KAIROS

WATER DAMAGE PROTECTION

ASSET RISK MITIGATION TECHNOLOGY

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WATER DAMAGE PROTECTION

01

Advanced Leak Detection

Noah Multifunction Leak Sensor

A comprehensive solution offering coverage to nearly eradicate all vulnerabilities by establishing automated thresholds to cease water flow in your multifamily or commercial buildings.

Guard against building floods and unintentional damage to infrastructure, preventing operational disruptions.

02

Water Meter + Automatic Shut-Off

M1X

Ensure efficient water usage in your multifamily/commercial buildings with remote metering and automatic shut-off features.

Automate water management with our system's event-driven response, designed to shut off supply when thresholds are exceeded, preventing water wastage and reducing costs.

03

Wide Area Network

LoRaWAN Gateway

As your multifamily or commercial buildings become networked via LoRaWAN Gateway, it's the ideal moment to implement our appliance leak detection system.

Water heaters, laundry, dishwashers, and ice makers -- are all potential areas of concern within your Wide Area Network.

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ADVANCED WATER RISK MANAGEMENT TECHNOLOGY

NOAH

MULTIFUNCTION LEAK SENSOR

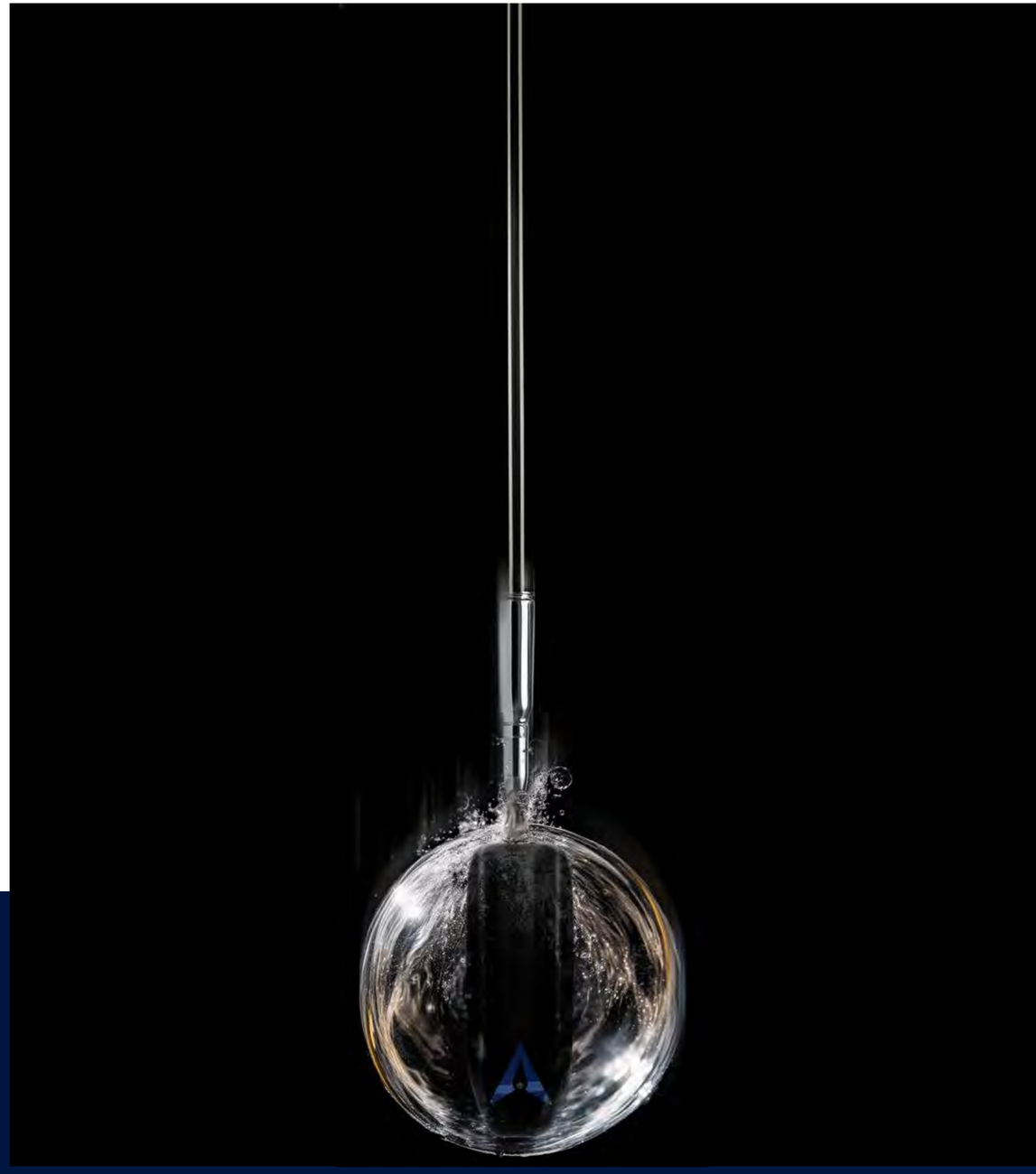
Each Noah harnesses the power of LoRa radio protocol, a high-penetration, long-range, low-energy communication system. This ensures the sensor maintains robust and reliable connectivity, even in a dense multi-story construction site. Count on the Noah Multifunction Leak Sensor to be a watchdog for any water-related hazards on your construction projects.

