

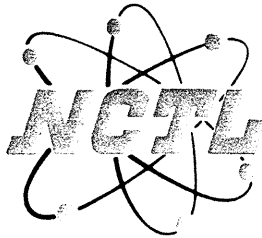
**STANEK VINYL WINDOWS**

**STRUCTURAL PERFORMANCE TEST REPORT**

Model "Ultra Series 2000 2 Lite Slider Slimline"  
Type XX Horizontal Sliding Vinyl Prime Window

NCTL-110-6654-2

*Gary D. Perkins*  
*Gary D. Perkins*  
*3/11/02*  
*6/6/02*



# NATIONAL CERTIFIED TESTING LABORATORIES

FIVE LEIGH DRIVE • YORK, PENNSYLVANIA 17402 • TELEPHONE (717) 846-1200  
FAX (717) 767-4100  
www.nctlinc.com

## STRUCTURAL PERFORMANCE TEST REPORT

REPORT NO: NCTL-110-6654-2  
TEST DATE: 02/16/99  
REPORT DATE: 03/29/99  
EXPIRATION DATE: 02/28/03  
REVISED DATE: 05/30/00

**Client:** Stanek Vinyl Windows  
4582 Willow Parkway  
Cuyahoga Heights, OH 44125

**Test Specimen:** Stanek Vinyl Windows' Model "Ultra Series 2000 2 Lite Slider Slimline" Type XX Horizontal Sliding Vinyl Prime Window (HS-R60 69x50).

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

### TEST SPECIMEN DESCRIPTION

**General:** The test specimen was a type XX horizontal sliding vinyl prime window measuring 69" wide by 50" high overall. The interior panel measured 33-3/8" wide by 47" high. The exterior panel measured 33-3/8" wide by 46" high. One (1) metal cam-type sweep lock was located at 9" from each end of the interior meeting stile. The metal keepers were located on the exterior meeting stile at the lock positions. A spring loaded plastic security stop was snap-fitted at 5-3/8" from the exterior meeting stile on the exterior panel top rail. A rigid vinyl combination liner/weatherstrip holder/jamb leg was snap-fitted at the interior and exterior jamb tracks. A rigid vinyl combination liner/weatherstrip holder/interior vertical sill leg was snap-fitted at the interior sill track. A rigid vinyl combination liner/weatherstrip holder/center vertical sill leg was snap-fitted at the exterior sill track. A rigid vinyl combination cover/weatherstrip holder/interlock was snap-fitted at the interior and exterior meeting stiles. A rigid vinyl cover was snap-fitted at both jamb stiles. One (1) plastic tilt latch was housed at the top of all panel stiles. A rigid vinyl combination glazing bead/pull handle was snap-fitted at each jamb stile. A metal roller/plastic housing was located at each end of both panel bottom rails. One (1) galvanized steel reinforcement channel (0.050" thick) was fastened with five (5) evenly spaced screws and filled the length of all rail and stile hollows. The frame and panels were of welded mitered corner construction.

**Glazing:** Both active panels were interior glazed using sealed insulating glass with a two (2) leaf dual durometer back-bedding and a snap-in two (2) leaf dual durometer glazing bead. The overall insulating glass thickness was 15/16" consisting of two (2) lites of double strength annealed glass, a "Heat Mirror" film, and two (2) spaces created by a twin desiccant-filled steel spacer system.

**Weatherseals:** A single strip of center fin weatherstrip (0.370" high) was located at the right jamb and both meeting stiles. A single strip of center fin weatherstrip (0.290" high) was located at both jambs. Double strips of center fin weatherstrip (0.290" high) were located at all rails. Double strips of center fin weatherstrip (0.370" high) were located at the left jamb. Triple strips of center fin weatherstrip (0.370" high) were located at the sill. An open cell foam air baffle measuring approximately 3" x 1-1/4" x 5/8" was located under the sill inserts at each end of all sill tracks.

PROFESSIONALS IN THE SCIENCE OF TESTING

*Handwritten signature: Gary O. Perkins*  
3/11/02

**Weeps:** One (1) weep hole measuring 3/16" x 1/4" was located at each end of both sill track inserts. One (1) weep hole measuring 1/2" x 1/8" was located at each end of the center vertical sub-sill leg. One (1) weep hole measuring 1" x 3/16" was located at 7/16" from each end of the exterior horizontal sill face. One (1) weep hole measuring 1-1/2" x 5/16" and employing a plastic weep cover with aluminum weep flap was located at 3" from each end of the exterior vertical sill face. One (1) weep hole measuring 3/16" x 5/16" was located at each end of both bottom rail glazing channels. One (1) weep hole measuring 1/2" x 1/4" was located at each end of both bottom rail exterior horizontal surfaces.

**Interior & Exterior Surface Finish:** White vinyl (PVC).

**Sealant:** The jamb and sill inserts were sealed to the frame with a caulk sealant.

**Screen:** An insect screen measuring 64-1/4" wide by 45" high was of mitered type corner construction with staked-in-place die cast aluminum corner keys. The screen employed fiberglass mesh cloth with a hollow vinyl spline and two (2) head retainer springs. A single strip of polypile weatherstrip (0.250" high) was located at each stile.

