After a decade, Mike Holmes still cares because he knows the work he, his crew and others do makes a real difference to the people they help.

Photograph by: Alex Schuldt/The Holmes Group, Postmedia News

With summer winding down, some homeowners might be looking for ways to keep the sun shining in their homes through the winter. One option is building a solarium. But you have to be careful because with so much glass you risk a lot of heat or cool loss in the rest of your home.

Anyone thinking about adding a solarium to their home needs to do their homework. That means research. A solarium is a lot like an addition. Your contractor will need permits and to follow building code.

For example, there’s a limit to how much glass you can have on the side of your house depending on how close you are to the property line — not the fence that might be along the line. One of the reasons is because of fire risk. Code tries to protect homes from fire spreading to adjacent properties — and windows are one way it can spread quickly.

The further your home is from the property line, the more glass it can have on that side. But if your home is less than four feet from the property line, you can’t have any glass. That means no solarium.

The key is finding a reputable contractor to design a room that suits your needs. Look for someone with plenty of experience building solariums — the more, the better. The pros I go to have been in the business for 40 years.

How do you know you found a pro? For one, they won’t give you a quote over the phone, and they won’t accept the job until they’ve seen your home.

An experienced solarium builder will spend at least two to four hours talking with the homeowner to figure out what they want, what they need and what can be done.

They should be asking questions like, “How many people live in your home?” and “What’s it going to be used for?”

Often homeowners will have unrealistic expectations about the size of the solarium, how much work is involved, how long it takes and the cost. It’s the contractor’s job to guide you on what can and can’t be done, and what your options are.

On average, a solarium can cost between $30,000 to $50,000, depending on size, and can take two to four weeks to build. Be prepared.
Foundation

A solarium needs a foundation and you usually have three main options. The first is building what some pros call a "frost wall." That's the footings with a basic block foundation on top — imagine a basement with the middle filled in.

The second option is building a foundation with a basement. So you have the solarium on top and a basement below it. But that option automatically adds an extra week — not to mention a lot of extra cost — to complete the job.

The third option is having a concrete slab on grade with posts driven through the slab to lock it in place, so it won't shift or move over time. But the kind of posts your contractor uses will make all the difference.

We used Techno Metal Post's helical pile — three at the back of the solarium (the part that's away from the house). They're like giant metal screws, so the frost can't grab them and pull them up.

Only a certified technician can install these posts because specialized hydraulic machinery that measures soil conditions has to be used.

Glass

The glass in a solarium is different than the glass we use for windows — or at least it should be. Most windows today have double or triple pane low-E glass. If a contractor suggests using this type of glass on your solarium, don’t hire them. They're not pros. The glass will lead to heat or cool escaping your home and then causing condensation — so your solarium will be fogged up. And what's the point of that?

The guys we hired used an exclusive product that’s a multi-coat glass for the roof. It has up to 12 layers of different coatings on the inside of the glass, not the outside. But the glass on the solarium's walls has fewer coatings because the side of the solarium doesn't get direct sunlight so you don't need as many. Plus, more coatings give us a darker glass, and we want the glass to be as clear as possible to take advantage of the sunlight.

Where the solarium faces is also important. For example, if it’s facing south it's going to get more sunlight; this is good because that's the goal. But your contractor needs to make sure that the glass they use keeps the UV rays and heat out (or cold in the winter) but lets the light in.

The great thing about hiring the right pro is that they'll usually include a lifetime guarantee on the glass of your solarium. It's even transferable to new homeowners. It's a great selling point if you ever decide to move, but who would want to leave a home with such a great addition?

Catch Mike Holmes in an all-new season of Holmes Makes It Right, Tuesdays at 9 p.m. on HGTV. For more information, visit hgtv.ca. For more information on home renovations, visit makeitright.ca.