

# Tremco Roofing and Building Maintenance - SkyBEAM™



## Collect and analyze building data from the roof, the façade and everywhere in between

Every month your utility bills remind you that your building's losing energy. But where? Through the roof? Around doors and windows? Through the façade? Maybe it's all three, or somewhere else.

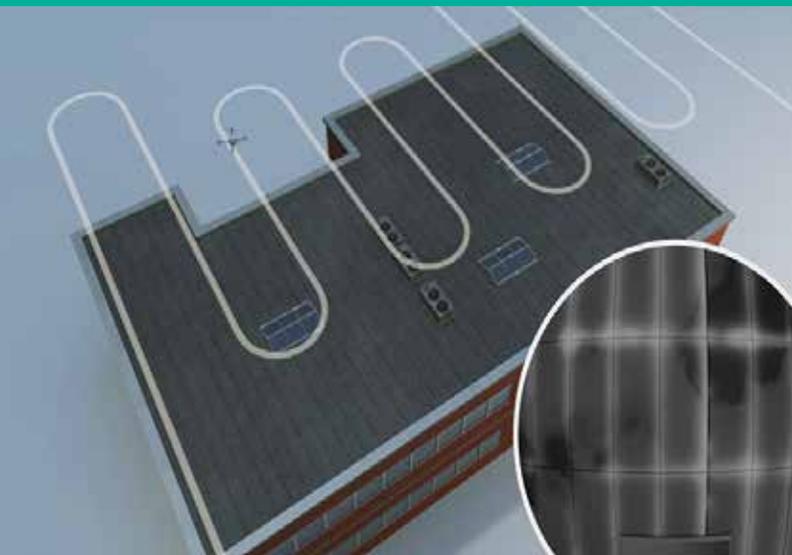
If you can't see where energy is being lost, you can't plan for repairs. But nighttime infrared roof scans can be dangerous, and using a hand-held thermal or video camera to map the façade is not efficient. There simply wasn't a good way to do this until now.

**Until SkyBEAM™ from Tremco Roofing and Building Maintenance.**



**TREMCO**  
Roofing & Building Maintenance Division

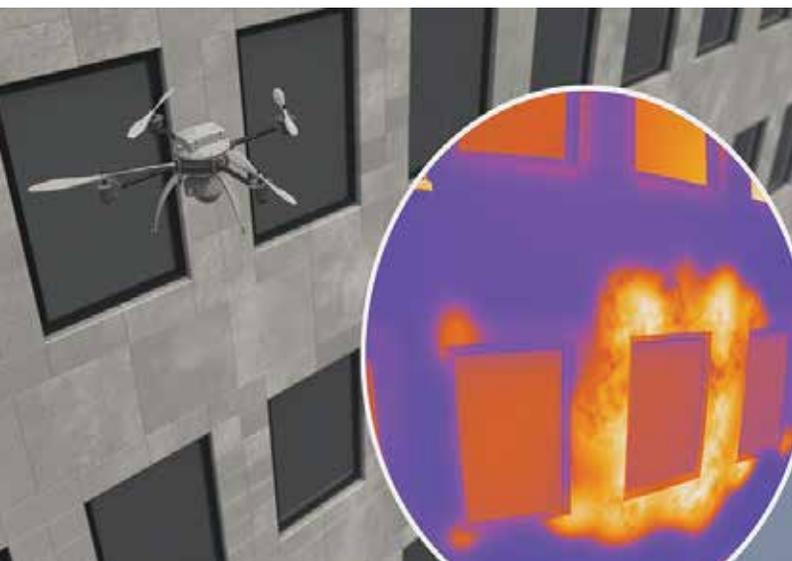
Where buildings typically lose energy.



### The future of facility mapping takes off

The groundbreaking SkyBEAM (Building Envelope Asset Mapping) system is an unmanned aerial vehicle (UAV) equipped with high-resolution thermographic (infrared) and video cameras to help our customers find where their facilities are losing energy through the building envelope, and to find and photograph other potential problems such as rooftop safety hazards.

SkyBEAM gathers building data faster, more thoroughly and more safely than any other method. Our highly-trained technicians program the UAV to fly to the precise height, do the mapping and return. SkyBEAM can map buildings up to 40 stories tall without expensive tools such as scaffolding, identifying problems that would have been virtually impossible to detect before. SkyBEAM also eliminates the need to send technicians onto roofs to conduct infrared scans, which means no safety risks.



### Pinpointing building energy issues, improving safety

SkyBEAM's thermographic camera graphically depicts energy inefficiencies by showing temperature variations within the building. This often occurs around windows, and on rooftops, where wet insulation retains heat longer than dry insulation.

To detect warm, wet insulation more easily, infrared scanning is most effective at night when the sun is not heating the building. Sending a crew onto a roof in the dark can be dangerous, despite safety precautions that Tremco Roofing puts in place.

SkyBEAM eliminates this danger. Technicians on the ground operate the UAV, which scans the roof in a programmed pattern. SkyBEAM's multiple infrared photographs are combined into a single large image showing precisely where the wet insulation is located. Technicians can then safely mark these areas during the day for removal and replacement, or further analysis if necessary.

In addition to infrared scanning, SkyBEAM's video camera can photograph other potential problems such as the need for appropriate rooftop safety equipment, including screens over skylights and permanent guardrails around hatches and the perimeter. It can also map the façade for cracks and other damage that compromise the building's integrity.





### Interactive reporting clearly shows the building's condition

SkyBEAM consolidates the infrared scanning and videotaped images into a comprehensive, interactive, easy to understand report that facility owners and managers, and technicians, access through a cloud-based application. The report clearly and accurately shows problem areas, helping you determine a plan of action.

A 2-D and 3-D virtual model of the building can be viewed from any angle. Swiping the model lets you overlay thermal images to their exact location on the building. With a tablet, users can add photographs and comments while technicians on site can verify work performed, all in real time. This helps ensure that the report always has the latest information.

Data can also be transmitted down to people on the roof. Through geo-positioning, technicians can see exactly where they are in relation to problem areas. They can bring up the thermal scan of the roof on their tablet, and the scan moves with them as they walk across the roof. This helps them precisely locate where work is necessary.





## Helping revolutionize the construction industry

### Nothing else is like SkyBEAM.

SkyBEAM gives decision makers accurate visual evidence of where their building is losing energy, especially from areas that were difficult to scan before. SkyBEAM will help improve your facility maintenance planning and budgeting; is the safest way to conduct night time infrared scanning; and helps technicians maximize their time as they easily locate and repair rooftop damage.

SkyBEAM is available through our relationship with Toronto-based Industrial SkyWorks, experts in aerial mapping and reporting. Already used successfully in Canada, on April 18, 2016, SkyBEAM became the first UAV approved by the FAA for nighttime commercial drone operation in the United States.

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### What's the next step?

See a video of SkyBEAM at work at [www.tremcoroofing.com/services/skybeam-aerial-mapping/](http://www.tremcoroofing.com/services/skybeam-aerial-mapping/) then let your local Tremco Roofing representative introduce you to its many benefits.

### Call us at

**1.800.562.6013 (U.S.)**  
or **1.800.668.9879 (Canada)**  
or visit [www.tremcoroofing.com/find-a-rep/](http://www.tremcoroofing.com/find-a-rep/).