



TEST REPORT

Report No.: H0213.01-525-44

Rendered to:

NORTH EAST WINDOWS USA, INC.
Merrick, New York

PRODUCT TYPE: Single Hung Window
SERIES/MODEL: PW630

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

| Title | Summary of Results |
|--|---|
| Primary Product Designator | R-PG110-FW |
| Design Pressure | ±5267 Pa (±110.00 psf) |
| Air Infiltration | 0.05 L/s/m ² (0.01 cfm/ft ²) |
| Canadian Air Infiltration/Exfiltration Level | Fixed |
| Water Penetration Resistance Test Pressure | 575 Pa (12.00 psf) |

Test Completion Date: 04/25/2017

Reference must be made to Report No. H0213.01-525-44, dated 05/05/17 for complete test specimen description and detailed test results.

1.0 Report Issued To: North East Windows USA, Inc.
1 Kees Place
Merrick, New York 11566

2.0 Test Laboratory: Architectural Testing, Inc.
145 Sherwood Avenue
Farmingdale, New York 11735
631-815-1900

3.0 Project Summary:

3.1 Product Type: Picture Window

3.2 Series/Model: PW630

3.3 Compliance Statement: Results obtained are tested values and were secured by using the designated test method(s). The specimen tested successfully met the performance requirements for a **R-PG110-H (48" x 48")** rating.

3.4 Test Dates: 04/25/2017

3.5 Test Record Retention End Date: All test records for this report will be retained until April 25, 2021.

3.6 Test Location: Intertek-ATI test facility in Farmingdale, NY. Calibration of test equipment was performed by Architectural Testing in accordance with AAMA 205-14 "In-Plant Testing Guidelines for Manufacturers and Independent Laboratories".

3.7 Test Sample Source: The test specimen was provided by the client. Representative samples of the test specimen 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 C. Any deviations are documented herein or on the drawings.

3.9 List of Official Observers:

| <u>Name</u> | <u>Company</u> |
|----------------|-----------------------------|
| Craig Ginsberg | Architectural Testing, Inc. |

4.0 Test Specification(s):

AAMA/WDMA/CSA 101/1.S.2/A440-08, *NAFS - North American Fenestration Standard/Specification for Windows, Doors, and Skylights*

5.0 Test Specimen Description:

5.1 Product Sizes:

| Overall Area: 1.0 m ² (10.8 ft ²) | Width | | Height | |
|---|-------------|--------|-------------|--------|
| | millimeters | inches | millimeters | inches |
| Overall size | 1220 | 48 | 1220 | 48 |

5.2 Frame Construction:

| Frame Member | Material | Description |
|----------------------|----------|---|
| Head, jambs and sill | PVC | Extrusions with install/mounting flange and glazing leg |

| | Joinery Type | Detail |
|-------------|--------------|------------|
| All corners | Miter | PVC welded |

5.3 Weatherstripping: No weatherstripping was utilized.

5.4 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 | Aluminum box tube accommodating a 14mm air space | Annealed 3.2mm (1/8") pane | Annealed 3.2mm (1/8") pane | Interior wet glaze with a dual durometer PVC glazing bead with fin seal |

| Location | Quantity | Daylight Opening | | Glass Bite |
|-------------|----------|------------------|-----------------|---------------|
| | | millimeters | inches | |
| Fixed panel | 1 | 1099 x 1099 | 43-1/4 x 43-1/4 | 12.5mm (3/8") |

5.5 Drainage:

| Drainage Method | Size | Quantity | Location |
|---------------------------|---------------------|-----------------|---|
| Weeps with flapped covers | 1-1/8" x 0.25" slot | 2 | 2-3/8" from either edge of unit on sill |

5.6 Hardware: No hardware was utilized.

5.7 Reinforcement: No reinforcement was utilized.

5.8 Screen Construction: No screen was utilized.

6.0 Installation:

The specimen was installed into a Spruce-Pine-Fir wood buck. The rough opening allowed for a 3/8" shim space. The exterior perimeter of the window was sealed with silicone caulk applied to the inside of the nail fin.

| Location | Anchor Location |
|---|------------------------|
| Spaced around the perimeter every 6" in the windows installation flange | Roofing nails |

