

Examples of how to insulate your foundation

Example 1:

R402.2.9 Basement walls.

Walls associated with conditioned basements shall be insulated from the top of the basement wall down to 10 feet (3048 mm) below grade or to the basement floor, whichever is less. Walls associated with unconditioned basements shall meet this requirement unless the floor overhead is insulated in accordance with Sections R402.1.2 and R402.2.8.

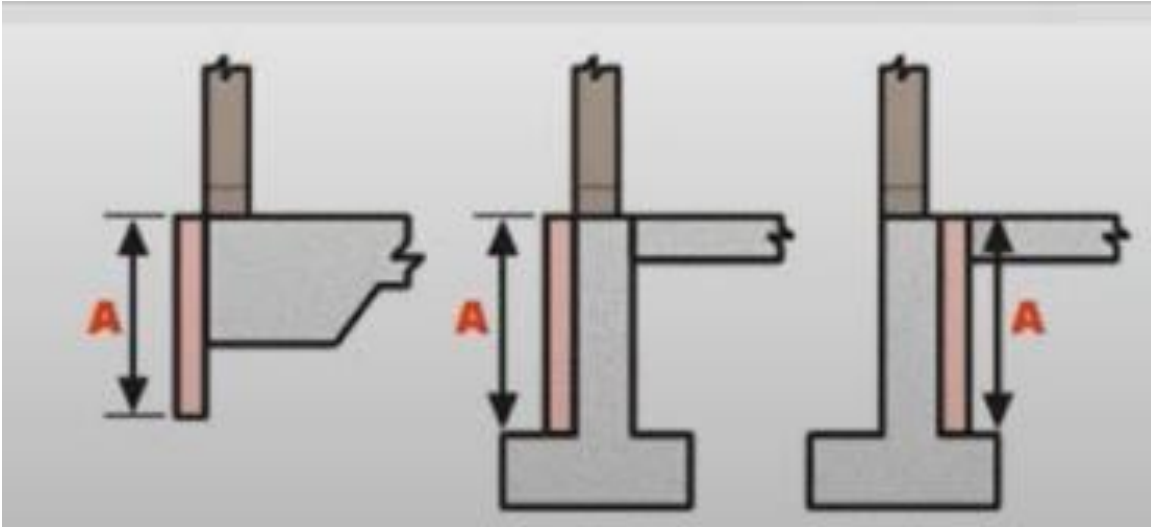


Figure 1 <https://www.energycodes.gov/technical-assistance/training/courses/rescheck-basics>

Example 2:

R402.2.10 Slab-on-grade floors.

Slab-on-grade floors with a floor surface less than 12 inches (305 mm) below grade shall be insulated in accordance with Table R402.1.2. The insulation shall extend downward from the top of the slab on the outside or inside of the foundation wall. Insulation located below grade shall be extended the distance provided in Table R402.1.2 by any combination of vertical insulation, insulation extending under the slab or insulation extending out from the building. Insulation extending away from the building shall be protected by pavement or by not less than 10 inches (254 mm) of soil. The top edge of the insulation installed between the exterior wall and the edge of the interior slab shall be permitted to be cut at a 45-degree (0.79 rad) angle away from the exterior wall. Slab-edge insulation is not required in jurisdictions designated by the code official as having a very heavy termite infestation.

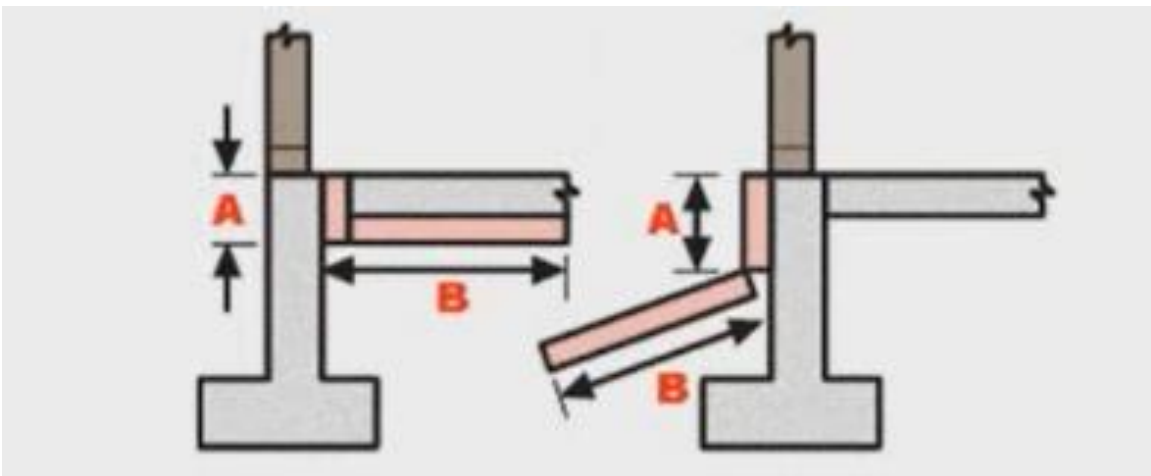


Figure 2 <https://www.energycodes.gov/technical-assistance/training/courses/rescheck-basics>

Helpful tips for converting a non-conditioned basement or garage into a conditioned space

Homeowners interested in converting non-conditioned space into conditioned space, specifically in a basement or on a slab should take the time to know the following IECC 2015 codes prior to planning their renovations. On both sides of this handout are helpful codes and illustrations on how to apply rigid foam insulation to your slab and foundation.

The minimum slab and basement R-value in our zone is R-10 according to the IRC 2015.

Note: If you should find a product which meets or exceeds the R-10 minimum insulation value and is not rigid insulation, you may provide specs of the product to a code officer to determine whether it is acceptable or not for your project.

Here are a few helpful codes:

R503.2 Change in space conditioning.

Any nonconditioned or low-energy space that is altered to become conditioned space shall be required to be brought into full compliance with this code.

Exception: Where the simulated performance option in Section R405 is used to comply with this section, the annual energy cost of the proposed design is permitted to be 110 percent of the annual energy cost otherwise allowed by Section R405.3.

R505.1 General.

Spaces undergoing a change in occupancy that would result in an increase in demand for either fossil fuel or electrical energy shall comply with this code.

R505.2 General.

Any space that is converted to a dwelling unit or portion thereof from another use or occupancy shall comply with this code.