


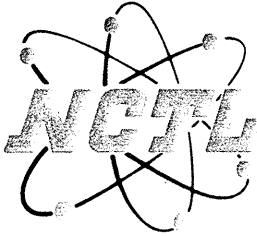
**STANEK VINYL WINDOWS**

**STRUCTURAL PERFORMANCE TEST REPORT**

Model "3 Lite Horizontal Slider" Type XOX  
Horizontal Sliding Vinyl Prime Window

NCTL-110-7227-2

  
*Danny D. Perkins*  
*Danny 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-110-7227-2  
Test Date: 03/03/00  
Report Date: 03/07/00  
Expiration Date: 03/31/04

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

**Test Specimen:** Stanek Vinyl Windows' Model "3 Lite Horizontal Slider" Type XOX  
Horizontal Sliding Vinyl Prime Window (HS-R35 119x66).

**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 XOX horizontal tilt and slide vinyl prime window measuring 119-1/8" wide by 65-1/2" high overall. Both panels measured 29-1/8" wide by 62-3/8" high. The fixed lite was glazed to the frame members, providing a viewing area of 56-1/4" wide by 59-3/4" high. One (1) metal cam-type sweep lock was located at 17" from each end of the left and right meeting stile. The metal keepers were located on the fixed meeting stiles at the lock positions. One (1) plastic tilt latch was located at the top end of all stiles. A plastic cap was snap-fitted and cemented at each end of both panels jamb stile glazing bead/pull handles. A rigid vinyl cover was snap-fitted and cemented at the length of both jamb stiles. A rigid vinyl combination cover/ weatherstrip holder/ interlock was snap-fitted and cemented at the length of the left and right panel meeting stiles. A rigid vinyl combination cover/ center vertical leg/ weatherstrip holder was snap-fitted and cemented at the exterior sill and head tracks of both active panels and the exterior track of both jambs. A rigid vinyl combination cover/ weatherstrip holder/ interior vertical leg was snap-fitted and cemented at both interior jamb tracks and the length of the interior sill track. A single metal roller/ plastic housing was located at each end of both panel bottom rails. One (1) galvanized steel rectangular reinforcement channel (0.050" thick) was fastened with five (5) evenly spaced screws and filled the length of all active panel stile hollows. One (1) galvanized steel rectangular reinforcement channel (0.050" thick) was fastened with three (3) evenly spaced screws and filled the length of all active panel rail hollows. One (1) galvanized steel rectangular reinforcement channel (0.050" thick) was fastened with six (6) evenly spaced screws and filled the length of both fixed meeting stile hollows. The frame and active panels were of welded mitered corner construction. The fixed meeting stiles were fastened to the head and sill at 27-3/8" from each jamb with two (2) screws.

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**Glazing:** The fixed lite was interior glazed using sealed insulating glass with a butyl tape back-bedding and a snap-fitted dual leaf dual durometer glazing bead. Both active panels were interior glazed using sealed insulating glass with a dual leaf dual durometer back-bedding and a snap-fitted dual leaf dual durometer glazing bead. The fixed lite overall insulating glass thickness was 1" consisting of an SC75 Heat Mirror film suspended between two (2) lites of 3/16" thick annealed glass and two (2) krypton-filled spaces created by Bayform's Warm Edge 7mm spacer system. The active panels' overall insulating glass thickness was 7/8" consisting of an SC75 Heat Mirror film suspended between two (2) lites of double strength annealed glass and two (2) krypton-filled spaces created by Bayform's Warm Edge 7mm spacer system. A pyrolytic type low emissivity coating was applied to glazing surface no. 3.

**Weatherseals:** A double strip of center fin weatherstrip (0.260" high) was located at all panel rails. A single strip of center fin weatherstrip (0.280" high) was located at the head, active meeting stiles and the fixed meeting stiles. A double strip of center fin weatherstrip (0.280" high) was located at the sill and both jambs. An open cell foam air baffle measuring approximately 2-1/2" by 1-1/4" by 5/8" was located at each end of the interior sill track which covered the weep hole under the sill cover.

**Weeps:** One (1) weep hole measuring 3/8" x 1/4" was located at each end of the interior sill track cover which drained to the interior hollow. One (1) weep hole measuring 3/8" x 1/4" was located at each end and at midspan of the center vertical sill leg. One (1) weep hole measuring 1-1/2" by 1/4" and employing a plastic/aluminum weep cover was located at 2-7/8" from each end of the exterior sill face. One (1) weep hole measuring 5/16" in diameter was located at 1-5/8" from each end of both active sill covers horizontal surface which drained to same size weep holes in the exterior horizontal sill face. One (1) weep hole measuring 3/16" in diameter was located at each end of both active bottom rail glazing channels and one (1) weep hole measuring 1/4" by 3/16" was located at each end of exterior horizontal bottom rail surfaces.

