

HVAC for High Performance Homes Workshop **Workshop Description and Outline**

Title:

HVAC for High Performance Homes Workshop 3 Hours

"What all trade professionals & builders need to know about HVAC Systems"

Brief highlights of the proposed workshop:

This workshop will show practical and cost effective strategies for ensuring high performance homes have appropriate HVAC systems that create comfortable, energy efficiency and healthier indoor environments. This full day workshop will start with a brief review of the elements included in and the relevance of high performance homes in the residential building industry. Participants will then learn how proper HVAC design and installation will enhance the performance features in a very cost effective way. Topics such as appropriate sizing methods, managing humidity, strategies for improving air quality and alternative heating and cooling options will be covered in detail. Participants will be encouraged to discuss successful strategies they have used and any barriers they have encountered in implementing high performance HVAC systems. Builders and trade contractors will take away key HVAC design parameters and installation methods that have been proven to provide better performance at lower overall cost.

Relevance to Attendees:

The workshop will be of most interest to:

- New home builders, remodellers and their estimators, designers, site supervisors
- HVAC contractors
- Designers and architects
- Building Officials and Energy Raters.

Learning Objectives:

- Learn how to identify high performance homes and why different approaches to HVAC systems are required.
- Learn the methods for and the advantages of properly sizing heating, cooling and ventilation system options.
- Identify new cost effective alternatives for HVAC systems that are appropriate for high performance homes.
- Identify the potential barriers to implementing better HVAC systems and learn strategies that others have used to overcome them.

Specific Topics to be Covered:

- Proper sizing methods for HVAC systems in the context of high performance homes
- New heating and cooling technologies available and how to implement them
- Improving distribution systems for greater comfort and lower operating costs
- HVAC strategies for controlling and improving indoor air quality
- Moisture control using HVAC systems
- Testing and verifying performance in both existing and new homes
- Managing house pressures and ensuring combustion safety

Note:

- The workshop will in all cases be adapted to the climate zone and HVAC practices of the local area where it is being presented to ensure it is relevant to participants.