City of Fort Collins, Alternative Small Commercial Building
Air Barrier Testing Protocol (Effective April 15, 2022)

Approved Testers
Air barrier leakage testing results will only be accepted from Certified RESNET Raters, BPI Building Analysts, or CFC approved large commercial building testers.

2021 Code Reference and Scope
Alternative Compliance with IECC Section C402.5.3.
2021 IECC Section C402.4 requires the verification of an air tightness standard on completed commercial buildings, using the City of Fort Collins Building Air Leakage Test Protocol. **The alternative testing protocol described here is for small commercial buildings or spaces of less than 5000 sf,** including conditioned spaces within larger unconditioned commercial buildings, and commercial spaces within multi-use buildings. The tested commercial building or space must be no more than two stories in height.

Air Leakage Testing Protocol
- Use the Residential Energy Services Network (RESNET) Mortgage Industry National Home Energy Rating Standards, referenced ANSI/RESNET/ICC 380 standard for testing airtightness of building.
- A multi-point air tightness test shall be conducted, per Section 4.4.2.
- **The maximum air leakage rate** at 50 Pascal test pressure **shall not exceed 0.25 CFM50/square foot** of unit enclosure surface area (total surface area of all walls, floors & ceiling).

Submittal requirement
The report from blower-door testing software shall show, at minimum, the following information:
- Building address and business name
- Company name, the name and signature of the Certified Rater or Building Analyst conducting the test, and the date.
- Building envelope area – wall, roof and floor area (square feet), provided by the designer of record
- Average Corrected Building leakage flow rate at 50 Pascal test pressure (Avg Corrected CFM50).
- Percentage uncertainty in the corrected CFM50, at the 95% confidence level (not to exceed 5%).
- Building air change rate at 50 Pascal test pressure (CFM50 sq ft surface area = CFM50/sq ft surface area)

Notes
- "Building volume & Sq Ft of Surface Area" If not printed in the software output, may be handwritten on the output. CFM50 per sq ft surface area should be recorded in the comments/notes section if using TECTITE.
- The following companies' software complies with the requirements of this alternative test protocol:
  - The Energy Conservatory
  - Retrotec