

PIMA Educational Program:

Polyisocyanurate Insulation in the 2015 International Codes: Roofing, Reroofing and Walls

Course Length: 3 Hours

The International Code Council (ICC) publishes a coordinated set of model codes that provides comprehensive minimum requirements for the building and construction environment. These codes, often referred to as the "I-Codes", consist of a base building code (the *International Building Code* or IBC) and separate volumes addressing subjects such as plumbing, mechanical, residential construction, energy conservation and existing buildings, among others.

Topic 1

Most of the I-Codes are based on the default requirements for new construction. Roofing, however, is different. Most (about 75%) of the roof systems installed on US buildings end up on *existing* buildings, not new. Reroofing is one of the most common construction projects; most US buildings will have three or more roof systems during their useful lifespans.

In order to fully understand the code requirements for reroof projects, it is necessary to review three separate codes. While the IBC contains the basic material requirements for roof covering assemblies, other provisions for reroofing can be found in the International Existing Building Code (IEBC) and the International Energy Conservation Code (IECC). Recent clarifications and reorganizations to the IECC and IEBC for reroofing have improved the clarity of the code requirements, but given the need to coordinate the provisions across three codes, many users of the code will benefit from a reroofing review.

The PIMA session includes a discussion of the requirements and definitions for roofing, roof repair and reroofing (which includes roof recover and roof replacement) in the IBC, IEBC, and IECC. The program is intended to connect the dots and assist attendees in understanding the material and installation requirements for roof assemblies (including reroofing), as well as compliance with provisions for fire, structural, weather protection and energy efficiency.

Topic 2

Traditional wall envelope insulation design strategies are based on the use of cavity insulation, interrupted by framing members, cladding support hardware, and other penetrations. Employing a continuous insulation (CI) design to reduce thermal transmission due to those thermal short circuits has become an effective means to reducing building energy use.

This presentation provides a comprehensive overview of the application of continuous insulation. The presentation will instruct attendees in five topic areas; continuous insulation (CI), applications, energy code compliance, building code compliance and installation detailing. Attendees will gain a comprehensive understanding of the use, properties and benefits of as continuous insulation.