7.0 Test Results: The temperature during testing was 21.7°C (71°F). The results are tabulated as follows:

| Title of Test | Results | Allowed | Note |
|---|--|--|-------------|
| Air Leakage, Infiltration per ASTM E 283 at 75 Pa (1.57 psf) | 0.05 L/s/m ² (0.01 cfm/ft ²) | 1.5 L/s/m ² (0.30 cfm/ft ²) max. | 1 |
| Air Leakage, Exfiltration per ASTM E 283 at 300 Pa (6.27 psf) | 0.05 L/s/m ² (0.01 cfm/ft ²) | Report only | |
| Water Penetration, per ASTM E 547 at 575 Pa (12.00 psf) | Pass | No leakage | 2 |
| Uniform Load Deflection, per ASTM E 330 taken at locking stile +5267 Pa (+110.00 psf) -5267 Pa (-110.00 psf) | 2.5 mm (0.10") 2.5 mm (0.10") | No breakage No breakage | 3 |
| Uniform Load Structural, per ASTM E 330 taken at locking stile +7900 Pa (+165.00 psf) -7900 Pa (-165.00 psf) | 0.8 mm (0.03") 0.3 mm (0.01") | No breakage No breakage | 3 |
| Forced Entry Resistance, per ASTM F 588 Grade: 10 | Pass | No entry | |
| Thermoplastic Corner Weld | Pass | Meets as stated | |

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

Note 2: Without insect screen.

Note 3: Observations: Deflection measured along jamb.

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.

Craig Ginsberg
Technician

Frank Pennisi
Director of Fenestration

CG:jlc

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

Appendix-A: Alteration Addendum (1)

Appendix-B: Photographs (2)

Appendix-C: Drawings (4)

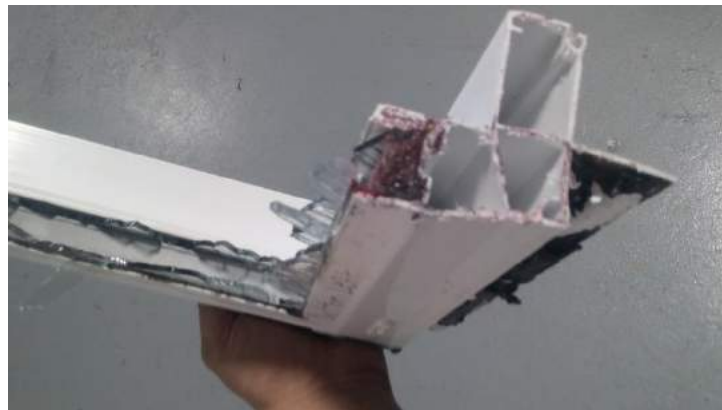
Appendix A
Alteration Addendum

Note: No alterations were required.

