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**EVALUATION CENTER**  
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**RENDERED TO**

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PRODUCT EVALUATED: Simulated Stacked Stone Siding  
EVALUATION PROPERTY: Structural Performance

**Report of Testing 4' x 4' Exterior Wall Panel in accordance with the following criteria: ASTM E330-02 "Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights, and Curtain Walls by Uniform Static Air Pressure Difference."**

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## Revision Summary

DATE	SUMMARY
April 15, 2009	Original Report

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## 2 Introduction

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Intertek has conducted R&D testing for GenStone Enterprises, LLC, on a 4' x 4' exterior wall panel assembly to evaluate structural performance. Testing was conducted in accordance with ASTM E330-02 *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls, by Uniform Static Air Pressure Difference* modified to follow the procedures of ASTM D5206-06a *Standard Test Method for Windload resistance of Rigid Plastic Siding*. This evaluation began April 14, 2009 and was completed April 15, 2009.

## 3 Test Samples

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### 3.1. SAMPLE SELECTION

Samples were submitted to Intertek directly from the client. Construction of the wall assembly and application of the tested siding material was done by Intertek at the Middleton, WI facility.

### 3.2. SAMPLE AND ASSEMBLY DESCRIPTION

The wall assembly was constructed with 2x4 lumber framing, 24" on center, and sheathed with 3/4" plywood. 1" diameter hole were cut into the plywood to facilitate static loading of the siding material with plastic sheeting in between the plywood and the siding. The siding material was fastened to the plywood with #8, 2-1/2" wood screws (see installation fastener schedule).

Two vertical joints were built into the test sample, one over a vertical stud, and one within the plywood field. Nail hem measured 1" by 1/2" thick.

## **4 Testing and Evaluation Methods**

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### **4.1. TEST STANDARD 1**

Structural performance per ASTM E330-02 *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls, by Uniform Static Air Pressure Difference.*

#### **4.1.1. Deviation From Standard Method**

Only negative loading was applied and no deflection measurements were taken.

### **4.2. TEST STANDARD 2**

Windload resistance per ASTM D5206-06a *Standard test Method for Windload Resistance of Rigid Plastic Siding.*

#### **4.2.1. Deviation From Standard Method**

Only (1) sample was tested.

## 5 Testing and Evaluation Results

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### 5.1. RESULTS AND OBSERVATIONS

#### STRUCTURAL PERFORMANCE

The sample was negatively loaded in 5 psf increments starting at 5 psf until failure occurred. Each load was held for 30 seconds before increasing to the next load. Failure occurred at approximately 8 seconds into the 30 second hold at -175psf when the siding material pulled over the screw heads in (2) locations and broke the nailing hem at (4) locations. (see photo's)

#### 5.1.1. Statement of Measurement Uncertainty

All measurements were taken with 95% confidence level. Pressure measurements were taken with pressure transducers (WHI #553 and #873) with an accuracy of +/- 3 PSF.

## 6 Conclusion

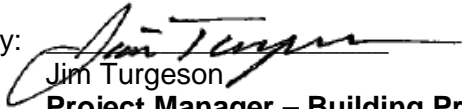
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The sample under evaluation sustained a maximum load of 170 psf when tested in accordance with ASTM E330-02 (modified per ASTM D5206).


The conclusions of this test report may not be used as part of the requirements for Intertek product certification. Authority to Mark must be issued for a product to become certified.

### INTERTEK

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## 7 Installation, Fastener Schedule

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8 screws total  
6 @ designated spots in the  
flange  
2 in the field  
all spots designated by red  
circles



## 8 Photo's

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