MONTGOMERY COUNTY HISTORIC PRESERVATION COMMISSION
STAFF REPORT

Address: 6807 Westmoreland Ave., Takoma Park  
Meeting Date: 6/13/18

Resource: Non-Contributing Resource  
Takoma Park Historic District  
Report Date: 6/6/18

Applicant: Loretta Kelly  
Public Notice: 5/30/18

Review: HAWP  
Tax Credit: n/a

Case Number: 37/03-18DD  
Staff: Dan Bruechert

Proposal: Window Replacement

RECOMMENDATION
Staff recommends that the Historic Preservation Commission approve the HAWP application.

PROPERTY DESCRIPTION
SIGNIFICANCE: Non-Contributing Resource to the Takoma Park Historic District
STYLE: Ranch
DATE: c.1913

The subject property is a heavily modified two-story side gable house. The house is clad in Hardi siding, with vinyl one-over-one sash windows (Staff believes that these windows were replaced c.2000, but has been unable to locate the Staff report for this HAWP). The windows at the basement level are wood awning and sash windows in various states of degradation.
PROPOSAL
The applicant proposes to replace six basement windows with replacement vinyl windows and a square window on the left side of the house.

APPLICABLE GUIDELINES
When reviewing alterations and additions for new construction to Non-Contributing Resources within the Takoma Park Historic District, decisions are guided by the Takoma Park Historic District Design Guidelines (Design Guidelines) and Montgomery County Code Chapter 24A (Chapter 24A).

Takoma Park Historic District Design Guidelines
There are two very general, broad planning and design concepts which apply to all categories. These are:

The design review emphasis will be restricted to changes that are at all visible from the public right-of-way, irrespective of landscaping or vegetation (it is expected that the majority of new additions will be reviewed for their impact on the overall district), and,

The importance of assuring that additions and other changes to existing structures act to reinforce and continue existing streetscape, landscape, and building patterns rather than to impair the character of the district.

Most Alterations and additions to Non-Contributing/Out-of-Period Resources should be approved as a matter of course. The only exceptions would be major additions and alterations to the scale and massing of Non-Contributing/Out-of-Period Resources which affect the
surrounding streetscape and/or landscape and could impair the character of the historic district as a whole.

*Montgomery County Code, Chapter 24A Historic Resources Preservation*

(b) The commission shall instruct the director to issue a permit, or issue a permit subject to such conditions as are found to be necessary to insure conformity with the purposes and requirements of this chapter, if it finds that:

1. The proposal will not substantially alter the exterior features of an historic site or historic resource within an historic district; or
2. The proposal is compatible in character and nature with the historical, archeological, architectural or cultural features of the historic site or the historic district in which an historic resource is located and would not be detrimental thereto or to the achievement of the purposes of this chapter; or
3. The proposal would enhance or aid in the protection, preservation and public or private utilization of the historic site or historic resource located within an historic district in a manner compatible with the historical, archeological, architectural or cultural value of the historic site or historic district in which an historic resource is located; or

**STAFF DISCUSSION**

The applicant proposes to remove five windows in the basement and one window the left side of the house with Platinum Majestic windows.

Based on Staff’s observation at a site visit, the windows in the basement appear to be historic, with the exception of the rear window on the right side, which has been removed and is covered by plywood. Most of the windows show significant signs of degradation and deferred maintenance. Staff observed several rotten members and warping of a number of window frames and jambs. Staff finds that it would be possible through herculean effort to salvage these windows, however, the Guidelines for non-contributing resources to the Takoma Park Historic District do not require the retention of these features as they will not affect the scale and massing of the house or affect the surrounding streetscape.
The applicant proposes to remove a single window on the 1st floor of the house. This window is a square casement window on the left side of the house near the street (see below). The existing window is a wood frame with a plexiglass storm. The decorative stained glass is a panel that is installed behind the wood window. Staff supports removal of this window, as it does not appear to be installed in a manner consistent with a historic wood window. The removal of this window will not impact the scale or massing of the non-contributing house and will not have a negative impact on the surrounding streetscape.
Figure 1: The square 1st floor window to be replaced.

The applicant proposes to install Platinum majestic windows to fit the existing window openings. The proposed window is vinyl, which is not typically an appropriate material; however, Staff finds this is an acceptable window for several reasons. First, this is a non-contributing resource to the Takoma Park Historic District, and changes that don’t affect the scale, massing, or surrounding streetscape should be approved as a matter of course. Second, six of the windows are at the basement level, which will have a reduced impact on the visual impact the building has on the streetscape. Third, unlike most vinyl windows, this window will have a finish that is designed to allow it to be painted (Staff has been provided with material samples and will distribute these during the work session prior to the HPC meeting). These windows will not have the shiny appearance of a PVC window that is found to be visually inconsistent in most historic settings. Finally, this window has more depth than many “off the shelf” vinyl windows and though it lacks the profile of a wood window, it is more compatible with this non-contributing resource.

The applicant proposes to replace the double hung windows with double hung windows and will install a hopper window with a dryer vent on the right side (see Circle: ___ for details). The windows on the left side of the house will be fixed picture windows. This configuration is acceptable under the Guidelines and Staff recommends approval of this HAWP.

**STAFF RECOMMENDATIONS**
Staff recommends that the Commission approve the HAWP application;
and with the general condition applicable to all Historic Area Work Permits that the applicant will present 3 permit sets of drawings to HPC staff for review and stamping prior to submission for permits (if applicable). After issuance of the Montgomery County Department of Permitting Services (DPS) permit, the applicant will arrange for a field inspection by calling the DPS Field Services Office at 240-777-6370 prior to commencement of work and not more than two weeks following completion of work.
APPLICATION FOR HISTORIC AREA WORK PERMIT

Contact Person: Loretta Kelley
Contact Email: LorettaKelley@Faithfull.org
Tax Account No.: 01075944
Daytime Phone No.: 301-270-4925

Name of Property Owner: LaGreca Kelley Living Trust
Daytime Phone No.: 301-270-4925
Address: 6807 Westmoreland Ave, Takoma Park, MD 20912
City: Street:
Street Number: Street Zip Code:

Contractor: AmericanHomeCenterInc.
Phone No.: 301-226-1144
Contractor Registration No.: MHIC 37401

Agent for Owner: NA
Daytime Phone No.: NA

LOCATION OF BUILDING PERMIT

House Number: 6807
Street: Westmoreland Ave.
Town/City: Takoma Park
Nearest Cross Street: Walnut and Elm
Lot: 11
Block: 18
Subdivision: 025
Lib: 53671
Folio: 191-192
Parcel: 1301075944

