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# Policy Regarding: Blower Door Testing – Sample Testing

# 1. Introduction

**Blower Door Test required -** 2012 IECC Section R402.4.1.2 (Montana Amended)

The building or dwelling unit shall be tested with a blower door test and verified as having an air leakage rate not exceeding four air changes per hour or less when tested at 50 Pascal – (4 ACH50).

## 2. Scope

This policy will apply to all multi residential projects with six or more dwelling units in a building.

Note: Buildings with fewer than 6 units cannot be sampled. All individual dwelling units in buildings with 5 or fewer units must be tested.

#### 3. Procedure

Sample testing for any project must be pre-approved by the Building Division.

All individual dwelling units must be tested in buildings with fewer than 6 units.

To obtain approval, the applicant must submit a floor plan of each floor that requires testing to the Building Division. The floor plan must show the project information, including the job address and the applicant's contact information.

In addition, the floor plan must show each dwelling unit with square footage and specify each unit type. Verify the building orientation with a North arrow on the floor plan.

The actual sample units to be tested will be designated by Building Division staff and noted on the floor plan.

Testing shall be conducted by an approved party. A written report of the test results shall be signed by the party conducting the test and provided to the code official along with the approved testing floorplan.

At least one of each type of unit on each floor, with a minimum of 25% of total units on each floor shall be tested.

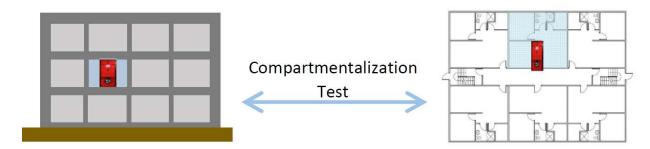
When a failure occurs in one unit type, two additional units of the same type shall be tested. If there are additional failures of that unit type, off of those unit types shall be tested.

All failed units shall corrected so that they are in full compliance with the minimum testing standards.

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## There are several methods used to measure air leakage from multifamily buildings.

The *compartmentalization* test is similar to a single-family home test. A single blower door is used to test one unit and the result will include air leakage to adjacent spaces. This is the simplest and most commonly used method.



Another option is the *whole-building* test. This test measures only leakage to the outside but usually requires multiple blower door fans and multiple operators. On very large buildings this can be prohibitive. Because all spaces in the building are under the same pressure, inter-unit leakage is negated. Factors such as building height, design, stage of construction, and especially weather on the testing day can make a whole-building test a challenge.



### 4. Exceptions

Generally, there should be no exceptions to this policy.

The need for an exception or modification to this policy will be decided on a case by case basis, jointly, by the Building Inspector and the Chief Building Official.