

# TOWN OF INDIAN RIVER SHORES

## **Blower Door Testing and Mechanical Ventilation**

The Florida Building Code (FBC) requires blower door testing for all new residential dwelling units, major renovations and additions. This would include single family houses, town houses, duplexes, and **each** condominium and apartment unit where the building is three stories or less.

**NOTE: Additions, alterations, renovations, or repairs to an existing home's thermal envelope are exempt if the new construction is less than 85% of the thermal envelope.** The FBC further requires mechanical ventilation if the blower door test has a result of less than seven (7) air changes per hour (ACH), and the Energy Code requires that the ACH be three (3) or less.

### Who can perform the blower door test?

Individuals with the following certifications/licensures will be approved:

1. Individuals defined under FL 553.993 (5) or (7)
  - Energy Auditor or Energy Rater
  - Currently Certified through RESNET or BUILDING PERFORMANCE INSTITUTE
2. Individuals licensed under FL 489.105 (3) (f), (g) or (i);
  - Class A Air Conditioning Contractor
  - Class B Air Conditioning Contractor
  - Mechanical Contractor
3. Individuals who have obtained blower door testing certification from a recognized agency

### What needs to be submitted and when?

The attached Blower Door Test Form is to be completed by the tester along with tester's certifications. The Blower door test form is required to be signed by the license holder or the certificate holder. The blower door test form is to be provided to the Town of Indian River Shores Building Dept. via [inspections@irshores.com](mailto:inspections@irshores.com). This must be received prior to issuance of Certificate of Occupancy

## TOWN OF INDIAN RIVER SHORES

## APPENDIX RD — FORMS

# **ENVELOPE LEAKAGE TEST REPORT (Blower Door Test)** **Residential Prescriptive, Performance or ERI Method Compliance** **2023 Florida Building Code, Energy Conservation, 8th Edition**

Jurisdiction:		Permit #:	
<b>Job Information</b>			
Builder:		Community:	Lot:
Address:			
City:		State: FL	Zip:
<b>Air Leakage Test Results</b>		<i>Passing results must meet either the Performance, Prescriptive, or ERI Method</i>	
<p><b>Prescriptive Method</b>—The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding 7 air changes per hour at a pressure of 0.2 inch w.g. (50 Pascals) in Climate Zones 1 and 2.</p>			
<p><b>Performance or ERI Method</b>—The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding the selected ACH(50) value, as shown on Form R405—2023 (Performance) or R406—2023 (ERI), section labeled as infiltration, sub-section ACH50.</p> <p><input type="radio"/> ACH(50) specified on Form R405—2023-Energy Calc (Performance) or R406—2023 (ERI):</p>			
<input type="radio"/> $\frac{\text{CFM}(50)}{\text{Building Volume}} \times 60 = \text{ACH}(50)$		<p><u>Method for calculating building volume:</u></p> <p><input type="radio"/> Retrieved from architectural plans</p> <p><input type="radio"/> Code software calculated</p> <p><input type="radio"/> Field measured and calculated</p>	
<input type="checkbox"/> <b>PASS</b>			
<p><input type="checkbox"/> When ACH(50) is less than 3, mechanical ventilation installation must be verified by building department.</p>			
<p><b>R402.4.1.2 Testing.</b> The building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding seven air changes per hour in Climate Zones 1 and 2, and three air changes per hour in Climate Zones 3 through 8. Dwelling units with an air leakage rate less than three air changes per hour shall be provided with whole-house mechanical ventilation in accordance with Section R403.6.1 of this code and Section M1507.3 of the <i>Florida Building Code, Residential</i>. Testing shall be conducted in accordance with ANSI/RESNET/ICC 380 and reported at a pressure of 0.2 inch w.g. (50 pascals). Testing shall be conducted by either individual as defined in Section 553.993(5) or (7), <i>Florida Statutes</i>, or individuals licensed as set forth in Section 489.105(3)(f), (g) or (i) or an <i>approved</i> third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the <i>code official</i>. Testing shall be performed at any time after creation of all penetrations of the <i>building thermal envelope</i>.</p> <p><b>Exception:</b> Testing is not required for additions, alterations, renovations or repairs of the building thermal envelope of existing buildings in which the new construction is less than 85 percent of the building thermal envelope.</p> <p>During testing:</p> <ol style="list-style-type: none"> <li>Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures.</li> <li>Dampers including exhaust, intake, makeup air, backdraft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures.</li> <li>Interior doors, if installed at the time of the test, shall be open.</li> <li>Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed.</li> <li>Heating and cooling systems, if installed at the time of the test, shall be turned off.</li> <li>Supply and return registers, if installed at the time of the test, shall be fully open.</li> <li>If an attic is both air sealed and insulated at the roof deck, interior access doors and hatches between the conditioned space volume and the attic shall be opened during the test and the volume of the attic shall be added to the conditioned space volume for purposes of reporting an infiltration volume and calculating the air leakage of the home.</li> </ol>			
<b>Testing Company</b>			
Company Name: _____		Phone: _____	
I hereby verify that the above Air Leakage results are in accordance with the 2023 Florida Building Code, Energy Conservation (8th Edition) requirements according to the compliance method selected above.			
Signature of Tester: _____		Date of Test: _____	
Printed Name of Tester: _____			
License/Certification #: _____		Issuing Authority: _____	