

NORTHEAST CREEK HOUSING

Blower Door Test Report
Houses 29 – **TEST #2**

Tests conducted 12.14.07. Report prepared by John Gordon.

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Introduction: The primary purpose of this test was to conduct a “test drive” of Bowman new blower door equipment. This report is supplemental to 11.12.07 test report.

Construction Status: In addition to those items noted in Test #1, the following had been completed. Plumbing and electrical rough-in; installation of cellulose insulation system at walls and roof; installation of rigid foam insulation at attic; sheetrock installed (NOT taped); thru-wall exhaust ducts for kitchen hood and bathroom exhaust installed and sealed; exterior doors (basement, front and rear) installed; and temporary heating appliance (pellet stove in basement) operational with combustion air being drawn from the interior environment. NOTE: No improvements made to window air sealing.

Test Results:

Building Shell Surface Area and Building Volume Amounts:

Building Shell = 4,135 SF
Building Volume = 21,934 CF

Blower Door Reading:

510cfm50

Air Sealing Target:

If the target is **1.2 ACH50** and interior volume is 21934 c.f., then the cfm50 target is:

1.2 ACH50 x 21934 c.f. = 26321 cfh50
26321 cfh50 / 60 min / hr = **439 cfm50**

ACH Ratings:

510cfm50 x 60 min. = 30,600 cfh50
30600 cfh50 / 21934 c.f. = **1.39 ACH50**

Air Leakage Rate (Target = .1 cfm/sf shell):

510cfm / 4,135 sf = **.12 cfm / sf shell**

Conclusion: 26% improvement over first test - the project is closing in on targeted performance.