



FAÇADE FOCUS

FACADES ARE THE BEST WAY TO CREATE A GOOD FIRST IMPRESSION IN ARCHITECTURE. NOT SURPRISING THEN THAT THE SPACE IS SEEING SEVERAL PATHBREAKING INNOVATIONS.

BY BINDU GOPAL RAO

The façade is the building's interface with the external environment, and it filters light, heat and air that operate in the internal environment. It also ensures that it gives the building an identity and an expression to the creativity of the designer besides setting the tone of the building and its occupants.

NEW VISTAS

Unitised facades are the latest in aluminum curtain walling systems. They are inspiring due to the endless possibilities in design freedom whilst keeping a high-quality finished product thanks to being prefabricated. "Unitised facades are formed of prefabricated and assembled units that may be transported directly from the factory to the job site and installed quickly on pre-prepared fixings. The panels are fully glazed and sealed off site, with gaskets and glazing beads pre-installed in factory-controlled circumstances rather than on site. The method can be applied to technically

hard projects as well as fast-track plans, new construction, and renovations. Also, new designs for more complicated and bespoke facades can be created," says Subhendu Ganguly, Managing Director, AluK IND. Span Floors have introduced an exterior grade Vulcan plywood which can once again be used in fully exposed applications. This is a first when fully exterior grade plywood with a decorative face has been introduced that is stable in sun and rain. Satinder Chawla, Managing Director, Span Floors, says, "Ours is a speciality modified wood called Vulcan timber, which has been designed for fully exposed, harsh exterior environments. This wood has been modified using state-of-the-art technology, which is a patented combination of high heat treatment, coupled with wood lamination, anti-termite, and anti-fungal treatments. As a result, this timber no longer has the traditional problem of excessive movement, warping, or insect attack and can be easily used on facade cladding, screens, decks, pergolas, outdoor furniture, doors, windows, and the like. Due to its inherent stability, we can



1. Span Floors has a new state-of-the-art wood coating technology that is silicon-based and is a major performance jump over the existing wood coating systems available.

2. Subhendu Ganguly, Managing Director, AluK IND

3. Satinder Chawla, Managing Director, Span Floors



4. Parul Mittal Director
Greenlam Industries

5. Sumit Gupta, Managing
Director, ALSTONE

6. Greenlam's NewMika FX exterior grade compact panels are designed with NMEF Technology that ensures that the facades are durable and dependable.

7. Greenlam exterior panels have materials that are graffiti and stain-resistant, termite-proof as well as mechanical shock resistant owing to the modified phenolic resin that gives the façades, extreme tensile strength, and flexibility.

8. Alstone Alcomb is a futuristic and revolutionary panel because of its superior quality control procedures that include rigorous testing under the most stringent standards.



create large wood sections which architects can use to create fabulous facades."

