

Air Leakage/Blower Door Testing

Air leakage testing is required for all new residences and commercial buildings under the 2018 International Residential (IRC) and Energy Conservation (IECC) Codes.

Commercial:

The building thermal envelope shall be tested in accordance with ASTM E 779 at a pressure differential of .3 inch water gauge (75 Pa) or an equivalent method approved by the building official and deemed to comply with the provisions of this section when the tested air leakage rate of the building thermal envelope is not greater than 0.40 cfm/ft² (2.0 L/s x m²). A note from the approved testing agent shall be placed upon the final report submitted for building division review indicating compliance with the 2018 IECC requirements. If the first test fails, the tester shall recommend corrections to pass the test. After corrective measures are taken, the building must be retested and the passing test turned in to the building official.

Exceptions:

1. The building official *may* waive the air leakage testing requirement for buildings or portions thereof that are not fully enclosed and fully conditioned, such as warehouses and repair garages with overhead doors that are frequently open while in operation.
2. Townhouses and condominiums may use the City of Fort Collins Protocol for New Multifamily Building Air Tightness Testing as an alternative test.

Residential:

Per 2018 International Energy Conservation Code (IECC) and 2018 International Residential Code (IRC), “testing shall be conducted in accordance with RESNET/ICC 380, ASTM E779 or ASTM E1827 and reported at an air pressure of 0.2 inch w.g. (50 Pascals).” In our Climate Zone 5B, a passing test requires three or fewer (3) Air Changes per Hour (ACH). Testing shall be conducted by an approved third party with a written report provided to the building official showing the test results at ACH50. If the first test fails, the tester shall recommend corrective measures to improve air tightness, then perform a second test after corrections have been made. If the home still fails but has significantly improved its air tightness, the owner may request code modification approval by submitting both test results and an explanation of the corrective actions taken.

To be considered an “approved third party,” an air leakage tester must demonstrate knowledge and experience of test procedures and protocols, through certification by a recognized organization such as RESNET (Residential Energy Services Network) or BPI (Building Performance Institute), or otherwise demonstrate their competence at air leakage testing to the satisfaction of the Chief Building Official. A partial list of approved third party testers is on the back of this handout. Some may no longer be in business.

Many Home Energy (HERS) Raters will perform air leakage testing as part of their overall energy ratings. Either a complete rating report including air leakage testing, or a report of a stand-alone test, will be acceptable to meet the testing requirement.

Approved Air Leakage (Blower Door) Testers in Larimer County

Allied Insulation, 6617 S. College Ave., Fort Collins CO 80525, www.mascocs.com (970) 797-3144
Annadel Building Solutions, P.O. Box 741, Mancos CO 81328
Architectural Energy Corporation, 2540 Frontier Ave. Ste 100 Boulder CO 80301 www.archenergy.com (800) 450-4454
Burgess Construction, 9033 E. Easter Place, Ste. 200, Centennial, CO 80112 www.burgess-inc.com (303) 300-4527
Colorado Professional Inspections, 1780 Hyde Ct., Loveland CO 80538
Deeper Green Consulting, 35 Wheeler Pl., Frisco CO 80443, www.deepergreenconsulting.com, (970) 389-2448
E3 Power, 1616 17th St. #383, Denver CO 80202, www.e3power.net, (303) 292-1233
Efficiency Revolution, 1150 Inca St. Unit 23, Denver CO 80204, www.encyrevolution.com, (303) 868-6653
Energy Logic, 309 Mountain Ave, Berthoud CO 80513, www.nrglogic.com, (800) 315-0459
EnerSmart Energy Solutions, 3735 Doolittle Rd., Monument CO 80132, www.enersmartenergy.com, (719) 313-6171
Energy Wise Colorado, 3410 SCR 31, Loveland CO 80537, Lisa Parrish, www.energywisecolorado.com, (970) 776-8009
Energy Wise Consultants, 111 S. 7 St., Grand Junction CO 81501, www.energywisecompanies.com (970) 242-9473
Frostbusters & Coolth Co., 190 ½ Garfield Ave. Carbondale CO 81623, www.frostbusters.com, (970) 963-7325
Green Spot, 1654 Grant St., Denver CO 80203, www.yourgreenspot.com, (303) 394-9627
Green Your Home, Colleen Locker, greenyourhomedenver@gmail.com (720) 628-7290
Greg Bowdish, Progressive Engineering, greg@progressiveengineering.biz, (970) 590-6059
Greg Fox, Efficiency Matters, 1800 E. Lincoln Ave. Fort Collins CO 80524, www.encycymatters.net, (970) 566-1249
GS Services, Fort Collins, Paul Higman, phigman@gs-email.com (970) 219-6776
Home Energy Systems, 6124 Ouray Way, Aurora CO 80016, www.hescolorado.com, (303) 944-9627
Home Performance Solutions, 2342 Tavern Way, Castle Rock CO 80233, www.hpsenergy.com (720) 985-8445
In the Now...For the Future, 7 Bassick Pl., Westcliffe CO 81252, www.sustainabilityconsultation.com (719) 783-4191
John Henry and Associates, 3513 Costilla Ave., Centennial CO 80122, (720) 496-3520, andersonarch@aol.com
Lightly Treading, 4303 Brighton Blvd. Bldg. 3, Denver CO 80216, www.lightlytreading.com, (866) 973-9268
Mike Truitt, This Efficient House, 1600 Crescent Dr. Fort Collins CO 80526, www.thisefficienthouse.com, (970) 204-9931
Nate Gagliano, NoCo Energy Solutions, 4805 NCR 23E, Laporte CO 80535, www.nocoenergysolutions.com, 310-6240
PIE Consulting & Engineering, 6275 Joyce Drive, Suite 200, Arvada, CO 80403. www.pieglobal.com, (866) 552-5246
Richard Anderson, Anderson Associates, 422 E. Oak St., Fort Collins CO 80524, (970) 484-0306
Scott Home Inspection, 3728 W County Road 10, Berthoud CO 80513, www.scotthomeinspection.com (970) 532-2424
Sustainably Built, 1720 15th St., Boulder CO 80302, www.sustainablybuilt.com, (303) 447-0237
Timberline Insulation Inc., 4109 Ziegler Rd., Ft Collins CO 80525, john.timerlineinsulation@gmail.com, (970) 888-1395

List is not exclusive –Air Leakage Testers certified by Building Performance Institute, Air Barrier Association of America, RESNET, or other approved agencies/local jurisdictions, can be added to this list by verifying credentials and experience.

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