

**Sentinel Roof Technologies' Leak Sentry** is a unique, always-on leak detection system that monitors any change in the moisture content of the roofing assembly. This leak detection and location system with electronic sensors, located in the the roof assembly envelope, uses electric signals and a sensor grid to locate leaks.

Some leaks take weeks, and even months, migrating down through the roofing assembly, saturating the surrounding insulation until it finds an opening in the structural deck in which to enter the building interior.

At this point we are no longer dealing with just a roof repair, but with interior damages and loss of production.

Alerting you when water first enters the roofing assembly can greatly reduce or eliminate these potential damages and extend the service life of your roof.

The electronic leak detection system with perimeter wiring left in place for future testing, while useful, is a dormant installation. It needs to be activated before use and that is often after someone has experienced a leak.

**Sentinel's Leak Sentry** is an important addition to new and existing roofs that have insulation below the primary membrane, and/or which can have a vapor retarder on the deck.

The system has smart sensors which are designed to measure if any water/ moisture is getting inside the roofing envelope and to constantly transmit this data to the monitoring system for analysis. If the roofing envelope experiences moisture intrusion from a given source, and the rate of change in the water vapor in the envelope increases to a predetermined level, the system triggers an alarm. The roof data is processed and monitored by a state of the art, secure, cloud based micro-service architecture. This means that roof data can be consumed in real time, with little to no delay, and advanced analytics can be brought to bear on the data which will eliminate the false alarm "noise" that other systems might pick up. The advanced analytics utilizes a control period spanning months to train a model, which consists of weather data and roof configuration, to look for changes in readings driven by one of those factors.

The quantity and configuration of Sentinel's Leak Sentry sensors determine the resolution of the grid and the resolution determines the size of the area where a leak may be coming from.

Contact us to learn more.

## Sentinel's Leak Sentry at a Glance

- Early warning of moisture buildup inside the building envelope.
- Ideal for retrofitting an electronic leak detection system into existing roofs.
- Location of leakage, even under heavy overburden or root barriers and fill.
- Provides automatic scheduled monitoring.



## Sentinel Roof Technologies