

PosiTest® AIR Leak Tester

The PosiTest **AIR** Leak Tester performs spot tests for air and water leaks in building envelopes and rigid air barrier systems.

The Industry

Building envelopes and air barriers are designed to control the flow of air and water vapor into and out of a building. The growing demand for environmentally responsible building practices in North America is the force behind the development and implementation of government regulations and building codes for air barrier systems. The US and Canada have already begun adopting these codes.

Onsite testing during installation is necessary since the air barrier will typically be covered by finishing materials (siding, etc.).



Q. – What is an air barrier?

A. – Material or a combination of materials acting as a system to control the movement of air into and out of a building.

Q. – Why is testing important?

A. – An air barrier works best when the seal is continuous throughout the building envelope. Penetrations into the envelope must be sealed to prevent air leakage. The flow of air into and out of the building envelope can damage envelope components, increase energy usage through additional heating and cooling loads, and can stimulate mold and mildew growth.

Q. – What are the benefits of controlling air flow?

A. –

- Improved energy efficiency
- Improved indoor air quality
- Controlled mold growth
- Reduced corrosion and deterioration of wall components



Bubbles indicate an air leak. An estimate of the relative size of the leak can be made based on the size and speed with which bubbles form.

Types of Air Barrier Systems

- Single and Two Ply Membranes
- Liquid Applied Membranes
- Sprayed Polyurethane Foam (SPF)
- Boardstock
- Metal Liners
- Exterior Insulation Finishing Systems (EIFS)
- EPDM roofing systems
- Waterproofing

Types of Air Leak Sites

- Penetrations – fasteners, masonry ties
- Joints/Seams
- Cracks
- Porous Surfaces

Q. – What standard does the PosiTest AIR comply with?

A. – ASTM E1186 - Standard Practices for Air Leakage Site Detection in Building Envelopes and Air Barrier Systems

Preparing and Testing Air Barriers



Applying a single ply membrane wrap to concrete masonry unit (cmu)



Masonry ties penetrate the wrap and must be sealed to maintain air tightness



Penetrations and membrane seams/joints are tested