

Elevated Expectations

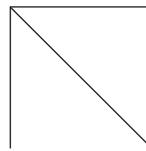
Trends and challenges in high-end door and entrance hardware **By Wendy Vardaman**





Owners and architects of high-end projects have higher expectations with respect to design, engineering and performance, and these expectations present glaziers with challenges and opportunities to stand out. High-end doors and entrances make a statement, and their hardware requires detail-driven focus in design and installation to satisfy customers, according to glaziers and suppliers.

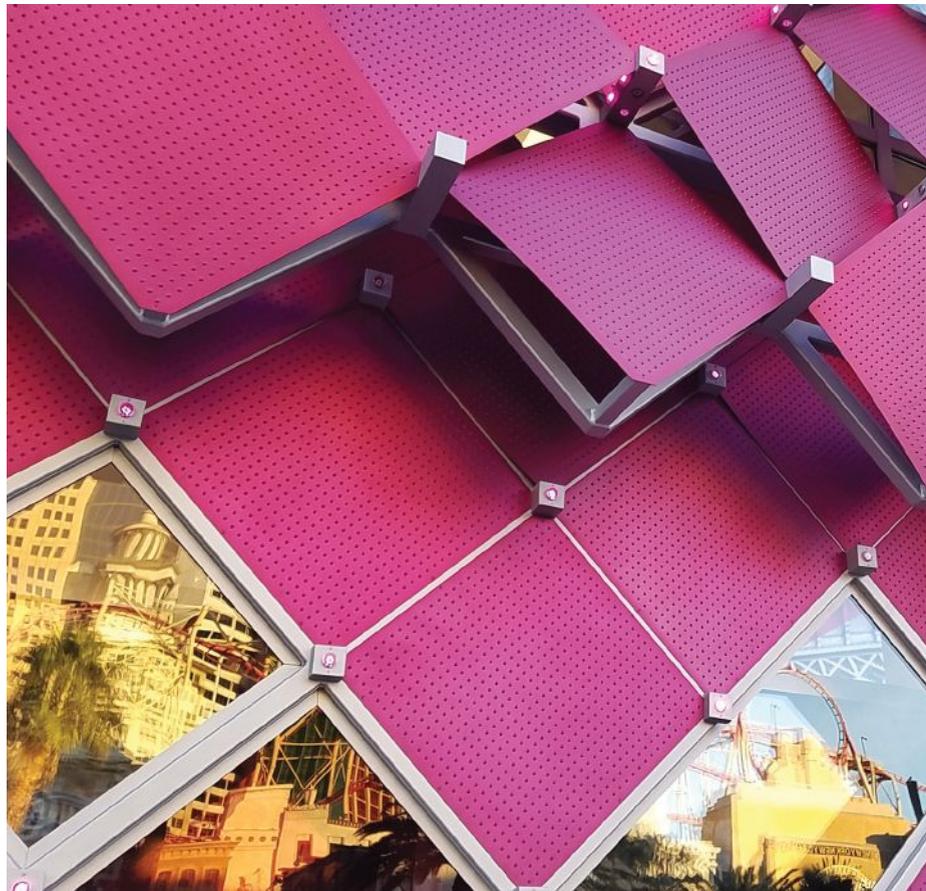
Glazing systems and hardware for high-end projects aim to enhance performance, which may include hurricane and impact resistance, thermal efficiency, ease of operation, and high-tech options, such as wireless-enabled locks. Customization is a characteristic of these projects, which means that lead times are longer and that their installation requires more technical support from engineers and manufacturers, according to industry sources. ▶



Dairy Farmers of America Headquarters

High-end doors and entrances aren't just for high-end retailers. The newly renovated Dairy Farmers of America headquarters in Kansas City, Kansas, features SL70 all-glass walls from NanaWall Systems, nanawall.com. The headquarters was designed by HOK, hok.com, and glass was installed by the Flynn Group of Companies, flynncompanies.com. According to NanaWall, overall design goals

included an elevated way to bring in fresh air ventilation and natural daylight. Matt Thomas, marketing manager at NanaWall Systems, says security was an important consideration for the system's hardware. SL70 uses a multipoint locking system, which includes top and bottom polyamide-capped locking rods, deadbolt and Schlage compatible lock set. The NanaWall SL70 is NFRC certified and can meet or exceed Energy Star standards in all climate zones. Photo courtesy of NanaWall Systems.



Hardware and entrance trends

Doors, entrances and their hardware can make a statement that is part of a unique, consistent and recognizable brand identity for high-end jobs. Customers continue to want more glass and less metal. Glass is getting bigger. Doors are often tall and may be frameless, with exposed glass edges and tall, slim door pulls and other hardware designed to disappear.

“[Customers] want open views, with no interruptions, with slimmer profiles and invisible tracks,” according to Bob Linford, vice president, California operations, Giroux Glass, girouxglass.com.

Customizable features that help create a unique entrance are important to the market. “Customizable cladding finishes can promote a company’s branding theme, and optional LED lighting can add distinct aesthetic appeal,” says Andrew Haring, vice president of marketing, C. R. Laurence, crlaurence.com.

Trend Watch

- MORE GLASS, LESS METAL
- CUSTOMIZABLE FEATURES
- CONSISTENT FINISHES
- INTEGRATED TECHNOLOGIES

Consistency is also important for creating specific looks. Officials from Assa Abloy, assaabloyglass.us, note, “Attention to details makes the difference. Consistency in finish throughout all door hardware components is important to architects and designers.”

Integrated technology is also an aspect of entrance designs and hardware. At Giroux, customers have requested security locks on frameless systems, card readers, and electrochromic and switchable glass, says according to Russell South, project manager, high-end design, Giroux Glass. Additionally, complex multipoint locks are often featured on sliding systems.

