**SPECIAL SECTION** 

## DESIGN BUILD

BUSINESS INTELLIGENCE FOR REALTY DECISION MAKING





## How can we make our façades more sustainable?

With growing demand, there is an urgent need to fix some loopholes in the glass and façades market to ensure high performance of buildings.

The global construction glass market is expected to grow in the forecast period of 2020 to 2025 with a CAGR of 3.1 per cent, and is expected to reach \$57,850 million by 2025.

The global façade market is expected to witness a CAGR of 6.40 per cent from 2021 to 2026. The introduction of smart façades integrated with thermo-bimetals is expected to drive growth in coming years. Several architectural companies are also laying emphasis on the development of modern, eco-friendly façade designs for

overcoming limitations pertaining to excess heat control and soundproofing, thereby representing one of the key trends in the global façade market.

**CW** organised a virtual roundtable on the topic to delve deeper into current trends, innovations, latest advancements, limitations, and more, in the glass and façades market.

Increasing urbanisation and the

What's driving growth?

towards aesthetically appealing building designs are among the key drivers for the global glass and façade market.

"Based on end-use requirements and how the market is moving after the pandemic, commercial buildings are the leaders in glass demand, followed by residential," says Jatin Shah, Managing Director, Technical Due Diligence (India), Colliers. "Hotel and hospitality



for separate packages; all of it is in a lumpsum total package."

In Venkatesh's view, all the elements used to put up façades should be of good quality.
"SS anchors and brackets are a few primary requirements to ensure sustainability of glazing." When a project goes for tendering and commercial negotiations, the first thing brought to the management level is using materials to reduce the budget and take a chance with the quality, he observes. "People don't know the difference between various products and materials that can be used in projects."

Sometimes, as a decision-maker or specifier, you can demand a warranty for your project. This puts the onus on the user and material manufacturer, notes Subramanian. We do not have standardised codes for façades and materials. "It is a highly unorganised sector and, hence, it puts pressure on material manufacturers who want to put up a system that is sustainable. Being among the stakeholders, there are challenges. For instance, the standards do not talk about Indian climatic conditions and we need to start talking about these to make the industry safer and sustainable."

## Checks and balances

Checks and balances from start to finish are a must so that the system is in place during the project. So, a lot of problems and mistakes can be avoided, notes Ramalingam. The final designs for a project may change on the engineering and structural system fronts, but from the aesthetic perspective, they mostly remain the same as designed by the architect.

The industry needs to be more organised and have its checks and balances in place; specifications and codes have to be clearly written. "We need to imbibe these

## Key expectations from users

When asked about the key expectations users have from material manufacturers in terms of services, supply reliability and warranty, this is what our panellists had to say:

- · Jatin Shah: Suppliers and manufacturers need to declare part of the system and not their product. Environmental product declaration is important as well.
- · Mitu Mathur: Education of applicators and architects regarding new materials and ways of application.
- · GK Venkatesh: We need to start asking for what we want.



"Solar panel-based façades are going to be the future in the façade space."

- Azhaguvel Ramalingam, Senior Director-Hyderabad Operations Projects & Development Services, JLL India



"Doubleglazed glass used in all our buildings is not a specification but a norm."

- Sarabjit Singh, Founder and Architectural Designer, Villa Ortiga

changes and impose them; we cannot expect change until this happens," says Shah. "The industry needs to create these standards, educate people, skill people who work on façade installation, and all the parts required to fix a façade need to be tested for all parameters. The transparency, upskilling and having the right code and specification are extremely important. We need to realise that a façade consultant is an extremely important consultant. We cannot

have a project without a façade consultant in place. A lot of development is already happening and we all need to walk together and take the industry to the next level."

"We need to start asking for what we want," states Venkatesh. "Let's not wait for norms to be included and announced; let us frame the norms."

"In the design and build tenders we work on, we try and involve the façade consultant before the specifications are laid out," says Mathur. "So that when it comes to design and build, the leverage is only given to the structural design and not any kind of aesthetic or façade systems that are being put in place."

When one puts the onus on anyone, their ability comes into play, which helps get what you want. "This puts a lot of onus on us as a company when we supply," says Subramanian. "We won't give a warranty if somebody doesn't give us a proper design review, choose the right product and right applications. We have set up a project management services team as part of our qualifications to give a warranty for a project as it is an industry need because most of the industry is unorganised till today."

- SERAPHINA D'SOUZA

To share your views on the market for Glass and Façades in India, write in at Feedback@ConstructionWorld.in