GEW104-14 607.6.1

Proponent: Brenda Thompson, Chair, representing Sustainability, Energy, High Performance Code Action Committee

Revise as follows:

607.6.1 Buried Underground and below slab piping. Service hot water <u>Insulated piping that is</u> located under a concrete slab-on-grade floor or that is <u>buried underground shall be installed in a</u> waterproof conduit. The ends of the conduit shall terminate above the floor or above grade. piping installed within a slab or below grade shall be insulated in accordance with Section 607.6 and shall be placed within a physically protective, waterproof channel or sleeve having internal dimensions large enough so that the piping and insulation can be removed and replaced, and maintain its dimensional integrity during and after construction.

Exception: For <u>underground insulated</u> piping not other than that located under building slabs, insulation <u>a waterproof conduit</u> is not required <u>for the piping</u> where the insulation manufacturer stipulates indicates that the pipe piping insulation will <u>retain maintain it's the design</u> insulating value in underground <u>damp soil</u> applications in <u>damp soil</u> and where <u>the insulated piping is</u> installed in accordance with the <u>insulation</u> manufacturer's instructions.

Reason: The requirement for having insulated piping *removable* from the waterproof conduit does not save energy and is not a 'green' practice. It only serves to make the installation of the piping more expensive. The building industry has been burying millions of feet of service water heating system piping and none of it is removable because it doesn't need to be. If the type of piping is chosen correctly for the application and the design parameters for use of the piping are followed, the piping installation is a permanent installation. Yes, there might be some extremely isolated cases where piping might require repair or replacement but potential for that happening is the same for piping located anywhere in a building (above or below ground) whether the piping is hot or cold. The removability requirement is not feasible for large sizes or rigid types of piping. It is clear that the author of this section was only thinking about small diameter flexible tubing in a single family home application. The removability requirement is just not feasible for the vast majority of applications.

The exception was reworked because the wording didn't make sense: "insulation is not required where the insulation manufacturer..." A few words were changed/added to make the exception read with more clarity.

This proposal was submitted by the ICC Sustainability Energy and High Performance Code Action Committee (SEHPCAC). The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. In 2012 and 2013, the SEHPCAC has held six two-day open meetings and 50 workgroup calls, which included members of the SEHPCAC as well as any interested parties, to discuss and debate proposed changes and public comments. Related documentation and reports are posted on the SEHPCAC website at: http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx.

Cost Impact: Will not increase the cost of construction.

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