Unique visions

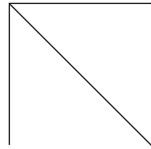
Key to the high-end door and entrance market is customization coupled with performance, sources say. “Every job is not only different from each other, it’s one of a kind. Each high-end project we do represents someone’s unique vision of his or her own personal idea, so that no two projects are ever alike,” says Rob Carter, chief estimator, high-end design, Giroux Glass.

Unique visions create challenges for glaziers, with expectations about expertise, coordination of scheduling and partners, and engineering problems to solve. To meet that challenge, Giroux Glass, for example, focuses on building a team of specialists. Communication with customers is important, because they don’t always know that their vision requires new systems and solutions, or what that can mean in terms of scheduling, company officials say.

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T-Mobile Showcase Store

Installed by the High-end Design Department at Giroux Glass, girouglass.com, and completed in December 2017, the new T-Mobile Showcase Store in Las Vegas features customized, $\frac{9}{16}$ -inch tempered laminated Starphire glass and Vanceva Starphire glass in magenta to match T-Mobile’s branding. The exterior features magenta laminated glass walls covered in metal panels, panes of Starphire magenta laminated glass inside a custom metal facade and a magenta faux door that create a dramatic entryway on a scale that supports T-Mobile’s goal of creating a cutting-edge, showcase store.

The project was designed by Nadel Architecture, nadelarc.com, with assistance from Fitch Design, fitch.com, Giroux and T-Mobile. DC Building Group, buildwithdcbg.com, acted as general contractor. Goldray Glass, goldrayglass.com, supplied the magenta glass. Additional glass

suppliers were Glasswerks, glasswerks.com, and Innovative Structural Glass, structuralglass.com. Steel Structures, highsteel.com, provided the custom steel frame and internal standoffs for the exterior wall/ faux door, along with glass supports. Metal systems were provided by Arcadia, arcadiainc.com; Innovative Structural Glass (point supports, glass doors and structural glass walls); C.R. Laurence (aluminum base shoe for handrails), crlaurence.com; and American Metals (cladding), americanmetals.com. In addition to the magenta exterior walls, Giroux Glass installed a point-supported structural glass wall, glass walls, an insulating glass curtain wall system, handrails, risers and glass landings, and glass divider walls. Photos courtesy of Giroux Glass.

end installations, although Florida building codes create an additional constraint to scheduling and logistical challenges already involved in these projects, due to the testing and code approval process, company officials say.

According to Ray Crawford, president, Crawford-Tracey Corp., “High-end designers typically want larger components, innovative designs, and increased spans and sizes. The turnaround time to develop custom products and have them tested is a relatively slow process in this industry, but we have been successful balancing the aesthetic and luxury feel designers want to achieve with the structural durability and strict compliance required by the Florida building code.”

High-end retail requires staying on top of trends and developing products that appeal to designers. Like Giroux, Crawford-Tracey continues to see larger spans of glass in all its jobs, along with higher expectations across

Miami Design District Storefronts

Customization is a prominent trend for high-end door hardware in Crawford-Tracey's Miami projects, as high-end retailers emphasize brand standards, according to company officials. Retailers often send hardware directly from their representative, but the company recommends participating in the selection process to ensure the hardware is compatible with the application and mechanism of the entryway. Owners sometimes have customized exterior cladding, supports and door handles with company branding, as is the case with the Tony Burch and Tom Ford stores, two recent Crawford-Tracey projects in the Miami Design District.

The Tom Ford store was designed by Barry Michael Ludlow, and the Tony Burch store by David A. Udkow Architect. Both projects include standard hinges, locksets and mechanics on the doors to comply with code. Handles were supplied directly from the retailers to match all stores and maintain brand standards. The stores also feature Crawford-Tracey's Pro-Tech line that offers hurricane protection, including a water rating of 100 pounds per square foot. Photos courtesy of Crawford-Tracey Corp.



the board. Says Crawford, "There is greater concern for security/safety, thermal efficiency and ease of use as it pertains to entrances and energy performance."

Tips for success

High-end entrance system and door applications offer opportunities for companies looking to capitalize on value-added product and design installations. However, they also present notable challenges. (See sidebar at right). Custom products can increase lead times, requiring additional communication and coordination. Strict code requirements, increased system complexity and high expectations for quality demand extreme precision with fabrication and installation. Suppliers offer a number of recommendations for glaziers to ensure success on high-end projects.

To start, glaziers should take extra

time and attention at the bid stage. "Customers need to be careful during the bid process. They need to understand the details and have a well-defined scope of the work, as part of their bid package," says Mike Nicklas, director of engineered glass systems, J.E. Berkowitz, jeberkowitz.com.

Once on the project, glaziers should take extra care in reviewing the specifications. "Specifications are one of the most important elements of the purchasing process. If the specification is not clear, ... ask questions," says Gregg Wakefield, business development, Bella Architectural Products, bellaarchitectural.com.

Due to increased complexity on many high-end entrance and door applications, suppliers recommend glaziers communicate early and often with project team members to manage scheduling and lead times. Companies should allow time for additional engineering and technical support. "This high-end

work requires a lot of coordination of complex hardware items. Critical scheduling of equipment and manpower for these installations will be adversely affected if there are fitment issues," says Melissa Thompson, glass engineer, Assa Abloy Glass Solutions.

More complex systems generally translate to more complex installations. Suppliers should work closely with suppliers to ensure successful installation. "Installation is one of, if not the most, important factors in having your door work properly and last the duration of time. Being off level in the slightest of degrees can affect the whole system," says John Finley, regional sales manager, Panda Windows & Doors, panda-windows.com.

"Many designs incorporate unique features that add to their high performance, but may cause some complexity

