



THE
GLASS
EXPANSE

A CLOSER LOOK
AT THE MOST
TRANSFORMATIVE
WINDOW
AND DOOR
SOLUTIONS
OF 2018 WITH
MILGARD

By KATE GRIFFITH

PRODUCT PERFORMANCE IS INTEGRAL to sustainability, and few products do as much for a building and its occupants as good windows and doors.

Ventilation, natural light, connection to the outside world—not to mention points of egress in situations of emergency—those seemingly simple panes of glass offer a link to the world beyond that keeps us from minding whether we’re stuck inside. Yet so often they’re an afterthought: inconceivable window placements on the sides of McMansions, flimsy panes purchased in bulk to save a few bucks in large apartment projects, long spans of glass that look lovely but hardly function.

A window’s a window, right? A door’s a door.

Not so much.

“Typically there are two things that motivate architects,” says **Kevin Anez**, director of product management for **Milgard Windows & Doors**, a West Coast manufacturer with more than 50 years in the business of made-to-order natural light products.

CLEAR BENEFITS

“The first thing that motivates architects is performance from a thermal perspective and a structural

perspective,” he says.

“And the second is design language. How does a product tie into a design intent of a home?” But what often gets overlooked, he says, is everyday practicality and things like venting configuration and end-user operations. That is, how easy is it to actually use those windows and doors the way they’re intended? “A lot of times people get focused on the look or energy efficiency of a window, but we need to think about how we interact with products, too.”

At Milgard, that sort of thinking translates into hours upon hours of product testing for window and door options that run the gamut of materials, styles, performance requirements, and operability measures. “Beyond the functional

▲
Milgard puts many hours into testing its products—from materials to performance.
►

engineering aspects, we think a lot about ergonomics,” says **Kevin Vilhauer**, engineering manager for the Milgard door team. “That’s why our SmartTouch® lock has been so successful.”

The SmartTouch feature allows a window or door to unlock in the direction it’s opened, with a smooth, easy motion and particular care paid to how users grip their handles and move to open the pane.

“By partnering with a nationally recognized health nonprofit, we were able to test the SmartTouch window lock with people who have a hard time gripping and operating certain types of hardware,” Vilhauer says. The final product was so well accepted by people with different disabilities that it fits in with the

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TOP 5 MILGARD INNOVATIONS FOR 2018

More contemporary styles are expected to lead sales going into 2018, as well as evolving color palettes featuring darker, richer tones, according to Kevin Anez, director of product management for Milgard Windows & Doors. Their top innovations this year are:

CUSTOM MOVING GLASSWALL SYSTEMS

Moving glass wall systems offer a great way for homeowners to replace old doors, add new doors, and create a connection to nature with vast panoramic views, Anez says.

ESSENCE SERIES® INSWING & OUTSWING PATIO DOORS

Essence inswing and outswing patio doors add another option to the Essence line of windows. “The line’s broad range of features, best-in-class warranty, and competitive price make this product an innovative addition to the Milgard portfolio,” Anez says.

ESSENCE SERIES® RADIUS CASEMENT

The combination of concealed hinges with seamless-yet-durable sashes and frame materials helped win the Essence Radius Casement a *Window & Door Magazine* Crystal Achievement award.

SDL GRIDS FOR ALUMINUM PRODUCTS

SDL (Simulated Divided Light) Grids give aluminum windows a fresh look for a spring renovation. “Customers often choose aluminum windows and doors to maximize their viewing area,” Anez says. Now they can combine contemporary sightlines with a more traditional look.

TUSCANY® SERIES VINYL

The Milgard proprietary blend of vinyl, combined with advanced hardware systems and a Full Lifetime Warranty, make Tuscany vinyl windows and doors a great customer value. (See milgard.com for complete warranty details.)



latest building trend to ensure residents can age in place.

Beyond ergonomics, Vilhauer and his team test product features like air filtration, structural resiliency in the face of hurricane force winds, and, of course, durability. Vilhauer's team also cycle tests its locks more than 250,000 times. Additionally, forced-entry is tested, giving the tester a time limit and a set of tools to break into windows and doors. "Our objective is to design our products so that they are safe and secure," he says.

SECURE AND STYLISH

Annealed, tempered, and laminated glasses offer varying levels of security and insulation. Design options range from contemporary to traditional styling, and feature materials range from vinyl to aluminum, fiberglass, and wood, so homeowners and building designers can find

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anything to suit their needs and price points. "Vinyl is a great material to work with, and it's recyclable," Anez says of one of the award-winning and most popular products Milgard manufactures. "What makes our product different is that we use a special blend of PVC that gives us a consistent wall thickness, which is important in maintaining certain performance categories."

In 2017, Milgard was recognized as the brand most used in the western U.S. for both its vinyl and fiberglass window products in the Hanley Wood BUILDER brand study. Also in 2017, Milgard windows contributed to a Gold Nugget Award for Best Zero-Net Energy for a California home. But these winning windows and doors aren't for new builds alone.

One of the best ways home owners and architects can spruce up the sustainability and design aesthetics of their spaces is by changing out the windows. "You notice right away the clarity of looking through new glass," Anez says. "And going from a single pane product to a double pane translates to reduced heating and cooling bills." **gb&d**

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Up Front Typology Inner Workings Features Spaces Punch List

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London's Dalston Works is the largest building made of cross-laminated timber.

75 The Building That Gives Back

Sustainability meets community at Bloomberg's new European headquarters.

77 Building Hope

Maggie's Centre Barts in London helps cancer patients heal in a healthier environment.