Stanek Vinyl Windows
Structural Performance Test Report
NCTL 210-2712-1
Series "3000" Vinyl
Horizontal Sliding Window
Test Date: 10/15/01

NATIONAL CERTIFIED TESTING LABORATORIES

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STRUCTURAL PERFORMANCE TEST REPORT

Report No: NCTL-210-2712-1
Test Date: 10/15/01
Report Date: 01/25/02
Expiration Date: 10/15/05

Client: *Stanek Vinyl Windows*
4570 Willow Parkway
Cuyahoga Heights, OH 44125

Test Specimen: *Stanek Vinyl Window's Series "3000" Type XOX Horizontal Sliding Vinyl Prime Window (HS-R70 126 x 72).*

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 sliding vinyl prime window measuring 126" wide by 72" high overall. Both interior active panels measured 32-1/4" wide by 69" high providing a viewing area of 27-5/8" wide by 64-1/2" high. The fixed lite was glazed to the frame members, providing a viewing area of 56-1/2" wide by 66-1/2" high. One (1) metal sweep-type lock was located at 7" from each end of the interior active lock stile. The metal keepers were located on the fixed meeting stile at lock positions. Both extruded aluminum fixed meeting stiles were fastened to the head and sill using two (2) (#8 x 3") pan head screws. The frame and active panel was of welded mitered corner construction. The interior vertical sill leg measured 2" from the threshold to the bottom sill track.*

Reinforcement: *The panels were reinforced with a 0.050" thick galvanized steel formed semi-tubing measuring 0.930" deep by 0.724" high with 0.144" opening in all panel rails and stile hollows.*

Glazing: *The active panel was interior glazed using sealed insulating glass with a dual durometer back-bedding and an interior snap-in dual durometer rigid vinyl glazing bead. The fixed lite was interior glazed using sealed insulating glass with a silicone back- bedding and a snap-in rigid vinyl dual durometer glazing bead. The overall insulating glass thickness for both lites was 7/8" consisting of two (2) lites of 1/8" thick tempered glass and one (1) space created by an intercept spacer system.*

Weatherseals: *One (1) strip of centerfin polypile weatherstrip (0.290" high) was located at the interior sill leg and active head. One (1) strip of centerfin polypile weatherstrip (0.290" high) was located at the interior of the fixed meeting stile and the interior of the active jamb. One (1) strip of centerfin polypile weatherstrip (0.290" high) was located at the center sill head and active jamb leg. One (1)strip of centerfin polypile weatherstrip (0.290" high) was located at the interior top rail of the active sash and the interlocking stile of the active sash.*

Weeps: *One (1) weep hole measuring 1-1/2" x 1/4" and employing a plastic weep cover was located at 3-1/4" from each end of the exterior sill face. One (1) weep hole measuring 1" x 1/8" was located 4-1/8" from each end of the exterior sill track. One (1) weep hole measuring 1/4" x 1/4" in diameter was located at each end of the sill track.*

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

Sealant: *The fixed meeting stile was sealed at the head and sill with small joint sealant.*

Screen: *No screen employed.*

TEST RESULTS

Par. No.	*Title of Test & Method*	*Measured*	*Allowed*
2.2.2.5.1	*Operating Force*		
	Active Panel Open	*14 lbf*	*25 lbf*
	Close	*16 lbf*	*25 lbf*
2.2.2.5.2	*Deglazing - ASTM E987*		
	Active Panel		
	Top Rail (50 lbf)	*11.2 % (0.056")*	*<100%*
	Bottom Rail (50 lbf)	*8.4 % (0.042")*	*<100%*
	Left Hand Stile (70 lbf)	*12.4 % (0.062")*	*<100%*
	Right Hand Stile (70 lbf)	*8.0 % (0.040")*	*<100%*
2.1.2	*Air Infiltration - ASTM E283*		
	1.57 psf (25 mph)	*0.04 cfm/ft²*	*0.3 cfm/ft²*
*2.1.3 **	*Water Resistance - ASTM E547/ASTM E331*		
	5.0 gph/ft²		
	WTP= 9.0 psf	*No Leakage*	*No Leakage*
*2.1.4.2 ***	*Uniform Load Structural - ASTM E330*		
	60.0 psf Exterior	*0.030"*	*0.264"*
	60.0 psf Interior	*0.000"*	*0.264"*
2.1.8	*Forced Entry Resistance - ASTM F588*		
	Level 10	*Meets As Stated*	
	(See Appendix A for test results)		

OPTIONAL PERFORMANCE

Par. No.		*Title of Test & Method*	*Measured*	*Allowed*
4.3		*Water Resistance - ASTM E547/ASTM E331*		
		5.0 gph/ft²		
		WTP= 11.25 psf	*No Leakage*	*No Leakage*
4.4.2	**	*Uniform Load Structural - ASTM E330*		
		90.0 psf Exterior	*0.128"*	*0.264"*
		90.0 psf Interior	*0.088"*	*0.264"*

** *No glass breakage or permanent damage causing the unit to be inoperable*

TEST COMPLETED 10/15/01

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-R70 126 x 72 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.

