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Job No. J99026443

REPORT NO. J99026443-001

FIELD AIR INFILTRATION TESTS OF TWO WINDOWS LOCATED IN ALLENS CREEK SCHOOL, PITTSFORD, NY

RENDERED TO

WINDOW REPAIR SYSTEMS, INC.
788 OLD DUTCH ROAD
VICTOR, NY 14564

INTRODUCTION

This report gives the results of Field Air Infiltration tests on two windows. The windows were installed in Allens Creek School, Pittsford, NY.

AUTHORIZATION

Completed credit card acceptance form.

TEST METHOD

The window was tested in accordance with the following standard:

- ASTM E783, "Standard Test Method for Field Measurement of Air Leakage through Exterior Installed Windows and Doors".

INSTRUMENTATION

Electro Manometer, Alnor, Model 8530D-1
Alnor Vane Anemometer Model HH-30
Erdco Flowmeter Model 3211-0210

Sample #1 (non retro-fit window)

The test specimen consisted of a Double Hung Aluminum Window, which measured 36 3/4 inches wide by 87 1/2 inches high. The window was described by the client as original condition.

Results of Test

Air Leakage
Test Pressure: 1.57 lb. ft.^{2}
Sample Leakage: 10 CFM
Operable Crack Length: 21.83 linear feet
Leakage per Foot Crack Length: 0.46 CFM/ft.

Observations

While test conditions were maintained, smoke was generated around the exterior of the window to indicate air infiltration problem areas.

- Considerable leakage was noted at the corners of the interlock.
- Moderate leakage occurred through the interlock in front of the sweep lock and at the corners of the sill and sill dam.
- Slight leakage was observed through the seals around the entire frame.

Sample #2 (retro-fit window)

The test specimen consisted of an Aluminum Window, which measured 36 3/4 inches wide by 87 1/2 inches high. The window appeared to have been identical to Sample #1 prior to being retro-fit. A part of the retro-fit procedure that had been performed by the client was to seal the top and sides of the upper sash to the frame, effectively making the window single hung.

Results of Test

Air Leakage
Test Pressure: 1.57 lb. ft.^{2}
Sample Leakage: 2.5 CFM
Operable Crack Length: 12.25 linear feet
Leakage per Foot Crack Length: 0.20 CFM/ft.

Observations

While test conditions were maintained, smoke was generated around the exterior of the window to indicate air infiltration problem areas.

- Slight leakage was observed at the corners of the interlock
- Minimal leakage occurred at the window bottom and seals

CONCLUSION

The evaluation of the test results is left to the discretion of the client.

Report Approved by:

Norman H. Bay, Manager
Acoustical Testing

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