Why Noah?

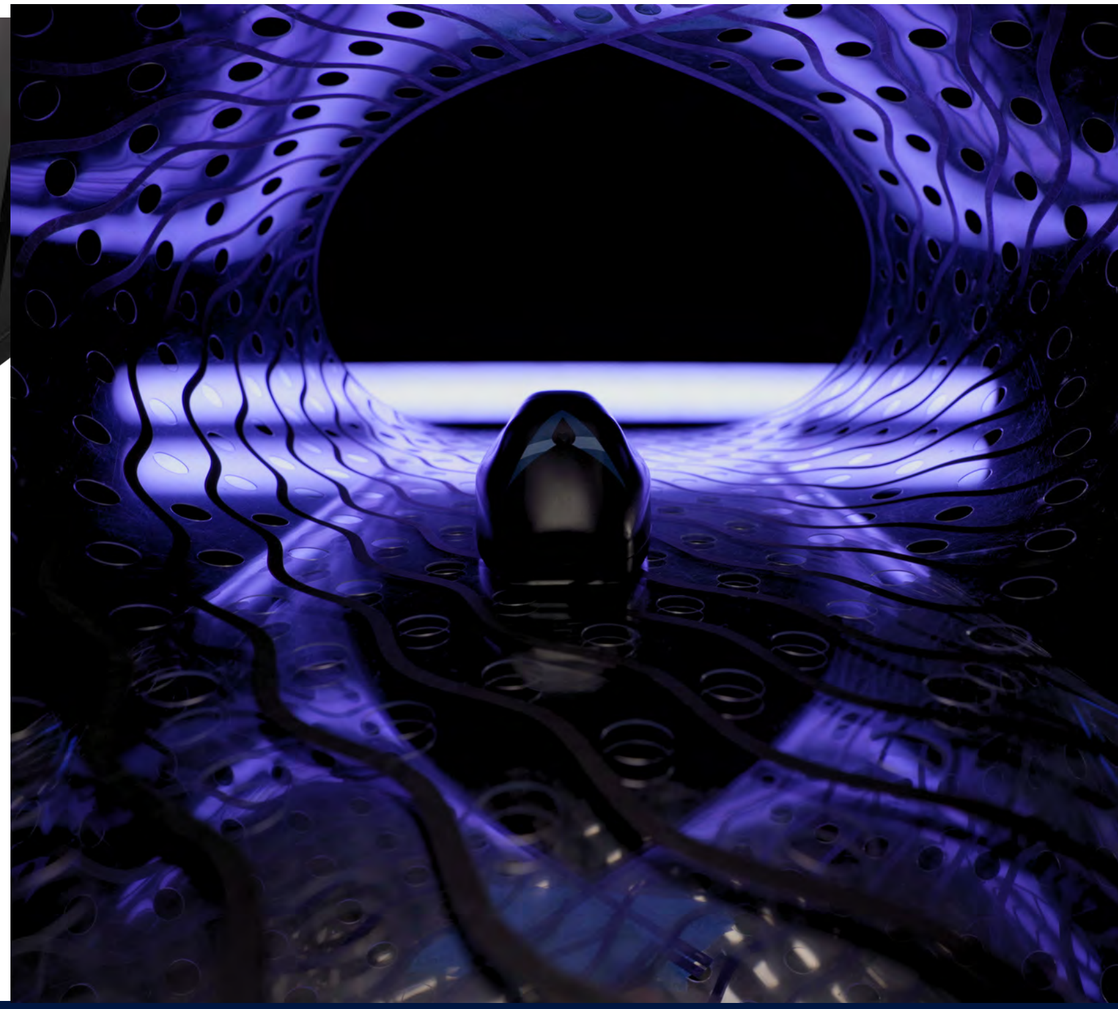
- 10+ Year Battery Life
- Temperature sensing
- Strong Signal Penetration
- Tamper Detection