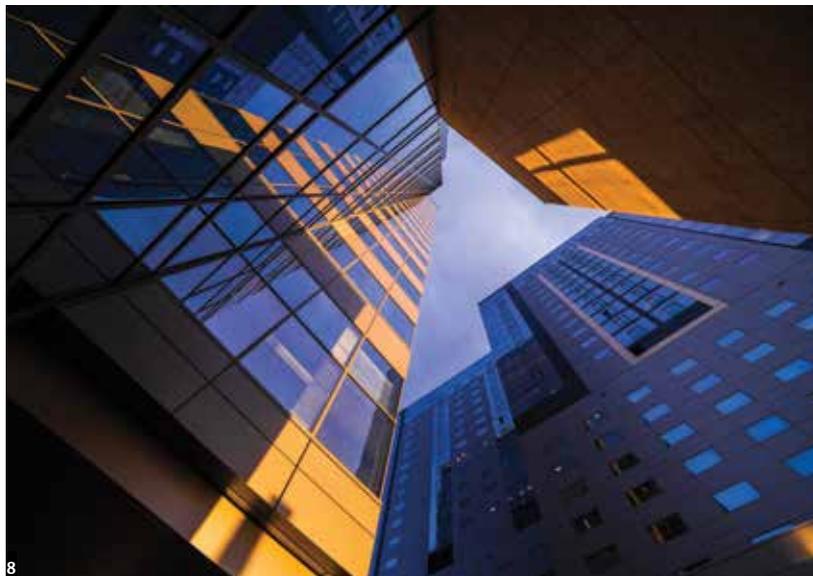
PRODUCTS GALORE

Recently, Greenlam launched the NewMika FX, a range of

high-quality exterior façade solutions that are made for and in India. The collection offers styles under three categories - Timeless Wood, Robust Solid, and Bold Abstract that can add a new dimension and personality to one's exterior. ALSTONE, a leading manufacturer of High-Pressure Laminate (HPL) & Fire Rated Composite Panel in India, has launched the futuristic and revolutionary Alstone Alcomb. "This is unique because of its core properties as well as applications which makes it one-of-its-kind in the category. The promising product has features like fire protection, A2 grade, high strength, and excellent rigidity, being lightweight, impact and sound resistance, and 100 per cent recyclable. Right from building facades, ceilings/flooring panels and furniture to commercial/military vehicles and doors and floors of railways - Alstone Alcomb can be used in a wide range of applications," says Sumit Gupta, Managing Director, ALSTONE.

DESIGN TALK

Facades are a very specific result of how context, culture, programmatic requirements, and innovative design align, allowing the architecture and landscape to combine in both form and spatial experience. Phillippe Fouché, Director & Principal Architect, SAOTA, explains, "Facades should not only be an attractive statement but also be informed by function and environmental requirements. A building's facade is multifaceted, continuously evolving and moving





COURTESY: SAOTA ARCHITECTS

through the change in weather, light, and operability of its user. A multi-layered experience is achieved through pragmatic drivers such as planter balustrades, screens, glazing, and cantilevered overhangs that control natural light, privacy and enables encounters with the habitants' surroundings." Ar. Abhigyan Neogi, Founder and Principal Architect, Chromed Design Studio, adds, "Facades can manage the micro-climate of indoor spaces and cater to the comfort of the end-users. While materials such as glass and metal have been extensively used in designing facades for their functionality and aesthetic quality, the revival of earthy materials, such as terracotta, can be seen. They not only display a rustic feel to the structure but also respond to the context climatically."

Aesthetics Matter

While designing a facade, one of the most important factors that cannot be overlooked is the direction of the sunlight. A facade that focuses on natural lighting, thermal comfort and proper ventilation is more efficient, which is why balconies and windows are carefully positioned. Sugandha Kumar Goel, Architect & Interior Designer, Sai Kripa Creations, says, "While balconies and windows are usually placed in the direction of sunlight, the rest of the space gives the architect a free license to focus on modeling a more elegant and stylish structure which can be done via lighting, use of stones, and aluminum and steel metal sheets. Architraves, skirtings and cornices as decorative elements enable the doors, windows and building corners to pop out." Rudraksh



COURTESY: 42MM ARCHITECTURE



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9. Aluminium alloy, used for the construction of panels is a non-combustible material that works well as a fire retardant and fire prevention material.

10. In the Avas Wellness development, various mechanisms have been explored as a means of layering the façade.

11. The porosity in the façade also responds to privacy that the internal spaces need. They are also the predefined structure for an internal space that helps to draw meaning from the same.

12. The façade is the envelope that encases the building with its exterior. It is the threshold that defines inside and outside. This is the functional value of the façade.

13. Philippe Fouché, Director & Principal Architect, SAOTA

14&15. Rudraksh Charan and Priyanka Khanna, Founders & Architects, 42MM Architecture



COURTESY: 42MM ARCHITECTURE

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16. Ar. Abhigyan Neogi,
Founder and Principal
Architect, Chromed Design
Studio

17. A facade is one of the most essential feature of a building, influencing practically everything from the structure's identity to the designer's initial impression of visitors and others.