PART ONE: TYPE OF PERMIT ACTION AND USE

1A. CHECK ALL APPLICABLE:
☐ Construct ☐ Extend ☐ Alter/Remodel
☐ Add ☐ A/C ☐ Room Addn. ☐ Deck ☐ Shed
☐ Move ☐ Install ☐ Wreck/Raze
☐ Install ☐ Fireplace ☐ Woodburning Stove ☐ Single Family
☐ Revision ☐ Repair ☐ Removable
☐ Fence/Wall (complete Section 4) ☐ Other: replace windows

1B. Construction cost estimate: $ 3,000

1C. If this is a revision of a previously approved active permit, see Permit #

PART TWO: COMPLETE FOR NEW CONSTRUCTION AND EXTENSION ADDITIONS

2A. Type of sewage disposal: ☐ 01 ☐ WSSC ☐ 02 ☐ Septic ☐ 03 ☐ Other:

2B. Type of water supply: ☐ 01 ☐ WSSC ☐ 02 ☐ Well ☐ 03 ☐ Other:

PART THREE: COMPLETE ONLY FOR FENCE/RETAINING WALL

3A. Height _______ feet ______ inches

3B. Indicate whether the fence or retaining wall is to be constructed on one of the following locations:
☐ On party line/property line ☐ Entirely on land of owner ☐ On public right of way/assessment

I hereby certify that I have the authority to make the foregoing application, that the application is correct, and that the construction will comply with plans approved by all agencies listed and I hereby acknowledge and accept this to be a condition for the issuance of this permit.

Loretta Kelley
Signature of owner or authorized agent
4/18/18 Date

Approved: ___________________________ For Chairperson, Historic Preservation Commission
Disapproved: ___________________________

APPLICATION/PERMIT NO.: ___________________________ Date Filed: ___________________________

SEE REVERSE SIDE FOR INSTRUCTIONS
THE FOLLOWING ITEMS MUST BE COMPLETED AND THE REQUIRED DOCUMENTS MUST ACCOMPANY THIS APPLICATION.

1. WRITTEN DESCRIPTION OF PROJECT
   a. Description of existing structure(s) and environmental setting, including their historical features and significance.
      Non-contributing, two-story single-family house built in 1913, completely renovated and enlarged (gutted to studs, new siding, new window openings, added front bay, rear family room and enclosed porch) under building permit in 2001-02. At time of renovation, basement windows were not replaced. Additionally, one small picture window on first floor (in stairwell) to second floor was not replaced.

   b. General description of project and its effect on the historic resource(s), the environmental setting, and, where applicable, the historic district:
      Replace seven windows in basement (two double hung, four small picture, one large picture), replace one small picture window on first floor. Windows to be white vinyl (Ideal Platinum Series 3000). One window to be replaced is located over existing door at entrance to house. Additional changes will be made to window opening sizes or locations. No change to the historic resource or environmental setting.

2. SITE PLAN
   Sites and environmental setting, drawn to scale. You may use your plot. Your site plan must include:
   a. the scale, north arrow, and data;
   b. dimensions of all existing and proposed structures; and
   c. site features such as walkways, driveways, fences, ponds, streams, trash dumpsters, mechanical equipment, and landscaping.

3. PLANS AND ELEVATIONS
   You must submit 2 copies of plans and elevations in a format no larger than 11" x 17". Plans on 8 1/2" x 11" paper are preferred.
   a. Schematic construction plans, with marked dimensions, indicating location, size and general type of walls, window and door openings, and other fixed features of both the existing resource(s) and the proposed work.
   b. Elevations (facades), with marked dimensions, clearly indicating proposed work in relation to existing construction and, when appropriate, context. All materials and fixtures proposed for the exterior must be noted on the elevations drawings. An existing and a proposed elevation drawing of each facade affected by the proposed work is required.

4. MATERIALS SPECIFICATIONS
   General description of materials and manufactured items proposed for incorporation in the work of the project. This information may be included on your design drawings.

5. PHOTOGRAPH
   a. Clearly labeled photographic prints of each facade of existing resources, including details of the affected portions. All labels should be placed on the front of photographs.
   b. Clearly labeled photographic prints of the resource as viewed from the public right-of-way and of the adjoining properties. All labels should be placed on the front of photographs.

6. TREE SURVEY
   If you are proposing construction adjacent to or within the drip line of any tree 6" or larger in diameter (at approximately 4 feet above the ground), you must file an accurate tree survey identifying the tree, location, and species of each tree at least 10 feet.

7. ADDRESSES OF ADJACENT AND CONFRONTING PROPERTY OWNERS
   For all projects, provide an accurate list of adjacent and confronting property owners (not tenants), including names, addresses, and zip codes. This list should include the owners of all lots or parcels which adjoin the parcel in question, as well as the owner(s) of lot(s) or parcel(s) which lie directly across the street/highway from the parcel in question.

PLEASE PRINT (IN BLUE OR BLACK INK) OR TYPE THIS INFORMATION ON THE FOLLOWING PAGE.
PLEASE STAY WITHIN THE GUIDES OF THE TEMPLATE, AS THIS WILL BE PHOTOCOPIED DIRECTLY ONTO MAILING LABELS.
Ideal Platinum Hopper Window

Slimline Profile with less vinyl gives you more glass and light

Tilting inward, our basement hopper provides both light and ventilation in many hard to accommodate areas in your home. The stainless steel hinges provide durability while the sash tilts inward with easy turn and tilt locks. Designed to keep insects, rodents, and cold air outside of the home, the optional dryer vent provides added protection from the weather and minimizes wall damage during installation.

- Weather resistant, fully welded frame and sash is strong, durable and maintenance free.
- Heavy-duty latch and keeper provide enhanced security to your home's basement.
- Slope step sill allows for easier water drainage.
- Foam filled frame and sashes add energy efficiency and comfort.
- Slope step sill allows for easier water drainage.
- Double strength glass is heavier and far more durable than single strength.
- Stainless steel hinge assembly for durability and ease of operation.
- Optional dryer vent includes a 4" diameter aluminum pipe and collar.
- Slimline design provide less vinyl frame, more glass.
TEST REPORT SUMMARY

Rendered to:
Ideal Window Manufacturing, Inc.
100 West 7th Street
Bayonne, NJ 07002

PRODUCT TYPE: Tilt Double Hung
SERIES/ MODEL: "Platinum Series"

