

2024 City of Boulder Energy Conservation Code

Residential Testing Forms

Instructions:

These forms shall be used for reporting of the testing required for residential construction projects. Depending on the project scope, one or all these forms may need to be submitted. If applicable to the project, once testing has been completed, fill out the form and submit to the CSS portal to satisfy your energy code conditions.

Forms:

- Residential Envelope Testing Form
- Residential Duct Testing Form
- Residential Ventilation Testing Form



**City Of Boulder Colorado Energy Conservation Code
Residential Envelope Test Reporting**

Planning and Development Services Building Codes

1101 Arapahoe Ave. Boulder CO 80302

Phone 303-441-1880

House Address:

Permit #:

Permit Holder:

Phone #:

Testing Date:

Building Envelope Air Leakage Blower Door Test

R402.4.1.2 Testing. The building or dwelling unit shall be tested for air leakage. The maximum air leakage rate 3.0 air changes per hour for single family buildings, or 0.16 CFM per square foot of dwelling unit enclosure area for other than a single-family buildings. Testing shall be conducted in accordance with RESNET/ICC 380, ASTM E779 or ASTM E1827

Automated Multi Point Test Required. Attach copy of blower door manufacture software report

Total SQFT of Conditioned Floor Area (CFA)

Total Conditioned space Volume

Total Dwelling Unit Enclosure Area

Test Results

ACH50 = CFM50 x 60 / Volume = ACH50

or

CFM50 / dwelling unit enclosure area

ACH50

CFM/sqft of dwelling unit enclosure area

Picture of Guage test results

Testing company:

Tester Name (print):

Signature:

Phone:

Email:

HERS Rater, RFI or BPI Cert #



City Of Boulder Colorado Energy Conservation Code Residential Duct Testing Reporting

Planning and Development Services Building Codes

1101 Arapahoe Ave. Boulder CO 80302

Phone 303-441-1880

House Address:

Permit #:

Permit Holder:

Phone #:

Testing Date:

Duct Leakage Testing:

R403.4.5 Ducts shall be pressure tested in accordance with ANSI/RESNET/ICC 380 or ASTM E1554

Number of Duct Systems

Type of test: Rough-in with air handler Rough-in without air handler Post construction

	System 1	System 2	System 3	System 4
SQFT of Conditioned Floor Area (CFA) served				

Total Duct Leakage Target ≤ X CFM of leakage

4CFM duct leakage target (CFA/100) x (4CFM)

3CFM Duct leakage target (CFA/100) x (4CFM)

Rough- in Test Total Duct Leakage Tested

Duct tester fan flow cfm@25

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Post Construction Total Duct Leakage Test

Duct tester fan flow cfm@25

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Duct System serves ≤ 1200 SQFT leakage target 50CFM

Duct tester fan flow cfm@25

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Duct Leakage to Outside Test for R406 ERI Compliance

Duct tester fan flow cfm@25

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Picture of Guage test results



Testing company:

Tester Name (print):

Signature:

Phone:

Email:

HERS Rater, RFI or BPI Cert #



City Of Boulder Colorado Energy Conservation Code
Residential Ventilation Testing Reporting

Planning and Development Services Building Codes
1101 Arapahoe Ave. Boulder CO 80302 Phone: 303-441-1880

House Address:
Permit Holder:

Permit #:
Phone #:
Testing Date:

Ventilation Flow Measurements:

R403.7.3 Testing. Mechanical ventilation systems shall be tested and verified to provide the minimum ventilation flow rates required by Section R403.7

Bath and Powder room Ventilation flow >= 50 CFM

Table with 5 columns: System 1 Location, System 2 Location, System 3 Location, System 4 Location, System 5 Location. Rows include Flow Rate and CFM.

Whole House Controlled Ventilation System

Form with input fields for Balanced Ventilation System, ASHRAE 62.2 Ventilation Target, and Measured Ventilation Rate.

Kitchen Hood ventilation rate is >= 100 CFM

Form with input field for Measured Ventilation Rate.

OR

Exempt from testing:

Form with input field for Kitchen range hoods that are ducted to the outside with 6-inch or larger duct and not more than one 90-degree elbow or equivalent in the duct run.

Form with input fields for Testing company, Tester Name (print), Signature, Phone, Email, and Certification #.