

RED1-365-22

IECC: R403.6.3, R403.6.4 (New)

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2024 International Energy Conservation Code [RE Project]

Revise as follows:

R403.6.3 Testing. ~~Mechanical~~ Each mechanical ventilation systems shall be tested and verified to provide the minimum ventilation flow rates required by Section R403.6, in accordance with ANSI/RESNET/ICC 380. Where required by the code official, testing shall be conducted by an *approved* third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official.

Exceptions:

1. Kitchen range hoods that are ducted to the outside with 6-inch (152 mm) or larger , a length of 10ft (3048 mm) or less, and not more than two 90° elbows or equivalent shall not require testing.
2. A third-party test shall not be required where the ventilation system has an integrated diagnostic tool used for airflow measurement, programmable airflow settings, and a user interface that communicates the installed airflow rate.
3. Where tested in accordance with Section R403.6.4, testing of each mechanical ventilation system is not required.

Add new text as follows:

R403.6.4 Dwelling unit sampling. For buildings with eight or more dwelling units the mechanical ventilation systems in the greater of seven, or 20 percent of the dwelling units in the building shall be tested, including a top floor unit, a ground floor unit, a middle floor unit, and the unit with the largest conditioned floor area. Where buildings have fewer than eight dwelling units, the mechanical ventilation systems in each unit shall be tested. Where the ventilation flow rate of a mechanical ventilation system is less than the minimum permitted mechanical ventilation rate, corrective actions shall be made to the system and the system retested until it passes. For each tested dwelling unit that has a lesser ventilation flow rate than the minimum permitted ventilation flow rate, an additional three dwelling units, including the corrected unit, shall be tested.

Reason: The committee approved a sampling methodology for demonstrating compliance in the envelope leakage and duct leakage sections. Not approving the same methodology and as a result requiring every bath fans, kitchen hoods, and supply fans to be tested in every dwelling unit does not make sense. The ventilation testing can be more time-consuming than the duct leakage and envelope testing while the resulting negative impact of non-compliance of ventilation systems is less than that of the envelope and duct leakage testing.

Updated Simulated Path table to give direction on how to input results when testing is performed with or without a sampling methodology.

Cost Impact: The code change proposal will decrease the cost of construction.

Reducing the number of tests required to demonstrate compliance will reduce the burden and cost of compliance verification.