

Building Envelope Evaluation

CTLGroup provides building envelope investigations, remedial action plans, laboratory testing of material components, and litigation support services, which include:

- Identifying areas of thermal bridging or defective thermal insulation using infrared thermography
- Construction document review and analysis
- Providing repair options when feasible and replacement options when necessary
- Providing evaluations and materials identification for expansion joints, flashing, joint sealants, and water proofing materials
- Product development of materials used in building envelope systems
- Materials evaluation of systems used in building envelopes

Water Infiltration and Condensation Issues

Building design and construction defects resulting in water damage requires investigation by professionals with expertise in building enclosures. CTLGroup's experts can identify the defects causing water damage using forensic techniques including:

- Wind-driven rain (on site) penetration testing
- Analysis of building wall components for condensation potential using WUFI and THERM
- Laboratory testing to determine the potential of water vapor transmission of materials

Air Barrier

Proper air barrier installation can save energy and prevent future moisture issues. Air barriers in properly designed building envelopes are required by standard building codes and municipalities. CTLGroup's air barrier services include:

- Blower-door testing
- Air and water barrier repair solutions

Building Envelope Commissioning Services (BECX) and Retro-Commissioning

CTLGroup provides BECx consulting services that are effective in achieving high performance within the building enclosure systems. Planning and executing strategies to reduce the risk of occurrence of air/water leakage, condensation and thermal transmission in the building enclosure requires a high level of coordination among all stakeholders.

CTLGroup is experienced in devising and coordinating BECx programs to ensure that new construction and renovation enclosure systems perform and operate as designed. Services are preformed thru the life of the project:

- Early Phase Design Coordination
- Additional Design and Submittal Review
- System Manual Review
- Verification of Occupant and Operator Training
- Post-Occupancy Operation Review