<table>
<thead>
<tr>
<th>Title</th>
<th>Summary of Results</th>
</tr>
</thead>
</table>
| Primary Product Designator                              | Class R-PG35: Size tested 1016 x 1600 mm (~40 x 63 in) - Type H
| AAMA/WDMA/CSA 101/L.S.2/A440-11                          | Class R-PG35: Size tested 1016 x 1600 mm (40 x 63 in) - Type H
| AAMA/WDMA/CSA 101/L.S.2/A440-08                          | H-R35 1016 x 1600 (40 x 63)                             |
| Positive Design Pressure\(^1\)                           | +1680 Pa (+35.09 psf)                                   |
| Negative Design Pressure\(^1\)                           | -1680 Pa (-35.09 psf)                                   |
| Operating Force (in motion\(\text{max}\))\(^2\)           | 106.7 N (24 lbf)                                       |
| Air Infiltration\(^2\)                                   | 0.1 L/s/m\(^2\) (0.02 cfm/ft\(^2\))                    |
| Water Penetration Resistance Test Pressure\(^2\)         | 260 Pa (5.43 psf)                                      |
| Uniform Load Structural Test Pressure\(^1\)              | ±2520 Pa (52.63 psf)                                   |
| Forced Entry Resistance\(^2\)                           | ASTM F588-07 - Grade 10 Pass                            |

NOTE: \(^1\)Test results with 2.5 mm and 3 mm glass
NOTE: \(^2\)Test results with 2.5 mm glass only

Test Completed: 06/24/14
Revision Date: 08/20/14

Reference must be made to Report No. NCTL-110-17180-1 dated 08/06/14 for complete test specimen description and data.

For National Certified Testing Laboratories

Jay Leader
Technician

Professionals In The Science of Testing

1 of 30
AAMA/WDMA/CSA 101/I.S.2/A440-11
AAMA/WDMA/CSA 101/I.S.2/A440-08
AAMA/WDMA/CSA 101/I.S.2/A440-05

STRUCTURAL TEST REPORT

NCTL-110-17180-1

REPORT TO:
IDEAL WINDOW MANUFACTURING, INC.
100 WEST 7TH STREET
BAYONNE, NJ 07002

REPORT NUMBER: NCTL-110-17180-1
REPORT DATE: 08/06/14
REVISION DATE: 08/20/14

PRODUCT:
“Platinum Series”
Tilt Double Hung
Report Number: NCTL-110-17180-1

Report Date: 08/06/14
Revision Date: 08/20/14

Report To: IDEAL WINDOW MANUFACTURING, INC.
100 West 7th Street
Bayonne, NJ 07002

Test Date: 06/24/14

Specification:
AAMA/WDMA/CSA 101/I.S.2/A440-11
AAMA/WDMA/CSA 101/I.S.2/A440-08
NAFS North American Fenestration Standard/Specification for windows, doors, and skylights
AAMA/WDMA/CSA 101/I.S.2/A440-05
Standard/Specification for Windows, Doors, and Unit Skylights

Performance Results:
AAMA/WDMA/CSA 101/I.S.2/A440-11- Specimen 1 & 2
Class R-PG35: Size tested 1016 mm x 1600 mm (~40 x 63 in)-Type H
AAMA/WDMA/CSA 101/I.S.2/A440-08 – Specimen 1 & 2
Class R-PG35: Size tested 1016 mm x 1600 mm (40 x 63 in)-Type H
AAMA/WDMA/CSA 101/I.S.2/A440-05 – Specimen 1 & 2
H-R35 1016 mm x 1600 mm (40 x 63)

Description of Specimen Tested:

Note: All dimensions are in the order (Width x Height x Thickness) unless otherwise noted.

Model/ Series: Platinum Series
Configuration: Tilt Double Hung

Frame Size:
Overall
1016 mm x 1600 mm (40" x 63")

Sash Size:
Top Sash
910 mm x 783 mm (35.813" x 30.813")
Bottom Sash
935 mm x 783 mm (36.813" x 30.813")

Viewing Area:
Top Sash
638 mm x 711 mm (33" x 28")
Bottom Sash
864 mm x 711 mm (34" x 28")

Frame & Sash Type: Extruded vinyl
Joint Construction: Frame & Sash
Mitered, welded
Glazing Components
Specimen 1
Overall 22.10 mm (0.870") nominal
Glass Thickness (2) Lites of 2.5 mm (0.090") nominal annealed glass
Spacer Type/Size 17.53 mm (0.690") Coated U-shaped steel spacer (Type CU-D)
Specimen 2
Overall 22.10 mm (0.870") nominal
Glass Thickness (2) Lites of 3 mm (0.122") nominal annealed glass
Spacer Type/Size 16.90 mm (0.669") coated U-shaped steel spacer (Type CU-D)
Glazing System Exterior glazed with a silicone back-bedding and a snap-in rigid vinyl single leaf dual durometer glazing bead

Weatherstrip
Type (1) Strip vinyl wrapped foam
Location Head
Type (1) Strip center fin
Location Sill
Size 11.43 mm (0.450") high
Location Exterior meeting rail
Size 6.86 mm (0.270") high
Location Stiles
Size 7.37 mm (0.290") high
Location Interior and exterior meeting rails
Type (1) Strip single leaf foam bulb vinyl
Location Bottom rail
Type (2) Strips center fin
Location Top rail
Size 5.59 mm (0.220") high

Operating Hardware
Locks
Type Metal cam-type sweep lock
Location 178 mm (7") from each end of the interior meeting rail
Keeper
Type Metal
Location Exterior meeting rail at the lock positions
Balance
Type Double coil spring balance system
Location Each jamb track
Pivot Bar
Type (1) Die-cast T-shaped
Location Each end of the exterior meeting rail and bottom rail fastened with (2) screws

Auxiliary
Type Rigid vinyl safety latch lock
Location 114.3 mm (4.5") From the exterior meeting rail on the stiles
Type Rigid vinyl balance cover
Location Each interior jamb track
Type: Rigid vinyl sash stop
Location: Bottom of each exterior jamb track
Type: Plastic tilt latch with thumb actuator
Location: Each end of the top rail and interior meeting rail

**Reinforcement**
Type: Composite contour-shaped
Location: Meeting rails

**Weep Description**
Size: (2) 6 mm (0.25") wide by 3 mm (0.125") high
Location: 66.68 mm (2.625") from each end of the bottom rail
Size: 6 mm (0.25") wide by 3 mm (0.125") high
Location: 73.03 mm (2.875") from each end of the exterior meeting rail
Size: 82.55 mm (3.25") wide by 1.6 mm (0.063") high
Location: Each end of the sill screen retainer

**Interior/Exterior**
Surface Finish: White vinyl (PVC)

**Insect Screen**
Size: 897 mm (35.313") wide by 770 mm (30.313")
Corner Construction: Mitered, staked-in-place aluminum corner keys
Material: Fiberglass mesh with solid spline
Installation Method: Two (2) jamb retainer springs and spring loaded latches at the bottom rail

**Installation Method**
The window was installed in a 50.8 mm x 254 mm (2" x 10") spruce-pine-fir lumber test buck and secured to the buck with (1) #8 x 63.5 mm (2.5") pan head screw located at 63.5 mm (2.5") from each end of the interior jamb tracks. 19.05 mm (0.75") x 15.88 mm (0.625") wood blind stops were located at the exterior perimeter of the buck. Each blind stop was fastened with (1) brad nail located at 31.75 mm (1.25") from each end and 305 mm (12") on center thereafter. The exterior perimeter was sealed with a silicone sealant.

