

FunderMax:

ADDING A DIFFERENT DIMENSION TO FAÇADE



The nature of the façade used has the potential to transform the entire character of a building, lending it an appeal and personality that goes beyond the design of the structure. The exterior cladding used in a building is invariably wood, stone or brick tiles in a residence while commercial buildings lean towards glass or aluminium. Currently, plenty of synthetic options prevail, simulating wood or stone, making them popular choices.

While these undoubtedly accentuate the aesthetics of the exteriors, the often asked question is their functional aspect. Do they protect the structure from weathering or from extremes of temperatures? Besides, the materials used for cladding, are they sustainable options?

Essentially, facades are the 'skin' of the building, acting as a shield between external environment and the built structure. While protecting the structure, this skin should allow the building to breathe besides conveying its function, significance and character.

Facades can be both active and passive where active and interactive facades interact positively with climatological elements to enhance energy efficiency in the building. The façade elements that enable the same are typically rear ventilated where air is freely allowed to pass behind the façade with open joints at top and bottom and also in between. This allows increase in level of energy efficiency in the building.

Double skin facades consist of a single glazed external screen, a naturally ventilated cavity and a fully glazed curtain walling system as internal screen. Adjustable Venetian blinds in the ventilated cavity provide solar shading while the air filled buffer zone regulates the internal climate. As against this, the single skin façade consists of a single glazed external screen with or without the solar shading device in the form of adjustable louvers.

Back ventilated facades are a complex multi-layer solution enabling the dry installation of the covering elements. The ventilated cavities here use the pressure effects of the wind to dissipate energy of rain water and prevent it from entering the building.

Incorporating all these features and many more is the façade options offered by FunderMax India, a 100 per cent subsidiary of the principal company based in Austria, FunderMax GmbH. Using special resins and cellulose fibres, paper based cladding for the exteriors that is treated to withstand the harshest of weather conditions as well as act as an excellent insulating material for the structure, the FunderMax panels are water resistant, saline resistant, scratch resistant, impact resistant as well as most importantly UV light-resistance giving it optimal Light-fastness properties.

The FunderMax panels are cladded to the walls with a small air gap between the panels and the wall which not only enables the building to breathe but acts as insulation from all types of weather conditions. While



the heat ingress as well as the intensity of extreme cold is considerably reduced, the energy savings ensuing from its presence amounts up to 30 per cent. Added to this is the reduction in the fall of rain water directly on the walls of building.

The green element of FunderMax panels is evident in the sourcing of the materials too, with the paper used for the panels coming from FSC certified wood. The panels come in multiple colours and designs, with their individual representation limited only by the designer's creativity.

Thus the panels showcase themes ranging from dense forests, sports, art, airfield, famous personalities or just exotic patterns, while the play of multiple colours bring in varied dimensions to the façade. Alternatively, the panels also simulate glass that serves as a fine reflector of the outdoor scene.

Says Dr Prashanth Reddy, CEO and Managing Director, FunderMax India, "the panels are excellent material for theme parks, schools and public spaces as they are totally clear of sharp edges, while their colours, versatile patterns and multiple design options makes them prime candidate for these spaces."

Besides colours and patterns, the panels incorporate different forms such as perforations, louvers to address ventilation. The panels are also excellent railings for balconies, offering an artistic appeal to the façade with their colours and patterns.

Interestingly, the panels can also be used effectively to introduce haphazard projections in the façade that lend an element of novelty and character to the building. It also allows the effective use of the ensuing space in the interiors from the haphazard projections.

While the panels are indeed flat surfaced, it still does not negate the option of using them in curved structures. All it needs is clever usage and intricate crafting. Thus, an intricately curved exotic thematic structure can be clad with FunderMax panels by merely placing the flat panels deftly on the curved steel structure.

The use of panels incidentally is not confined to walls or curved structures but extends to ceilings too. Thus, an exotic ceiling displaying plenty of art and creativity can be brought about by merely using FunderMax panels. Exquisite patterns cut out or painted on these panels, can form the ceiling lending a unique character to the interior. Besides, the insulating property of the panels further ensures the interiors remain cool by reducing the heat ingress from an exposed roof.

The FunderMax panels can also be used in outdoor seating where the wood or iron benches could be clad with them, adding colour as well character through their thematic representations.