Darrell Akune, of Northshore Windows, shows off one of the types of windows his company installs. Akune says good installation is key.

PHOTO MIKE WAKEFIELD

Proper installation is key

Even the most energy-efficient windows on the market won't help homeowners slash their heating bills if they are not properly installed.

Darrell Akune is a partner at Northshore Windows, which has been operating on the North Shore since 2004. He says the physical window product is only half the equation when it comes to saving on utilities.

Akune advises homeowners to research installation methods when choosing a window company. A few extra dollars spent on labour could save money in the long run, especially in the notoriously damp Pacific Northwest.

Within the window replacement industry, retrofit (also known as reno-flange) products are popular, but something the team at Northshore Windows tries to avoid.

"It's a window that was designed basically to allow for quite a simple installation," says Akune. "The downside to it is that it's difficult to seal it."

Akune explains that reno-flange windows are sealed to the pre-existing frame with a bit of caulking. "We steer completely away from that style of replacement just because it is impossible to be 100 per cent sure that you've sealed it completely," he says.

Akune prefers "new construction" windows. They require more labour to install because of the carpentry work involved, but Akune says the result is a tight seal.

There are three energy-saving components that Akune says he includes in every window quote.

The first involves filling the space between a double-paned window with argon gas. This improves the thermal efficiency of the sealed glass unit, he says.

The second component involves the material of the spacer bar that separates the two panels. Akune stays away from the traditionally used aluminum because it conducts temperature and can result in condensation around the perimeter of the glass when it's cold outside. The third energy-efficient element is the application of a low-emissivity film to the surface of the glass. "The Low-E blocks ultra-violet rays so it's a really effective component for summertime at reducing heat coming in," says Akune, adding that the coating also helps retain indoor heat in winter.

So how do you know when it's time to replace or upgrade your windows? If you have wooden frames, a simple visual inspection will reveal rotting wood or bubbling paint. With newer double-paned windows, condensation or fogging between the glass is a warning sign.

"That indicates the seal of the unit has been compromised so warm, moist air is able to get in and then it condenses inside the glass," says Akune. Excessive condensation on the interior of the glass may indicate the window is not very efficient. Northshore Windows receives a rash of phone calls from chilly residents after the first cold snap of the year. "They'll describe what feels like a draft coming in, but really it's just the cold surface temperature of the glass," says Akune.

"They'll describe what feels like a draft coming in, but really it's just the cold surface temperature of the glass." Darrell Akune

Things don't change too rapidly in the window industry, but new products do occasionally come on the market, says Akune. For example, fibreglass window frames are now a popular option among homeowners who want a premium-looking window without the upkeep that comes with wood. Some opt for hybrid frames, which consist of a fibreglass exterior and esthetically pleasing wood interior. Whatever the product, Akune reiterates the importance of researching installation methods to ensure windows perform their best.

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