



Advanced Construction Testing

Your Trusted Partners in Field Testing

Is your building project facing challenges with

- Air Leakage
- Roofing or Waterproofing
- Curtain wall and Glazing
- Structural Performance
- Energy Efficiency

Does your project involve

- High-Rise
- Hi-Tech plant or Data Center
- Commercial
- Residential
- Government Buildings

If so, ACT's field testing can help

Let's work together to ensure your project meets the highest standards of quality and performance.

For more information on the tests listed here and for a free consultation, please contact us. We will ensure your building project succeeds!



info@actesting.com
800.704.1859
actesting.com



Advanced Construction Testing (ACT) Field Testing



Why Field Testing is Essential

Identify Flaws Early: Detect potential issues before they become costly problems.

Verify Compliance: Ensure your assemblies meets manufacturer's standards.

Reduce Risk: Mitigate uncertainties and avoid costly rework.

Demonstrate Excellence: Showcase your commitment to quality and innovation.

Accredited Field Tests We Offer

- ASTM E1105 - Static or Cyclic Water Penetration
- ASTM E783 - Air infiltration testing
- AAMA 501.2 - Nozzle test
- AAMA 502 - Field testing specification for windows
- AAMA 503 - Field testing specification for curtain wall

Non-Accredited Field Tests We Offer

- ASTM E576 - Field Frost Point Testing
- ELD - Electronic Leak Detection
- ASTM E779 - Whole Building Air Testing



Who Should Conduct Field Testing?

Contractors and Builders: To reduce risk in construction; verify the trade contractor's work and ensure compliance with specifications and building codes.

Building Owners: To ensure the quality and performance of their buildings, especially in critical structures like, data centers, biotech, chip plants, hospitals, etc.

Architects and Engineers: To validate design assumptions and ensure the building's performance meets expectations.

Developers: To reduce risk in multi-family structures like condominium and critical facilities like construction of data centers, chip and battery plants, hospitals, etc.

Commissioning Agents: To verify specified performance and compliance with owner requirements.

Anyone involved in the construction, ownership, or management of buildings with complex facades, fenestration systems, roofing and waterproofing assemblies should consider these tests to ensure the safety, durability, and energy efficiency of their structures.

Why Choose ACT?

Expertise: Our team of experienced engineers and technicians provides reliable testing services nationwide.

State-of-the-Art Equipment: We use the latest technology for accurate and efficient testing.

Customized Solutions: Our services are tailored to your specific project needs.

Fast Turnaround: We deliver results quickly to minimize project delays.



Electronic Leak Detection

Electronic Leak Detection (ELD) is a non-invasive method to pinpoint leaks in roofing or waterproofing membranes by detecting electric currents where water penetrates. It helps verify that the roofing membrane is watertight during and after construction. This test is mandatory for waterproofed systems with over burdens like topping slabs, planters and pavers.



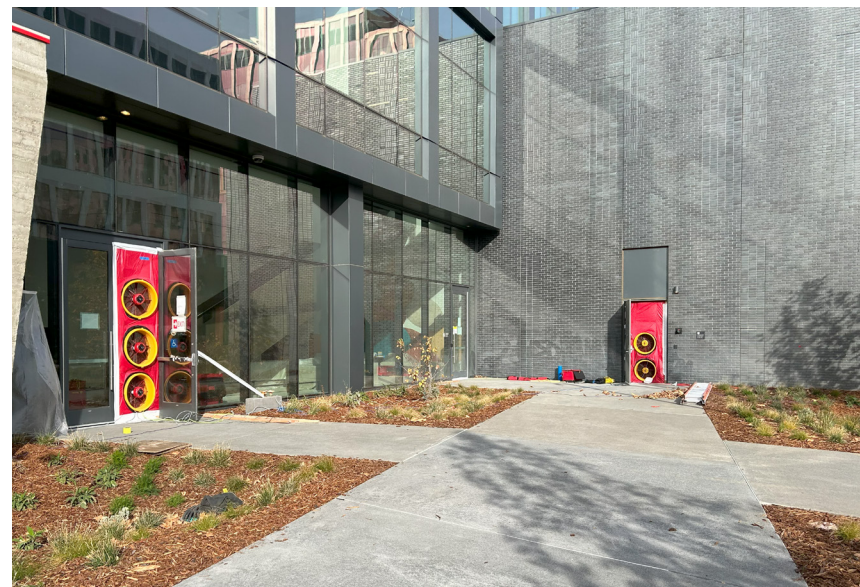
ASTM E1105

ASTM E1105 is a comprehensive test used to evaluate the water resistance of installed windows, doors, skylights, and curtain walls, by simulating heavy rain conditions. This test helps ensure the durability and performance of these assemblies.



ASTM E779

ASTM E779 (Whole Building Air Testing) measures the air leakage rate of a building to ensure airtightness is within specified limits. This test helps verify energy efficiency, improve indoor comfort, and meet building codes. It's ideal for achieving green certifications like LEED or Passive House. It is mandatory on all federal buildings.



ASTM E783

ASTM E783 applies to both residential and commercial buildings with exterior windows, doors, or curtain walls. However, it is more commonly used in commercial buildings and large multi-unit residential projects, where stricter energy efficiency and airtightness standards are required. In this test, a custom chamber is built and attached to a window. Then, a vacuum is pulled on the chamber to test for air leakage.



FGIA/AAMA 501.2

The FGIA/AAMA 501.2 Test is used by isolating parts of the glazing system for diagnosing leaks and general performance.



FGIA/AAMA 503

The FGIA/AAMA 503 Test is primarily focused on commercial buildings. This includes high-rise buildings, office complexes, retail stores, and other commercial structures that utilize large-scale fenestration systems and demonstrates the quality and performance to building owners, architects and contractors.



FGIA/AAMA 502

The FGIA/AAMA 502 Test is primarily focused on residential and multi-family applications, this test focuses on windows and sliding glass doors, assessing their performance for air infiltration, water penetration, and structural integrity after installation.



ASTM E576

ASTM E576 is a test used to measure the frost or dew point inside sealed insulating glass units (IGU). IGU's are hermetically sealed to prevent air and moisture from entering the sealed cavity. Desiccants are placed inside the IGU to remove incidental moisture trapped during fabrication. This test verifies if moisture has penetrated the IGU and overwhelmed the desiccants, causing premature failure.