17. The art of building and designing a facade is to find a balance between the aesthetics and practicality of a building. Although the opportunities to enrich architecture through details, whether simple or complex, are limitless.



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MINIMAL SLIDER BY TECHNAL

The key benefits of the Technal Lumeal GAn Minamilist include a minimal slider offering panoramic views. With a visible sight line of only 27 mm, it is one of the slimmest systems in the world. This system has a concealed threshold frame offering seamless inside outside connection and barrier free entry to/from the outdoors. A concealed sash technology offers the possibility of concealing the outer frame in the wall pocket. Having been tested for 3 kpa design wind pressure and 4.5 kpa ultimate wind pressure, 390 pa water tightness and 300 pa air tightness in ASTM standards this is perfect for hurricane prone and coastal areas with heavy rainfall. The best part is that it is available in 2,3,4 and 5 shutters - all of them with minimal shutter width, in sizes up to 3.5 m in height and 1.8 m in width that allows abundant natural daylight and views in any space. Likewise, the Technal MX-EL Unitized Facades with Integrated Fins of 500 mm depth have been used at the Ascendas International Tech Park, in Pune to offer superior shading and offer higher glare control without compromising on natural daylight. The Technal MX-EL Unitized System has a three-way adjustable bracketing to accommodate complex façade geometries and a three-barrier system to ensure highest level of air and water tightness.

Charan and Priyanka Khanna, Founders & Architects, 42MM Architecture, add, "A good design does not create a choice between practicality and aesthetics. Sometimes, an aesthetic aspect might be a little difficult to maintain; however, there are always solutions like modification in junction details, modification in material selections, and introducing a maintenance agency to induce practicality to the thought-out aesthetics."

MATERIAL MIX

Facades are changing in terms of materials as well. Aluminum facade systems are typically used for facade frames because of their strength and stability, and they are ideal for application in commercial as well as industrial sectors, including offices, hospitals, and schools. The unique curtain walling systems provide modern buildings with the flexibility and enhanced functionality they expect. Parul Mittal, Director, Greenlam Industries Ltd., says, "Our NewMika FX exterior grade compact panels are designed with NMEF Technology that ensure that the facades are durable and dependable. Offering beauty with durability, they come with UV resistant coating and high pressure manufactured dense panels that ensure that the facades never lose their charm, come hail or high water." Ritu Gupta, Co-Founder, Pramod Group, adds, "In a wide location, the elevations are designed with a high massing. Similarly, the elevations situated in lesser wide locations are designed with less massing so that the facade gels with the location and stands out. The day and night aesthetics are also balanced practically with the use of specific materials along with lighting which highlights the aesthetics in the facade and gives a rich look at both the times."

