

Entering an Addition in the REScheck Software

The addition (the newly conditioned floor space) complies with the code if it complies with all of the applicable code requirements. For example, requirements applicable to the addition of a new room would most likely include:

- Insulating the exterior walls, ceiling, and floor to the levels specified in the code.
- Sealing all joints and penetrations.
- Installing a vapor retarder in unventilated framed walls, floors, and ceilings.
- Identifying installed insulation R-values and window U-factors.
- Insulating and sealing any ducts in unconditioned portions or exterior components (walls, ceilings, or floors) of the new space.

There are three approaches to make an addition comply with the energy code:

1. The addition as defined above meets all code requirements. This approach does not require that the original portion of the building meet code requirements.
2. If the building combined with the addition complies with the code, the addition will also comply, regardless of whether the addition complies alone. For example, a sunroom that does not comply with the code is added to a house. If the entire house (with the sunroom) complies, the addition also complies.
3. In the 2000 and 2003 IECC, additions less than 500 sq ft. (46.5 sq meters) of conditioned floor area may meet the prescriptive envelope requirements in the table. To use this table, the total area of windows, doors, and skylights cannot exceed 40% of the gross wall and roof area of the addition.



Using REScheck to comply with approach #1:

- Ceiling - gross area (sq ft.) and insulation R-value.
- Exterior walls - gross area (sq ft.) of new exterior walls and insulation R-value (the existing exterior wall(s) that will become interior wall(s) once the addition is built are to be considered interior walls and should not be entered as part of the addition wall area).
- Windows/Doors - gross area (sq ft.) of windows and/or doors with U-factor from NFRC label or default table in the help section of REScheck.
- Floor - gross area (sq ft.) of addition and insulation R-value. If the floor is a slab, the length of the exterior slab edge should be entered in linear feet.

If your addition does not comply with the energy code:

- Increase the insulation R-values in the ceiling, walls, and/or floor if possible.
- Upgrade the windows (the lower the U-factor of the window, the better the window).
- Decrease the window area.