

# LEEP TECHNICAL FORUM

LOCAL ENERGY  
EFFICIENCY  
PARTNERSHIPS

in **B.C.**

January 16 & 17, 2020  
January 20 & 21, 2020  
January 23 & 24, 2020  
January 27 & 28, 2020  
January 29 & 30, 2020  
February 3 & 4, 2020

Vancouver  
Prince George  
Kamloops  
Victoria  
Nanaimo  
Abbotsford



Pending Approval:  
12 Continuing Professional  
Development Credits

The BC homebuilding industry is searching for cost effective and robust ways of building high performance homes. **This Forum was developed to address four of the gaps BC Builders identified** during LEEP Technology Forums and LEEP Builder Exchanges. Resulting program as follows:

**DAY 1 09:30-18:00**

AM **Costing High Performance Housing**  
PM **High Performance Wall Systems**

**DAY 2 07:30-15:30**

AM **Heat Pump System Best Practice**  
PM **Integrated Design Process**

**WHEN:** Dates as listed above. Registration at 9:30 on Day 1 and 7:30 on Day 2. Breakfasts & lunches provided on both days. Forum from 10:00-18:00 on Day 1, and 8:00-15:30 on Day 2.

**REGISTRATION:** Please fill out this 1-minute [registration questionnaire](#), which will also direct you to visit the event page of the website of the local CHBA chapter to register.

**DELIVERY:** LEEP in BC is supported by the following organizations:

*Canadian Home Builders' Association, including  
Homebuilders Association Vancouver (HAVAN)  
CHBA Northern BC  
CHBA Central Interior  
CHBA Vancouver Island  
CHBA Fraser Valley*

*BC Housing Research Centre  
BC Hydro  
FortisBC*



## Day 1 Morning (starts 10:00) Costing High Performance Housing

Builders, designers and other industry participants will work together to use local pricing and the results of 1000s of case study HOT2000 runs to find the most cost effective ways of reaching step code energy targets or CHBA's Net Zero Ready label. The spreadsheet **LEEP Costing Tool** allows you to select various energy conservation measures (ECMs) and instantly see the impact on energy consumption and construction costs.

Available Performance Levels	Material Options	Upgrade Cost	Percent Incremental	Include Design
<b>Roof Insulation Options</b>				
R-39.2	Base Case	\$0	-	Yes
R-60	Fiberglass blow-in	\$885	44%	Yes
R-80	Fiberglass blow-in	\$1,955	96%	Yes
<b>Exterior Walls</b>				
R-16.5	Base Case	\$0	-	Yes
Max 2x6 (R-24 batt) R-18.2	Base Case with R24 batt	\$2,324	14%	Yes
R-22	Lowest Cost Option	\$3,455	20%	Yes
R-24	EPS	\$4,505	27%	Yes
R-30	Lowest Cost Option	\$6,440	38%	Yes
R-36	Lowest Cost Option	\$9,155	54%	Yes
R-40	VPS	\$13,180	78%	Yes

## Day 1 Afternoon (finishes 18:00) High Performance Wall Systems

Builders looking for information on NEW best practices and practical assembly details for high-performance wall systems should register for this Seminar.

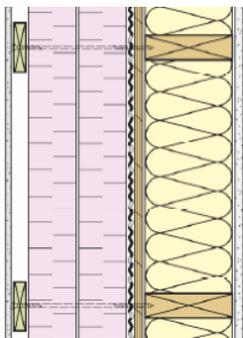
Multiple Wall Systems suitable for use in Net Zero or Passive House projects with wood framing, will be presented along with the science to explain the 'how' and 'why'. BC Building Code will be used as a reference to spur questions and discussion.

This seminar will provide reliable and tested information on the building science of high-performance wall assemblies including; choice of materials, tapes and fasteners, various options for water and vapour control, and window installation in thick-walls.

The 1-minute [registration questionnaire](#) will help us customize the workshop to the interests of local builders.