DOWNLOAD SPEC SHEET

WWW.KAIROSWATER.IO



NOAH



SMART MEMBRANE TECHNOLOGY

We are the only patented leak sensor solution using flexible printed membranes with LoRaWAN technology. Our sensors are designed to detect leaks from water pipes, pump systems, common appliances, and other infrastructure. With our smart sensors installed, property owners can save money by detecting leaks and mitigating risks before major water damage occurs.

Why Flexible Electronics?

- 100% reusable
- Detection severity
- Ultrafast Leak Detection
- Flexible Spatial Coverage

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CAPABILITIES

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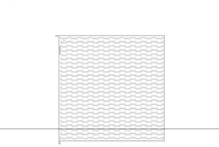
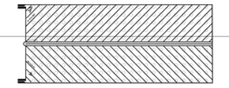
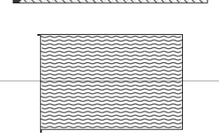
Product Features

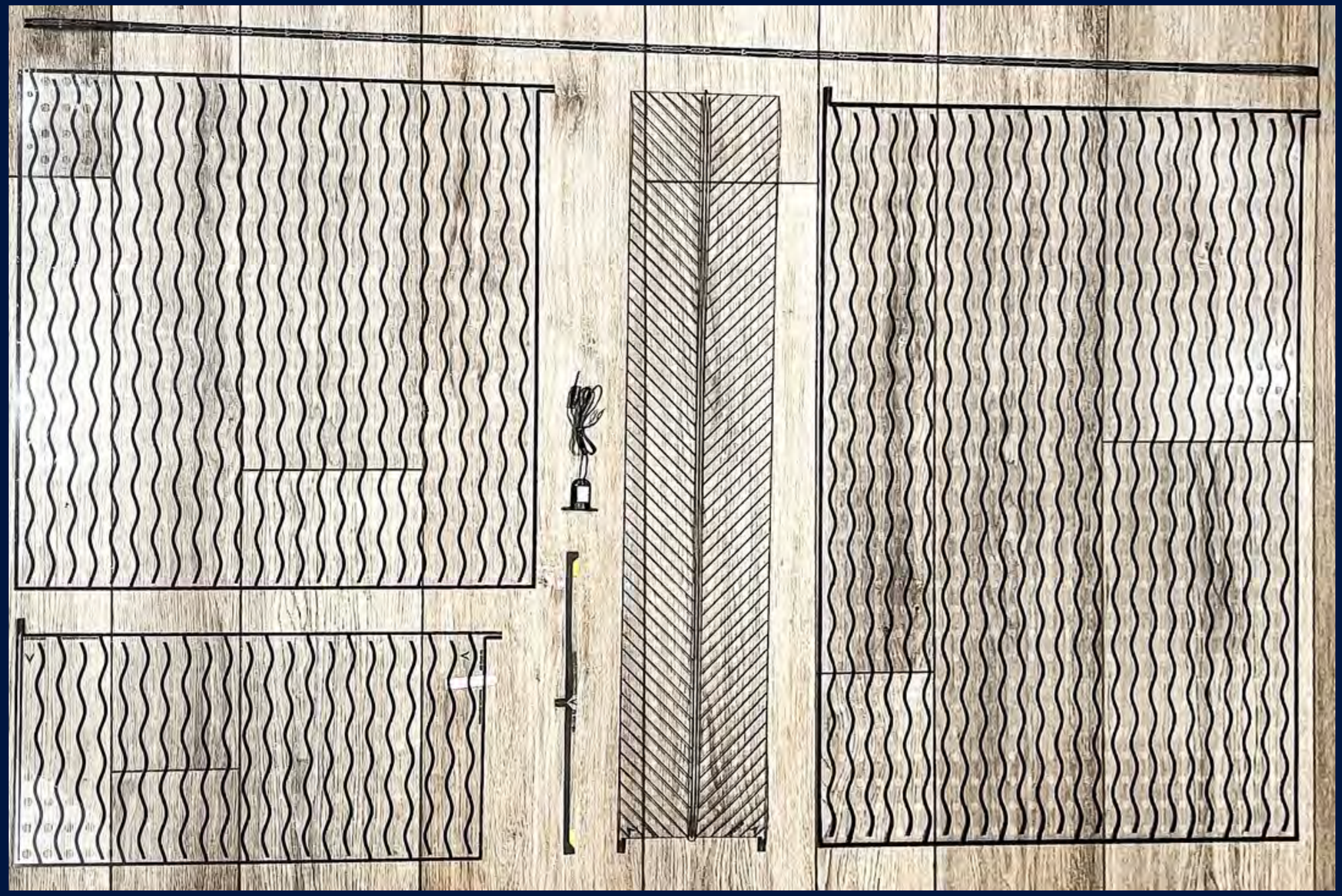
Feature	Product	Property Type	Description
Noah Leak Detection		• High/Mid Rise Apartments • Garden Style Apartments • Commercial Offices • Senior Living Facilities	Properties can use the Noah Water Leak Sensor to gain transparency into your water related risk and protect your asset from unexpected water damage.

