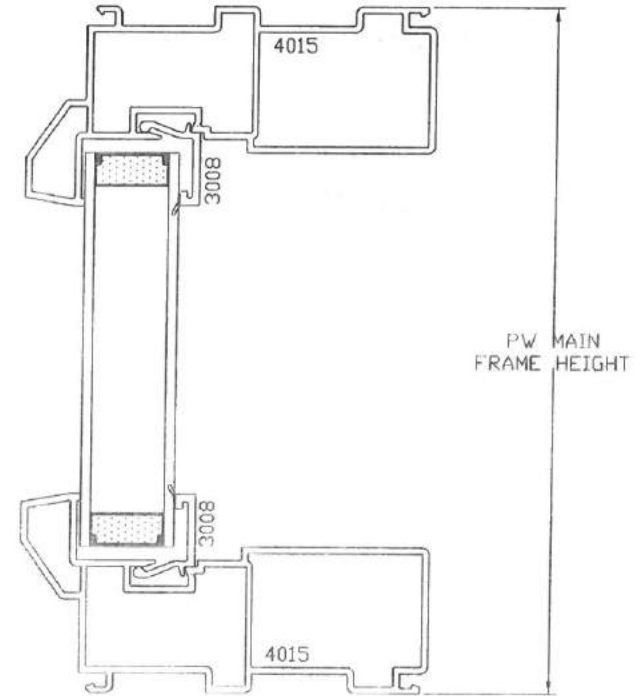
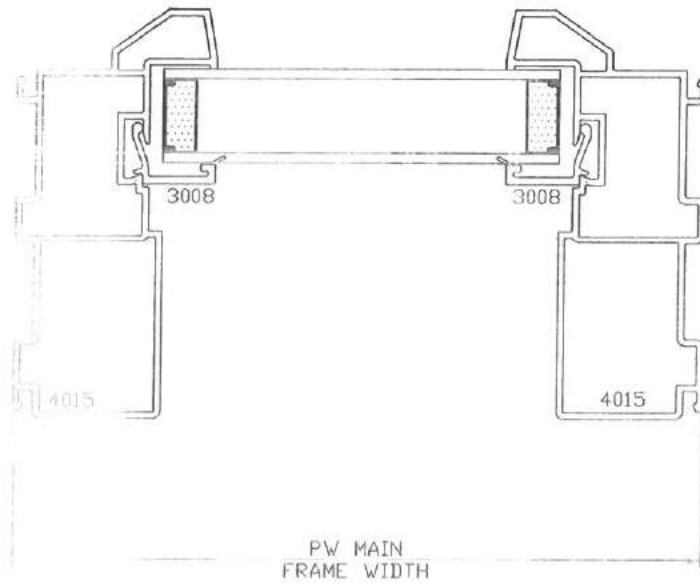
145 Sherwood Avenue
Farmingdale, New York 11735

Telephone: 631-815-1900
www.intertek.com/building

SECTION 12


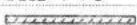
DRAWINGS

The test specimen drawings have been reviewed by Intertek B&C and are representative of the test specimen(s) reported herein. Test specimen construction was verified by Intertek B&C per the drawings included in this report. Any deviations are documented herein or on the drawings.



**TEST SPECIMEN COMPLIES
 WITH THESE DETAILS
 ANY DEVIATION IS NOTED**
 REPORT NO. L1273.01-525-44
 TEST DATE: 3/24/18

DO NOT SCALE DRAWING

			SZ LOCATION FOR IMPACT TEST SPECIFICATION—LENGTHS TO 3/8"	ALLOWABLE BOW MAX. 1" PER 14' ANGULARITY TO BE ± 1/2			
			DRAWN FOR  BY DDS DESIGNS	1) MATERIAL RIGID PVC 2) CAPSTOCK  3) UNSPECIFIED WALLS 4) BREAK ALL CORNERS R 5) AREA SQ.IN. 6) WT/FT LBS/FT	TITLE PW 4015 WELD MAIN FRAME		
					DWN BY DDS SCALE DATE 01/03/12 CHKD BY APPD BY COMPUTER NO DWG NO PW4015 CROSS SECTION		
NO.	REVISION	BY	DATE	"OUR NAME SAYS IT ALL"			

