

INNOVATORS

Inside Masonite's innovation center, a door opens

By H. LEE MURPHY |



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Steve Swartzmiller, Masonite's chief technology officer

Photo by Kendall Kamman

How much technology, beyond a burglar-proof lock, can go into a plain old door? Plenty, it turns out, at a company like Masonite International, which over most of the past 60 years has maintained a corporate innovation center in West Chicago that currently employs 60 people and sprawls over 140,000 square feet, bigger than many warehouses and manufacturing plants.

Though Masonite is based in Tampa, Fla., it was once a subsidiary of Chicago-based USG and well-known for the wall paneling that was ubiquitous in American dens and basements through the 1960s and '70s. More recently, the company has dropped paneling and become a specialist in doors, produced not from ordinary wood but pressed wood, fiberglass and steel.

It's a competitive business, with Jeld-Wen and Fortune Brands Home & Security's Thermo-Tru also vying for market share in interior and exterior doors. Masonite is gaining an edge, in the minds of some distributors, through its technology. Want a realistic wood grain pattern on the face of your fiberglass door? Masonite has developed an ink-jet printing process that can imprint three patterns of maple and dozens more in other wood types. From 10 feet away, you can't tell whether it's the real thing.

The Masonite center, which employs 30 engineers, has an 88-pound pendulum swinging against different door designs all day to test their resistance to forced entry. There are fire and acoustics labs to test durability and sound-deadening properties. Freeze-thaw chambers can reproduce a five-year cycle of seasons, ranging from a Chicago summer of 90 degrees to a winter below zero, in a matter of days, thus testing glue and paint adhesion.

There is no production plant nearby, and that's on purpose. "If they are next to each other, your engineers will be asked by production people to work out problems at the plant itself," says **Steve Swartzmiller**, 56, who heads the Masonite center as chief technology officer. A mechanical engineer with a bachelor's degree from Ohio State University, Swartzmiller arrived five years ago after 22 years with Dow Chemical.

Devotion to R&D is not new at the company, he notes: William Mason, **who founded Masonite in 1925**, once worked in the labs of Thomas Edison. Mason came up with a way to scoop up wood scrap at lumber mills, separate the fibers and recombine them into pressed wood, a cheaper alternative to solid wood.

Bob Hannapel, a manager of the Chicago sales territory at River City Millwork in Rockford, visited the Masonite center recently and came away impressed. He says Thermo-Tru, **produced by Deerfield-based Fortune Brands**, has been the market leader, but Masonite is catching up. "Their innovation has become state-of-the-art, and the marketing of their brand has gotten better, too," he says.

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