

GG297-14

1003.2.7, 605.2.

Proponent: Mike Fischer, Kellen Company, representing Center for the Polyurethanes Industry (mfischer@kellencompany.com)

Revise as follows:

605.2. Roof replacement. Above-deck insulation for roof replacement on an existing building where the existing roof assembly is part of the *building thermal envelope* and contains with insulation entirely above the deck and where the roof slope is less than two units vertical in 12 units horizontal (17 percent slope) shall be in accordance with Section 1003.2.7.

Revise as follows:

1003.2.7 Roof replacement insulation. For *roof replacement*, where the existing roof assembly is part of the *building thermal envelope* and contains insulation entirely above deck, roof replacement shall include compliance with the requirements of Table C402.1.2 or Table C402.2 of the *International Energy Conservation Code*.

~~For roof replacement on an existing building with insulation entirely above the deck and where the roof slope is less than two units vertical in 12 units horizontal (16 percent slope), the insulation shall conform to the energy conservation requirements for insulation entirely above deck in the *International Energy Conservation Code*.~~

~~**Exception:** Where the required R-value cannot be provided due to thickness limitations presented by existing rooftop conditions, including heating, ventilating and air conditioning equipment, low door or glazing heights, parapet heights, proper roof flashing heights, the maximum thickness of insulation compatible with the available space and existing uses shall be installed.~~

Reason: The 2012 IgCC contains provisions for roof replacement that differ from the recently approved clarification language in the 2015 IECC (see CE15-13). This proposal is necessary to align the two codes. The exceptions for slope and technical feasibility are removed since those options are not part of the base code and to remove a conflict because compliance to the IECC for envelope requirements is required by Section 605.1.

This proposal modifies the current Chapter 6 requirements and also inserts the new language in the 2015 IECC that directly addresses roof replacement.

The base technical requirement for the 2012 IgCC's thermal envelope requirements is a 10% reduction (improvement) in U-factor, but roof replacement in the IgCC is required only to upgrade to the current IECC code level for R Value or U-Factor. This consideration is an important acknowledgement of issues facing roofing contractors when reroofing. Furthermore, the IgCC Section 605.1.1 does not include instructions for R-Value increases to achieve a 10% improvement over the IECC. While that distinction is important because of the difficulty in applying a 1.1 multiplier to R-Values for assemblies where framing factors and other variables affect the installed thermal resistance of the assembly, roof replacement for insulation entirely above deck is considered to be a *continuous* insulation material. By retaining Table C402.2 (R- Value) of the IECC in the new language in Section 1003.2.7, this proposal will keep compliance for reroofing under the IgCC a simpler process while maintaining equivalent energy efficiency. Reroofing is one of the most common commercial building renovations; it is critical that compliance be streamlined for those projects.

Cost Impact: Will not increase the cost of construction

GG297-14 : 1003.2.7#1-FISCHER872