

Testing

Weep vents are a critical component of an effective drainage/ventilation system. After independent testing comparisons between Mortar Net® WeepVent™, cell vents and open head joints, we found that a considerable amount of airflow was lost with both venting products. Mortar Net Solutions® felt the need to look at redesigning our WeepVent™ product to increase airflow characteristics. After much testing, Mortar Net Solutions® came up with a new WeepVent material that has 36% less air resistance, and therefore, far outperforms other cellular venting type products. We believe this further enhances the effectiveness of our “Mortar Net System” for drainage and ventilation in all cavity wall designs.

Test Results

A pilot sample, EM 7254, was made and tested for air resistance and compared to our original product. As predicted, this sample has 36% less air resistance than our original product. It is made with a larger diameter fiber, and at the same fiber weight, has less fiber surface area. Less surface area means less air resistance.

Air resistance is measured in our lab using an apparatus that measures the air pressure difference across the thickness of the sample. We call this the ΔP , and this small difference is measured in inches of water column or W.G. (water gauge). A pressure difference of 1.0” W.G. is equal to a pressure of 0.036 psi. exerted on the weep vent. This difference exists because there are more air molecules on the upstream side of the vent than the downstream side (air space in the wall). The draft that is present through the weep vents produces the driving force that moves air in and out of the building. If the draft encounters less resistance through the vent, more air will pass. Therefore lower air resistance means more air flow through the wall.

The apparatus we use is also a quality control test for industrial air filters. For the test, 6” diameter die-cut samples are obtained from the product and placed in a holder. A constant, controlled air flow is maintained during the test and the pressure difference across the sample is measured with a sensitive, inclined manometer that has an accuracy of ± 0.002 “W.G.

Specification

WeepVent™

Masonry

Subject to compliance with requirements, provide UV-resistant recycled polyester mesh, treated to be anti-inflammatory, inserted into open head joints. Match color selection with mortar color. (Choose from brown, red, almond, white, tan, gray.)

Product Subject to Compliance

WeepVent™ as manufactured by Mortar Net Solutions®