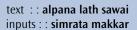


前FOCUS: FACADES i i industry forum: Prefabricated Homes i i personality: Ar. Amit Porwal i gennext: Quirk Studio i i photo essay: Antonella sava

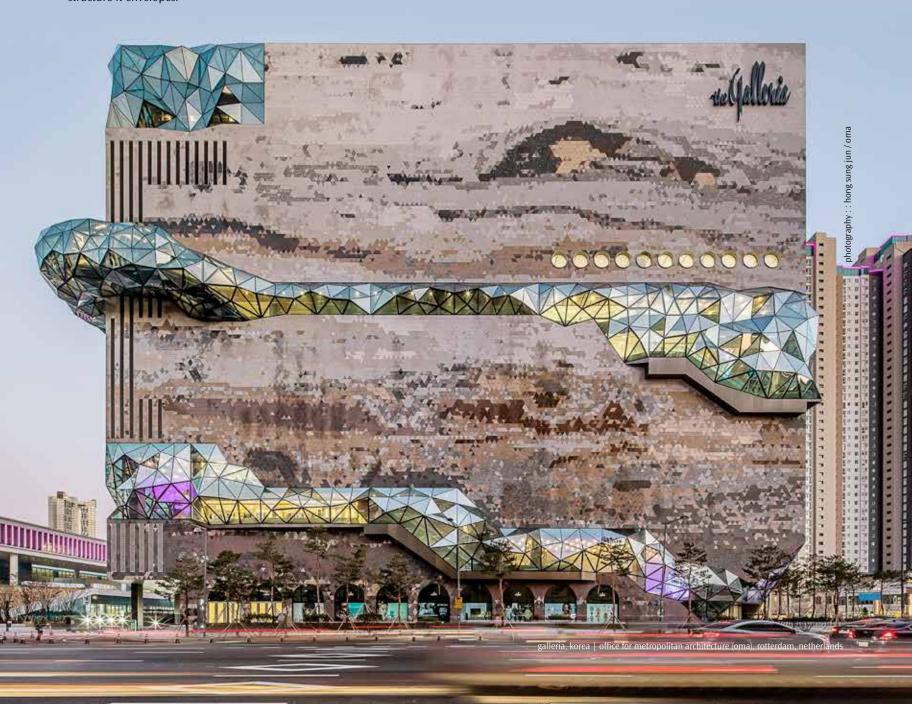


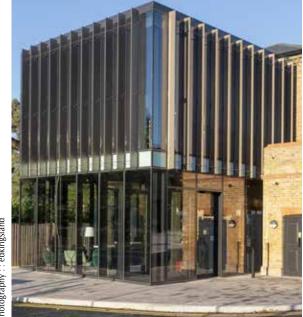


SKIN IN THE GAME

architects use technology and material to create magic in clothing the built form, taking aesthetic and function to the next level

Aesthetically, façades bestow chameleon-like properties to the buildings they embrace, from thematically melding into surroundings to standing out and becoming landmark properties; making some structures distinguished and others indistinguishable, depending on the client's brief. Design interventions too often endow a building with a façade that creates a climatic buffer around the structure it envelopes.





factors that drive design

Context is king when a project is architect-driven. Ar. Kazushi Miyamoto, Principal, 123Architects, Beijing, says, "I always want to provide a design that exceeds the client's expectations but it's important for me to design façades that are connected to the surrounding environment in terms of material used, color and history."

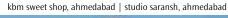
Facades go beyond the merely aesthetic to perform myriad functions, which architects say require a series of interventions from the façade to the innermost recesses. Rahul Jain, Principal Architect, Rahul Jain Design Lab (RJDL) says, "An ideal façade design not only enables the right amount of light, heat and wind but also provides adequate privacy resulting in an overall interior comfort." Des. Vivek Singh Rathore, Design Principal, Salient Design Studio, follows what he terms the ABC system to achieve this: A - architecture, B - budget, and C care of the facade.

