

Automatic Always-On Interply and Below Membrane Leak Detection

Leak Detection for All Types of Roofing and Waterproofing: Single Ply, Hot and Cold Bituminous, Modified Bitumen.

Gaussan™ EST provides the most comprehensive and accurate leak detection system available for hot or cold bituminous, torch-applied modified bitumen or single ply roofing and waterproofing. Our sensor cables are robust enough to be used not only in building applications, but also in applications as demanding as landfill liners, chemical waste and containment linings and other civil applications.

Gaussan™ sensors can be installed under the roofing or waterproofing membrane or actually mopped or torched into the interply of a hot or cold bituminous multi-ply membrane. The sensors are connected to an on-site JACE communicator that provides 24/7 monitoring while simultaneously pinpointing leak locations and time of leakage event. The Gaussan™ EST system can be integrated with other building monitoring equipment and systems.

Gaussan™ EST at a Glance

- Permanently installed in the roofing envelope
 - Single Ply: Underneath the membrane
 - Hot or Cold Bitumen: Interply or Underneath
 - Modified Bitumen: Interply or Underneath
- Always-on 24/7 monitoring
- Effective under any overburden
- Pinpoints leakage and membrane problems
- Protects investment in building and components
- Environmentally rugged and stable, used in chemical, civil and environmental applications



How Gaussan™ EST Works

The core of the system is an electro-resistive or bi-metallic felt into which is embedded with the Gaussan™ sensors. The felt and sensors can be placed either under the membrane or interply if the membrane is multi-ply. Electrical impulses on the surface of the membrane are not received by the sensors until there is a breach and water touches the felt, at which time the sensors record the signal and provide the controlling computer with this information. The computer can also receive non threatening condition reports by polling the sensors at regular intervals.

The computer evaluates the strength of the signal and its duration, and if a set threshold is met, notifies that a leak has occurred via internet, sms or other means. The computer generates status reports continuously, describing the condition of the roof as it controls the functions of the entire leak detection system. This status can also be viewed online.