Leak Detection Sensors

Appliance	Size	Membrane	Applications
Toilet	1x12		• Common types of leaks found in the home include worn toilet flappers, dripping faucets, and other leaking valves. All are easily correctable. • Ten percent of leaks waste 90 gallons or more per day. • Most common leaks can be eliminated after retrofitting a unit with new Kairos labeled fixtures and other high-efficiency appliances
HVAC	9x18		• The main cause of water leaking from your HVAC system is an issue with the drain pan • Broken condensate pans are a very common source of issues
Dishwasher	20x20		• Average leaks are equivalent to 1,200 loads in the dishwasher • Running the dishwasher only when it's full can eliminate one load of dishes per week and save the average family nearly 320 gallons of water annually. • Letting your faucet run for five minutes while washing dishes can waste 10 gallons of water and uses enough energy to power a 60-watt light bulb for 18 hours.
Water Heaters	6x30		• 75% of Water Heaters Fail within 12 Years • 250 Gallons of Water Can Be Lost in a Single Day from a 1/8-Inch Crack in a Pipe • The Insurance Institute for Business & Home Safety puts water heater failure in the top five causes of water damage
Sinks	9x18		• A leaky faucet that drips at the rate of one drip per second can waste more than 3,000 gallons per year. That's the amount of water needed to take more than 180 showers! • Leaky faucets can be fixed by checking faucet washers and gaskets for wear and replacing them if necessary
Refrigerators	20x30		• Ice maker malfunctions are a major source of issues for refrigerators • Water filter problems often result in similar issues • If the defrost drain is clogged, water will back up into the freezer and down into the fridge. Eventually, it will pool on your floor.
Building Envelope	Strip Sensor		• Using the strip sensor technology can help you monitor water ingress behind walls. • Can also be used to monitor roofing penetrations.

