



Building Guide ILLOWA Chapter of ICC



International Energy Conservation Code How to use RESCheck

The Energy Conservation Code applies to ALL new projects, including additions, renovations and new homes. Any project that is not built to this code is in violation of state law, regardless of whether the home is in an area that requires building permits or not. While there are other methods allowed to meet the energy code requirements, Res-Check is generally accepted and is readily accessible by non-design professionals.



U.S. Department of Energy

Building Energy Codes



The RESCheck report can be created online at WWW.ENERGYCODES.GOV. Full knowledge of the structure design is required— The information entered will be checked during construction to ensure the structure is being built as designed.

Res-Check-How to:

1. Go to WWW.ENERGYCODES.GOV
2. On the right side of the screen there are 3 boxes with the res-check logo. Click on the 3rd one down labeled "Rescheck-web".
3. Click "Register" and create a login. This allows you to work on your project periodically and the information entered will be retained for future sessions.
4. A new window will open. Click "Start Res-check".
5. In the upper right corner, name your project and save. A pop up will appear telling you the project saved. Click ok. You should save periodically in the event the program is closed unexpectedly or closed without a final save. Information entered since the last "save" will not be saved! You may re load the saved portion of the project at any time by clicking "Load Project" in the upper right hand corner.
6. In the "Code" drop down, select "2009 IECC", select your state, if the project is within city limits, select the city, if not, then select the county.
7. Under "compliance Method" select "UA trade off"
8. Select the project type and whether it is a 1/2 family or multi family dwelling.
9. Enter the Sq Ft of the all conditioned Floor Area, adding all floors and basement area together. (Crawl spaces and unheated garages are not conditioned space.
10. Click on "Edit Project Details" box on the right and fill in the name, address and zip. This will print on all reports so that the building department will be able to identify which project this report is associated with.
11. At the top of the page, click on the "Envelope" tab.
12. Click "ceiling", choose the type of ceiling this project has and click "Create Ceiling".
13. Note— if you accidentally create a component line, you can highlight it and click delete at the top of the page.
14. Under "gross Area" enter the outside wall to outside wall square footage of the ceiling area covering all conditioned space. Only include the garage area if the garage is conditioned. Do not count pitch of roof and squares of shingles unless you are applying sprayfoam to the underside of the roof deck.

****Foam insulation inside a structure SHALL be protected from heat and damage by minimum 1/2 gypsum wall board or *approved* equivalent. (R316.4)**

DISCLAIMER: ILLOWA Chapter of the ICC has created this handout to assist with plans submittal under the 2009 International Residential Code, and it is not intended to cover all circumstances. Please check with the Department of Building Safety for additional requirements.



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15. Under “cavity Insulation” enter the R value of the insulation to be applied from the top of the ceiling drywall to the top of the 1st layer of insulation. If additional insulation is to be applied, enter the R-value for the additional insulation under “Continuous Insulation R-value.”
16. At any point you may click “check Compliance” at the bottom of the page. The box will change to either red for fails, or green for passes. Either way– continue adding other building components. Only after ALL components are entered will the Pass/Fail box matter. If the box shows “fails” at the end, additional insulation may be installed to meet the minimum requirements.
17. Click “wall”, select the type of wall you are referencing. Ex) wood frame-16”O.C. determine the square footage of exterior walls surface area, including the area for the rim joists. (Example– A simple 36 X 54 home with 7 ft walls and 10 inch floor joists would be $36 + 36 + 54 + 54 = 180$, $180 \times 8 = 1440$ sq ft.)
18. Enter the R-value of the insulation to be installed between the studs under “Cavity Insulation R-Value” Enter any additional insulation under “Continuous Insulation R-Value”. The software automatically accounts for studs, sheathing and drywall.
19. Click “window”, select the type of windows to be installed in the previously entered wall. Ex) Vinyl Frame Double Pane Low-E. Use the rough opening size to determine square feet for all windows to be installed in the previous wall section that is Vinyl with double pane low-E. Repeat this step for each kind of window that will be installed in this wall section.
20. Click “Door”. Select the type of door being installed in the previously entered wall. If more than one door with the same over or under 50% glass is being installed in this wall, the sq ft may be entered as one door. Enter the rough opening sq ft. and U value.
21. repeat 17 through 20 for all types of above grade walls.
22. After ALL above grade walls have been entered, click either “Basement” or “crawl”, Select the type of construction, fill in the depth of the walls, average depth below grade and depth of insulation as shown. Click “Create Basement”, or “Create Crawl space”.
23. Repeat 17 & 18 for this wall section. If there is a walk out basement, count those as above gradewalls.
24. When ALL envelope components have been listed with the proper square footage, click “Check Compliance in the lower left corner.
25. If the button turns red and says “fails”, the structure MUST have an increase in insulation values to meet the minimum requirements of the Energy Code. Any value shown on the Res-check must be installed during construction!
26. If the button turns green, click save, to save the final version. Then Click “Reports” in the upper right of the page.
27. You may e-mail the final report by filling in this page, or, you may save the “Your Compliance report” .pdf on your computer for viewing and printing.
28. Send one of these versions to your local building department along with one set of completed building plans showing the dimensions and locations of the building components that you listed in the Res-Check.