

SMARTEX[®] VM

On-Demand Leak Protection

Vector Mapping For Use on Exposed Waterproofing or With Overburden

Progeo Smartex[®] VM electronic leak detection system pinpoints all penetrations in the waterproofing, even under overburden such as green roofs or plaza decks. It is basic quality control and risk mitigation for new and existing waterproofing and recommended as part of a standard maintenance plan.

Smartex VM At a Glance

- Pinpoints all penetrations
- Far superior to flood or infra-red testing
- Works on bare roofs, green roofs, plaza decks, ballasted roofs
- Permanent setup can be installed
- Detailed testing report provided
- Additional Smartex products available for permanent, automated leak detection
- Cannot be used on EPDM waterproofing



How it Works

Smartex[®] VM pinpoints breaches through a waterproofing membrane by creating a positive and negative electrical plate over and under the non-conductive waterproofing membrane. If there are any penetrations in the waterproofing, current will flow through the membrane and the exact location detected with Smartex testing equipment. Vector mapping requires water to be in and on the surface of the roof in order to allow current flow. A boundary wire is installed around the perimeter of the area to be tested and all conductive roof drains or other elements are screened off. To perform the test, the negative side of the Smartex impulse generator is connected to the boundary wire and the positive side to a conductive layer under the waterproofing which can be the roof deck or Smartex[®] Conduct.

Smartex[®] Conduct is required under the waterproofing when the roofing system is loose laid or fully adhered with vapor barrier which blocks electrical access to the deck or with a wooden deck. It can also be installed in a mechanically fastened roof to facilitate testing by minimizing the distance water has to travel signaling a leak.

The permanent setup includes boundary cables, access to cable leads if overburden will be installed and Smartex[®] Conduct if required. Smartex[®] VM is often done in conjunction with Smartex[®] LP, which can test vertical surfaces.