

Air Tightness Requirements for New 1&2 Family Dwellings and Ancillary Buildings (coach and laneway homes)

Home airtightness requirements (3.5 ACH @50Pa for single family and 2.1 cm²/m² NLA for coach and laneway homes) have been the code-minimum requirement in the City of Vancouver since January 1st, 2015 when the 2014 VBBL was put in to effect.

Starting April 2018, builders of new homes will be notified by the building official at NEC inspection (foundation is poured, soon to start framing) that the following blower door test results must be achieved to pass inspection:

1&2 Family Dwellings:

Pre-Drywall (mid-construction): 5.0 ACH @ 50Pa

Final / Pre-occupancy: 3.5 ACH @ 50Pa

Ancillary Buildings (e.g. coach and laneway homes) with <1,200 sq.ft. floor area

Pre-Drywall (mid-construction): 3.0 cm²/m² NLA

Final / Pre-occupancy: 2.1 cm²/m² NLA

To ensure a passed air tightness test, it is highly recommended to:

1. Plan ahead: have a continuous air barrier strategy outlined at the design stage, including interior partition walls between two family dwellings
2. On-site supervision: have a dedicated 'air-tightness boss' to provide oversight and ensure continuity is maintained
3. Repair leaks at pre-drywall stage: while the minimum requirement to pass inspection at mid-construction is 5.0 ACH (3.0 NLA), it is recommended to achieve <3.5 ACH (2.1 NLA), as repairing leaks is much less intrusive at this pre-drywall stage
4. Take an airtightness course: learn how to design and install an effective air barrier in a hands-on class

Air tightness courses

Taking an airtightness course will help you understand the path to achieving the City VBBL requirements. One day air-tightness courses are available through BCIT and Small Planet Supply. <http://www.smallplanetsupply.com/vancouver-airtightness-1>

Relaxations to meeting code will no longer be permitted through airtightness course participation.

BC Housing Illustrated Guide

The most effective air barrier strategy may change depending on the envelope design, location and the penetrations and junctions. Refer to the [R22+ Effective Walls in Residential Construction in BC Guide](#) for more guidance and illustrations.