

Ask Jon Eakes

Stopping cold air drafts from ducts to the outdoors.

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I get a lot of complaints about cold air drafts coming in through ducts connected to the outdoors. Here are some solutions.

Butterfly dampers

Any exhaust vent that rises up and out will have a tendency to let cold air fall back down that duct. Quality butterfly dampers are available that have a little spring inside, two flappers and a weather-stripped rubber stopper. The one in the first photo comes from a company called Aeroflo at www.ContinentalFan.com. They prevent most air movement in the wrong direction. This one costs 30 to 40 dollars, as opposed to a cheap 5 dollar one (single plate that pivots), but it is about that much more effective as well.

Floating hood damper -- superb for Clothier Dryers

The second photo shows the best exhaust hood I have ever seen. It comes in two models, the one in the graphic has a spring to assist the lift of the floating hood when used with a low powered bathroom exhaust fan. The one for use with a powerful clothes dryer does not have that spring. This large and a bit ugly gadget has a hat like lid that floats on the exhaust air stream inside the hood. When the exhaust air stops, it drops down and locks off the duct. No wind, no birds, no bugs can get back in. It never freezes open or closed. You can't make it smaller, but you can paint it. It is made by Heartland Products Inc. but they don't have a web site. It can occasionally be found in hardware stores but you can find it as a recommended product on many energy efficiency store sites -- just Google: Heartland Dryer Vent. If you have to buy it from the US, the least expensive shipping is from the company themselves at HeartLandNatural.com. (Thanks for heads up Ken) Even then the less than \$20 hood is about \$36 US to ship to Canada. Harold has recently found it in the Home Hardware catalogue under the name Dryer Vent Closure.

Combustion Air Damper

When you have a gas furnace that uses household air for combustion (as opposed to a closed combustion chamber that uses outdoor air and no chimney) the Canadian Gas code requires that you have a combustion air duct bringing fresh air into the area around the furnace. This provision in the code has been enforced for years in the Prairies and has recently begun to be enforced in Eastern Canada. The problem is that this duct spills cold air into the basement 24 hours a day. For a through discussion of this problem check out the link to "Combustion Air" and to the Hoyme Damper.

A company in Alberta produces the answer to this problem, called a Hoyme Damper, and it is the only damper approved by the gas code for this use. When the thermostat calls for heat, the damper opens and lets the fresh cold air in, which gets sucked up by the furnace and sent up the chimney. When the furnace goes off, the damper closes the duct. Simple and efficient to make your basement heatable. It has been used for 20 or more years in Alberta, and is barely even known by heating contractors east of the Prairies. We should talk to each other more often.

Cleaning Ducts

Follow this link for cleaning your ducts.

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