# **Energy Retrofits for Older Vermont Buildings**

On-Line Course: Tuesday, May 25, 2021 8:00am - 3:30pm

6 Credits: AIA-HSW, EEN & BPI

This year, Vermont's older buildings are being renovated at an unprecedented level due both to market pressure and to energy incentives. Guiding documents like Vermont's Residential and Commercial Building Energy Standards present one-size-fits-all approaches based on modern construction that can adversely impact older buildings. We need a coherent strategy for retrofitting older materials and assemblies that recognizes their value and nature. This course will focus on residential and small commercial buildings with a panel of experienced professionals discussing best practices. Run as a forum, this course invites all interested professionals, from those with experience to those who have basic questions.

Attendance is limited to 50 participants to ensure participation. Both the course content and the registration of attendees will be preferenced to Vermont professionals.

### **Course Description and Objectives**

Using 1-2 case studies, the panelists will focus an hour on each of the major considerations of a retrofit:

- 1. Foundation and basement/crawlspace floors
- 2. Exterior frame: walls and roofs
- 3. Windows & doors, including general leakage
- 4. Finishes, both exterior and interior and including chimneys/fireplaces
- 5. Mechanical systems & solar generation, including electrical
- 6. The remaining hour will be 15 minutes at the beginning as the overview ethics and a suggested approach-- plus 45 minutes at the end to address why this approach is important, including the problems of many energy raters. Resources such as sources of incentives and of preservation guidance will be shared as handouts.
- 7. There will be a half hour break for people to eat lunch as well as small breaks during the day.

#### At the end of this course you will be able to:

- Understand key differences in pre-WWII construction that require special consideration in retrofits.
- Be aware of risks of treating historic assemblies and materials like modern ones.
- Understand an approach to historic building retrofits that protects original construction yet meets energy code requirements.
- Know where to get further guidance for working with particular assemblies and materials.

 Optimize energy performance of an historic building while preserving or restoring it.

### **Panelists & Moderator:**

Judy L. Hayward (Preservation Education Institute and Historic Windsor Inc.)

Bob Neeld (Engineering Ventures) – structural engineer

Tom Perry (New Leaf Design) – builder

Chuck Reiss (Reiss Building and Renovation) – builder

Steve Spatz (Efficiency VT)

Alex Tolstoi (Vermont Property Preservation Consultants and Preservation Trust of VT)

Sandra Vitzthum (Sandra Vitzthum, Architect) – architect

## **Continuing Education Credits:**

This course is approved for:

- 6 AIA health/safety/welfare CEUs
- 6 EEN (Energy Excellence Network of Efficiency Vermont) credits
- 6 BPI (Building Performance Institute) credits

Participants may request certification for any or al of these credits. Paper certificates will also be issued.

## Registration

Space is limited. Call Sandy Vitzthum at 802-223-1806 or email her at vitzthum@sover.net

**Register Now**