**Test Results - AAMA/WDMA/CSA 101/I.S.2/A440-2011, 2008 & 2005**

<table>
<thead>
<tr>
<th>Paragraph</th>
<th>Test</th>
<th>Specimen 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.3.1/9.3.1</td>
<td>Operating Force and Force to Latch - Method B (Force Gauge) ASTM E2068-00(08)</td>
<td>Initiate Motion = 102.2 N (23 lbf)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maintain Motion - Opening = 93.3 N (21 lbf)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maintain Motion - Closing = 106.7 N (24 lbf)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Allowed (Normal Use) = 155 N (35 lbf)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Allowed (R Ratings) = 155 N (35 lbf)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Latches = 31 N (7 lbf)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Allowed = 100 N (22.5 lbf)</td>
</tr>
</tbody>
</table>

**NOTE:** The results above represent the maximum force among all sash tested.
**Paragraph 5.3.2.1/9.3.2 Test**

Air Leakage Resistance
ASTM E283-04(12)

The tested specimen meets or exceeds the performance levels specified in AAMA/WDMA/CSA 101/1.5.2/A440-2011, 2008, and 2005 for air infiltration at 75 Pa (1.6 psf).

- **Maximum Allowable** = 1.5 L/s/m² (0.3 cfm/ft²)
- **Specimen 1**
  - Extraneous Air Leakage = 2.69 L/s (5.7 cfm)
  - Total Air Leakage = 2.88 L/s (6.1 cfm)
  - Air Infiltration Rate = 0.1 L/s/m² (0.02 cfm/ft²)

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**Paragraph 5.3.3/9.3.3 Test**

Water Penetration Resistance
ASTM E547-00(09) and ASTM E331-00(09)

**3.4 L/ (min• m²) (5.0 gph/ft²)**

**Specimen 1**

No Leakage after 4 cycles of 5 minutes at 260 Pa (5.43 psf)

*NOTE:* Tested with and without insect screen

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**Paragraph 5.3.4.2/9.3.4.2 Test**

Uniform Load Deflection at Design Pressure
ASTM E330-14

- No damage after positive = 1680 Pa (35.09 psf) held for 10 seconds
- No damage after negative = 1680 Pa (35.09 psf) held for 10 seconds

**Specimen 1**

- Measured Deflection Positive = 7.90 mm (0.311 inches)
- Measured Deflection Negative = 8.99 mm (0.354 inches)

**Specimen 2**

- Measured Deflection Positive = 8.15 mm (0.321 inches)
- Measured Deflection Negative = 8.13 mm (0.320 inches)

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**Paragraph 5.3.4.3/9.3.4.3 Test**

Uniform Load Structural Test
ASTM E330-14

- No damage after positive = 2520 Pa (52.63 psf) held for 10 seconds
- No damage after negative = 2520 Pa (52.63 psf) held for 10 seconds

**Specimen 1**

- Measured Permanent Set Positive = 0.36 mm (0.014 inches)
- Measured Permanent Set Negative = 0.48 mm (0.019 inches)
- Maximum Allowed (0.4%) = 3.51 mm (0.138 inches)

**Specimen 2**

- Measured Permanent Set Positive = 0.18 mm (0.007 inches)
- Measured Permanent Set Negative = 0.41 mm (0.016 inches)
- Maximum Allowed (0.4%) = 3.51 mm (0.138 inches)

*NOTE:* Deflection and Permanent Set measurements taken on the meeting rail over an 876 mm (34.5") span.
### Paragraph 5.3.5/ 9.3.5
**Test**

**Forced Entry Resistance**

ASTM F588-07

**Type A Window Assembly/ Grade 10**: = Pass

**Specimen 1**

**Test**

<table>
<thead>
<tr>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disassembly</td>
<td>No Entry</td>
</tr>
<tr>
<td>Lock Manipulation</td>
<td>No Entry</td>
</tr>
<tr>
<td>Sash Manipulation</td>
<td>No Entry</td>
</tr>
<tr>
<td>Test A1</td>
<td>No Entry</td>
</tr>
<tr>
<td>Test A2</td>
<td>No Entry</td>
</tr>
<tr>
<td>Test A3</td>
<td>No Entry</td>
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<td>Test A4</td>
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<tr>
<td>Test A5</td>
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<tr>
<td>Test A6</td>
<td>No Entry</td>
</tr>
<tr>
<td>Test A7</td>
<td>No Entry</td>
</tr>
<tr>
<td>Hardware Manipulation Test</td>
<td>No Entry</td>
</tr>
<tr>
<td>Sash Manipulation Test</td>
<td>No Entry</td>
</tr>
</tbody>
</table>

**NOTE:**
1. T1 = 5 minutes, L1 = 667 N (150 lbf), L2 = 333 N (75 lbf), L3 = 111 N (25 lbf)
2. Loads were held for 60 seconds.

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### Paragraph 5.3.6.2/ 9.3.6.2
**Test**

**Specimen 1**

**Thermoplastic Corner Weld Test (PVC products only)** = Pass

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### Paragraph 5.3.6.3/ 9.3.6.3
**Test**

**Deglazing Test**

ASTM E987-88(09)

**Specimen 1**

**Top Sash**

<table>
<thead>
<tr>
<th>Sash</th>
<th>Maximum Allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail</td>
<td>320 N (71.84 lbf)</td>
</tr>
<tr>
<td>Maximum Allowed</td>
<td>90% (100%)</td>
</tr>
<tr>
<td>Top Rail</td>
<td>6.0%</td>
</tr>
<tr>
<td>Meeting Rail</td>
<td>4.0%</td>
</tr>
<tr>
<td>Stiles - 230 N (51.71 lbf)</td>
<td></td>
</tr>
<tr>
<td>Maximum Allowed</td>
<td>90% (100%)</td>
</tr>
<tr>
<td>Left Stile</td>
<td>8.0%</td>
</tr>
<tr>
<td>Right Stile</td>
<td>8.0%</td>
</tr>
</tbody>
</table>

**Bottom Sash**

<table>
<thead>
<tr>
<th>Sash</th>
<th>Maximum Allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail</td>
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<td>Maximum Allowed</td>
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</tr>
<tr>
<td>Meeting Rail</td>
<td>8.0%</td>
</tr>
<tr>
<td>Bottom Rail</td>
<td>6.0%</td>
</tr>
<tr>
<td>Stiles - 230 N (51.71 lbf)</td>
<td></td>
</tr>
<tr>
<td>Maximum Allowed</td>
<td>90% (100%)</td>
</tr>
<tr>
<td>Left Stile</td>
<td>10.0%</td>
</tr>
<tr>
<td>Right Stile</td>
<td>10.0%</td>
</tr>
</tbody>
</table>

