









Submittal Date:

High Performance Buildings Start with the Building Envelope

- Eliminate air leakage forimproved indoor air quality, comfort and energy consumption
- Financial payback from energy savings
- Longer building life-cycle from improved performance

888-250-1570 canambuildingenvelope.com







Together with our affiliated companies, Canam Building Envelope Specialists and general contractor WTI, Tremco is pleased to submit our Building Envelope Assessment Proposal for your consideration.

> Our Assessment process is designed to identify opportunities for improving indoor air quality, occupant comfort and energy consumption by eliminating leaks in the building envelope. Our objective is to determine the potential financial benefits which result from subsequently improved operating efficiencies, longer building system life cycles, and lower heating and cooling costs.

Typical problems solved by sealing the building envelope include:

- Uncontrolled loss of conditioned air (resulting in excessive energy consumption)
- Condensation, moisture, mildew and mold
- Premature deterioration of building components
- Temperature fluctuations
- Transfer of exterior and interior odors
- Insect and animal infestations
- Dirt infiltration
- Inefficient, costly mechanical systems operation

The Air Barrier Inspection Process

PERFORMED BY A CANAM TRAINED TREMCO OR WTI

INSPECTOR,

OUR TOP-TO-BOTTOM

ASSESSMENT WILL

- **IDENTIFY AIR LEAKAGE**
- PATHS AND REMEDIAL

WEATHERPROOFING

MEASURES OFFERING A

FINANCIAL PAYBACK.

COPIES OF ENERGY BILLS

AND FLOOR PLANS ARE

REQUIRED IN ADVANCE

TO ENSURE A THOROUGH

EVALUATION OF ALL

FLOORS.

THE SURVEY INCLUDES:

- Determination of air leakage paths: On-site walk-through of the building to identify and record the envelope condition, to confirm energy loss and moisture issues. Interior and an exterior overview of components are inspected, including:
 - a Windows
 - b Doors
 - c Wall and floor joints
 - d Ceiling and wall joints
 - e End wall joints
 - f Roof and wall joints
 - g Stair and elevator shafts
 - h Garbage chutes
 - i Plumbing and pipe penetrations

- 2 Qualitative assessment of air leakage paths: Based upon leak dimensions, an assignment of tight, average or loose will be assigned to leak sites, such as existing weather- stripping of windows.
- 3 Estimation of air leakage flow rate: The following information is used to determine the various pressure regimes:
 - a Inside/outside temperature difference to determine the stack pressure distribution. The current calculation procedure is based on the monthly average ambient temperature for the location.
 - Wind speed and directions to determine the wind pressure distribution. This is based on the monthly average wind speeds available for the location.
 - c Characteristics of the mechanical ventilation system and operation procedures based on field data. If unavailable, typical mechanical pressure distribution is assumed based on building type. A well-maintained system creates a pressure difference of about 2 to 4 Pa (based on field measurements).
 - d The flow path distribution and air leakage characteristics. This is a key element of the calculation procedure and is used for defining the leakage area associated with air leakage paths.
 - e Building dimensions, exposure, shielding, orientation, typology, and construction details are evaluated to determine the average monthly airflowinfiltration and exfiltration. Either infiltration or exfiltration airflow is required for the energy calculation.
- 4 Recommended air sealing measures: Weather-stripping and sealing measures are defined and costsestimated for all building envelope components utilizing floor plans. Material specifications are provided.

5 Potential energy savings calculation and cost-benefit analysis: Calculations are performed to determine the potential reduction in peak heating and cooling demands. The reduction in peak demand and energy cost is then compared with the cost of an energy efficiency measure to determine financial benefits.

THE ENERGY SAVINGS MODEL DETERMINES:

- a The reduction in heating demand for the building at the peak winter conditions.
- b The reduction in leakage of cooling loads.
- Using the combined factor of demand diversity and the effectiveness of air sealing measures, the energy savings model further determines the reduction in space heating demand at the generation level.

<u>2 Year Warranty</u>

Canam as part of Weatherproofing Technologies, Inc. warrants the work against material defects in workmanship for a period of two (2) years from the Date of Substantial Completion. This will include all predefined exclusions as noted in the contract document. This warranty is twice the Industry standard due to the experience and confidence in the value of work performed. Extension of this warranty may be obtained at additional cost. Please see your Canam representative for details. An optional Service Agreement may be purchased to assure the performance of wear items replaced as part of the Building Air Leakage remediation.

Inspection Fee

ACCOUNT:

BUILDING DESCRIPTION:

COSTS:

DELIVERABLES:

A written report will be provided post-inspection:

- General condition assessment of inspected building
- Condition photographs identifying performance issues
- Financial payback analysis of budgetary pricing
- Canam Building Envelope Weatherization Proposal provided upon request.

ACCEPTANCE OF PROPOSAL:

The above prices, specifications, and conditions are satisfactory and are hereby accepted. You are authorized to complete this contract as specified. Payment shall be upon completion. Address the PO to Weatherproofing Technologies, Inc. (see below). Please allow a two-week notification to book assessment before the site visit.

Date of Acceptance:	PO#:	Tit	le:

Name:

Signature:

CONTACT:

Weatherproofing Technologies, Inc. 3735 Green Road Beachwood, OH 44122