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DANIEL D. CONYERS
Laboratory Manager

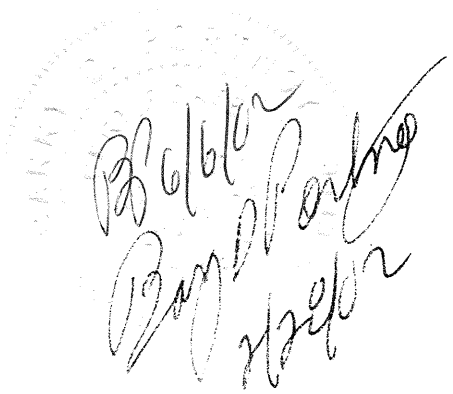
APPENDIX A

Forced Entry Resistance Test Results

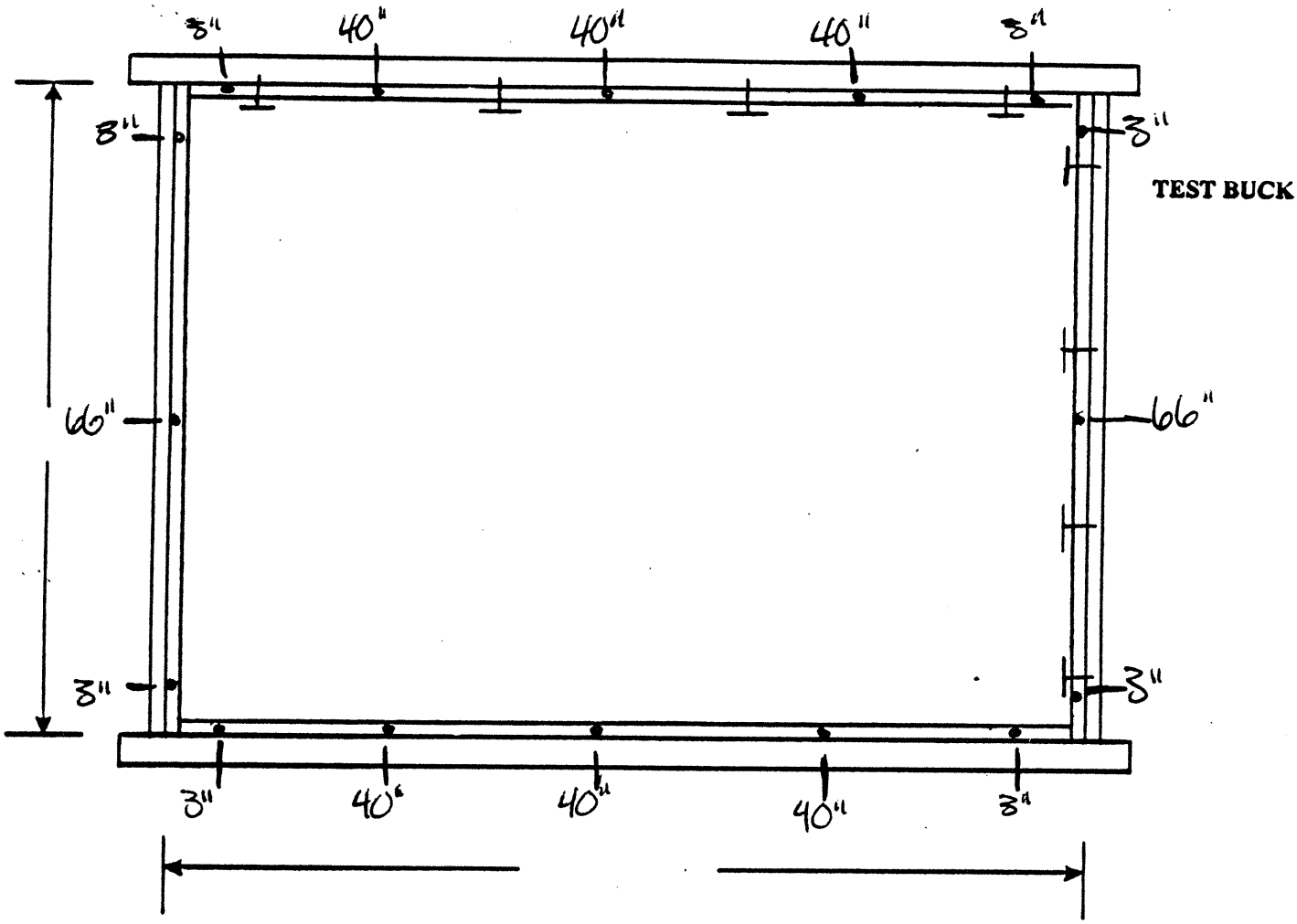
Test Method: *ASTM F588-97, "Standard Test Method for Measuring the Forced Entry Resistance of Window Assemblies, Excluding Glazing Impact".*

TEST RESULTS

Paragraph No.	*Loads*	*Duration*	*Measured*	*Allowed*
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*



FASTENER LOCATIONS



The test specimen was mounted to the test buck using screws at location shown.

The test specimen was mounted centered on a Southern Yellow Pine 2"x12" test buck using 10 #8x3 FHS

Barry D Poling 6/6/02

Barry D Poling 7/26/02

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COMPANY: Stanek Windows

TEST DATE: 10-15-01