

Advanced Building Science Asynchronous Course Syllabus

Successfully completing the CHBA Net Zero Builder Training is a requirement for Builders, Renovators, and Energy Advisors participating in the CHBA Net Zero Home Labelling Program.

This course qualifies as a pre-requisite for the CHBA Net Zero Builder Training.

Participants of this course are required to have a copy of the CHBA Builders' Manual to reference the Building Science details.



For those who need to know how to build homes in one of the toughest climates on earth, the CHBA Builders' Manual is the most authoritative guide you will find for building superior energy-efficient housing.

Order this bestseller at www.chba.ca/chba-builders-manual.

Overview

Since R-2000 launched in the 80's we've learned a lot about best practice techniques, materials, and systems for builders to develop high performance homes - with the building science that underlies it all forming the critical foundation upon which we built our Net Zero courses on. In this course participants can learn from the experience gained from decades of constructing high performance homes from coast to coast to coast.

This course starts by reviewing the history of high-performance homes and Net Zero Energy (NZE) housing in Canada. Then it explores how to use the "House as a System" approach to optimize energy efficiency and home occupant comfort. It covers air barrier technologies, including thermal transfer, vapour barriers, and moisture management in addition to how changes in the envelope impact HVAC systems in high-performance homes. Throughout the course, participants will explore real-world examples and discover tips for building homes that meet Tier 2, Tier 3 and 25–50% energy performance improvement over code.

Course modules include:

- The history of building science
- Managing the flow of heat, air and water
- Water resistive barriers in homes
- Air barriers in homes
- Vapour control in homes
- Space heating and cooling, and ventilation systems

A passing grade of 75% or better is required to receive the course certificate and to be eligible to enroll in the CHBA Net Zero Builder Training course.

Audience

This course qualifies as a pre-requisite for the CHBA Net Zero Builder Training. Successfully completing the CHBA Net Zero Builder Training is a requirement for Builders, Renovators and Energy Advisors participating in the CHBA Net Zero Home Labelling Program. For more information see the <u>Program Requirements</u>.

This course is also recommended for designers such as Architectural Technologists, Architects, Engineers, HVAC Designers, as well as Building Officials, and Trades.

When / Cost

The course is delivered in an online asynchronous format, which enables you to log in and take each module at your own pace.

We anticipate that the course will take between 6 to 8 hours to complete, and we encourage you to complete the course within 1 week of starting; we've found students achieve the best results by completing the course within one week of their initial log in.

Upon successfully completing your exam, your course certificate will be available for download in the CHBA Absorb platform.

You can register for this course here.

CHBA member price: \$500 (less \$400 rebate = \$100*)
Non-member price: \$750 (less \$400 rebate = \$350*)

TAKE ADVANTAGE OF REBATES!

As part of CHBA's <u>Enabling Tiered Codes</u> — <u>Implementation and Market</u>

<u>Preparedness</u> project, funded by Natural Resources Canada (NRCan) under the Codes Acceleration Fund (CAF), we're pleased to offer rebates for this course. Please note that funding is limited, and rebates will be provided on a first come, first served basis. *Learn more <u>here</u>*.

Continuing Professional Development (CPD) Points

This course is accredited for 16 CPD points through BC Housing.

NOTE: This course does NOT meet the "Construction Technology" qualification requirement for New Residential Builders as set out by the Licensing and Consumer Services Branch of BC Housing.



Questions? Need Tech Support?

If you have any questions or technical difficulties, please email us learning@chba.ca. Our offices are open Monday to Friday from 9 to 5 ET and we will endeavour to respond within 1 business day of receiving your email.

For more information on the Net Zero Home Labelling Program visit www.chba.ca/nze.

The consumer webpage is www.NetZeroHome.com.

To learn how the CHBA Net Zero Council is working to remove the barriers to voluntary adoption of Net Zero and Net Zero Ready Homes, visit www.chba.ca/nzc.

^{*}To those students who pass the exam. Learn more here.