Pass a Rescheck

Today on the Reschexpert blog we want to talk to you about some of concepts that you need to know to pass a Rescheck. If you have never worked with the Pacific Northwest National Laboratory and Department of Energy's Rescheck Softwares then there are some items that you might not know. Rescheck Web and Rescheck Desktop have some red lines built into them that can result in your Rescheck passing or your Rescheck failing so in this Rescheck blog post we are going to discuss the intricasies of passing a Rescheck.

The following are a list of items that can make your Rescheck Pass or Fail

Slab insulation Wall R Value Roof R Value Basement Wall R Value Window U Value Window SHGC Door U Value Door SHGC

Now let's take a look at each example and talk a little bit more about each item above as it pertains to your everyday Rescheck.

https://www.rescheck.info/2022/12/05/rescheck/

Slab insulation has been a big topic in the field of Rescheck over the past few years. In years past the Rescheck softwares Rescheck Web and Rescheck Desktop would allow the home's building envelope to work as a system when generating a pass or fail score. In a recent update the rules were changed. Now, if your climate zone requires slab insulation you can no longer use a trade off. You must install the slab insulation or your Rescheck will fail. An everyday example would be that in a climate zone requiring slab insulation you could add more insulation to your roof, walls, windows, or doors and then lessen the amount of insulation needed in your slab. This is no longer the case. If your climate zone requires your slab to be insulated in Rescheck you must have it on your Rescheck report and installed either horizontally or vertically in your slab, no exceptions. So if your Rescheck is not passing and everything else looks legit, then the slab insulation would be the first area that I check to get your Rescheck back on track.

https://www.rescheck.info/?s=manual+j

Wall R value is another big area in Rescheck. The most common wall insulation values I see in Rescheck are R13, R15, R19, R21. The major differences is that R13 and R15 are typically installed in a 2x4 wall and R19 and R21 are used in 2x6 walls. So once you cross the threshold from 2x4 to 2x6 walls the entire cost of your framing package increases on your home. One caveat is with some brands of closed cell spray foam having an R value of near 6.5 per inch you can still achieve the R19 in a 3.5" 2x4 wall cavity. Either way, the R value is what is important in Rescheck software whether you are using batts, spray foam, sheep wool, or mud and hay the determined R value is what is entered into the software and calculated in Rescheck software. In some climate zones anything less that R19 walls will generate another automatic failure. You will notice this because your project in Rescheck will fail by roughly 10%. If you change the wall R value from R15 to R19 it will then move into passing territory. This is how you know that the wall needed to be R19 and the software will not accept anything less.

https://www.rescheck.info/2022/02/18/rescheck-versus-manual-j

Roof R value is much the same in Rescheck. The R values are different and greater. The most common R values we see are R30, R38, and R49. Sometimes in Texas and South Carolina we can see R values as low as R21 and R19 create a passing score, however this is very uncommon. The same as a wall system your Roof system in Rescheck will cause your Rescheck to fail if you do not have enough insulation for your climate zone. Again the tricky part comes down to the framing. Sometimes you do not have a ceiling rafter tall enough for an R49 batt. If you shop the proper closed cell insulation you can get roughly 6.5 R value per inch and even a 2x8 rafter system could possibly hold the R49 needed to take your Rescheck from failing to passing.

Basement R values are similar to above grade walls. The one difference is that you often see a lot more continuous insulation than cavity insulation. This is typically installed in 4x8 sheets. Common basement R values start at R11 and go up to R21 in Rescheck. Although you could have more or less depending on your climate zone. Again, if you leave your basement R value at zero then chances are that your Rescheck will fail. To pass your Rescheck you should plan to start your basement R value at R11 and work your way up from there.

https://www.rescheck.info/?s=manual+j

Window and Doors efficiency are calculated in Rescheck using their U value and SHGC. This is very important. I cannot count the number of times someone has sent me a window package that did not meet the state's criteria for Rescheck on their project. These are cut and dry pass and fail values that if you do not have a low enough U value or SHGC on your window or door package the Rescheck will fail. The most common U values that we see on projects start at U.3 then they move their way down from from. Most state codes only allow U values of .4 or lower, but it differs greatly from state to state and IECC code package. Be sure to get this information straight before ever signing a window quote. Once you get over a .3 U value in a window package the Rescheck can become increasingly harder to pass. So while you may think you are saving a hundred bucks on a less efficient window package, you might find yourself moving from 2x4 walls to 2x6 walls in your framing package to compensate for the less efficient windows. Window and Door SHGC has similar criteria. Typically the standard is .25 SHGC or lower in many states and IECC codes. If your windows average over .25 SHGC the Rescheck softwares Rescheck Web and Rescheck Desktop will automatically fail your project, and they cannot be installed. If you check two items on your window and door packages check your U value and SHGC before ordering! Without having the proper U value and SHGC on your windows and doors for your climate zone your Rescheck will not pass.

https://www.rescheck.info/2019/03/31/windows-doors-wrong-shgc-u-value-for-rescheck/

This concludes our in depth look at how to pass a Rescheck and some common items that might trip up a DIY or Do It Yourself Rescheck creator. We loving looking at the minute details of Reschecks and Rescheck software and then helping others create their own Reschecks using the lessons we have learned on the front lines of our Rescheck service. If you are having trouble creating a Rescheck then we can create it for your with our Rescheck service simply email PDF plans, jobsite address, and square footage to <u>service@rescheck.info</u> and we will get you taken care of.

https://www.rescheck.info/2022/01/12/how-to-perform-a-rescheck/