PW4015

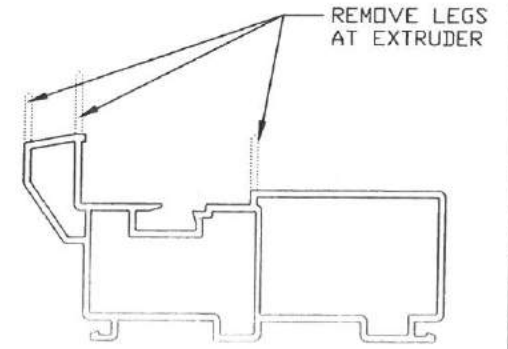
N.E. P/N	Qty	Description	Vendor P/N	Vendor	U.O.M.	Formulas
		FRAME PARTS				
4015-00	2	990P/W FRAME-W/ FIN & J. WIDTH, WHITE	4015-00	QUALITY	FT	W + .25
4015-10	2	990P/W FRAME-W/ FIN & J. WIDTH, ALMOND	4015-10	QUALITY	FT	W + .25
4015-30	2	990P/W FRAME-W/ FIN & J. WIDTH, BROWN	4015-30	QUALITY	FT	W + .25
4015-40	2	990P/W FRAME-W/ FIN & J. WIDTH, CREAM	4015-40	QUALITY	FT	W + .25
4015-10	2	990P/W FRAME-W/ FIN & J. HEIGHT, ALMOND	4015-10	QUALITY	FT	H + .25
4015-30	2	990P/W FRAME-W/ FIN & J. HEIGHT, BROWN	4015-30	QUALITY	FT	H + .25
4015-40	2	990P/W FRAME-W/ FIN & J. HEIGHT, CREAM	4015-40	QUALITY	FT	H + .25
3008-40	2	GLAZING BEAD, CREAM WIDTH	3008-40	QUALITY	FT	W - 5.625
3008-10	2	GLAZING BEAD, WHITE HEIGHT	3008-10	QUALITY	FT	H - 7.25
3008-30	2	GLAZING BEAD, ALMOND HEIGHT	3008-30	QUALITY	FT	H - 7.25
3008-40	2	GLAZING BEAD, BROWN HEIGHT	3008-40	QUALITY	FT	H - 7.25
10274	2	3/16 X 1 3/8 X 60 EPS STRIPS (FOAM) WIDTH	60-1 375-1875	FOAM PAK INC.	FT	H - 7.25
10274	2	3/16 X 1 3/8 X 60 EPS STRIPS (FOAM) HEIGHT	60-1 375-1875	FOAM PAK INC.	FT	(W-3)
10273	2	9/16 X 1 3/8 X 60 EPS STRIPS (FOAM) WIDTH	60-1 375-583	FOAM PAK INC.	FT	(W-3)
10273	2	9/16 X 1 3/8 X 60 EPS STRIPS (FOAM) HEIGHT	60-1 375-583	FOAM PAK INC.	FT	(H-3)
10271		FOAM WRAP, 3/4 X 1 1/2 X 4 1/2 PSA ONE SIDE	WW-0750X1500X75	SECUN RUBBER & PLASTICS	FT	(H-3)
10132		12" x 8500" MACHINE WINDOW FILM (80% BR SKID)	WIN 12-8500	ULTRA-PAK INCORPORATED	FT	W+HX10

