

Buying replacement windows by George Pinch, P. Eng.

It takes a lot of courage, and can cost a lot of money, to replace windows in your home. Still, that has not deterred thousands of British Columbians from doing it. Reasons for installing new windows seem to be fairly consistent:

- existing windows are old wood sash, very drafty
- existing windows have aluminum frames and are wet with condensation all winter
- existing windows are single glazed

Window replacement is not a job to be taken lightly. The biggest concern, after cost, is finding an installation company you can trust with the daunting task of penetrating the "envelope" of your house and leaving it in as good, or better, condition as before they started.

Many factors arise when buying replacement windows:

- where are they made, and by which company
- what quality standards do the windows meet (or exceed)
- who installs them (the company and the people they employ)
- how long has the installation company been in the business
- what warranties do they provide
- can you tour the window manufacturers plant to see windows made, or visit an existing installation
- would you like some larger (or smaller) windows
- would you like to change the style (e.g. from double hung to horizontal slider or casement)
- finally, and perhaps the most important, the cost.

Let's consider each of the above points in more detail.

Manufacturer:

There are more window manufacturers in BC than there needs to be, that is, there is not enough business available to keep all of them busy all the time. Therefore, there is always a risk that some manufacturers will price a job too low in order to increase their volume, but in order to make the job profitable, they will cut some corners when it comes to making the product. Therefore, you should know who makes the windows, and their reputation for timely deliveries, quality of construction and finish, and attention to any problems should they arise.

Standards:

In Canada, the Canadian Standards Association (CSA) has developed the standards for window performance (CSA Standard A440). BC Hydro, in their Power Smart program, specifies windows with a higher CSA A440 rating on three key factors - air infiltration, rain penetration and blowout resistance - than is permitted by the BC Building Code. In some climate regions, Power Smart windows must also use low-e glass (a glass with a coating that significantly improves thermal performance) and sometimes argon instead of air between the sheets of glass. Always ensure that you are aware of the effect a howling wind and rain storm can have on your house, and choose windows that will not let water or excessive amounts of air enter your home. (Note: Never pressure-wash around your windows. A pressure washer produces a "driving rain" pressure far in excess of the highest rating in the CSA A440 standard.)

Installation:

The best windows in the world can be of no use to you if not properly installed, therefore you must be absolutely sure of your choice of contractor and the job they will do to ensure your new windows will last for decades without leaking. Keeping rain out is the greatest problem your window installer will encounter, and a lot of knowledge is required by your contractor and his crew to ensure water never enters the structure of your home. Check out your contractor thoroughly before awarding any contracts. Ask him about the qualifications of his work crew.

How long has the installation company been in the business?

Make sure your contractor has had several years of continuing good business history. Get references, and follow up on them.

Warranties:

Compare warranties offered by window manufactures and those of the installation contractor. Do both have a good history; are they likely to be around long enough to honor their warranty if required? Deal with companies with good track records.

Plant tour:

If possible, get a tour of the window manufactures plant. Ask a lot of questions. Look at how they do the welding and clean off the vinyl that protrudes at each weld. If the weld is not cleaned, this rough spot is unsightly and will collect dirt that cannot be cleaned off. Ask to see a sample of the framing material. Take it in your hands and try to bend and deform it. If you can bend or deform it by hand, it may also distort when installed.

Would you like some larger (or smaller) windows?

If you have a room, or rooms, where you have never liked the window size or location, consider making some changes. It will cost extra, but greater satisfaction with your home may be worth it.

Would you like to change the style? (e.g. from double hung to horizontal slider or casement)

Changing windows is the time to change window styles. Most people do not hesitate to change old wood-frame bathroom windows from double-hung to awning type, and twin double hung to a single, larger horizontal slider or casement style. Don't forget you can have muntin bars (grids) inside the glass, and some manufactures even have windows that simulate heritage style windows. Take your time and look at all your options. What do you want your house to look like when the work is all done?

Cost:

Retrofitting windows is expensive; therefore there is always a strong desire to deal with the lowest bidder. This is fine, if you plan to sell the house soon, but if you are going to stay in it for several years, give some thought to why the low bidder is where he is - at the bottom of the pack. Is he using lower-priced windows? Is he a "highball" contractor - in and out in a day, so to speak? In this market, if a contractor is using a better window, he has to pay more for it and he has to charge more. If his crew pays attention to all installation details and does them right, it will take longer, he has to pay his crew more, so it costs you more. Homeowners are more inclined than home builders to look at the longer term - product quality, longevity, fine appearance, ease of maintenance, warranties, better workmanship; all those factors that make the first cost less important than lifetime cost. A new house full of windows will cost less than a new car, but will last two or three (or more) times as long. Keep this in mind when buying windows. (And your next car.)

George Pinch, P.Eng.