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

**Sealant:** All frame and panel covers and each end of the fixed meeting stiles were sealed with a silicone sealant.

**Screen:** Two (2) insect screens measuring 27-1/8" wide by 60-5/8" high were 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, two (2) retainer springs and a polypile weatherseal at one (1) stile. Two (2) plastic spacer buttons were located at the bottom rails.

**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		
	Right Panel Open	15 lbf	20 lbf
	Close	15 lbf	20 lbf
	Left Panel Open	15 lbf	20 lbf
	Close	14 lbf	20 lbf

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2.2.2.5.2	<i>Deglazing - ASTM E987</i>		
	<i>Right Panel</i>		
	<i>Top Rail (50 lbf)</i>	2.8 % (0.014")	<100%
	<i>Bottom Rail (50 lbf)</i>	4.2 % (0.021")	<100%
	<i>Jamb Stile (70 lbf)</i>	5.0 % (0.025")	<100%
	<i>Meeting Stile (70 lbf)</i>	5.8 % (0.029")	<100%
	<i>Left Panel</i>		
	<i>Top Rail (50 lbf)</i>	3.8 % (0.019")	<100%
	<i>Bottom Rail (50 lbf)</i>	4.0 % (0.020")	<100%
	<i>Jamb Stile (70 lbf)</i>	3.6 % (0.018")	<100%
	<i>Meeting Stile (70 lbf)</i>	5.2 % (0.026")	<100%
2.1.2	<i>Air Infiltration - ASTM E283</i>		
	<i>0.57 psf (15.0 mph)</i>	0.1 cfm/ft <sup>2</sup> (0.10 cfm/ft <sup>2</sup> )	-----
	<i>1.57 psf (25.0 mph)</i>	0.2 cfm/ft <sup>2</sup> (0.17 cfm/ft <sup>2</sup> )	0.3 cfm/ft <sup>2</sup>
2.1.3	* <i>Water Resistance - ASTM E547</i>		
	<i>5.0 gph/ft<sup>2</sup></i>		
	<i>WTP= 2.86 psf</i>	No Leakage	No Leakage
2.1.4.2	** <i>Uniform Load Structural - ASTM E330</i>		
	<i>22.5 psf Exterior</i>	0.001"	0.240"
	<i>22.5 psf Interior</i>	0.001"	0.240"
2.1.7	<i>Welded Corner</i>	<i>Meets As Stated</i>	
2.1.8	<i>Forced Entry Resistance - ASTM F588</i>		
	<i>Level 10</i>	<i>Meets As Stated</i>	
	<i>(See Appendix A for test results)</i>		

**OPTIONAL PERFORMANCE**

<u>Par. No.</u>	<u>Title of Test &amp; Method</u>	<u>Measured</u>	<u>Allowed</u>
4.3	* <i>Water Resistance - ASTM E547</i>		
	<i>5.0 gph/ft<sup>2</sup></i>		
	<i>WTP= 7.50 psf</i>	No Leakage	No Leakage
4.4.2	** <i>Uniform Load Structural - ASTM E330</i>		
	<i>52.5 psf Exterior</i>	0.006"	0.240"
	<i>52.5 psf Interior</i>	0.007"	0.240"
	* <i>Tested with and without screen</i>		
	** <i>No glass breakage or permanent damage causing the unit to be inoperable</i>		

TEST COMPLETED 03/03/00

Handwritten signatures and dates: "3/6/00" and "3/11/00". A circular stamp is partially visible in the background.

*The tested specimen meets (or exceeds) the performance levels specified in Table 2.1 of AAMA/NWWDA 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-R35 119x66 product designation.*

*Detailed drawings were available for laboratory records and compared 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**

*Douglas R. Young (amb)*  
**DOUGLAS R. YOUNG**  
Technician

*Marc A. Cramer*  
**MARC A. CRAMER**  
Acting Manager of Testing Services

DRY/amb

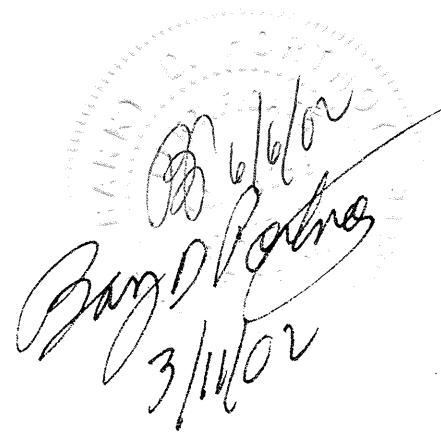
*BP 6/6/02*  
*Raymond P. Castro*  
*3/11/02*

**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
10.2.4.1 Fixed Lite Lock Manipulation		5 Minutes	No Entry	No Entry


  
*Ray D. Patena*  
 3/11/02