

## **FIX IT UP!**

*Bruce Turner*

### Vent Your Frustrations or Don't Get All Steamed Up!

Homes today are tighter and better insulated than they have ever been before. Insulated windows and weatherstripped doors do a great job of conserving energy and reducing utility costs. But there's a downside to that sealed environment – while cold air is kept out, moist air is kept in.

We've talked before about how moisture can devastate your home's infrastructure – it causes dry rot, mold and a whole lot of other nasty stuff that nobody wants, and sealing water out is vital to the health of your house. But moisture doesn't always come from the outside – it's generated inside as well, particularly in that steamy bathroom.

You've got a vent fan in your bathroom, don't you? Most people do. But do you know where that vent leads? I can't tell you how many times I've opened up a duct to discover a builder's shortcut – the fan vents into the attic or the basement instead of to the outside of the house. One client of mine discovered that for 20 years his bathroom fan had been pushing steam into a yard-long duct that led absolutely nowhere. What's more, by code, a bathroom vent fan is not a requirement if there's an operable window in the bathroom.

The fact is, however, that a window simply won't do the job. What you need is a complete air exchange in that bathroom on a regular basis, and that requires a vent fan. Fortunately, fans aren't expensive and not difficult to install, and there's a good variety on the market. And new technology has made some of them so quiet you can barely hear them.

All fans are rated by CFM, which stands for Cubic Feet per Minute – how much air they move from one place to another. For a normal 40-square-foot bathroom, a 90 CFM fan is adequate, but for a bigger bathroom with a whirlpool tub or other features, you need a bigger fan with a stronger motor. As you might expect, the higher the CFM, the higher the price – but you'll see significant price differences even among vent fans with similar CFNs because of the noise factor. The quieter the fan, the more you'll spend.

Your bathroom duct should lead the damp air to the outside of the house in the shortest distance possible. The air duct should angle slightly downward towards the outside, so if there's any condensation in the duct, it drips outward rather than back into the fan.

And once you have a bathroom van installed, use it religiously. Put a dial timer on it and make sure it runs for a good 30 minutes after you finish your shower or bath. If your house is tightly sealed, open a window somewhere to allow circulation, because the damp air pushed out by the fan needs drier air to replace it. (You can install a unit with a heat lamp to keep the bathroom warm.) And if your bathroom gets a lot of use, use a programmable timer switch and set it up to run the fan at least 30 minutes a day. Not many people do that. Eventually they wish they had.

Every year, people pay me thousands and thousands of dollars for moisture-related repairs that would have been completely unnecessary with a just a little more air circulation. Trust me, your bathroom will stay healthy a whole lot longer with some fan support.

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