45 X 45

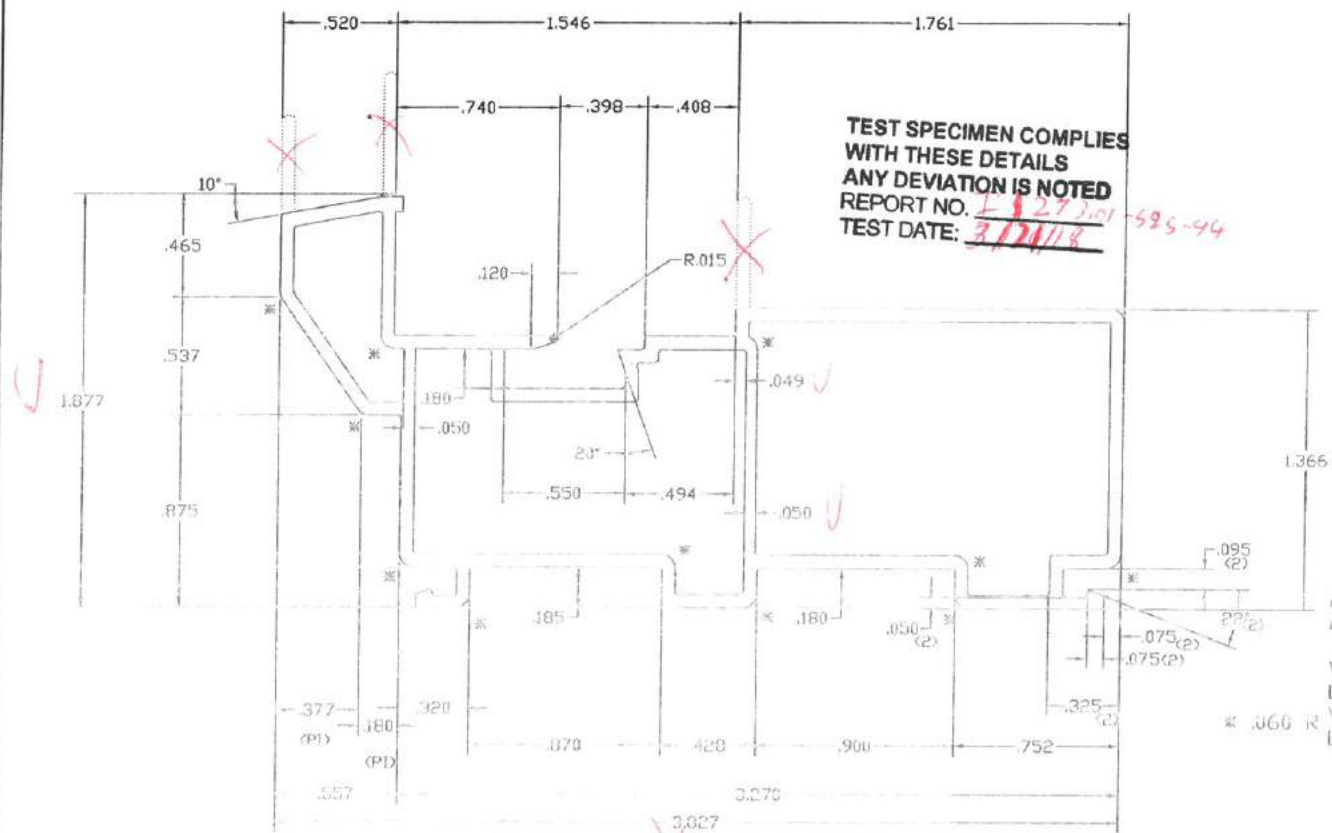
N.E. P/N	Qty	Description	Vendor P/N	Vendor	U.O.M.	Formulas
		GLASS PARTS				
10100		GLASS, 72 X 84, SSB, CLEAR	1140	PPG	SQ FT	W - 6, H - 6.125
10283		GLASS, 72 X 84, DSB, CLEAR	1456	PPG	SQ FT	W - 6, H - 6.125
10101		GLASS, 72 X 84, SSB, LOW E SOLAR STRIP 60	5343	PPG	SQ FT	W - 6, H - 6.125
10284		GLASS, 48 X 80, OBGURE	451997	PPG	SQ FT	W - 6, H - 6.125
10190		GLASS, TEMPERED, CLEAR	180T	GLASS AMERICA	SQ FT	W - 6, H - 6.125
10191		GLASS, TEMPERED, OBSURE	620T	GLASS AMERICA	SQ FT	W - 6, H - 6.125
10249		GLASS, 72 X 84, SSB, LOW E SOLAR STRIP 70, R5	18LE	GLASS AMERICA	SQ FT	W - 6, H - 6.125
10250		GLASS, 72 X 84, SSB, LOW E, COMFORT, TINT, R5 R8	663-000	PPG	SQ FT	W - 3.3125, H - 3.3125
10128		31/48" GRAY DURASEAL 14.0 FT / SPOOL	TI-AG390	GLASS AMERICA	SQ FT	W - 3.3125, H - 3.3125
10129		31/48" GRAY DURALITE 14.0 FT / SPOOL	824-94R-957	TRUE SEAL	FT	
10220		1/8 X 7/8 X 1 SETTING BLOCK	870-54H-957	LANATEK	FCS	
10102		3/16 X 610 WHITE MUNTIN	12871-001-25	RAMAPO	FT	W-6.8125, H - 5.9375
10211		3/16 X 610 TAN MUNTIN	041EJ5VBI	RAMAPO	FT	W-6.8125, H - 5.9375
