

**MARKETING BULLETIN — Roofing Systems**

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**SeamFree™ Liquid Membrane System Resistant to Root Growth**

Membrane resistance to roots and creeping plant shoots is critical to the performance of vegetative green roofs. The Center for Green Roof Research at Pennsylvania State University recently completed a root, stolon and rhizome penetration resistance study using the Johns Manville SeamFree Liquid Membrane and PermaFlash® Bituminous Flashing System products. In both cases, the SeamFree and PermaFlash products performed very well under the study conditions.

**Test Procedure**

Green Roof Membranes/Root Barriers were tested for root resistance to Pyracantha and Quack Grass in a two-year greenhouse study based on the German Landscape Research, Development and Construction Society (FLL) procedures described in “Investigating resistance to root penetration at green-roof sites” (FLL, 2002). The current procedure is recognized by manufacturers, planners and roofing contractors in Europe and the United States.

*SeamFree Membrane application*



*After two years of plant growth*



*Photos courtesy of The Center for Green Roof Research at Pennsylvania State University*

**Results**

The SeamFree Liquid Membrane System proved to be resistant to root damage. No roots, stolons or rhizomes penetrated the SeamFree or PermaFlash materials on the bottoms or sides of any of the test containers. Corner seams applied within the recoat window and repair patch seams outside of the recoat window were also tested. In both situations, the test containers were free of root penetration.

SeamFree Liquid Membrane System is a waterproofing system comprised of an asphalt/urethane base, activator and polyester reinforcing scrim. The system provides an elastomeric, monolithic membrane ideal for green roofs and plaza decks. It can also be used as a stand-alone roof membrane coated with granules or a cool roof coating. Contact your local JM sales representative for more details.

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