

## **2024 City of Boulder Energy Conservation Code**

### **Commercial Testing Forms**

#### Instructions:

These forms shall be used for the reporting of the testing required for commercial 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:

- Commercial Building Envelope Air Leakage Testing Form  
(Building unit or Dwelling or Sleeping unit)
- Commercial Duct Leakage Testing Form  
(Dwelling unit or Sleeping unit ONLY)
- Commercial Ventilation Testing Form  
(Dwelling unit ONLY)



City Of Boulder Colorado Energy Conservation Code
Commercial Envelope Test 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:

Building Envelope or Dwelling/Sleeping Unit Air Leakage Testing

C402.5.1.2 Building Thermal Envelope Testing. The building thermal envelope shall be tested in accordance with ASTM E779, ANSI/RESNET/ICC 380, ASTM E3158 or ASTM E1827 or an equivalent method approved by the code official. The measured air leakage shall not exceed 0.25 cfm/ft^2 of the building thermal envelope area at a pressure differential of 0.3 inch water gauge (75 Pa).

AND/OR

C402.5.1.4 Dwelling and sleeping unit enclosure testing. The dwelling or sleeping unit envelope shall be tested in accordance with ASTM E779, ANSI/RESNET/ ICC 380, ASTM E1827 or an equivalent method approved by the code official. The measured air leakage shall not exceed 0.20 cfm/ft^2 of the testing unit enclosure area (or 3ACH) at a pressure differential of 0.2-inch water gauge (50Pa).

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 Building or Dwelling Unit Enclosure Area

Three empty rectangular boxes for inputting CFA, Volume, and Enclosure Area.

Test Results

CFM50 / dwelling unit enclosure area

Empty rectangular box for CFM50 input.

CFM/sqft of dwelling unit enclosure area

or

ACH50 = CFM50 x 60 / Volume = ACH50

Empty rectangular box for ACH50 input.

ACH50

Picture of Guage test results

Large empty rectangular box for pasting a picture of gauge test results.

Testing company:
Tester Name (print):
Signature:
Phone:
Email:
Certification #

Five horizontal lines for entering testing company, tester name, signature, phone, and certification number.



# City Of Boulder Colorado Energy Conservation Code Commercial 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:

## Dwelling and Sleeping Unit Duct System Leakage Testing:

C403.12.3 Ducts shall be 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 Result**

Duct tester fan flow cfm@25

--	--	--	--

**Post Construction Total Duct Leakage Result**

Duct tester fan flow cfm@25

--	--	--	--

**Duct System serves ≤ 1200 SQFT leakage target 50CFM**

Duct tester fan flow cfm@25

--	--	--	--

Picture of Guage test results

Testing company: \_\_\_\_\_

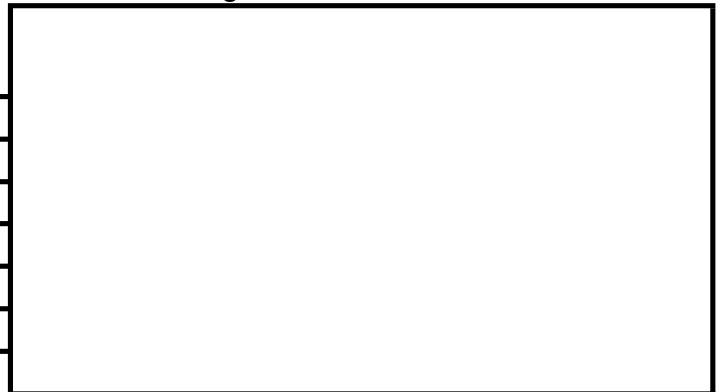
Tester Name (print): \_\_\_\_\_

Signature: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

BPI or Other Cert #: \_\_\_\_\_





**City Of Boulder Colorado Energy Conservation Code  
Commercial Dwelling Unit Ventilation 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:

**Dwelling Unit Ventilation Flow Measurements:**

C403.7.2.2 Testing. Mechanical ventilation systems shall be tested and verified to provide the minimum ventilation flow rates required by Section C403.7.2

**Bath and Powder room Ventilation/Exhaust flow ≥ 50 CFM**

System 1 Location	System 2 Location	System 3 Location	System 4 Location	System 5 Location
Flow Rate	Flow Rate	Flow Rate	Flow Rate	Flow Rate

CFM

**Whole House Controlled Ventilation System**

Balanced Ventilation System

ASHRAE 62.2 Ventilation Target  CFM

Measured Ventilation Rate  CFM

**Kitchen Hood ventilation rate is ≥ 100 CFM**

Measured Ventilation Rate  CFM

OR

Exempt from testing:

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.

Testing company: \_\_\_\_\_

Tester Name (print): \_\_\_\_\_

Signature: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

Certification #: \_\_\_\_\_