**NOTE:** The glass bite was approximately 12.7 mm (0.5")
This test report was prepared by National Certified Testing Laboratory (NCTL), for the exclusive use of the above named client and it does not constitute certification of this product. The results are for the particular specimen tested and do not imply the quality of similar or identical products manufactured or installed from specifications identical to the tested product. The test specimen was supplied to NCTL by the above named client. No conclusions of any kind regarding the adequacy or inadequacy of the glass in the test specimen are to be drawn from the ASTM E330 test. Forced entry resistance test equipment used is in compliance with Section 7 of the ASTM F588-07 test method. Foam tape is mounted to the perimeter of the test buck prior to clamping to the test wall. NCTL is a testing lab and assumes that all information provided by the client is accurate and does not guarantee or warranty any product tested or installed. The results in this report are actual tested values and are applicable to the specimen tested only, using the components and construction methods described herein.

Detailed drawings were available for laboratory records and compared to the test specimen at the time of this report. Component drawings were reviewed for product verification. The bill of materials contains details with any deviations noted. Ambient conditions during the referenced testing are available upon request. A copy of this report along with representative sections of the test specimen will be retained by NCTL. This report does not constitute certification or approval of the product, which may only be granted by a certification program validator or recognized approval entity. All tests were conducted in full compliance with the referenced specifications and/or test methods. This report is the joint property of National Certified Testing Laboratories Inc. and the Client to whom it is issued. Permission to reproduce this report by anyone other than National Certified Testing Laboratories Inc and the Client must be granted in writing by both of the above parties. This report may not be reproduced, except its entirety, without the written consent of NCTL.

National Certified Testing Laboratories

Jay Leader
Technician

Robert H. Zeiders, P.E.
Vice-President Engineering & Quality

NJLI / dm
Attachments
Appendix A – Revision Summary
Appendix B – Drawings
Appendix A

Section 1:

Component Drawings, with Applicable Part Numbers, Manufacturing and Modeling Details, were Reviewed (as submitted) for Product Verification (Reference: NCTL-110-17180-1)

See Attached Documentation; any deviations noted.

Note: The above referenced component drawings (if applicable) along with representative sections of the test specimen will be retained per procedure by NCTL. This testing facility assumes that all information provided by the client is accurate.

Section 2:

<table>
<thead>
<tr>
<th>Identification</th>
<th>Date</th>
<th>Page &amp; Revision</th>
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<tr>
<td>Original Issue</td>
<td>08/06/14</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Revision 1</td>
<td>08/20/14</td>
<td>Changed from (1) strip to (2) strips of weather strip located at the stiles and top rail and changed meeting rails to interior and exterior meeting rails</td>
</tr>
<tr>
<td>Revision 2</td>
<td>08/20/14</td>
<td>Changed (2) strips to (1) strip of weather strip located at the bottom rail and (1) strip to (2) strips of weather strip located at the top rail</td>
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Appendix B

Drawings
## ULTRATE PLUS WITH DUAL WALL HANDLES

<table>
<thead>
<tr>
<th>Description</th>
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<tbody>
<tr>
<td>WINDOW WIDTH</td>
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<tr>
<td>WINDOW HEIGHT</td>
<td>63</td>
</tr>
<tr>
<td>TOP GLASS WIDTH</td>
<td>33.9375</td>
</tr>
<tr>
<td>TOP GLASS HEIGHT</td>
<td>28.9375</td>
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<tr>
<td>BOTTOM GLASS WIDTH</td>
<td>34.9375</td>
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<td>BOTTOM INSERT WIDTH</td>
<td>36.75</td>
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<td>SCREEN WIDTH</td>
<td>35.3125</td>
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<tr>
<td>SCREEN HEIGHT</td>
<td>30.25</td>
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### FRAME EXTRUSIONS

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<tr>
<td>062408 761 HEAD EXP</td>
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<tr>
<td>066514 701A HEAD REPLC</td>
<td>40.25</td>
</tr>
<tr>
<td>066060 702W02 SILL W/PILE</td>
<td>40.25</td>
</tr>
<tr>
<td>066515 703 07023 LEFT JAMB-REPLC</td>
<td>63.25</td>
</tr>
<tr>
<td>066515 703 07023 RIGHT JAMB-REPLC</td>
<td>63.25</td>
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<td>066040 763A 07022 Left SASH STOP</td>
<td>2.5</td>
</tr>
<tr>
<td>066040 763A 07022 Right SASH STOP</td>
<td>2.5</td>
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<tr>
<td>066076 765 CRM WHT SILL ANGLE</td>
<td>40</td>
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<tr>
<td>062527 2408-(509)-101-192 BAL CVR-7</td>
<td>30.75</td>
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<td>062527 2408-(509)-101-192 BAL CVR-7</td>
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### WOOLPILE/SEALS IN FRAME/FOAM EXT.

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<tbody>
<tr>
<td>082370 W23251NW-.187X-.250 WHITE W/PLASTIC FIN</td>
<td>.187 x .250</td>
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<tr>
<td>CHELSEA SUP.</td>
<td></td>
</tr>
<tr>
<td>090032 33114-00189 .75 x 2&quot; x75' Ether PSA-1</td>
<td></td>
</tr>
<tr>
<td>090032 33114-00189 .75 x 2&quot; x75' Ether PSA-1</td>
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</tr>
<tr>
<td>090032 33114-00189 .75 x 2&quot; x75' Ether PSA-1</td>
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### TOP SASH EXTRUSIONS

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<td>TTT cut sizes w/ weld B/O</td>
<td></td>
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**Test Specimen Complies With These Details. Any Deviation Is Noted.**

**Report No. NCTL-110E171801**

**Test Date 4/24/14**

**Calculations**

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<td>-5.0625</td>
<td></td>
</tr>
<tr>
<td>28.9375</td>
<td></td>
</tr>
<tr>
<td>-4.25</td>
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<td>-4.6875</td>
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<td>30.25</td>
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**Ames Over 32343**

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<th>Description</th>
<th>Value</th>
<th>In Head</th>
<th>In Sill Leg</th>
<th>Left Jamb</th>
<th>Right Jamb</th>
<th>Head</th>
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<tr>
<td>.187 x .250</td>
<td>Proxy</td>
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<tr>
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<td>.187 x .450</td>
<td>Proxy</td>
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<td></td>
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---

