Technical Bulletin F6-07

Windload Performance - Defined

(includes applications for PVC Shake, Shingle, Stone and Shapes)

What is it?
Test method for the specific difference in static air pressure (positive or negative) at which failure of siding product occurs – expressed as pounds per square foot. We are primarily interested in the negative air pressure, which simulates the siding being pulled off the wall.

Significance and Use
Represents the effects of windload on exterior building surfaces. Other variables such as wind direction, time, and height of building above ground, building shape, terrain; surrounding structures need also be factored into the overall performance expectation of the siding.

Test Specimen
Siding samples selected at random, frames from wood - 2x4s sized to accommodate specimens - three stud spaces wide and four siding panels high – with starter strip – stud spacing for products tested are on 16” centers.

Procedure
Test Specimen is positioned over the test chamber. Pressure is applied to back of siding (simulating negative wind load – suction) in increments of 5 psf - held for 30 seconds before increasing loads in increments 5psf - Test is continued until failure.

Failure of siding specimen has occurred when any of the following has taken place:
1) nail hem is torn or disengaged from fastener
2) permanent buckling of siding
3) fastener withdrawal from frame
4) permanent disengagement of locks

What to look for
When viewing a siding manufacturer’s wind load test report – be certain to review how their material was mounted, type of fastener used (staples and the use of washers tend to improve the test results) and also the distance between each fastener. Ask to receive copy of the test report completed by an independent test laboratory.