Ar. Sanjay Prakash, SHiFT Architects, says design and comfort follow climate, "The types of façade we create are climate-responsive in context to the interior comfort and design scheme. For example, in an institutional project in Jabalpur, we used the concept of permeability to make it more comfortable in the summertime. Jaaliwork allows the hot breeze to escape through the façade's skin while converting it to much cooler air through terracotta and sandstone. The interplay of earthen material and air penetration adds freshness and curiosity to the interiors while maintaining thermal comfort. With advancements in projection screen technology, we could further use the orientation of the building to ensure that indoor spaces like exhibition galleries and seminar halls were glare-free and day-lit as well."

Inspiration, too, is integral to letting a façade soar skyward, along with the imagination, while architects work hard at anchoring these dreams in reality. An understanding of the technical processes involved helps. Ar. Prakash says, "Designing a façade is as technical as it is artistic. One must have an initial idea of its implementation and durability while designing, in the first place, and be practical while articulating a façade; creating a balance of art and economy." Ar. Takbir Fatima, Director, DesignAware agrees, "There is a delicate balance between a calculated methodical approach and a gesture that is whimsical. In our process, we look at factors that make the façade purposeful and functional, and these are used to generate the façade design. These factors maybe sun path, climate, orientation, views, etc. Sometimes, we may use a form or material on a whim, so it is a balance of both."

Examining the basic principles of building facades, Ar. Manoj Choudhary, Director, Edifice, says, "Building orientation is important as the facade needs to align with daylight and solar heat gain. A north-facing facade is ideal for more light and requires less shading while the south-facing façade needs to avoid the sun, and therefore requires horizontal shading."

Health and safety aspects are woven in too. Ar. Choudhary says the choices made are integrated, informed and detailed. "Health and safety aspects like smoke evacuation, sealing, ventilation, air, water, temperature proofing and maintenance are essential components of design and these ensure the design intent."





masquerade, china | 123 architects, beijing, china



cafe infinity, its dental college, greater noida | ridl (rahul jain design lab), ghaziabad





gardens bay, chennai | a+v (architecture + value), chennai



dev children's hospital, gujarat | usine studio, vadodara, gujarat



magazine london, uk | nissen richards studio, london





Quality of design and a vision of the final structure are ultimately, key. Ar. Prakash says, "To be a timeless structure, the façade needs to be innovative yet complementary to the design. I'd say design quality matters the most. If the façade is structurally sound in compliance with a building that is resilient to future shocks and can subsist without any further lavover, then it showcases design quality and is sustainable holistically." Ar. Ben van Berkel, Founder & Principal Architect, UNStudio, feels that thinking of the desired result helps chart the path. He says, "Sometimes, it requires creative reverse engineering while at other times, you have to invent new ways of manufacturing or constructing components."

A holistically-considered design leads to efficient construction practices. Malay Doshi, Partner, Studio Saransh, says, "The balance between the artistic nature of a facade and practicality can see a symbiosis in a multitude of ways. When ideating it well in time, it is possible to synchronize the implementation of the facade with the construction of spaces within."

choice of material

Architects choose from a diverse palette including materials such as brick, ceramic, wood, terracotta, concrete composites, fiber glass, perforated metals that protect a wall of plants, wire mesh or stone to achieve the desired impact. Ar. Fatima says, "Parameters that decide the design evolve during the design process in keeping with the surrounding context, materials selected, the interior look, as well as external or environmental parameters that control the sizes of openings and the orientation of shading devices." Ar. Miyamoto agrees that material choices must be able to balance a stable structure and function with design.

Ar. van Berkel elaborates, "Material decisions are determined by: weight, durability, costs, versatility, functionality, aesthetic effect, climate, sustainability, etc. Often you test the materials and how they are assembled by making mock-ups and changes to optimize the façade elements." A more difficult project with several constraints sometimes brings out the best in design choice. Ar. Arvind Jain, Principal Architect, A.J. Architects, says, "Practicality and ease of maintenance is of prime importance, and sometimes limiting or challenging creativity brings out better results.'