**TTT cut sizes w/ weld B/O**

---

**# 1 2011**
066250 965 TOP HANDLE-DUAL WALL
066137 737A 07023 KEEPER RAIL CREAM WHITE 16'
133230 948 06022 REBAR KEEPERAIL
066511 908W01 LEFT TOP STILE
066511 908W01 RIGHT TOP STILE
066036 716A GLAZING BEAD-Mitred width- 2 pieces
066036 716A GLAZING BEAD-Mitred-height- 2 pieces

WOOLPILE/SEALS TOP SASH
CHELSEA SUP. .187 x .220 in extrusion from Chelsea
CHELSEA SUP. .187 x .220 in extrusion from Chelsea

082075 W43271NW .187 X .270 WHT W/SOFT FIN
084001 W43351NW WHITE .187 X .350
CHELSEA SUP. .187 x .250 in extrusion supplied by chelsea
CHELSEA SUP. .187 x .250 in extrusion supplied by chelsea

0.187 x .290 Fin
0.187 x .290 Fin

066508 906 07023 LOCK RAIL
133230 948 06022 REBAR LOCKRAIL
066260 955 BOTTOM HANDLE
066511 908W01 LEFT BOTTOM STILE
066511 908W01 RIGHT BOTTOM STILE
066036 716A GLAZING BEAD BOTTOM WIDTHS-Mitred 2 pieces
066036 716A GLAZING BEAD BOTTOM HEIGHTS-Mitred 2 pieces

WOOLPILE/SEALS BOTTOM SASH

084001 W43351NW WHITE .187 X .350
084003 32689-21 OFF-WHITE BULB SEAL

CHELSEA SUP. .187 x .250 in extrusion supplied by chelsea
CHELSEA SUP. .187 x .250 in extrusion supplied by chelsea

0.187 x .290 Fin
0.187 x .290 Fin

010405 BA-9710C 3/8" STAPLE, BEA-TY95110NX-(staple to hold in woolpile)

1/2 SCREEN EXTRUSIONS

179433 E1687 CMP LOCK BTM RAIL OFF WT 16"(E1000)-Bottom Rail
179432 E1888 CMP PLAIN RAIL OFF WHT 16"(E1001)-Top Plain rail
179434 E1889 CMP RAIL STOP OFF WHT 16" (E1002)-Side w/ bead
179432 E1688 CMP PLAIN RAIL OFF WHT 16"(E1001)- Top Plain rail

TTT cut sizes w/ weld 8/O

Lockrail
EXT. Seal- Bottom HDL.
Inside Bottom Seal
Outside Stile
Inside Stile

as required

TTT cut sizes

36.5
35.25
29.625
29.625
1/2 SCREEN PARTS

019000  SCR N W R N L  
033010  CKL .206 X .212 CORNER KEY PERFECT FIT (LOC 11) 
020051  9183 X 187 NC SCR N SPR NG 
160510  160 BLK SCREEN CORD 160300-6 
042025  551LH-WO8085 SCREEN BOLT EURO-WHITE (LINEN) Left Scrn. Lock 
042026  550RH-WO8085 SCREEN BOLT EURO-WHITE (LINEN) Right Scrn lock 
042031  1066-BW SPRING SCREEN TRIGGERS 
160499  SCR CLOTH SUMMARY ALL DEPTS 

Misc Other Parts LABELS

019080  LABEL-4" X 1 1/8"-BRT PINK ON ROLLS W/ RIBBONS 
019105  4 X 4 LABELS W/ CLEANTAC II 
019090  COS-09-0947 LABEL * ORDER THRU CARLENE, FROM PASTERS * 
010011  8A X 2 1/2" PHIL PAN 2P 4 PCS PER BAG-Installation screw 
019130  PN#9359 DURATRUST N/C REP DOUBLE HUNG 
010410  TP12FS 1/2" REINF FIL TAPE- to hold sills > to head exp. 

Packaging

100100  PULP CORNER 5.5" X 4" X 5.5" 
100051  ADU20312  10" - 80 GAUGE- 6000/ROLL 

Balance System Parts-

033015  BALANCE BRACKET R 101005RH, 304P01R-"X"-TOP L 
033016  BALANCE BRACKET L 101004LH, 304P01L-"Y"-TOP R 
033015  BALANCE BRACKET R 101005RH, 304P01R-"X"-Top L 
033016  BALANCE BRACKET L 101004LH, 304P01L-"Y"-TOP R 
010152  BA X 5/8" PHIL PAN HEAD SS.410 -NO DEFECT Brck-screw 
10002  10-24 X 1 1/8" JAMB ADJUSTER SET 

Lock and Keeper Parts

033002  C30706.42 KEEPER OFF WHITE 
033002  C30706.42 KEEPER OFF WHITE additional if over 26" wide 
11117  6A X 1" #4 PHIL FLAT 410SS VIYL HLD OFF/WHT NEW (4) keeper screws

Qty=1  Qty=4 
Qty=2  Qty=2  as required 
Qty=1  Qty=2  as required 
Qty=2  Qty=2  Qty=1  Qty=1  Qty=20" 
Qty=2  as req. 
Qty=1  Qty=1  Qty=1  Qty=4  Qty=2 
Qty=1  Qty=1  Qty=4
033000  A30700403.42  RIGHT HAND OFF- WHT LOCK
033000  A30700403.42  RIGHT HAND OFF- WHT LOCK additional if over 26" wide
011119  #6 X 1" PH FL ZINC STL VYN- L- HD IDEAL WHT LOCK SCREW (4) lock screws

SASH PARTS-Misc.
042004  7390FC--L.005 JW LEFT SIGHTLINE TILT LATCH CRM WHT 76020-001 Top Sash Left
042005  7390FC--L.005 JW RIGHT SIGHTLINE TILT LATCH CREAM WHT 76120-001 Top Sash Right
042021  860998EE DELUXE VENT LOCK CRM WHT- Night Latch
033013  356503000-16YS503 TIE IN PIVOT BAR-Top Sash
010330  6-20 1/4 X 1/2 PHIL TRUSS ZP-Top Sash pivot Bar Screws
040479  2260.003-LH-EURO WHITE END RAIL PLUG-Top Sash LH
040478  2260.003-RH-EURO WHITE END RAIL PLUG-Top Sash RH

042004????  7390FC--L.005 JW LEFT SIGHTLINE TILT LATCH CRM WHT 76020-001-Bot Sash Left
042005-????  7390FC--L.005 JW RIGHT SIGHTLINE TILT LATCH CREAM WHT 76120-001 Top Sash Right
033013  356503000-16YS503 TIE IN PIVOT BAR-Bottom Sash
010330  6-20 1/4 X 1/2 PHIL TRUSS ZP-Bottom Sash pivot bar Screws
040479  2260.003-LH-EURO WHITE END RAIL PLUG-Bot Sash LH
040478  2260.003-RH-EURO WHITE END RAIL PLUG-Bot Sash RH