**Appendix B
Photographs**



**Photo No. 1
Corner Sample**



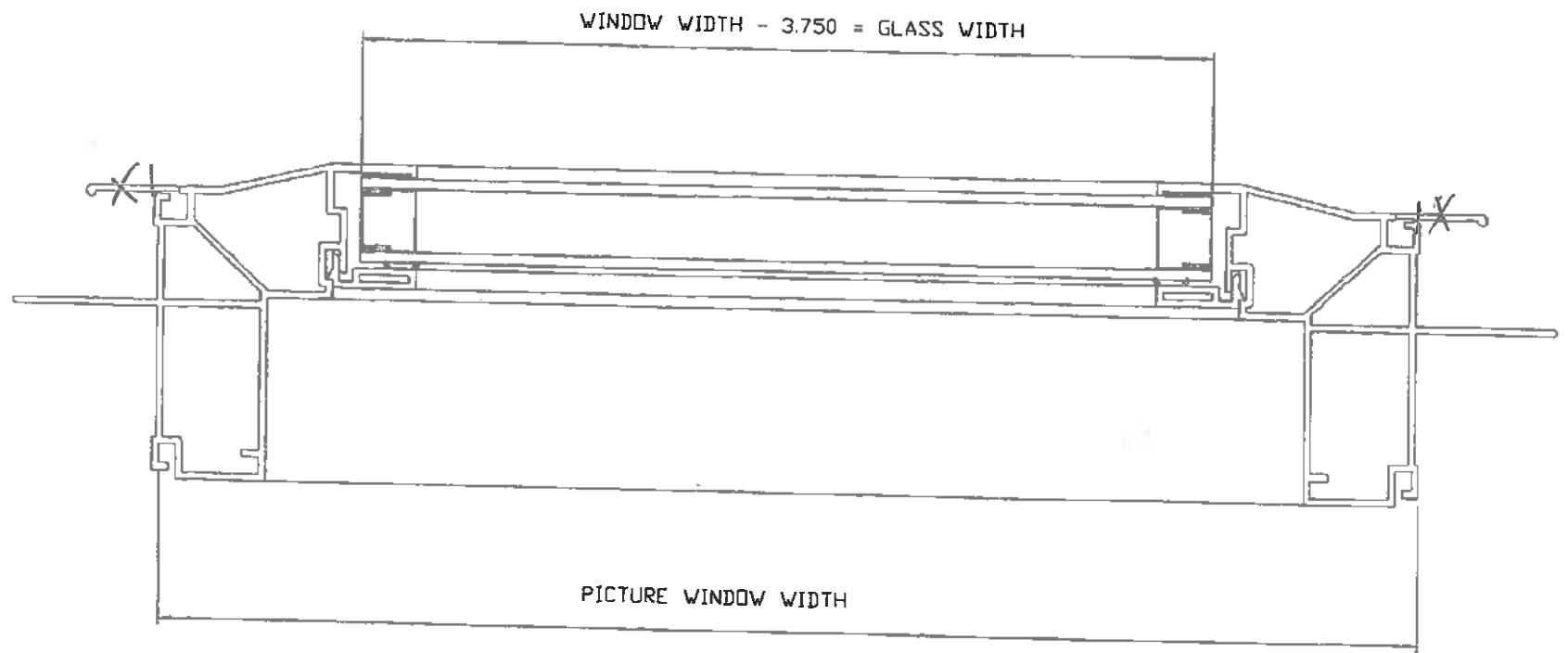
**Photo No. 2
Section View of Sample**


Appendix C

Drawings

Note: Complete drawings packet on file with Architectural Testing, Inc.

MT GROUP
TEST SPECIMEN COMPLIES
WITH THESE DETAILS
ANY DEVIATION IS NOTED
 REPORT NO. H0213.01-525-44
 TEST DATE: 4/25/11



| | | | | | |
|---|--|-------|----------------|---------|---------|
| DRAWN FOR  QUALITY LINEALS BY MCLAREN DESIGNS | TITLE 1010 SERIES PICTURE WINDOW HORIZONTAL ASSEMBLY | | | | |
| | DWN BY DDS | SCALE | DATE 3-9-99 | CHKD BY | APPD BY |
| | COMPUTER NO | | | | REV |
| | DWG NO B-PW-HORIZONTAL ASSEMBLY | | | | |

PW630 BOM

| A/E P/N | Qty | Description | Vendor P/N | Vendor | U.O.M. | Formulae |
|---------|-----|---|------------------|--------------------------|--------|------------|
| | | FRAME PARTS | | | | |
| 1011-00 | | PW FRAME, WIDTH, WHITE | 1011-00 | QUALITY | FT | W + 25 |
| 1011-10 | | PW FRAME, WIDTH, ALMOND | 1011-10 | QUALITY | FT | W + 25 |
| 1011-40 | | PW FRAME, WIDTH, CREAM | 1011-40 | QUALITY | FT | W + 25 |
| 1011-00 | | PW FRAME, HEIGHT, WHITE | 1011-00 | QUALITY | FT | H + 25 |
| 1011-10 | | PW FRAME, HEIGHT, ALMOND | 1011-10 | QUALITY | FT | H + 25 |
| 1011-40 | | PW FRAME, HEIGHT, CREAM | 1011-40 | QUALITY | FT | H + 25 |
| 1511-00 | | PW FRAME, WIDTH, WHITE, W/ FIN & J | 1511-00 | QUALITY | FT | W + 25 |
| 1511-10 | | PW FRAME, WIDTH, ALMOND, W/ FIN & J | 1511-10 | QUALITY | FT | W + 25 |
| 1511-40 | | PW FRAME, WIDTH, CREAM, W/ FIN & J | 1511-40 | QUALITY | FT | W + 25 |
| 1008-00 | | PW FRAME, HEIGHT, WHITE, W/ FIN & J | 1008-00 | QUALITY | FT | H + 25 |
| 1008-10 | | PW FRAME, HEIGHT, ALMOND, W/ FIN & J | 1008-10 | QUALITY | FT | H + 25 |
| 1008-40 | | PW FRAME, HEIGHT, CREAM, W/ FIN & J | 1008-40 | QUALITY | FT | H + 25 |
| 1008-00 | | PW GLAZING BEAD, WIDTH, WHITE | 1008-00 | QUALITY | FT | W - 2.875 |
| 1008-10 | | PW GLAZING BEAD, WIDTH, ALMOND | 1008-10 | QUALITY | FT | W - 2.875 |
| 1008-40 | | PW GLAZING BEAD, WIDTH, CREAM | 1008-40 | QUALITY | FT | W - 2.875 |
| 1008-00 | | PW GLAZING BEAD, HEIGHT, WHITE | 1008-00 | QUALITY | FT | H - 4.1875 |
| 1008-10 | | PW GLAZING BEAD, HEIGHT, ALMOND | 1008-10 | QUALITY | FT | H - 4.1875 |
| 1008-40 | | PW GLAZING BEAD, HEIGHT, CREAM | 1008-40 | QUALITY | FT | H - 4.1875 |
| 10142 | | 8 X 2 PHIL PAN (4 PER BAG) INSTALL | 1008-40 | QUALITY | FT | H - 4.1875 |
| 10280 | | 3/8" ROUND PLUG, BEIGE | 8N200A/PS/2/ABAG | UNNEEDA BOLT | PCS | |
| 10281 | | 3/8" ROUND PLUG, BEIGE | 828-014 | CUSTOM CRAFT PLASTICS | PCS | |
| 10271 | | FOAM WRAP, 3/4 X 1 1/2 X 76 FT, PSA ONE SIDE | 828-014 | CUSTOM CRAFT PLASTICS | PCS | |
| 10133 | | 12" x 8500' MACHINE WINDOW FILM (80 PER SKID) | WM-0780X1800X75 | SECION RUBBER & PLASTICS | FT | 2H |
| | | | WMN 12-8500 | ULTRA-PAK INCORPORATED | FT | WM-HX10 |