10103		3/16 X 610 BRONZE MUNTIN	041EJ5V7AN	RAMAPO	FT	W-6.8125, H - 5.9375
10110		3/16 X 3/8 A CLIPS, INTERNAL MOUNTING CROSSES	041EJ5V8BR	RAMAPO	FT	W-6.8125, H - 5.9375
10127		GRIDLOC CLIPS 9/16 X 3/8 X 9/16 8000 PCS, 7/8 GLASS	CRC41BIJ	RAMAPO	PCS	
10105		8 X 13 WHITE ELISABETH MUNTIN	316-5RGL-580	RAMAPO	PCS	
10214		8 X 13 TAN ELISABETH MUNTIN	041EJ5V5	RAMAPO	FT	
10213		8 X 13 BRONZE ELISABETH MUNTIN	081EJ5V6TAN	RAMAPO	FT	
10109		8 X 13 WHITE EXTERNAL CROSSES	051EJ5V8R	RAMAPO	FT	
10216		8 X 13 TAN EXTERNAL CROSSES	CRC318E BI	RAMAPO	PCS	
10215		8 X 13 BRONZE EXTERNAL CROSSES	CRC318E TAN	RAMAPO	PCS	
10107		BAVIERA BRIGHT GOLD NICKEL KEYS	CRC318E BR	RAMAPO	PCS	
10108		BAVIERA BRIGHT GOLD NICKEL KEYS	BAVFB B5	RAMAPO	FT	
10108		BAVIERA BRIGHT GOLD NICKEL CENTER KEYS	BAVFB WH	RAMAPO	FT	
10217		BAVIERA BRIGHT GOLD NICKEL CENTER KEYS	BAVCRNY BG	RAMAPO	PCS	
10218		BAVIERA BRIGHT GOLD NICKEL KEYS	BAVCRNY WH	RAMAPO	PCS	
10219		BAVIERA BRIGHT GOLD NICKEL KEYS	BAVCRNY BG	RAMAPO	PCS	
10219		BAVIERA BRIGHT GOLD NICKEL KEYS	BAVCRNY WH	RAMAPO	PCS	