Glass Items
090105  Wet Glazing Component A Silicone
090105  Wet Glazing Component B Silicone
090100  1/8 X 15/16 X 15/16 W HI TCK GLUE (GREEN) ECO BLOCK

Foam-Option- As shown on attached cross section Drawing- injected and strips
090154  Foam-Resin
090153  Foam-ISO
100305  Type "A" EPS Cellofoam .562" x .500 x 1.5"
100308  Type "D" EPS Cellofoam 0.49"/0.44" x .875

new part # needed with description chg.-for shark fin
new part # needed with description chg.-for shark fin

TEST SPECIMEN COMPLIES
WITH THESE DETAILS.
ANY DEVIATION IS NOTED.
REPORT NO. NCTL-110-17180-1
TEST DATE 6/24/14
CONFIDENTIAL & PROPRIETARY

THE INFORMATION CONTAINED IN THIS DOCUMENT IS CONFIDENTIAL AND PROPRIETARY TO AMESBURY GROUP, INC. REPRODUCTION IN WHOLE OR PART BY ANY MEANS IS EXPRESSLY PROHIBITED.

CUSTOMER APPROVAL

DATE

REVISIONS
1. Increased hinge gap from .045 to .055 8/V/12/10/99
2. See change 029-09 8/V/16/1/02

NOTES:

Title: OFFSET T-SLOT WITH PLATFORM

Dwg. or Part No. 32689

REV.

DRAWN DATE CHK'D SCALE:
RHM 3/16/99 5/1

57 Hunt Rd. Amesbury, MA 01913

EXTRUDED PRODUCTS DIVISION

AMESBURY GROUP INC.
DOUBLE HUNG HEAD

ILLUSTRATION OF PART AND CONTROL POINTS

TEST SPECIMEN COMPLIES WITH THESE DETAILS.
ANY DEVIATION IS NOTED REPORT NO. NCTL-110-17195

TEST DATE 6/12/2014

FLICK FUNCTIONAL CHECK
727 MULLION CLIP
WOOLPILE (.187 BACK)

CUSTOMER LENGTH | CHELSEA CUT LENGTH | TOLERANCE
---|---|---

DRAWN DATE: 03-03-09

Use the caliper diagram as your guide to measure the following control points:
Measure the following control points using #1 on the caliper diagram:
Measure the following control points using #2 on the caliper diagram:
Measure the following control points using #3 on the caliper diagram:
Measure the following control points using #4 on the caliper diagram:
Frequency of sampling: Process Specialist- 3 samples per shift recorded every 4 hours.
Auditor- 1 sample per shift recorded 1 hour after shift starts.

IF ANY CONTROL POINTS ARE NOT IN SPEC.
CORRECTIVE ACTION REQUIRED
TEST SPECIMEN COMPLIES
WITH THESE DETAILS.
ANY DEVIATION IS NOTED
REPORT NO. NCP - 110 - 172
TEST DATE 03/24/11

WEATHERSTRIP SPECIFICATION

<table>
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<tr>
<th>POSITION</th>
<th>SIZE</th>
<th>WEATHERSTRIP TYPE</th>
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<tbody>
<tr>
<td>A</td>
<td>.187 x .290</td>
<td>ULTRA FAB</td>
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FUNCTIONAL CHECK
WOOLPILE (.187 x .290)
765 SILL ANGLE

CUSTOMER LENGTH  CHELSEA CUT LENGTH  TOLERANCE

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<th>CHELSEA CUT LENGTH</th>
<th>TOLERANCE</th>
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<td>JPP 03-28-11</td>
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<tr>
<td>2</td>
<td>ADDED INTERNAL WALL SPEC AS CRITICAL DIMS</td>
<td>JPP 02-17-10</td>
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<td>1</td>
<td>ADDED INTERNAL WALL SPEC</td>
<td>JPP 02-21-10</td>
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DRAWN DATE: 05/28/10

Use the caliper diagram as your guide to measure the following control points:
Measure the following control points using #1 on the caliper diagram:
Measure the following control points using #2 on the caliper diagram:
Measure the following control points using #3 on the caliper diagram:
Frequency of sampling: Process Specialist- 3 samples per shift recorded every 4 hours.
Avail- 1 sample per shift recorded 1 hour after shift start.

IF ANY CONTROL POINTS ARE NOT IN SPEC. CORRECTIVE ACTION REQUIRED.
ALL PARTS ARE TO BE PACKED IN SAME DIRECTION

TEST SPECIMEN COMPLIES
W, OW, CW - USE WHITE FLEX
B, SND - USE BEIGE FLEX

ANY DEVIATION IS NOTED
REPORT NO. NCTL-110-17195-1
TEST DATE 06/24/04

FLEX DETAIL
SCALE = 4X

WEATHERSTRIP SPECIFICATION

FUNCTIONAL CHECK
705 LIFT RAIL
706 LOCK RAIL
707 KEEPER RAIL

6 ADDED PACK NOTE: W0913130 EAS 06-20-13
5 REVISED DIM 5, ADDED CRITICALS PER PLANT MANAGER REQUEST EAS 06-05-13
4 REVISED SICHER DRN 05-24-13
3 ADDED FLEX NOTE DRN 06-05-13
2 REVISED DIM .025 TOL & DIM .126 TOL EAS 05-12-08
1 REVISED SNAP IN LEG DIM. 013 WAS .138; DIM. 128 WAS .138 EAS 06-04-07

DRAWN DATE: 04-24-07

Use the caliper diagram as your guide to measure the following control points.
Measure the following control points using #1 on the caliper diagram: 2, 3, 4, 6, 7
Measure the following control points using #2 on the caliper diagram: 5
Measure the following control points using #3 on the caliper diagram: 1
Measure the following control points using #4 on the caliper diagram:

Frequency of sampling: Process Specialist- 3 samples per shift recorded every 4 hours.
Auditor- 1 sample per shift recorded 1 hour after shift start.

IF ANY CONTROL POINTS ARE NOT IN SPEC.
CORRECTIVE ACTION REQUIRED
NOTE: EVERY PROFILE REQUIRES PROPER STIFFENER FIT. REBAR REQUIRED IN EVERY WINDOW!

TEST SPECIMEN COMPLIES WITH THESE DETAILS.
ANY DEVIATION IS NOTED REPORT NO. NCTL-110-1750-5

TEST DATE 6/24/14

NOTE: WHITE WEATHERSTRIP IN ALL COLOR PROFILES!