Images courtesy of Odessa Group, Cresco, and Brody Developments



## Day 2 Morning (starts 08:00) Heat Pump System Best Practices



Air source heat pump manufacturers have been rapidly enhancing their products and systems. Builders need to know how to compare options and work with their designers and contractors to select systems that best fit their projects. These decisions effect robustness, first cost, comfort, operating efficiency, and operating costs.

Participants at this session will learn what to ask of their mechanical designers and contractors to get systems sized correctly based on the outdoor temperature range in their region and capacity needs. They will also consider cost effective ways of distributing conditioned air, and cost effective commissioning steps to improve operation.

## Day 2 Afternoon (finishes 15:30) Integrated Design Process



Finding the right energy targets for your builds, selecting the pathways for reaching them, and coordinating the implementation on site is challenging due to extra design coordination, approval time, sub-trades training, and quality assurance required on site.

Small details and early decisions can make a big difference in the long run. The Integrated Design Process (**IDP**) is a proven method builders have used to successfully effect change. Join us to learn how this collaborative inter-disciplinary process works, see case study illustrations of how builders have used it effectively, and consider how you could apply it to help you reach your goals.

The 1-minute [registration questionnaire](#) will help us customize the workshop based on the roles of participants at each location.



# Registration Information and Logistics

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**REGISTER:** This 1-minute [registration questionnaire](https://www.surveymonkey.com/r/GTLNQZL), will direct you to the registration page.  
<https://www.surveymonkey.com/r/GTLNQZL>

**COST:** Includes breakfasts and lunches. For rates and options, see registration link.

**LAPTOP with Excel:** Please bring a laptop **with Excel installed** and with minimum **two hours** worth of battery life remaining. This will allow you to follow the **LEEP Costing Tool** demonstration more closely. If you do not have a laptop, please bring a USB to copy the costing tool to bring home to your computer.

## LOCATION:

### Local CHBA Chapter

<b>Jan 16 &amp; 17, 2020 (Th/F)</b>	<b>Vancouver</b>	<b>HAVAN</b> <i>Delta Hotels by Marriott Conference Centre, 4331 Dominion St, Burnaby</i>
<b>Jan 20 &amp; 21, 2020 (M/Tu)</b>	<b>Prince George</b>	<b>CHBA-NBC</b> <i>Sandman Signature Hotel, 2990 Recreation Pl, Prince George</i>
<b>Jan 23 &amp; 24, 2020 (Th/F)</b>	<b>Kamloops</b>	<b>CHBACI</b> <i>Colombo Lodge, 814 Lorne Street, Kamloops</i>
<b>Jan 27 &amp; 28, 2020 (M/Tu)</b>	<b>Victoria</b>	<b>CHBAVI</b> <i>Hotel Grand Pacific, 463 Belleville St, Victoria</i>
<b>Jan 29 &amp; 30, 2020 (W/Th)</b>	<b>Nanaimo</b>	<b>CHBAVI</b> <i>Nanaimo Golf Club, 2800 Highland Blvd, Nanaimo</i>
<b>Feb 3 &amp; 4, 2020 (M/Tu)</b>	<b>Abbotsford</b>	<b>CHBAFV</b> <i>TBC: Quality Hotel &amp; Conference Centre, 36035 N Parallel Rd, Abbotsford</i>

**REMINDER:** Builders, designers, mechanical contractors, framers and energy advisors are recommended to register for both days, and to invite others from your team, including specialist trades, to register for the day of most interest to them.

**NOTES:** NRCan thanks our regional partners for hosting this event.

CanmetENERGY's LEEP team developed the overall program and is responsible for the development and delivery of two sessions, these being: Costing High Performance Housing, and High Performance wall systems.

BC Housing oversaw the development and delivery of the Integrated Design Process session.

BC Hydro oversaw the development and delivery of the session on Heat Pump System Best Practices.

Participant fees support local CHBA administrative and logistical efforts to make this event a success. Food and venue costs are jointly covered by BC Housing, BC Hydro and FortisBC to reduce fees.

