CBPCA Home Performance Contractor Training - HVAC Testing and Remediation

Dan Perunko founded Balance Point Home Performance Inc., a home performance testing and retrofit company in 2006. He has 18 years experience in renovating residential buildings, replacing all of the components from the foundation to the roof. He continues to pursue performance related training in the fields of HVAC, insulation, and building science.

Training and lecturing are an easy fit with his background in experiential education. He has presented to the Nevada County Contractors Association's green building class, the Nevada County Clean Power Coop, the Sierra Green Building Association, and Tthe American Camping Associations Western Region.

Course Title:

CBPCA Home Performance Contractor Training
HVAC Testing and Remediation

Date: June 15 - 18, 2009

Cost: $1000.00 (per Participant)

Classroom Location: Kissler Ranch
15108 Old Auburn Rd.
Grass Valley, CA

Instructor Contact Information:
Dan Perunko: Office: 530.477.0695
cell: 530.320.9698
dan@balancepointhp.com

In order to complete your registration, please reply with the following information:

Name:
Company name:
Mailing Address:
Email:
Cell phone:
Office phone:

Mail or email or fax completed registration form with a copy of your check to:
Harry Ford
CBPCA
1000 Broadway, Suite 410
Oakland, CA 94607
harry@cbpca.org
fax; 510-463-2690

(We will hold your seat for 4 days pending receipt of your check.)

You may pay via PayPal by requesting an invoice from Scott Fable: scott@cbpca.org. Please signify the name of the class.

TUITION REFUND may be available based on Participant's meeting the application requirements. (Click here for more

information)

Questions regarding the application process and tuition refund, contact Barbara Hernesman; barbarah@cbpca.org

Workshop Overview:
This four day class will give students who have already developed basic skills in Home Performance Assessment (HPA) the opportunity to gain more hands on experience designing and installing HVAC systems to home performance specifications. The students will spend two days in classroom covering the six performance factors for HVAC systems. There will be additionally two days in the field testing equipment and installing ducts. This class requires "hands on" participation in the process of installation and testing applications. The procedures taught will be in line with Building Performance Institute (BPI) standards and the Green Home Energy Update (GHEU)Level I & II classes.

Prerequisites:
Participants should have completed GHEU Level I & II or an equivalent and have basic field experience. Participants should be able to operate the tools involved in HPA prior to attendance. Participants that have not come through the GHEU classes but have practical experience with HPA tools and procedures will be allowed to attend.

Portions of the class will be conducted in real crawlspaces and attics, therefore all participants should be physically able to work in these spaces. Participants should bring personal protective gear, ie ear plugs, safety glasses, coveralls, sturdy shoes and respirator. Please also bring the "Residential Energy" book and your GHEU Level I binder.

Instructor student ratio:
Maximum 10 participants per instructor
Class size will be 16 - 20 participants

Objectives:
Participants will gain competence in the assessment of existing homes. Topics covered in the workshop will include:
o System Sizing using Manual J
o Equipment efficiency
o Duct System Design and efficiency
o System Air Flow
o Duct Conduction and Insulation Strategies
o Proper Procedure for charge and air flow
o Combustion Ventilation
o Draft testing
o Carbon Monoxide testing
o Field testing HVAC systems
o Static Pressure
o Temperature Rise
o Room to Room Air flow
o Duct Leakage and Sealing Strategies
o Refrigerant Charge
o Line Set Condition and Size
o Combustion safety testing
o Field Duct Installation

o Duct assembly and sealing
o Plenum connections

Schedule:
Day one - Classroom - Review Performance Factors
Discuss design targets for each factor
Review science supporting factors as necessary
Discuss testing protocols for each factor
Day two - Classroom - Manual J Software for field house.
Explain manual load calculation
Class to calculate simple building load using manual technique
Demonstrate Manual J software
Visit field house and sketch floor plan
Class to work through load calculation and duct design for field house
Day three - Field Duct System Installation
Class to install ground source vapor barrier under home
Class to install duct system according to design completed on day two
Day four - Field Duct Installation and testing
Class to complete installation of duct system
Class to commission/test out their work
Class to test-out for combustion safety.