TECHNICAL BULLETIN

Code Effective Date: October 3, 2016

Source Document:
19NYCRR 1240—Energy Code of New York State-2016 (ECNYS)
19NYCRR 1220—Residential Code of New York State-2016 (RCNYS)

Topic: Municipal Code Enforcement and Administration
Mandatory ACH 50 testing for Residential Construction
Exceptions for Non-Isolated Building Additions.

This document provides guidance to assist code enforcement officials in an understanding of the mandatory requirements for building envelope testing of Residential Buildings as required by the 2016 New York State Energy Code and the 2016 New York State Uniform Code (Residential Code).

As of October 3, 2016, all new Residential Construction must comply with the newly mandated ACH 50 or the so called “Blower Door” testing requirement which assures that the code required maximum allowable air leakage is not exceeded. This requirement is outlined in Section N1102.4.1.2 of the 2016 Uniform Code (Residential Code), and also Section R402.4.1.2 of the 2016 Energy Code. Since this testing requirement is now mandatory, the ACH 50 test must be performed on every dwelling unit constructed in New York State. The maximum allowable rate of air leakage as verified by the ACH 50 test is 3 air changes per hour. The testing procedure is to be performed at any time after the creation (and completion) of all of the required building penetrations. The testing procedure is allowed to be conducted by a third party testing agency or individual with qualifications acceptable to the Code Enforcement Official. A written report of the result of the test shall be signed by the party conducting the test, and shall be provided to the Code Enforcement Official.

1 In the case of Multiple Family dwelling units, in building of three stories or lesser in height, a sampling test protocol is allowable, in lieu of testing of every dwelling unit, or testing the entire building. Please refer to the 2016 Supplement to the New York State Energy Conservation Construction Code, Part 3, and Section 3.11 for specifics of the test protocol.
For convenience, a listing of available Third Party Energy Raters\(^2\) who may be able to provide services to complete the required testing, please see;

http://www.nyserda.ny.gov/Contractors/Find-a-Contractor/Home-Energy-Raters

Documentation of the ACH 50 test result

A written report of the results of the test must be signed by the party conducting the test, and the report must be provided to the Code Enforcement Official having jurisdiction, as evidence of compliance with the Mandatory Air Leakage requirements of the New York State 2016 Uniform Code and the New York State 2016 Energy Code.

Exceptions for Non-Isolated Building Additions, and Building Alterations

In our opinion, it is not practical to require an ACH 50 test for building additions and alterations except in the following situations;

1.) The Building Addition envelope is isolated/separated from the envelope of the existing building.

2.) Existing, non-conditioned space which is isolated/separate from the envelope of the existing building, is converted to conditioned space.

3.) Alterations of existing buildings where the existing building envelope’s air barrier, including all envelope components’ (including windows and doors) is altered in its entirety.

In our opinion it is more practical, (and is applicable) to require full inspection of the building envelope in accordance with the provisions of the Energy Code specific to Air Barrier and Insulation Installation. These requirements are outlined in Section R402.4.1.1 (N1102.4.1.1) and Table R402.4.1.1 (N1102.4.1.1). These are provisions of the code, and remain the sole method of assurance of a complaint building envelope for Non-isolated Building Additions, and Building Alterations. The CEO at his/her discretion, may require a third party inspector to carry out the detailed inspections as is allowed by Section R402.4.1.1 (N1102.4.1.1).

John R. Addario, PE, Director
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