Intertek | Architectural Testing

FIELD TEST REPORT

Rendered to:

REAL ESTATE AND CONSTRUCTION SERVICES

PROJECT: Senate / New Legislative Office Building
St. Paul, Minnesota

Report No.: E8666.05-201-43
Test Dates: 12/14/15
12/15/15
12/16/15
Report Date: 12/16/15

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FIELD TEST REPORT

Rendered to:

REAL ESTATE AND CONSTRUCTION SERVICES –
Department of Administration –
State of Minnesota
309 Administration Building, 50 Sherburne Avenue
St. Paul, Minnesota 55155

Report No.: E8666.05-201-43
Test Dates: 12/14/15
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12/16/15
Report Date: 12/16/15

Project Identification: Senate / New Legislative Office Building
St. Paul, Minnesota

Project Summary: Architectural Testing, Inc., an Intertek company ("Intertek-ATI"), was contracted to perform on-site testing at the above referenced project. Water penetration test were conducted on six (6) specimens consisting of a Kawneer 1600 UT Curtain Wall System. The specimens tested met the performance requirements listed herein.

Test Methods: Tests were conducted in accordance with the following:

AAMA 503-14, *Voluntary Specification for Field Testing of Newly Installed Storefronts, Curtain Walls, and Sloped Glazing Systems*

ASTM E1105–00 (2008), *Standard Test Method for Field Determination of Water Penetration of Installed Exterior Windows, Skylights, Doors, and Curtain Walls, by Uniform or Cyclic Static Air Pressure Difference*

Pre-Test Inspection:

A visual inspection of the designated test area was performed prior to testing. The test specimen was compared to other adjacent curtain walls on the project. No obvious deficiencies or anomalies were observed.

Test Procedure:

The perimeter of the chamber was attached and sealed to the curtain wall frame on the interior of the unit.

The chamber was equipped with a centrifugal blower/vacuum pump, air flow meter, and a pressure sensing device to maintain the desired air pressure differential across the assembly.

Water penetration testing was conducted at 15.0 psf pressure differential while simultaneously spraying water on to the exterior face of the assembly at the required rate of 5 gph/ft^2. During testing, the interior face of the test area was inspected for water leakage. Testing continued for 15 minutes.

Performance Criteria: Provided by Real Estate and Construction Services–Department of Administration–State of Minnesota per job specification section 08-4003-5 and 08-4003-6

TEST RESULTS
Date: 12/14/15
Ambient Exterior Air Temperature: 36°F
Barometric Pressure: 29.30 in. Hg

***General Note #1**: All locations referenced are as viewed from the interior unless otherwise noted.*

***General Note #2**: Unless specifically noted within this report, atmospheric conditions at the time of testing did not have an adverse impact on the results of the test. These environmental conditions are recorded for informational use only to confirm that the conditions will not have a negative impact on testing.*

***General Note #3**: The test area(s) were chosen by the client or client representative.*

Test Specimen #1:

Manufacturer: Kawneer
Description: 1600 UT series aluminum curtain wall system
Overall Size: 8' 3/4" wide by 8' 3/4" high
Location: South elevation, first floor, southeast hallway, second bay from the southeast corner of building.

Title of Test	Test Results	Allowable
Water Penetration @ 15.0 psf	No water leakage	No water leakage

Test Results: (Continued)

Test Specimen #2:

Manufacturer: Kawneer
Description: 1600 UT series aluminum curtain wall system
Overall Size: 8' 3/4" wide by 8' 3/4" high
Location: North elevation, first floor, north hallway, fifth bay from the east.

Title of Test	Test Results	Allowable
Water Penetration @ 15.0 psf	No water leakage	No water leakage

Test Specimen #3:

Manufacturer: Kawneer
Description: 1600 UT series aluminum curtain wall system
Overall Size: 8' 3/4" wide by 9' 2" high
Location: North elevation, third floor, first window from the east.

Title of Test	Test Results	Allowable
Water Penetration @ 15.0 psf	No water leakage	No water leakage

TEST RESULTS
Date: 12/15/15
Ambient Exterior Air Temperature: 33°F
Barometric Pressure: 30.00 in. Hg

Test Specimen #4:

Manufacturer: Kawneer
Description: 1600 UT series aluminum curtain wall system
Overall Size: 12' 1/2" wide by 9' 7" high
Location: West elevation, first floor, south of stair 1, second and third lites from the north.

Title of Test	Test Results	Allowable
Water Penetration @ 15.0 psf	No water leakage	No water leakage

Test Specimen #5:

Manufacturer: Kawneer
Description: 1600 UT series aluminum curtain wall system
Overall Size: 8' 3/4" wide by 9' 2" high
Location: South elevation, second floor, room 2213

Title of Test	Test Results	Allowable
Water Penetration @ 15.0 psf	No water leakage	No water leakage

TEST RESULTS
Date: 12/16/15
Ambient Exterior Air Temperature: 37°F
Barometric Pressure: 29.30 in. Hg

Test Specimen #6:

Manufacturer: Kawneer
Description: 1600 UT series aluminum curtain wall system
Overall Size: 12' 1/2" wide by 9' 7" high
Location: East elevation, third floor, room 3133, first and second lites from north.

Title of Test	Test Results	Allowable
Water Penetration @ 15.0 psf	No water leakage	No water leakage

Witnesses: The following representatives witnessed all or part of the testing.

Name	Company
Jacob Schneider	M.A. Mortenson Construction
Jake Bauer	CPMI
Dan Lopey	InterClad
Steve Flaherty	InterClad
Sam Moseley	Intertek-ATI
Jonathan P. Kasuboski	Intertek-ATI

Intertek-ATI will service this report for a period of four years from the test date. Test records, such as detailed drawings, datasheets, representative samples of test specimens, or other pertinent project documentation, will be retained by Intertek-ATI for the entire test record retention period.

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. It is the exclusive property of the client so named herein and relates only to the specimens tested. This report is intended to help in the client's quality assurance program, but it does not represent a continuous or exhaustive evaluation of the specimen tested or of other products or materials that were not evaluated. The statements and data provided herein do not constitute approval, disapproval, certification, or acceptance of performance or materials.

For INTERTEK-ATI:

Digitally Signed by: Jonathan P. Kasaboski

Jonathan P. Kasuboski
Project Manager

Digitally Signed by: Daniel A. Johnson

Daniel A. Johnson
Director-Regional Operations

SRM/jb

Attachments (pages): This report is complete only when all attachments listed are included.
Appendix-A: Photographs (2 pages)

Revision Log

Rev. #	Date	Page(s)	Revision(s)
0	12/16/15	N/A	Original report issue.

APPENDIX A

Photographs

Photo No. 1 – Test Specimen #1
Interior view with test chamber.

Photo No. 2 – Test Specimen #4
Interior view with test chamber

Photo No. 3 – Test Specimen #6
Interior view with test chamber.