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Submitted By:

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SOCIETY OF PETROLEUM ENGINEERS OF AIME

U.S. Aluminum Corp. - Texas 200 Singleton Drive Waxahachie, TX 75165

Attn: Jeff Lockenour

Date: November 13, 1995 (Reissued: May 21, 1998)

Report No. 23184RRR

## REPORT

SUBJECT: Performance testing in accordance with ASTM E 283-91 (Air Infiltration), ASTM E 331-93 (Water Resistance), ASTM E 330-90 (Uniform Load Deflection) and ASTM E 330-90 (Uniform Load Structural).

## DESCRIPTION OF UNIT TESTED

Type: Aluminum Storefront

Series: "BG" System

Overall Size: 7'11-1/4" x 7'7-1/4" (2.42 m x 2.318 m)

Configuration: 0.0 0.0

<u>Glass:</u> Sealed insulating glass: 2 pcs 1/4" (6.35 mm) tempered, 1/2" (12.70 mm) air spacer, 1" (25.4 mm) overall thickness.

<u>Glazing:</u> One row of NP255 gasket at exterior face of each fixed lite, full perimeter. Silicone spacer (SP455) at interior face of all vertical member of each fixed lite and vinyl gasket (NP225) at interior face of all horizontal member of each fixed lite. Vertical butt joint between the two pairs of fixed lite is sealed with silicone and SP455 spacers sealed with silicone.

<u>Weep Arrangement:</u> Two 5/16" (7.94 mm) dia. weepholes in bottom of each lower fixed lite sill and one 1/4" (6.35 mm) dia. weephole at center intermediate horizontal member (total of 5 weeps in mock-up).

<u>Sealant:</u> Exterior joint between (BG569) jamb and (BG560) snap-in filler are sealed fulled length with sealant. End dams at each end of intermediate horizontal members are sealed at perimeter.

<u>Other Features:</u> Frame members are thermally broken. Horizontal intermediate member secured by shear block at each end. Shear blocks are secured to jambs and vertical intermediate jamb by two (2) #8x1/2" (8 x 12.70 mm) screws.

Date Testing Started: September 22, 1995

Date Testing Completed: November 6, 1995

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U.S. Aluminum Corp. Reissued: May 21, 1998 Page 2 - Report #23184RRR

## SUMMARY OF TEST RESULTS

TITLE OF TEST	TEST METHOD	MEASURED	ALLOWED
Air Infiltration @ 6.24 psf (30.46 kg/m <sup>2</sup> )	ASTM E 283-91	0.04 CFM/Ft <sup>2</sup> (0.019 liter/sec)	0.06 CFM/Ft <sup>2</sup> (0.028 liter/sec)
Water Resistance @ 12.00 psf (58.58 kg/m <sup>2</sup> )	ASTM E 331-93	No Leakage	No Leakage
Uniform Load Deflection - Exterior 20.0 psf (97.64 kg - Interior 20.0 psf (97.64 kg	ASTM E 330-90 g/m <sup>2</sup> ) /m <sup>2</sup> )	0.283" (7.188 mm) 0.234" (5.944 mm)	0.497" (12.62 mm) 0.497" (12.62 mm)
Uniform Load Structural - Exterior	ASTM E 330-90	30.0 psf * (146.44 kg/m <sup>2</sup> )	30.0 psf * (146.44 kg/m <sup>2</sup> )
- Interior		30.0 psf * (146.44 kg/m <sup>2</sup> )	30.0 psf * (146.44 kg/m <sup>2</sup> )
- Permanent Set		Negligible	0.365" (9.271 mm)

\* No glass breakage, permanent deformation, or other damage causing the unit to be inoperable.

The above results were secured by using the designated test methods and they indicate compliance with the performance requirements of the above referenced specifications.

DALLAS LABORATORIES, INC. TESTING LABORATORY

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DIRECTOR, WINDOW & DOOR TESTING

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