



Residential Duct and Envelope Testing (DET) Form

Complete and submit this form to the inspector **prior to scheduling the final inspection**. For Group R buildings, testing agencies shall submit a summary report including a list of all units that are exempt from testing (Duct Leakage) and test results for all tested units, to include air leakage test reports for each tested unit.

Property Information

Provide the full address of property and Permit Application Number.

A

Property Address: _____

Permit Application Number: _____

Additional Energy Efficiency Compliance

Affirm development will comply with the additional energy efficiency requirements.

B

Additional Energy Efficiency Compliance (Optional)

I affirm the Improved Air Sealing and Efficient Ventilation System will comply with the Additional Energy Efficiency provisions of IECC 2021, Sections R408.2.5 and R401.2.1.

- Air Leakage Rate tested must be ≤ 3.0 ACH @ 50 Pa. (**Complete Section C Part I**)

Building Envelope Air Leakage

Complete this section for the Blower Door Test. Refer to the exception in Section N1102.4.1.2 / R402.4.1.2) for more details.

*Optional testing is not permitted where 'improved air sealing and efficient ventilation system' additional energy efficiency package is utilized. Optional testing result calculation is permitted only for:

- Attached single family and dwelling units in a multifamily building; and
- Buildings or dwelling units that are 1,500 sq. ft or smaller.

Note: Where blower door test fails, refer to the **Air Barrier and Insulation Installation checklist (V_004_CHK)** for minimum requirements.

C

Building Envelope Air Leakage - Blower Door Test

I. Test Result:

Fan Flow at 50 Pascals = _____ CFM50 Total Enclosure Area = _____ ft²

$$\text{ACH50} = \text{CFM50} \times 60 \text{ min} / \text{Area} = \text{_____} \quad \text{ACH50} \leq 3.0 \text{ ACH50}^{**}$$

**Where Prescriptive compliance methods are NOT utilized, air leakage rate testing results up to 5.0 ACH50 are permitted. Where the Improved Air Sealing & Efficient Ventilation System package is selected, a maximum 3.0 ACH50 air leakage testing result must be maintained. (Refer to the completed '2021 IECC Residential Compliance Path Selection Form' for compliance path)

II. *Optional Test Result Calculation:

Fan Flow at 50 Pascals = _____ CFM50 Total Enclosure Area = _____ ft²

$$\text{Leakage Rate} = (\text{CFM50} / \text{Area}) = \text{_____} \quad @50 \text{ Pa} < 0.30 \text{ CFM/ft}^2$$

Visual Inspection (Mandatory): Air Barrier and Insulation Installation Checklist has been completed and signed.

Special Inspection Agency: _____ Date: _____

Testers Name (print): _____ Signature: _____

Heating and Cooling System Duct Leakage

Complete this section for duct leakage testing of heating and cooling systems.

**Where ducts & air handlers are located entirely within the building thermal envelope, a maximum air leakage rate of 8.0 CFM/100 ft² is permitted

Note: Qualified professionals may be found at:

- <http://www.bpi.org/locator-tool/find-a-contractor>
- <https://www.hersindex.com/rater-verification/>
- <https://www.phius.org/find-professional>

D

Heating and Cooling Systems Duct Leakage

Energy code compliance path: Prescriptive (including REScheck) Performance or Energy Rating Index

Ducts & Air Handlers located **entirely within** the building thermal envelope**

Type of test performed:

- Rough-in without air handler (*Max Air Leakage Rate = 3.0 CFM/100 ft²*)
- Rough-in with air handler or Post construction (*Max Air Leakage Rate = 4.0 CFM/100 ft²*)

Test Result System 1**:

Fan Flow at 25 Pascals = _____ CFM25 Conditioned Floor Area (CFA) served by system = _____ ft²

$$\text{CFM25} / \text{CFA} \times 100 = \text{_____} \quad \text{CFM/100 ft}^2$$

Test Result System 2**:

Fan Flow at 25 Pascals = _____ CFM25 Conditioned Floor Area (CFA) served by system = _____ ft²

$$\text{CFM25} / \text{CFA} \times 100 = \text{_____} \quad \text{CFM/100 ft}^2$$

Declaration & Signature

I hereby certify that the information contained herein are true and correct to the best of my knowledge and belief.

Testing Company: _____ Testers Name (print): _____

Signature: _____ Date: _____

Special Inspections License No.: _____