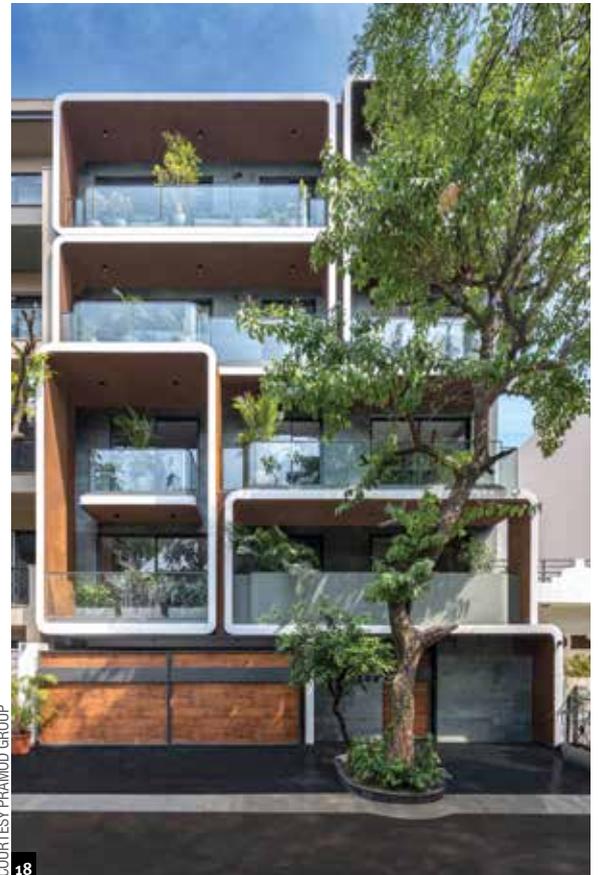
ECO EDGE

Nowadays, designers are emphasising more on green



COURTESY: PRAMOD GROUP

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COURTESY PRAMOD GROUP

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COURTESY: SPAN FLOORS



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SLIDING SYSTEM BY SCHÜCO

Schüco's AS PD 70.NI is a sliding system which provides a slim profile, allowing maximum daylight into any space. The Schüco Panorama Design sliding system allows natural light to encompass any room with a floor-to-ceiling glazing. It combines a slim interlock section and has a concealed outer frame to create an uninterrupted view from the inside to the outside. The system meets the highest performance requirements and is easy to use. With a 19 mm and 25 mm interlock profile width, this sliding system has an elegant look with high structural stability for large openings. The concealed frames come with room-height glazing with large width for a panoramic view. The system also has a patented threshold design that is raised automatically to retain a flush threshold at the bottom and sides and a slender face width even for a double-track, 4-vent design. The custom-engineered handle is a seamless extension of the system with an optimised grip for ease of use.

facades because not only are they aesthetically appealing, but also help in improving the efficiency of the building. "It helps in keeping the building cooler and improving the air quality. The plants we select should depend on the climate, maintenance, and aesthetic appeal. With the functionality of the building, we should pay close attention to scale, appearance, solid-to-void relationship, elevations, and materiality when designing facades. The

facade plays a critical role in the energy performance and interior function of a building," opine Anand Ojha and Ankit Ojha, Principal Designers, Anand Atelier Associate. Sustainability is no longer an afterthought; it has now become an essential consideration while designing and imagining the built environment. Nitin Mehta, Co-Founder and Executive Director, ALCOI, adds, "Human health is greatly impacted by the health of the building one spends their time in. Factors such as hygiene, sanitation, ventilation, light, and quality of materials determine the overall health of a building. Fenestration comes into the picture while taking care of a few of these factors. Designing systems that promote a healthier environment for the building can in turn promote a healthier lifestyle for its inhabitants." Modern facade design has made use of the most recent technological advancements and procedures that have led to current construction materials and processes, such as smart materials, which have opened huge design possibilities for structures. Robin R. Sisodiya, Founder and Principal Architect, ASRO Arcade Architects, concludes, "Today, with architecture, there is increasing use of digital tools like fabricated technologies, especially in facades, like machine learning, artificial intelligence, and Big Data play a significant part in the profession. Such tools will soon become more pervasive." ²⁰

WEBSITES:

- **AluK IND:** www.in.aluk.com
- **Span Floors:** www.spanfloors.com
- **Greenlam:** www.greenlam.com/india
- **ALSTONE:** www.alstoneindia.com
- **SAOTA:** www.saota.com
- **Chromed Design Studio:** www.chromed.in
- **Schueco:** www.schueco.com
- **Greenlam Industries Ltd.:** www.greenlamindustries.com
- **Pramod Group:** www.pramodgroup.in
- **Technal:** www.technal.com
- **ALCOI:** www.alcoi.in
- **ASRO Arcade Architects:** www.asroindia.in
- **Sai Kripa Creations:** www.facebook.com/saikripacreations

19. Vulcan timber is 100% FSC-certified material coming from sustainable forestry. It is extremely important that this factor be kept in mind while designing building facades so as to stem the planetary environmental degradation.

20. Ritu Gupta, Co-Founder, Pramod Group

21. Anand Ojha and Ankit Ojha, Principal Designers, Anand Atelier Associate

22. Nitin Mehta, Co-Founder and Executive Director, ALCOI

23. Robin R. Sisodiya, Founder and Principal Architect, ASRO Arcade Architects