| A/E P/N | Qty | Description | Vendor P/N | Vendor | U.O.M. | Formulae |
|---------|-----|---|---------------|---------------|--------|------------------------|
| | | GLASS PARTS | | | | |
| 10100 | | GLASS, 72 X 84, 88B, CLEAR | 1140 | PPG | 60 FT | W - 3.3125, H - 3.3125 |
| 10283 | | GLASS, 72 X 84, 88B, CLEAR | 1436 | PPG | 60 FT | W - 3.3125, H - 3.3125 |
| 10101 | | GLASS, 72 X 84, 88B, LOW E SOLARBAN 60 | 8949 | PPG | 60 FT | W - 3.3125, H - 3.3125 |
| 10284 | | GLASS, 48 X 60 OBRSCURE | 481997 | PPG | 60 FT | W - 3.3125, H - 3.3125 |
| 10190 | | GLASS, TEMPERED, CLEAR | 18CT | GLASS AMERICA | 60 FT | W - 3.3125, H - 3.3125 |
| 10191 | | GLASS, TEMPERED, OBRSCURE | 620T | GLASS AMERICA | 60 FT | W - 3.3125, H - 3.3125 |
| 10192 | | GLASS, TEMPERED, CLEAR LOW E | 18LE | GLASS AMERICA | 60 FT | W - 3.3125, H - 3.3125 |
| 10249 | | GLASS, 72 X 84, 88B, LOW E SOLAR BAN 70, R9 | 008-00 | PPG | 60 FT | W - 3.3125, H - 3.3125 |
| 10128 | | 3/48" GRAY DURASEAL 1410 FT / SPOOL | T1-AC38 | GLASS AMERICA | 60 FT | W - 3.3125, H - 3.3125 |
| 10129 | | 3/48" GRAY DURASEAL 1410 FT / SPOOL | 824-644-557 | TRUE SEAL | FT | |
| 10250 | 2 | 1 1/8" X 7/8" X 1 SETTING BLOCK | 870-64H-587 | TRUE SEAL | FT | |
| 10102 | | 3/16 X .610 WHITE MUNTIN | 12811-00126 | LAWATEK | PCS | |
| 10211 | | 3/16 X .610 TAN MUNTIN | 0418L8V81 | RAMAPO | FT | W - 4.125, H - 4.125 |
| 10110 | | 3/16 X 5/8 A CLIPS INTERNAL MUNTIN CROSSSES | 0416L8V7AN | RAMAPO | FT | W - 4.125, H - 4.125 |
| 10127 | | GRINDOC CLIPS 3/16 X 5/8 X 9/16 5000 PCS, 7/8 GLA | CRD418LJ | RAMAPO | PCS | |
| 10105 | | 8 X 18 WHITE ELISABETH MUNTIN | 318-366L-380 | TRUSEAL | PCS | |
| 10214 | | 8 X 18 TAN ELISABETH MUNTIN | 0818EY81 | RAMAPO | FT | |
| 10106 | | 8 X 18 WHITE EXTERNAL CROSSSES | 0818EY8AN | RAMAPO | PCS | |
| 10216 | | 8 X 18 TAN EXTERNAL CROSSSES | CRO818E-81 | RAMAPO | PCS | |
| 10107 | | BAVIERA BRIGHT GOLD PENCIL BAR | BAVAPB-BG | RAMAPO | PCS | |
| 10108 | | BAVIERA WHITE PENCIL BAR | BAVWPB-WH | RAMAPO | FT | |
| 10217 | | BAVIERA BRIGHT GOLD NYLON CENTER KEYS | BAV-CKNY-BG | RAMAPO | PCS | |
| 10218 | | BAVIERA BRIGHT GOLD NYLON 80Y | BAV-CKNY-8G | RAMAPO | PCS | |
| 10219 | | BAVIERA WHITE NYLON 80Y | BAV-80Y-NY-8G | RAMAPO | PCS | |
| | | | BAV-80Y-NY-81 | RAMAPO | PCS | |