TEST SPECIMEN COMPLIES WITH THESE DETAILS ANY DEVIATION IS NOTED TEST DATE: 3-21-16 525-44

TEST SPECIMEN COMPLIES WITH THESE DETAILS ANY DEVIATION IS NOTED
 REPORT NO. 1827201-595-94
 TEST DATE: 7/24/88



AREA BEFORE LEG REMOVAL = .912 IN SQ
 AREA AFTER LEG REMOVAL = .823 IN SQ
 WT/FT BEFORE LEG REMOVAL = .574 LBS/FT
 WT/FT AFTER LEG REMOVAL = .518 LBS/FT



DO NOT SCALE DRAWING

LOCATION FOR IMPACT TEST SPECIFICATION-LENGTHS TO 3/8"

ALLOWABLE BOW MAX. 1" PER 14" ANGULARITY TO BE ± 1/2

DRAWN FOR

BY DDS
 DESIGNS

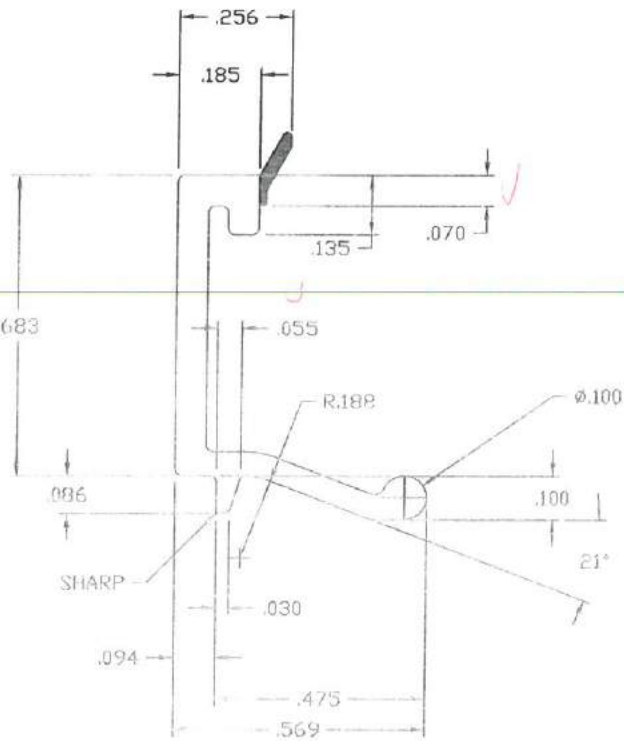
"OUR NAME SAYS IT ALL"

- 1) MATERIAL RIGID PVC
- 2) CAPSTOCK
- 3) UNSPECIFIED WALLS .060
- 4) BREAK ALL CORNERS .015 R
- 5) AREA .823 SQ. IN.
- 6) WT/FT .518 LBS/FT

TITLE WELDED PW					
PV MF NO FIN NO J					
DWR BY	SCALE	DATE	CHKD BY	APPD BY	
DDS	2:1	08-05-11			
COMPUTER NO					
DWG NO 4015					

NO.	REVISION	BY	DATE

TEST SPECIMEN COMPLIES
WITH THESE DETAILS
ANY DEVIATION IS NOTED
REPORT NO. E 1272-01-525-44
TEST DATE: 3/21/14



AREA OF RIGID PVC = .096
AREA OF SOFT PVC = .004

WT/FT OF RIGID PVC = .060
WT/FT OF SOFT PVC = .003

DO NOT SCALE DRAWING

SEE LOCATION FOR IMPACT TEST
SPECIFICATION—LENGTHS TO 3/8"

ALLOWABLE BCW MAX. 1" PER 14"
ANGULARITY TO BE $\pm 1/2$



DRAWN FOR
BY **DDS**
DESIGNS
"OUR NAME SAYS IT ALL"

- 1) MATERIAL RIGID PVC
- 2) CAPSTOCK
- 3) UNSPECIFIED WALLS .070
- 4) BREAK ALL CORNERS .015R
- 5) AREA .100 SQ. IN.
- 6) WT/FT .063 LBS/FT

TITLE WELDED DOUBLE HUNG
GLAZING BEAD

DWN BY DDS	SCALE 4:1	DATE 11/20/02	CHKD BY	APPD BY
COMPUTER NO				

DWG NO **3008**

NO.	REVISION	BY	DATE



Total Quality. Assured.

145 Sherwood Avenue
Farmingdale, New York 11735

Telephone: 631-815-1900
www.intertek.com/building

TEST REPORT FOR NORTH EAST WINDOWS USA, INC.

Report No.: I1273.01-525-44 R0

Date: 07/19/18

SECTION 13

REVISION LOG

REVISION #	DATE	PAGES	REVISION
0	07/19/18	N/A	Original Report Issue