**TEST RESULTS**

<u>Par. No.</u>	<u>Title of Test &amp; Method</u>	<u>Measured</u>	<u>Allowed</u>	
2.2.2.5.1	Operating Force Exterior Panel	Left	20 lbf	
		Right	20 lbf	
	Interior Panel	Left	20 lbf	
		Right	20 lbf	
2.2.2.5.2	Deglazing - ASTM E987 Exterior Panel	Top Rail (50 lbf)	<100%	
		Bottom Rail (50 lbf)	<100%	
	Meeting Stile (70 lbf)	<100%		
	Jamb Stile (70 lbf)	<100%		
	Interior Panel	Top Rail (50 lbf)	<100%	
		Bottom Rail (50 lbf)	<100%	
		Meeting Stile (70 lbf)	<100%	
		Jamb Stile (70 lbf)	<100%	
	2.1.2	Air Infiltration - ASTM E283 0.57 psf (15 mph)	0.1 cfm/ft <sup>2</sup> (0.09 cfm/ft <sup>2</sup> )	-----
			1.57 psf (25 mph)	0.3 cfm/ft <sup>2</sup> (0.18 cfm/ft <sup>2</sup> )

6/6/02  
 3/11/02

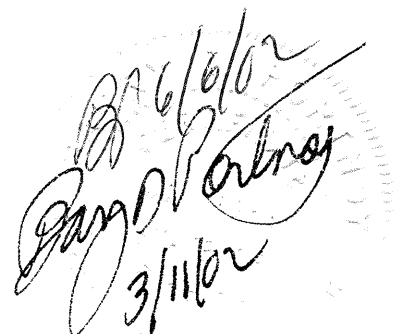
<u>Par. No.</u>	<u>Title of Test &amp; Method</u>	<u>Measured</u>	<u>Allowed</u>
2.1.3 *	Water Resistance - ASTM E547 5.0 GPH/FT <sup>2</sup> WTP= 2.86 psf	No Leakage	No Leakage
2.1.4.2 **	Uniform Load Structural - ASTM E330 22.5 psf Exterior 22.5 psf Interior	0.015" 0.008"	0.178" 0.178"
2.1.7	Welded Corner	Meets As Stated	
2.1.8	Forced Entry Resistance - ASTM F588 Level 10 (See Appendix A for test results)	Meets As Stated	

### OPTIONAL PERFORMANCE

<u>Par. No.</u>	<u>Title of Test &amp; Method</u>	<u>Measured</u>	<u>Allowed</u>
4.3 *	Water Resistance - ASTM E547 5.0 GPH/FT <sup>2</sup> WTP= 9.0 psf	No Leakage	No Leakage
4.4.2 **	Uniform Load Structural - ASTM E330 90.0 psf Exterior 90.0 psf Interior	0.029" 0.024"	0.178" 0.178"
*	Tested with and without screen		
**	No glass breakage or permanent damage causing the unit to be inoperable		

TEST COMPLETED 02/16/99

The tested specimen meets (or exceeds) the performance levels specified in Table 2.1 of AAMA/NWDA 101/I.S.2-97 for air infiltration. The listed results were secured by using the designated test methods and indicate compliance with the performance requirements of the referenced specification paragraphs for the HS-R60 69x50 product designation.


  
 3/11/02

Detailed drawings were available for laboratory records and comparison to the test specimen at the time of this report. A copy of this report along with representative sections of the test specimen will be retained by NCTL for a period of four (4) years. The results obtained apply only to the specimen tested. No conclusions of any kind regarding the adequacy or inadequacy of the glass in the test specimen may be drawn from this test. This report does not constitute certification of the product which may only be granted by a certification program validator.

NATIONAL CERTIFIED TESTING LABORATORIES

*Marc A. Cramer*

MARC A. CRAMER

Technician

*Douglas R. Young*

DOUGLAS R. YOUNG

Acting Manager of Testing Services

MAC/raw

*Bl 6/16/02*  
*Bay D Portray*  
*3/11/02*

**APPENDIX A**  
**Forced Entry Resistance Test Results**

**Test Method:** ASTM F588-97, "Standard Test Method for Measuring the Forced Entry Resistance of Window Assemblies, Excluding Glazing Impact".

**TEST RESULTS**

<u>Paragraph No.</u>	<u>Loads</u>	<u>Duration</u>	<u>Measured</u>	<u>Allowed</u>
10.1-Lock Manipulation		5 Minutes	No Entry	No Entry
10.2.1.1-Test A1	L1=150 lbf	1 Minute	No Entry	No Entry
10.2.1.2-Test A2	L1=150 lbf L2= 75 lbf interior	1 Minute	No Entry	No Entry
10.2.1.3-Test A3	L1=150 lbf L2= 75 lbf exterior	1 Minute	No Entry	No Entry
10.2.1.4-Test A4	L1=150 lbf L2= 75 lbf interior	1 Minute	No Entry	No Entry
10.2.1.5-Test A5	L1= 150 lbf L2= 75 lbf exterior	1 Minute	No Entry	No Entry
10.2.1.7-Test A7	L1=150 lbf L2= 75 lbf interior L3= 25 lbf interior	1 Minute	No Entry	No Entry
10.2.1.8 Lock Manipulation		5 Minutes	No Entry	No Entry

  
 M. J. [Signature]  
 Gary D. [Signature]  
 3/11/02