

## COZY HOME CORNER

*By the Zerodraft House Doctor*

### **Sealing and Insulating the Attic Hatch**

*In our last column, we discussed the importance of sealing the attic to prevent moisture-related problems such as premature roof failure, condensation and bucked shingles, ice damming, mould and mildew. Today, we'll look at the how-to details of one element of the attic project – sealing and insulating the attic hatch.*

We all have insulation in our attics to help keep the house warm. But attic access hatches are rarely insulated and sealed properly. Even the smallest gap in your insulation will make your house colder, and even the smallest crack in the air seal will allow warm, moist air to migrate into the attic, reducing the energy efficiency of your house and contributing to mould and mildew growth, premature roof failure and ice damming.

Because of the need to open and close the hatch, the traditional method of insulation has been to staple a glass fibre batt to the topside of the hatch. However, the batt tends to disintegrate over time as the hatchway is used. The attic hatch itself is usually just a piece of plywood. Often, it has warped over its years of service and no longer sits properly in its frame. It is extremely rare to find the trim around the hatch caulked and sealed, and even when weatherstripping has been installed, the hatch should be latched to ensure it is closed tightly and that air cannot pass through.

To get started on this comfort project, you'll need two-foot by four-foot sheets of two-inch-thick expanded polystyrene foam (the higher priced blue or pink coloured extruded polystyrene foams aren't necessary; the white expanded type is fine for this job), some polystyrene foam adhesive or a can of one-component polyurethane foam (make sure the adhesive you choose is compatible with your polystyrene), some clear, siliconized caulking for the trim, two hook and eye latches (make sure they're the right length for your hatch) and a brass handle.

The first step is to cut the polystyrene foam sheets to the size of your hatch. You'll want four pieces stacked one on top of the other to create eight-inch thick insulation, for a minimum insulation R-value of 32 (standard level for attic insulation). Adhere your pieces of polystyrene to the top (attic side) of the hatch, making sure the adhesive is given enough time to dry properly.

The next step is to caulk the outside perimeter of the trim to the ceiling, and between the trim and the hatch frame. Then, install the hook and eye latches opposite each other to firmly secure the hatch in position. Finally, install the handle in the middle of the bottom (house side) of the hatch to allow for easier opening and closing of the hatch.

This is a relatively low-cost, simple and quick home improvement project suitable for even a beginner Do-It-Yourselfer. But you'll find it makes a big difference to the comfort, durability and energy efficiency of your home.

