

FIXING GLASS

New age hardware are enhancing glass fittings as there is a growing preference for minimalist and sleek designs in glass fixtures.

By Bindu Gopal Rao

There has been a growing trend for different segments including entrance solutions, solutions for commercial interiors and solutions for premium homes.

OPTIONS GALORE

Saint-Gobain is bringing a suite of solutions closer to the customer for a seamless and hassle-free experience. Not just glass, now there is a range of hardware solutions offered, so everything is easily accessible right under one roof. Saint-Gobain focuses on several segments and provides end to end solutions across a diverse range of products including floor springs, hydraulic patch fittings, pull handles, sliding systems, clipper partition solutions and defender railing solutions. Innovations in modular and acoustic partitions offer a wide range of aesthetic options for interior applications. This includes switchable glass, that comes under the brand called 'PRIVALITE', colour laminated glass, gradient frosted glass, LED illuminated glass and digitally printed glass with custom designs. Alumil's range of hardware and fixtures includes products of unparalleled ergonomics and enhanced durability that offer great aesthetics. All solutions are carefully chosen and developed as Alumil Systems's parts, to provide our customers with an extensive range of architectural solutions. Alumil provides a diverse range of locks for windows and doors, crucial for both security and functionality in aluminium systems. While locks are commonly associated with doors and sliding systems, they are referred to as "mechanisms" in tilt & turn and lift & slide systems. Our latest offerings vary based on security needs and usability preferences, with single point and multi-point locks available, offering up to five locking points for doors and four for simple sliding systems.

NEW WAYS

Among the new trends that are being seen in glass fixtures and hardware are minimalist door handles, door hinges, and partition profiles that offer functionality without detracting from the aesthetic appeal of the glass. With a growing focus on sustainability, there's a shift towards using sustainable materials in glass fixtures and hardware. Manufacturers are exploring materials such as recycled glass and sustainable metals to reduce environmental footprint. Alumil has introduced its latest innovation, the child safety accessory for sliding systems. Dr HC Mario Schmidt, Managing Director, Lingel Windows and Doors Technologies Private Limited says, "We at Lingel Windows believe in innovation. We have introduced Lingel Safe Box (LSB) and Lingel Panser Glazing (LPG), a perfect combination of hardware and glazing. Security is a significant concern for many, catering to this demand at a higher level than before. With the introduction of the mortise locking system for added security, we have upgraded many more options in the last few months. This ensures complete safety for the occupants, providing perfect glazing, hardware, and locking systems to keep intruders away."

When it comes to glass fittings, minimalism and safety are taking centre stage without detracting from the aesthetic appeal of the glass.

ALUMINIUM RULES

Although aluminium is not a new age material, advancements in alloying techniques have led to the development of high-strength aluminium alloys with improved mechanical properties. Hemant Khurana, Managing Director, Mortars and Homes Business, Saint-Gobain India, says, “the significance of aluminium in making channels, handles, and frames for glass products lies in its combination of strength, durability, lightweight, corrosion resistance, design flexibility, thermal performance, and recyclability, making it a preferred material choice for various architectural and interior applications. Most of Alumil hardware including channels, handles and frames is made of aluminium, which is a lightweight, strong, and durable material. Aluminium is also corrosion-resistant, malleable and can be painted in any colour.



Dr HC Mario Schmidt, Managing Director, Lingel Windows and Doors Technologies



Hemant Khurana, Managing Director, Mortars and Homes Business, Saint-Gobain India



Theodoros Axouristos, MD, Alumil India

HINGING ON IT

Window and door hinges are essential components of opening systems, characterised primarily by their load capacity. Hinges can be visible or concealed, providing varying levels of refinement. “Visible hinges often feature a cylindrical shape and come in popular powder-coated or anodized colours, complementing the system’s appearance. Depending on the application, hinges serve different functions and Alumil latest offerings in this segment include the Stay Arms for projecting windows, Pivot Hinges for pivoting windows and Roller-hinges for bi-folding doors. These serve as vital touchpoints

within aluminium systems, infusing functionality and aesthetics. They are categorized into window, door, and lift & slide types, each with further subdivisions. Handles contribute to safety through key-operated locks and anti-burglar Secustic mechanisms, enhancing internal control and protection against intrusion. Alumil-designed handles complement system aesthetics and are available in various colours through powder coating and anodizing, with customization options. Rigorous certifications ensure handles’ durability and resistance to corrosion, affirming their quality and reliability across all levels of use,” says Theodoros Axouristos,

Managing Director, Alumil India.

DESIGN DETAIL

The selection of glass plays a pivotal role in defining the design ethos of a space by influencing its ambiance, aesthetics, functionality, and user experience. Architects and designers carefully consider the properties and characteristics of different types of glass to achieve their desired design vision and create spaces that resonate with occupants on both a visual and experiential level. The type of glass being used (example tempered, laminated, insulated) will influence the selection



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of hardware and fixtures. “Determine the intended function of the glass elements and select hardware accordingly. Consider factors such as whether the glass will be fixed or movable (example, sliding doors, Modular Partitions), the frequency of use, and any specific operational requirements (example, automatic opening/closing, locking mechanisms). Assess the load-bearing capacity of the hardware to ensure it can support the weight of the glass panels effectively. This is especially crucial for applications such as glass doors, balustrades, and partitions where safety is paramount. Choose hardware and fixtures that complement the design aesthetic of the space. Consider factors such as the style, finish, and material of the hardware to ensure it harmonizes with the overall design theme and architectural elements,” says Khurana. Select hardware and fixtures that are durable, reliable, and built to withstand the rigors of daily use. High-quality materials and construction will ensure longevity and minimize the need for maintenance or replacement over time. Ensure that the chosen hardware meets relevant safety standards and building codes, particularly for applications involving glass railings. Consider factors such as impact resistance, fire safety, and accessibility requirements to ensure compliance with regulations.

TREND CHECK

There is a growing preference for minimalist and sleek designs in glass fixtures and hardware. Consumers are opting for clean lines, slim profiles, and unobtrusive hardware that complement modern architectural styles. “Glass accessories are increasingly incorporating smart technology features such as remote-controlled operation, touch sensors and compatibility with home automation systems. Consumers are seeking customisation options to tailor requirements to their specific preferences and needs. This includes a variety of finishes, colours, textures, and hardware configurations to match interior design themes. Sustainability is a key consideration in fixtures and hardware design. With an increased emphasis on safety and security, glass fixtures and hardware incorporate advanced locking mechanisms, impact-resistant glass, and anti-lift devices to enhance protection against intrusion and accidents,” says Axouristos. In areas where air conditioning is prevalent, we are constantly cooling down the temperature inside while the outside temperature remains hot. While using a triple insulated glass the inner surface of the glass remains almost as cold as your room temperature. “This reduces the cost of your air conditioning and is also beneficial for the environment, contributing to the reduction of global warming where every initiative counts. Using triple insulated glazing is gaining traction as it provides effective sealing, like your fridge or freezer, preventing cool air from getting heated through the sun,” concludes Schmidt. [25](#)