

## Wind Driven Rain Resistance

### **Fullback® Thermal Support System protects sheathing from moisture and rain**

Architectural Testing, Inc. (ATI) tested the performance of the Fullback Expanded Polystyrene (EPS) in wind-driven rain to determine how much moisture might penetrate the wall system.

ATI exposed a "Dutchlap" vinyl wall panel without backing and an identical "Dutchlap" vinyl wall panel with Fullback inside to one hour of wind-driven rain at a velocity of 25 mph at a water application rate comparable to eight inches of rainfall per hour. The dimensions of the test frame measured 48 inches wide by 96 inches high. They were constructed of 2 inch by 4-inch lumber and one seamless sheet of one-half-inch-thick Oriented Strand Board (OSB) sheathing.

The amount of water absorbed by the OSB was measured.

Without Fullback, the wall system had retained 15.0 ounces of water 30 minutes after the "rain" stopped. It retained 4.5 ounces after an hour. Within 24 hours, all the moisture had evaporated.

The identical wall system sided with "Dutchlap" siding and Fullback had retained just 5.3 ounces of water 30 minutes after exposure, 0.3 ounces after one hour. Within 24 hours, all moisture had evaporated from the wall panel. The presence of Fullback behind the vinyl veneer actually inhibits the retention of moisture by the wall system.