



Date: 10/28/22

Building Services – Chief Building Official code interpretation:

The following is a building code interpretation by the Chief Building Official explaining the intent and requirement of a specific code section that is not entirely clear and not concisely explained in the code.

Issue: Installing a space conditioning appliance (heating equipment) within a garage requires insulating the garage to code per 2021 International Energy Conservation Code (IECC) Section **402.2.12 Sunroom and heated garage insulation**. However, exceptions to this requirement allow lower insulation R-values for specific components assuming the garage is isolated thermally from the home (ie: insulation between house and garage). These component assembly requirements include ceilings (min R-24) and walls (min R-13). The above assumes the garage will not be used as a space for living, sleeping, eating or cooking. To provide additional clarity between new construction and existing garages where heating space conditioning equipment is installed see below.

1. 2021 IECC - Existing Buildings Section R501.2 requires that spaces that change from unconditioned to conditioned comply with code section R502 Additions and thus meet code as it applies to new construction. Within this section there is an exception where slab-on-grade insulation shall not be required when installation would require the demolition of existing permanent building components. However, when the allowances listed in detail (2) below are met it will not require that an existing garage slab-on-grade floor be insulated.
2. Where space conditioning within an existing garage is intended to be on a limited basis and controlled by a switch only when the garage is occupied the exceptions to the insulation requirements above shall apply. Such space conditioning appliances shall utilize controls for countdown timing or occupancy that turn off the space conditioning appliance when not utilized for temporary occupant comfort. In addition, a relay switch shall be utilized to turn off space conditioning when an overhead door is left open for 20 min or more.

Marcus Coldiron
Chief Building Official