Leak Detection Membrane Variations

Membrane Sensor Material

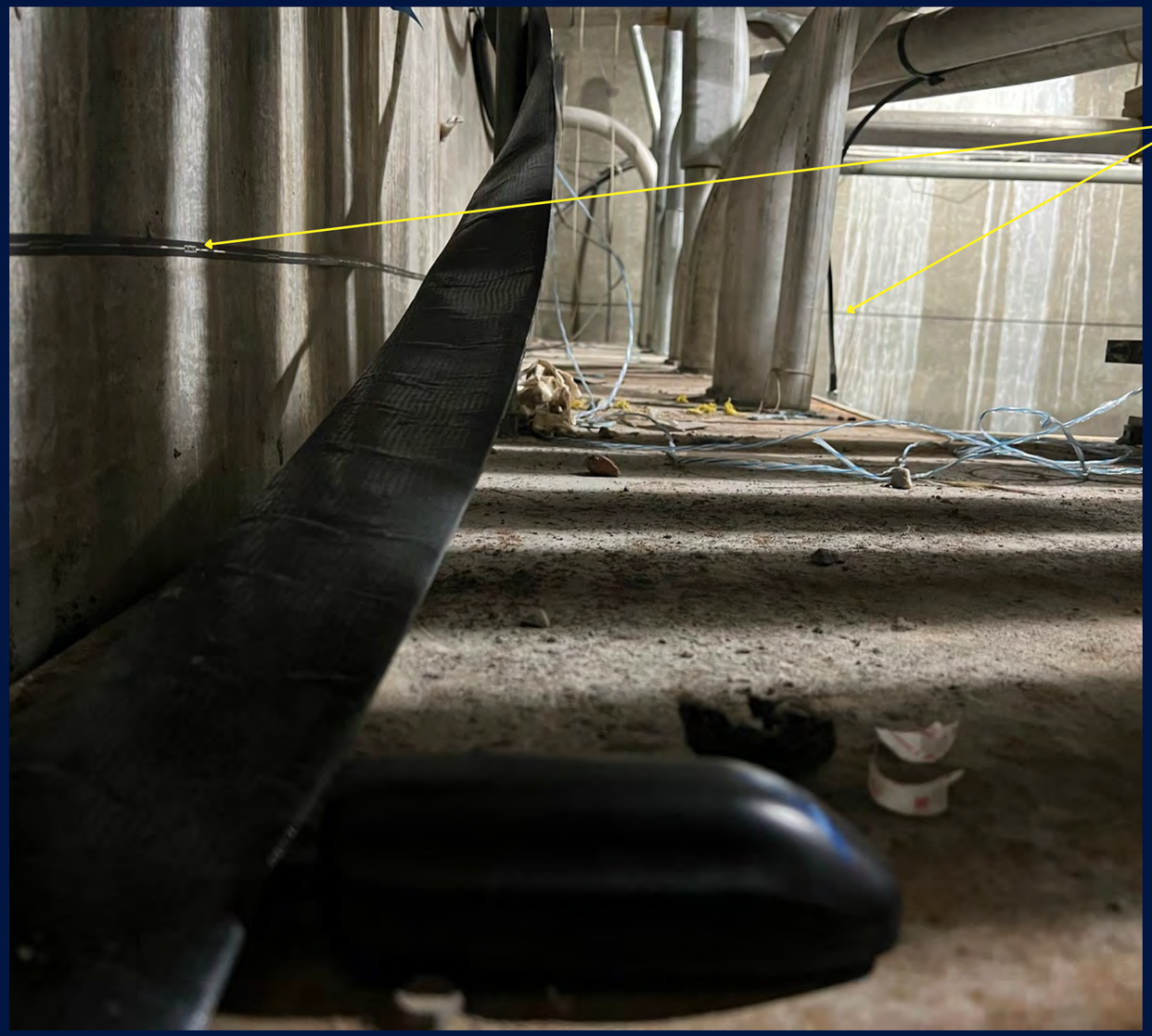


HVAC Ceiling Mount

Strip Sensor Membrane

Noah Leak Detection

The Install: Sweet Sensors & Strong Signal



- Flexible strip sensor technology was applied to the walls, floors, and conduit of the vaulted switch gear room to sense even the slightest intrusion of water.