<table>
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<th>SIZE</th>
<th>WEATHERSTRIP TYPE</th>
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<td>A</td>
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FUNCTIONAL CHECK
948 COMPOSITE REBAR
746 ALUMINUM REBAR
743 STEEL REBAR
716A GLAZING BEAD

CUSTOMER LENGTH | CHELSEA CUT LENGTH | TOLERANCE
--- | --- | ---

DRAWN DATE: 01-14-10

Use the caliper diagram as your guide to measure the following control points:
Measure the following control points using #3 on the caliper diagram:
Measure the following control points using #2 on the caliper diagram:
Measure the following control points using #4 on the caliper diagram:
Measure the following control points using #5 on the caliper diagram:

Frequency of sampling: Process Specialist-3 samples per shift recorded every 4 hours.
Audition-1 sample per shift recorded 1 hour after shift start.

IF ANY CONTROL POINTS ARE NOT IN SPEC. CORRECTIVE ACTION REQUIRED
TEST SPECIMEN COMPLIES WITH THESE DETAILS. ANY DEVIATION IS NOTED REPORT NO. NCTL-110-7180-12
TEST DATE 6/18/114

WEATHERSTRIP SPECIFICATION

FUNCTIONAL CHECK
703 JAMB
733 JAMB
717 T-MULLION

CUSTOMER LENGTH	CHELSEA CUT LENGTH	TOLERANCE

3 EXTENDED RT LEG_018	JPP 02/23/05
2 UPDATED PROFILE	BLG 12/15/03
1 UPDATED PROFILE WCS9382	BLG 11/20/03

DRAWN DATE: 06-03-03

Use the caliper diagram as your guide to measure the following control points.
Measure the following control points using #1 on the caliper diagram:
Measure the following control points using #2 on the caliper diagram:
Measure the following control points using #3 on the caliper diagram:
Measure the following control points using #4 on the caliper diagram:
Frequency of sampling: Process Specialist- 3 samples per shift recorded every 4 hours.
Audit: 1 sample per shift recorded 1 hour after shift start.
IF ANY CONTROL POINTS ARE NOT IN SPEC. CORRECTIVE ACTION REQUIRED
NOTE: WHITE WEATHERSTRIP IN ALL COLOR PROFILES

NOTE: 1. MATERIAL = RIGID PVC
2. FLEXIBLE PVC = 0.200
3. EXTERIOR COATING =
4. LAMINATE = 0.300
5. THINNER INTERIOR WALLE =
6. WALL THICKNESS =
7. RADIUS =
8. LOCATION FOR FIP CORRECT =
9. ANGULARITY =
10. PERPENDICULARITY =
11. PARALLELISM =
12. FLATNESS = 0.000
13. SPECIFICATION LENGTH TO
14. ANGULARITY TO BE ± 1/" 15. PROFILE MUST MEET D-303
16. PROFILE MUST MEET D-304
17. PROFILE MUST MEET D-301
18. PROFILE MUST MEET D-003
19. MAX BOW DWTH PER 38 LENGTH
20. INTERNAL WALL THICKNESS ±.010
   UNDER OTHERWISE SPECIFIED

WEATHERSTRIP SPECIFICATION
POSITION   SIZE    WEATHERSTRIP TYPE
A  .187 x .250 ULTRA FAB
B  .187 x .225 ULTRA FAB

FUNCTIONAL CHECK
716A GLAZING BEAD

DRAWN DATE: 09-20-06

USE THE CALIPER DIAGRAM AS YOUR GUIDE TO MEASURE THE FOLLOWING CONTROL POINTS:
MEASURE THE FOLLOWING CONTROL POINTS USING #1 ON THE CALIPER DIAGRAM:
MEASURE THE FOLLOWING CONTROL POINTS USING #2 ON THE CALIPER DIAGRAM:
MEASURE THE FOLLOWING CONTROL POINTS USING #3 ON THE CALIPER DIAGRAM:
MEASURE THE FOLLOWING CONTROL POINTS USING #4 ON THE CALIPER DIAGRAM:

FREQUENCY OF SAMPLING: PROCESS SPECIALIST- 3 SAMPLES PER SHIFT REPORTED EVERY 4 HOURS.
AUDITOR- 1 SAMPLE PER SHIFT REPORTED 1 HOUR AFTER SHIFT START.

IF ANY CONTROL POINTS ARE NOT IN SPEC.
CORRECTIVE ACTION REQUIRED
Shapes Die #
1002-HR4

ALLOY & TEMPER
6063 T5

WT/FT
.100

SCALE
4:1

AREA
.0772

UNMARKED WALLS
.035

DRAWN BY
MTM

BREAK CORNERS
.015

DESCRIPTION
SCREEN RAIL W/ STOP

SHAPES UNLIMITED, INC.
590 E. Western Reserve Rd.
Youngstown, Ohio 44514
Ph: 330-726-0844
Fax: 330-758-4353

TEST DATE: 03/09/04

TEST: SPECIMEN COMPLIES WITH THESE DETAILS.
ANY DEVIATION IS NOTED
REPORT NO. NCTL-110- 17190-1

EXPOSED

ACTUAL SIZE

= FULL R. (3)
Shapes Die #
1001-HR4

EXPOSED

ACTUAL SIZE

TEST SPECIMEN COMPLIES
WITH THESE DETAILS.
ANY DEVIATION IS NOTED
REPORT NO. NCTL-110-17180-I
TEST DATE 4/12/04

SHAPES UNLIMITED, INC.
590 E. Western Reserve Rd.
Youngstown, Ohio 44514
Ph: 330-726-0844
Fax: 330-758-4353

ALLOY & TEMPER 6063 T5 WT/FT .088
SCALE 4:1 AREA .0729
UNMARKED WALLS .035 DRAWN BY MTM
BREAK CORNERS .015
DESCRIPTION SCREEN RAIL

Aluminum Assoc. Std. Tolerances Apply Unless Specifically Shown Otherwise
TEST SPECIMEN COMPLIES
WITH THESE DETAILS.
ANY DEVIATION IS NOTED
REPORT NO. NCTL-110-17185-1
TEST DATE 6/24/14

CHELSEA BUILDING
PRODUCTS, INC.
505 CEDAR WAY, WILMINGTON, DE 19899

PRELIMINARY PART II
TITLE 700-CH-7306 TRUSTGARD REPLACEMENT DOUBLE HUNG HERITAGE SASH HOLLOW HANDLES
DRAWN BY JFP
DESIGNED BY
CHECKED BY
APPROVED BY
DRAWING NO. 1986.003

32885 AMESBURY BOTTOM SEAL
702A HEAD
945 PULL RAIL
948 LOCK RAIL COMPOSITE REBAR
737A KEEPER RAIL
716A GLAZING BEAD
945 LOCK RAIL
702 SILL
32885 AMESBURY BOTTOM SEAL
716A GLAZING BEAD
703 JAMB
945 STILE