

Water absorption of Fullback

Expanded polystyrene has a proven record of working very well in wet environments.

Fullback is a thermal support system designed to support vinyl siding in a sidewall application. As such, it is never submerged under water and is only exposed to water intermittently under wind-driven rain conditions. Regardless, we wanted to test Fullback's moisture performance under conditions more extreme than would be required in the field.

We provided the testing laboratory with five samples of Fullback. In accordance with ASTM C272 test standards, each sample was weighed. The specimens were then immersed in water at 74°F for 24 hours. Each sample was then individually removed from the bath, shaken vigorously for 30 seconds, patted with a dry cloth and weighed again. The average percent absorption by volume was only 2.75 – even when submerged underwater for a full day! The miniscule amount of adsorbed water does not affect the structural integrity of the product or its "R"-value.

We provided the testing laboratory with five samples of Fullback. In accordance with ASTM C272 test standards, each sample was weighed. The specimens were then immersed in water at 74°F for 24 hours. Each sample was then individually removed from the bath, shaken vigorously for 30 seconds, patted with a dry cloth and weighed again. The average percent absorption by volume was only 2.75 – even when submerged underwater for a full day! The miniscule amount of adsorbed water does not affect the structural integrity of the product or its "R"-value.