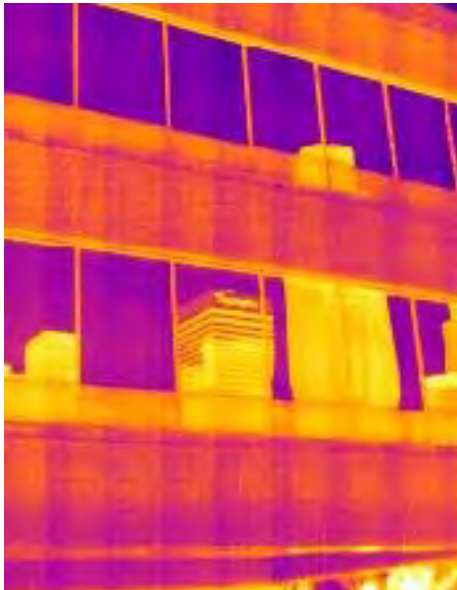


# Building Science Services



## Building Science Fast Facts

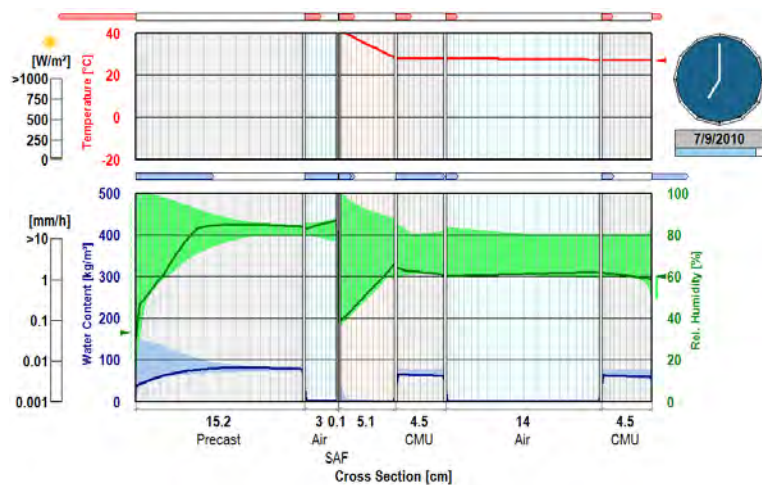
- Over 20 years experience in a wide range of projects for schools, hospitals, government buildings, residences, hotels, sports, entertainment, and specialty complexes.
- Fully trained and certified infrared thermographers and computer modelers.
- Certified teams on both coasts minimize travel and incidental costs.
- Building Science areas of expertise include:
  - Hygrothermal Computer Simulations
  - Infrared Thermography
  - Flooring

## Value

The building envelope should protect a structure from the exterior elements and provide an appropriate interior climate. Excessive air flows, heat loss, and vapor drives across the building envelope may accelerate degradation and result in poor building performance. Some symptoms may include uncomfortable interior climates, condensation, and even mold growth.

Architectural Testing applies its distinctive knowledge and expertise in the fields of Forensics, Curtain Wall, and Thermal Testing & Simulation to identify and resolve Building Science issues. Our expertise in Building Science includes:

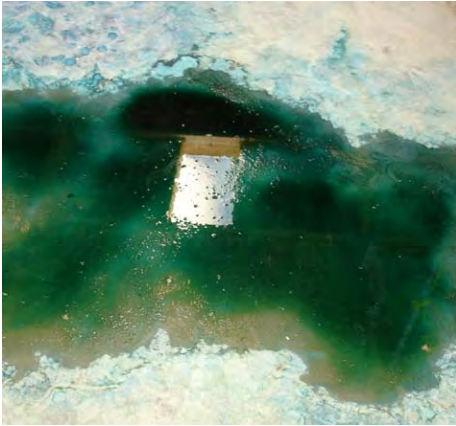
## Hygrothermal Computer Simulations



Although performance requirements for wall systems remain the same, each wall type achieves them differently. It is essential to understand these differences during building wall design. An optimal wall design relies on a strong understanding of thermal and moisture performance as it relates to the exterior and interior climates.

Architectural Testing uses certified engineers to use the latest moisture and heat (hygrothermal) transport software to analyze the effects of building material selection on the thermal and moisture performance of building components. We work closely with project architects, engineers, and owners to evaluate wall systems and HVAC design for durable solutions to potential heat, air, and moisture problems.

# Building Science Services

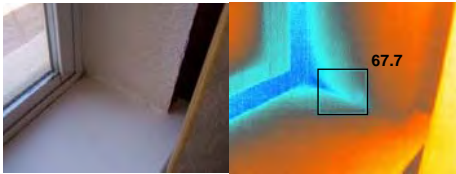


## Infrared Thermography

Infrared thermography is one of several non-destructive methods for detecting water intrusion or heat loss. It allows an investigation and repairs to be less intrusive, quicker, and less costly.

### Infrared thermography surveys include:

- Water intrusion detection for roofs, walls, window assemblies, and other building components.
- Heat loss and air leakage.
- Special quantitative surveys for unique failures or anomalies.



## Flooring

Floor coatings are critical to the performance and service life of a building. The science of choosing, installing, and maintaining floor coatings is complex and may have long-term financial implications. Although environments and performance needs vary, owners and tenants all seek to avoid major disruptions, property damage, and expensive repairs associated with flooring failures.

We assist our clients in achieving their performance requirements or identifying and resolving the cause of flooring failures through the following phases:

- Design – Work with the project team to determine the most appropriate and durable floor coating for the project requirements.
- Lab Testing – Analyze and test samples to verify performance or sources of failures.
- Analysis – Determine the cause and extent of failures and the most cost-effective method to repair the failures.

For more information on the power we can bring to your next project, visit [www.archtest.com](http://www.archtest.com)

The POWER In Performance Testing

