

Stop Building Envelope Air Leaks



Improve Comfort, Health, Safety and **Save Energy** too.

For building owners and managers with high performance goals, eliminating gaps, cracks and holes in the building envelope is the first simple step toward improving building performance and reducing energy costs.

The building envelope is the first line of defense against weather, insects, pollutants, and other environmental factors, which means maintaining its integrity is critical to meeting indoor air quality and energy consumption goals. What's more, if the building envelope isn't doing its job as intended, the effectiveness of other energy efficiency measures is severely limited.

Eliminating air leaks throughout the building envelope and interior compartments with a continuous air barrier solution is essential to meeting high performance building goals such as improving HVAC, lighting and water conservation systems. And with little disruption to occupants and often at a fraction of the cost of other system upgrades, air barrier improvements generate immediate, measurable results. This often means an attractive financial payback and long-term savings that can fund other building initiatives.

The Benefits of a Leak-Free Building Envelope

Improved Comfort, Health, Safety, Durability and Energy Use

A continuous air barrier system solves numerous building envelope problems, including:

- » Excessive energy consumption
- » Poor temperature and humidity control
- » Poor indoor air quality
- » Uncontrollable pest, odor, and dirt infiltration
- » Condensation and moisture on building structures
- » Ice dams on exterior structures



Achieving Air Barrier **Continuity**

Once air leakage sources are identified and economic implications are understood, air sealing measures may include a combination of steps, including:

- » Roof to wall sealing and insulation repairs
- » Sealing/caulking all accessible gaps, cracks and holes
- » Thermal insulation

- » Compartmentalization to contain odors and pathogens
- » Firestop systems
- » Weather-stripping doors and windows

Building Envelope Specialist Services include:

- » Whole building assessments and air leakage testing, including Smoke Pencil/Infrared/Blower Door
- » Energy and environmental impact evaluations
- » Financial analysis to determine the economic implications of an air barrier solution
- » Supervision of air sealing measures
- » Warranty and scheduled preventive maintenance for maximum performance



Article by Tremco Roofing and Building Maintenance

Questions or comments?

please contact Kathy Hearn, khearn@tremco.ca or Kyle Tusim, ktusim@tremco.ca

