

THE Revised NEW HAMPSHIRE ENERGY CODES

Effective August 17, 2007, the International Energy Conservation Code 2006 is the state-wide energy code with which anyone building, renovating or adding to a home or commercial structure must comply in all towns and cities. The new code is a simplification of the prior code and the compliance tools are also less complex. There is now only one form. There are no separate forms for renovations or additions. There are no calculations required. There are no packages. The new form resembles the previous *Express NH* form. Please download the new form entitled *New Hampshire Residential Energy Code Application* (Form EC-1) from www.puc.nh.gov.

Please fill out both pages of the form completely, entering the planned window U-values and insulation R-values. Your planned R or U values must meet or exceed those required. Enter N/A if that section is not present or not being altered in your project. If you are building with steel studs or trusses, contact the PUC for the more stringent insulation requirements.

RESCHECK SOFTWARE If your planned structure will not meet the minimum requirements laid out in the EC-1 form page 2, you may use the REScheck software package in the IECC 2006 edition when the location is set for Concord, NH to try to show compliance. REScheck is a much more complex method of demonstrating compliance, requiring extensive calculations. Be aware that your building may no longer comply with the code using REScheck under the new code.

You may download REScheck from the PUC Energy Codes page. Go to www.puc.nh.gov, click on *Energy Codes* and follow the links. Printouts from the old NHcheck software will not be accepted. If you currently use NHcheck, go to the “Code” on the toolbar and select IECC 2006. You will note minor visible changes but there are significant changes behind the scenes:

- You must enter the **Conditioned Floor Area** on the **Project** page
- Area weighted window U value above .40 is no longer acceptable in this climate zone. That is, if the average U value of your window square footage exceeds .40, no trade-offs will compensate.
- Glazing percentages are no longer calculated so removing windows will not allow a structure to pass.
- You must enter an **SHGC** number. Enter either the value off the windows you plan to use or 1.0. The SHGC number is not considered in this climate zone.
- Click the **Check Compliance** button periodically to...check compliance.
- A heating system trade-off is available only if the orientations of the walls are entered.
- IECC 2000 NHcheck or REScheck print-outs will not be accepted.
- Mail the EC-1 page 1 and the REScheck *Compliance Certificate* along with simple plans to the PUC.

REScheck Area-calc module. This tool will help you calculate the areas of ceilings, windows, doors, walls and floors. You can access Area-calc from REScheck by clicking on Tools.

ARCHITECT AND ENGINEER CERTIFICATION In addition to the requirements for a certification letter, published on the PUC websites, professional certification shall include a statement of the method used to determine compliance with the energy code.

NEW CONSTRUCTION

- **Ceiling R-Value.** If you want to list different R-values for different ceilings you may still do so using the REScheck software approach. Note that you may substitute R-38 ceiling insulation for R-49 if you maintain the full value of the insulation over the outside plates.
- **Insulation of Domestic Hot Water pipes.** Any domestic hot water pipes in unconditioned space must be insulated to a minimum of R-4.

THERMALLY ISOLATED SUNROOMS These are additions having greater than 40% glazing to wall and ceiling area.

- The floor area may not exceed 500 square feet.
- Thermal isolation must be maintained from the rest of the house. (The sunroom addition must be separated from the house by insulated walls, doors and/or windows.)
- If the area is to be heated, a separate heating system or zone with a thermostat must control the heat in the sunroom. (These features allow the occupant to isolate the room from the rest of the house and chose to heat or not heat that room.)
- A sunroom may not be used as either a kitchen or a sleeping room.

ADDITIONS, ALTERATIONS, RENOVATIONS OR REPAIRS TO A BUILDING

“...(s)hall conform to the provisions of this code as they relate to new construction without requiring the unaltered portions of the existing building or building system to comply with all of the requirements of this code.”

If you renovate or repair a portion of the building, *that portion* must be brought up to code standards. Use form EC-1 to document the planned renovations. Mark inapplicable boxes N/A and briefly note the conditions of the addition or renovation project such as “Adding on top of existing structure” or simply “Replacing windows”.

You need not seek code certification under the following conditions:

- New storm windows installed over existing windows or doors.
- Glass only replacement in an existing sash or frame.
- Existing ceiling, wall or floor cavities exposed during construction provided these cavities are already filled with insulation.
- Construction where the existing roof, wall or floor cavity is not exposed.

ONLINE COMPLIANCE

You may submit your application on-line. If you are using the New Hampshire Residential Energy Code Application (EC-1 Form) you may fill it out, sign it and e-mail it to energycodes@puc.nh.gov.

If you are using REScheck you will need the following:

- **REScheck Software** completed for the project and saved as an '.rck' file. To download this software go to www.puc.nh.gov and click on energy codes.
- **Area Calc Module** '.acx' file. To use this module, access it through REScheck software tools and save it as a separate '.acx file'.
- **An electronic copy of your plan.** This may be a scanned plan saved with a standard format such as .jpg, .tif, or .gif.
- E-mail your '.rck' '.acx' and your scanned plans to energycodes@puc.nh.gov

The former Online submittal process has been eliminated.

Mail any remaining materials to the NH Public Utilities Commission, 21 South Fruit Street Ste 10, Concord NH 03301-2429.

Please send code related questions and requests for technical support for the REScheck software to energycodes@puc.nh.gov or by calling 603-271-6306.