Building Enclosures for the Future – Building Tomorrow's Buildings Today

Friday, May 2, 2014
Noon to 4:30 pm
Walsh Construction Office, 2905 SW 1st Avenue

This half day session will cover the latest in building enclosure technology for buildings in the Pacific Northwest. Presented by one of North America's leading building science research engineers, Graham Finch of RDH Building Sciences will provide an overview of emerging wall and roof assemblies that provide durable, cost effective and energy efficient performance.

Recent energy code changes will be reviewed including an opportunity to discuss solutions to meet these more stringent requirements. Recent building science research and field monitoring information will be presented, demonstrating how insulation materials perform under different climatic conditions and how R-values change with time and season. Strategies to construct highly insulated wall and roof assemblies and avoid thermal bridging will be presented, along with several case studies to illustrate how these emerging technologies have been utilized in new and existing buildings.

Learning Objectives

1. Review and understand changes to Oregon Energy Codes that impact building enclosure design strategies and whole building energy efficiency.
2. Understand the design requirements for wall and roof assemblies and how the selection of the right insulation is critical to reliable long-term performance.
3. Learn about several emerging design strategies being used for the construction of highly insulated wall and roof assemblies and how to apply these technologies to projects.
4. Understand the impact that the selection of building enclosure assemblies will have on the space-conditioning and overall energy use of a building.

Schedule

Noon – 12:30 – Lunch

12:30 – 12:45 – Introduction – Graham Finch, RDH

12:45 – 1:30 – Energy Codes in Oregon State – Recent & Upcoming Changes & Requirements for the Building Enclosure – Eric McDaniel or David Young - RDH

1:30 – 2:45 – Walls – Insulation Requirements, Alternate Assemblies, Cladding Attachment, Detailing, Thermal Bridging Considerations, Air Barrier Systems – Graham Finch, RDH

2:45 – 3:00 – Refreshment Break

3:00 – 4:00 – Roofs – Conventional Roof Assemblies – Insulation and Membrane Selection Considerations – Graham Finch, RDH

4:00 – 4:30 – Discussion – Q&A