

## AVIVA Canada

### Rain Screen

#### Code Changes for Single Family Homes

Rain screen or drain cavity is essentially a built-in gap or cavity between the cladding of a building and the building paper layer. This gap allows water that may get beyond the cladding to 'escape' so that it does not seep through to the sheathing or framing where long term damage could occur.

This type of wall design has been incorporated into all condo or multi-family projects in the coastal region of the province for several years. The new code amendment extends this design requirement to single family homes for the first time.

For most single family builders this amendment to the Building Code will mean going back to school to learn new techniques and to change the way they design and build homes for their customers. Courses for builders have been developed and will be available beginning in the New Year. One course offered by Aqua Coast Engineering Ltd., a building envelope consulting firm, involves a mix of classroom presentations and hands-on practice to give single family builders the background they need as well as practical experience to enable them to correctly incorporate rain screen techniques into their construction projects.

The typical details for rain screen call for pressure treated strapping over the building paper to separate the cladding from the building paper. This cavity or capillary break allows for drying and drainage of incidental moisture and helps to ensure moisture will not penetrate the paper and come in contact with the sheathing. Most cladding will require rain screen including stucco, metal cladding, cedar siding, cultured stone veneers and fiber cement siding products. Some claddings such as real brick already have a cavity as part of the normal application.

Builders who have questions about these new requirements can contact CHBA-BC, the Homeowner Protection Office or their warranty provider. National Home Warranty is providing each of their single family home builders with a package of generic or sample 'details & drawings' to help them understand the unique requirements of rain screen and to incorporate these techniques in their houses.

#### **Does this mean homes without rain screen will leak?**

When amendments to the Building Code are introduced, they are seen as improvements to building practices and as a means of incorporating new techniques and new products. This rain screen amendment for single family houses was adapted from a multi-family building technique in an effort to improve the performance of single family homes. This doesn't mean that homes without rain screen will leak. Good building practices employed by builders in BC have always produced houses that exceed the standards of the building code. This amendment will make good homes that much better.

#### **Will houses look different with rain screen?**

Rain screen is a technique that adds a cavity or separation between layers in a wall. Nothing about a rain screen wall will look different before or after the code change comes into effect.

### **Will houses with rain screen cost more?**

There will be modest increases for labor and material as there is greater attention paid to the water-stopping details around windows and other through-wall breaks such as vents and hose connections. In the overall cost of a house, these very modest cost increases are far outweighed by the better wall design and the confidence that the wall assembly will perform at a higher level with rain screen.

### **Do builders have to use rain screen immediately?**

Typically when new or amended Building Code items are introduced, there is an adjustment period that might vary from a few weeks to a few months. Presumably each municipality where the rain screen code applies will decide if there will be time allowed for builders to comply. Each of the new home warranty providers that provide warranties on new single family homes will set their own requirements for when the code changes will be required if a municipality allows an adjustment period.

At National Home Warranty, every new home enrolled after the effective date for the code change will require the application of rain screen in the wall construction. National will require the adoption of the new code requirements regardless of any municipal adjustment period.

### **Guidelines**

Rain Screen Guidelines - PDF

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