Architects who work within the Indian milieu to create the materials lookbook of a project are sometimes faced with a subcontinent bursting with resource inspiration. At such times, says Ar. Prakash, "We just go local! Using indigenous material has always helped us be more cost-effective and energy-efficient. At the cultural and information centre in Jabalpur, for instance, we used a mix of 'durrie' and print-work of 'bandhni' for some of the interior finishes whereas the façade was an interplay of local sandstone and terracotta from Jabalpur. The use of perfectly-sized glass based on the orientation of the building further enhanced its thermal performance." Such a decision fulfils the architect's commitment to using low embodied energy materials and doesn't hurt the client's pocket.

technology updating processes

Ar. Miyamoto says that while the end result is anchored in the architect's design philosophy, new technologies provide many more tools. He says, "New technologies are enabling more complex façade forms with various materials so it's getting easier to produce the same quality as a render. It has a cost issue, though." Ar. Prakash believes that the future is unfolding in the present. "Our contemporaries are incorporating kinetic engineering, AI, pneumatic technology or parametrics in their façade design. With our commitment to energy-conscious architecture and sustainability, we endeavor to make our façade more breathable to age gracefully and is not treated just as an elevational skin over a building."

the seventy, noida, ncr | and, new delhi

changes in façade design

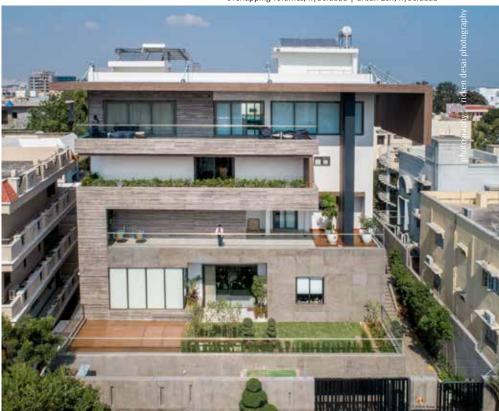
Façade design has evolved over the years, as Ar. Prakash discusses, noting the early trend toward brutalist facades, which changed over the years. "The world architectural façade was experiencing brutalism majorly. From using modular elements repeatedly representing different functional zones to using concrete for its raw and unpretentious honesty, we have subtly journeyed towards a façade that is true to its building. In this age, we know how to synthesize aesthetics with nature, blending unbuilt with the built environment. A façade needs to be equitable yet identifiable to the user, prominent yet complementary to the building and protective yet responsive to the environment."



organic india, (integrated production facility), lucknow \mid studio lotus, new delhi











MAGAZINE LONDON, UK

Nissen Richards Studio, London

Design brief and aim

To position the venue as a leading new space for contemporary culture.

How this was accomplished

A monolithic black box frontage was created for a new-build building in Greenwich, SE London. For visitors approaching from North Greenwich Station, Magazine London formed a dynamic new horizontal plane against the vertical cluster of City of London towers beyond, on the north bank of the Thames.

Magazine London's name was inspired by the gunpowder magazine that sat close to the site. The design referenced the site's industrial heritage through a monolithic, warehouse-style architectural approach, using a steel structure and saw-tooth external cladding, which created further horizontal banding.

Magazine London's bold and striking branding was done by Carter Studio who worked closely with the architects. The doubling/repetition of the logo was redacted by a rectangular shape to create a frame for content, permitting a variety of digital and print applications. The main site signage above the entrance was backlit at night with the brand name in black, helping make the building a glowing and iconic new local landmark.

In the foyer, floor-to-ceiling glazing provided views right through to the full-height glazed back wall and the river beyond. The elegant, glazed curtain walls were designed in regular modules, with slim-profile glazing mullions for minimum visual disruption. With an 8 m-high ceiling, the light-filled entry space also created an immediate sense of scale.