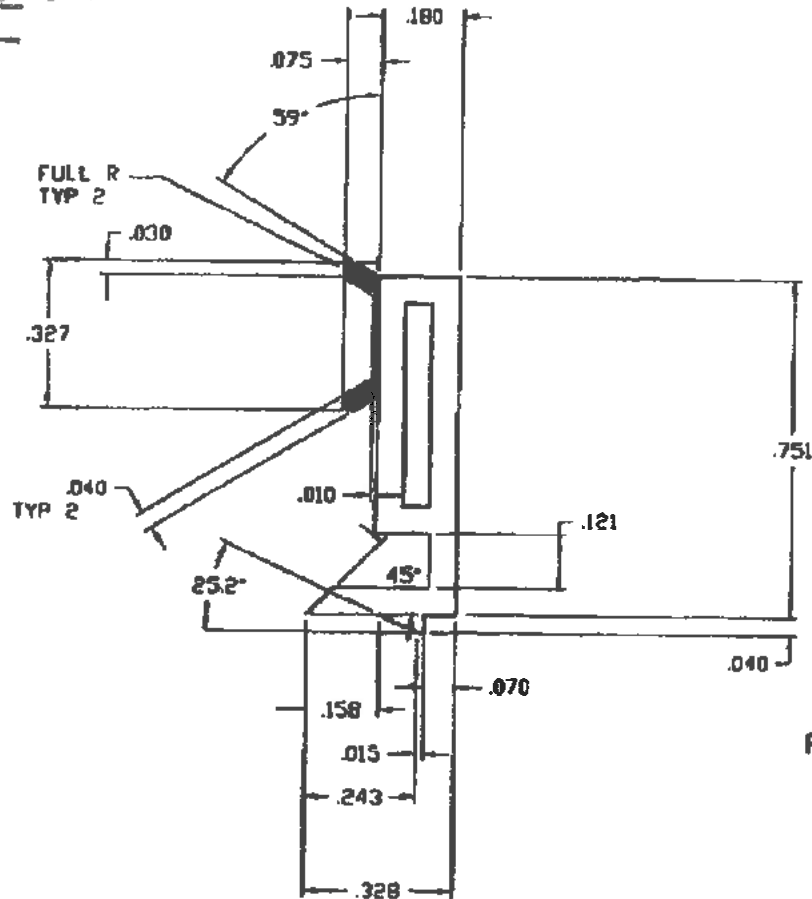
MT GROUP
 TEST SPECIMEN COMPLIES
 WITH THESE DETAILS
 ANY DEVIATION IS NOTED
 REPORT NO. #1021901-525-04
 TEST DATE: 4/25/11

MT GROUP
 TEST SPECIMEN COMPLIES
 WITH THESE DETAILS

ANY DEVIATION IS NOTED

REPORT NO. H0215.01-525-44

TEST DATE: 4/25/17




AREA OF RIGID PVC=.105
 WT/FT OF RIGID PVC=.066

AREA OF FLEX PVC=.008
 WT/FT OF FLEX PVC=.006

TOTAL AREA=.113
 TOTAL WT/FT=.071

Part#100B Glazing Bead

| | | | | | |
|---|---|--------------|----------------|---------|----------------|
| DRAWN FOR  QUALITY LINEALS BY MELANIE DESIGNS | TITLE 100B SERIES SH SH-PLAIN GLAZING BEAD | | | | |
| | DWG BY DBS | SCALE 4:1 | DATE 3-8-99 | CHKD BY | APPR BY RCV |
| DWG NO B-SH-101D-100B | | | | | |

PTOT YOS AIC TUS AT-TT AOW OB T/TA

CAEJCVS ACUVAEALUW

1001B