

BATHROOM REMODELING VENTILATION SOLUTIONS

The bath fan is rarely the first thing that comes to mind when people think about remodeling their bathroom. Steam showers, jetted tubs, marble tile, and fancy fixtures usually take center stage. But the exhaust fan can easily be the most important decision you make when planning a bath remodel — and not just because steam showers and jetted tubs release a lot of moisture into your house. As houses get tighter, clearing the air of contaminants becomes critical for good indoor air quality and the durability of your wall finishes. If you plan to weatherize or upgrade the insulation and airtightness of your home anytime soon, then it is important to plan a ventilation strategy now so you won't have to open up the ceiling and walls again later on. The lowly bath fan can play a key role in your home's indoor air quality (IAQ) by exhausting more than one room at once, controlling moisture, operating automatically or quietly and continuously running at a low level. Because bathrooms create so much moisture in a home, it is important to quickly exhaust the moist air to the outside before it condenses on the walls, ceiling, and windows. Duct layout and fan sizing are first steps.

Efficient air movement means a properly sized fan, a short duct run, smooth-walled ductwork, few or no elbows in the ducting, and a damper that doesn't restrict airflow. Typical bathrooms need a fan that can exhaust 1 cubic foot of air per minute (cfm) for each square foot of floor space. A single 100 cfm exhaust fan can handle a typical 100 sq. ft. bathroom with no separate water closet or jumbo jetted tub. More complicated bathrooms require more fans: one for the water closet, one for the jet tub, one for the shower, etc. The size fan that you need may increase for complicated duct runs. Efficient exhausting is even more challenging when part of a remodel because you don't always have the flexibility to put the fan where you want to. Duct runs may need to be longer and have more elbows in a retrofit design than they could be in a new-construction design. Available space above the ceiling could also be a concern as many fans on the market are too deep to fit in some ceiling cavities. For these reasons, ductwork should be considered early in the design process. Can you slip the ductwork into the ceiling framing for a direct run to the outside, or will you need to run the ducts perpendicular to the framing within a dropped soffit? If you add a dropped soffit, how will it blend with the rest of the room? Can you run the duct straight up and through the roof? Maybe a wall-mounted fan will need to do the heavy lifting. These simple decisions can really throw a wrench into remodeling plans if not considered early.

Controls and sensors can add design flexibility. After figuring out fan placement, fan size and duct layout consider how the fans will be operated — manually, automatically, semi-automatically, or continuously. The answer depends on what you want to achieve with your whole-house ventilation strategy. And this answer may change over time — after you weather-tighten the house or after the kids move to college, for example. Condensation sensors go beyond humidity sensors or timers by clicking on before dew point is reached and clearing humid air quickly. Motion sensors can allow a fan to operate only when people are home, which can help save energy. With the right fan, a clear exit strategy, and versatile control center, a quiet little bath fan can make a big splash in clean indoor air and home comfort.

For more information on Panasonic Ventilation Solutions visit us.panasonic.com/ventfans