The power of True Flow for cleaner indoor air and a healthy home

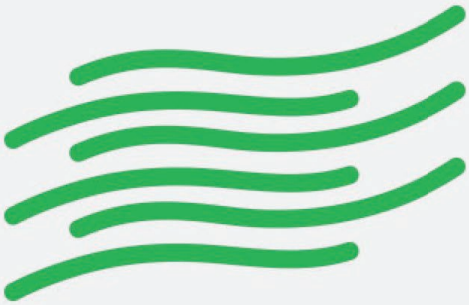
Building healthy homes is no longer optional. Recent studies show that homeowners' concerns about IAQ are at an all-time high. It's no secret that good indoor air quality is necessary for healthy living. The challenge lies in achieving this through an effective mechanical ventilation solution. Some ventilation fans are powerful enough to expel toxins and moisture out of the home, helping create a healthy living environment where occupants can breathe clean air. Unfortunately, many are not.

There's proof that a vent fan's listed airflow rating may not mean much. Despite a fan's advertised cubic feet per minute (CFM) rating, testing by Lawrence Berkeley National Laboratory shows nearly half of all installed ventilation fans fail the required airflow standards outlined in ASHRAE 62.2. That's a lot of non-compliant vent fans. And a lot of wasted money for builders, contractors, and homeowners.

Without the power to overcome static pressure in real-world installations, the average exhaust fan underperforms when compared to its promised operating specifications. We call this installed performance.

Gone with the wind

Based on results of field tests by one of the most renowned building science research institutions, we now know: just because a fan's specs state a certain CFM rating doesn't mean it performs at that level when installed in the home.



Installed performance is not everything, it's the only thing

Installed performance is a ventilation fan's ability to move air when installed in a typical home. It is the standard by which all vent fans should be tested and compared. However, most performance testing is done in controlled environments with optimal conditions, such as in a lab.

Controlled test environments are usually a best-case scenario (ie. straight and short duct runs with no turns) and not reflective of the real-world setting your fan will perform in. A good analogy would be a boxer training in the gym vs. fighting an opponent in the ring. Two completely different environments. One controlled, the other real-life.

For effective ventilation and heathier indoor air quality, installed performance is the only thing that matters.

> HVI-certified True Flow rating at 0.375" static pressure assures powerful CFM output to remove unhealthy air and moisture from your customer's home.

The problem: testing to minimum standards

One big reason for all the underperforming fans on the market appears to be the failure to accurately account for actual, real-world static pressure that is present in most homes.

As part of Panasonic's mission to promote healthy indoor air and healthy homebuilding, Panasonic ventilation fans are built for raw power, with the ability to move air effectively in everyday installed conditions. "That's why we engineer our fans to perform beyond the minimum 0.1" and 0.25" static pressure benchmarks," says Russell Pope, Research & Development Manager of Indoor Air Quality at Panasonic Life Solutions.

Panasonic ECM-motored models are the only HVI-certified ventilation fans on the market that overcome static pressure at the True Flow rating 0.375" level, which is more common on typical installations. The result? Optimum CFM output that expels unhealthy air and moisture, regardless of complicated duct runs, allowing you to meet codes, reduce callbacks and build healthier homes.

Static pressure explained

In the context of ventilation, static pressure represents resistance that hinders airflow. The higher the static pressure, the harder the fan has to work to pull air through the duct. Simply put, static pressure eats away at a fan's ability to move air. A static pressure reading is like a golf score. The lower the number, the better. The lower the static pressure, the greater the airflow and the more effective the exhaust.

The payoff? Better indoor air quality in the living space being ventilated.

The air-moving power of a True Flow ventilation fan

True Flow rating at 0.375" static pressure is the raw, tested power to move air in real-life home installations.

Why do we insist on a True Flow rating at 0.375"? We are seeing that static pressure in most homes is really 0.375" w.g. (water gauge), not 0.25", and not even close to the 0.01" level which competing fans show their test results at.

An HVI-certified True Flow rating at the 0.375" benchmark assures powerful CFM output to remove unhealthy air and moisture from your home. A fan that delivers anything less is probably not moving air enough to make a difference.

True Flow certified solutions for clean indoor air and healthy living

Whisper Green Select™ | maybe the world's most versatile ventilation product, provides customizable exhaust fan and fan-light combinations for healthy indoor environments. The first IoT fan product available for integration into artificial intelligence air quality strategies.

Whisper Ceiling DC™ | offers precision spot ventilation with built-in Pick-A-Flow™ to select your required airflow (50-80-110 CFM) and SmartFlow® technology that automatically increases fan speed when static pressure is detected.

WhisperSense DC™ | precision spot ventilation fan/LED light with built-in Dual Sensor technology for automatic moisture and odor control. Features Pick-A-Flow™ airflow selector and ECM motor with SmartFlow® technology.

WhisperValue DC™ | the lowest profile ENERGY STAR® rated ventilation fan available, ideal for single family & multi-family construction, featuring Panasonic's revolutionary ECM motor with SmartFlow™ technology and Pick-A-Flow™ airflow selector.

EcoVent™ | available in contractor packs only, this 70/90 CFM two-speed fan delivers power, performance and peace of mind during verification testing. Ideal for new residential construction to help you comply with the latest codes and standards.