Under Sink Area

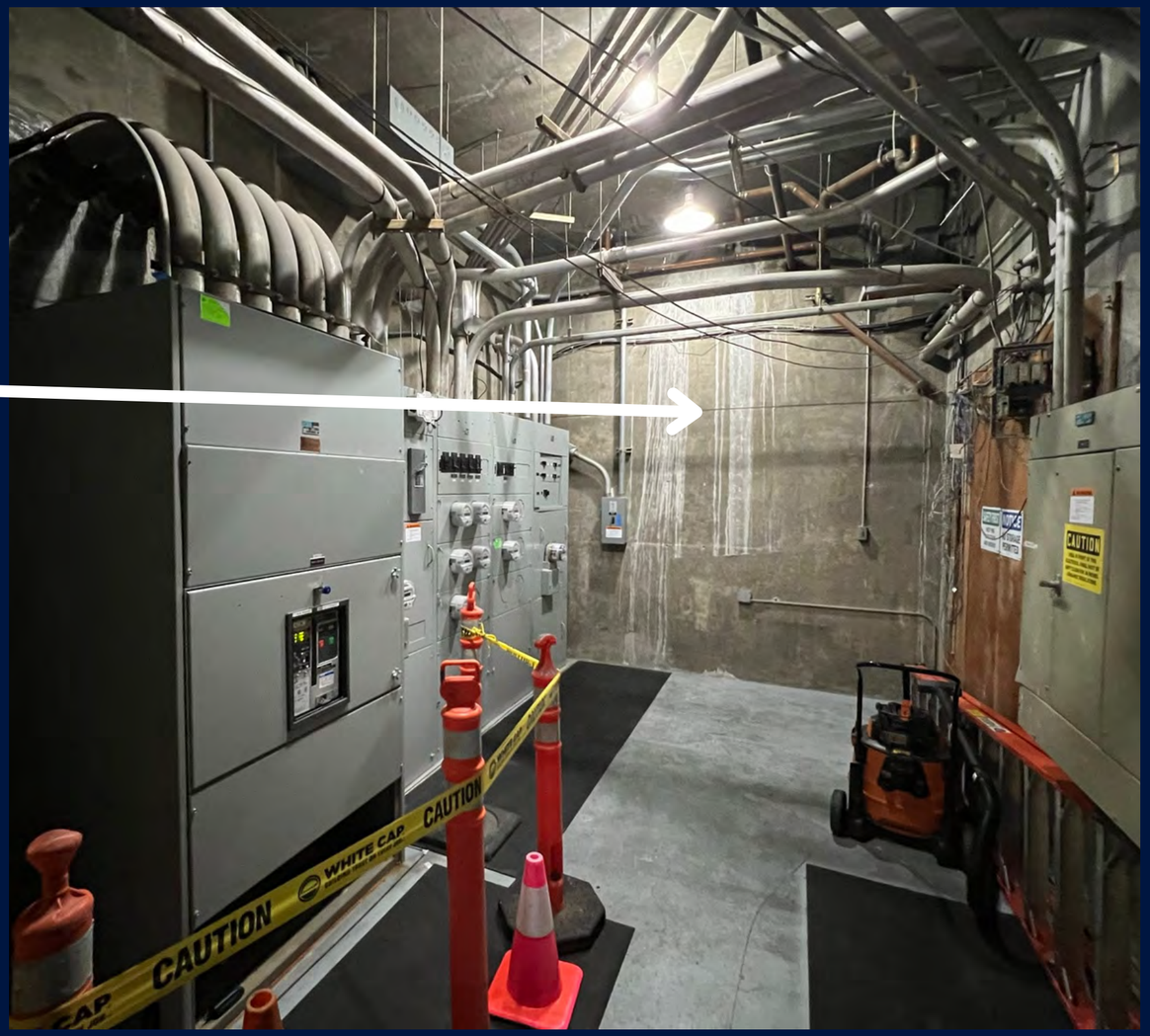
6X30 Membrane

Noah Leak Detection

Switch Gear Room

Strip Sensor Membrane

Noah Leak Detection



Mechanical Space

6X30 Membrane

Noah Leak Detection

The Install: Sweet Sensors & Strong Signal

- Flexible membrane sensor technology was applied to areas inside and underneath electrical equipment located near underground drainage systems.

3000Vac

Intrusion Risk

Flexible Leak Sensor

PTAC Application

6X30 Membrane

Noah Leak Detection

Elevator Shaft

Strip Sensor

Noah Leak Detection

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Smart Seamless Sensors

Leak Detection Zones in Mechanical Spaces, Bathroom , and even Laundry Room Applications

IN-UNIT MONITORING
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IN UNIT CAPABILITIES

Leak Detection Where You Need It

- Toilets
- Sinks
- Washing Machine
- Water Heaters
- Refrigerator
- Dishwasher

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NOTABLE MENTIONS

- **Zero insurance claims** post-deployment
- Avg. **ROI** within **under 6 months**
- Avg Year 1 **saving of $75,000**
- Deployed ~**24,000 sensors** in ~**10,000 units** since Feb 2021
- **312** major water events **detected** since Dec 2022
- Multiple patents granted
- **+10 year battery**
- Ultrasonic water submetering (0.44 gpm)
- Exceeds **AWWA accuracy standards** for **utility billing**
- Real-time notifications
- **Low power long-range** network coverage **(LoRaWAN)**

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LET'S WORK TOGETHER TO SECURE A MORE RESILIENT & SUSTAINABLE FUTURE.

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