

LEADING WITH LAMINATES

HIGH PRESSURE LAMINATES ARE EXTERIOR GRADE LAMINATES EXTENSIVELY USED AS A CLADDING MATERIAL AND MORE

BY BINDU GOPAL RAO



High Pressure Laminates (HPL) are a superior version of regular laminates. Greater in thickness, it also comes along with a substrate and has numerous applications. Naturally, both vendors and architects are using them in myriad ways in architecture and interiors.

THE CONCEPT

High Pressure Laminates are exterior grade laminates. These are extensively used as a cladding material. Being an engineered product, HPL provides perfection. With manageable attributes, this material is quick and easy to work with.

Apart from cladding, HPL can also be used for fabricating wardrobe and kitchen cabinets. HPL can prove to be a handy and functional material if used smartly. Swapna Bandekar, designer, Studio Five Partners explains, "we hear high-pressure laminate compared to melamine. Technically, melamine is a chemical used in both HPL and low

pressure laminates (LPL).

The special consistency and the production process under high pressure gives HPL an outstanding product feature." A successor of the original plastic laminate, it is produced by pressing thin sheets of paper or resin together. It is a consolidation of 6-8 layers of kraft paper, which

1. HPL offers immense flexibility to mold the design into new dimensions.



2. Khozema Chitalwala, principal designer, Designers Group.

3. & 4. Being sturdy, water-proof, and termite-proof, renders HPL as a great cladding material.



are glued together and bonded under high pressure and heat; resulting in a very robust product. The overlay paper reduces abrasion and scratch while the decorative paper provides it with the required visual appeal.

HPL offers immense flexibility to mold the design into new dimensions, therefore is a preferred choice of architects and interior designers. "HPL is used to elevate the aesthetics of different spaces and lend a premium appeal while ensuring high safety standards. AFX laminates from the house of Greenlam Laminates' collection comprises of HPL sheets that are fingerprint resistant, low maintenance, do not need a rigorous cleaning procedure and help in keeping surfaces hygienic. Regular laminates tend to fade over time, however, HPL can also be used for exterior cladding as it is stable to light and immune to UV rays which preserve its original homogenous tone. Greenlam's HPL sheets are resistant to dry heat at 180°C, immersion in boiling water, cracking, scratching, staining, color change, cigarette burns and steam. These laminates are imbued with low heat conduction which sustains surface temperature, i.e., neither get too cold during winter nor too hot during summer," says Parul Mittal, director, Greenlam Industries Ltd.

ADVANTAGE FACTOR

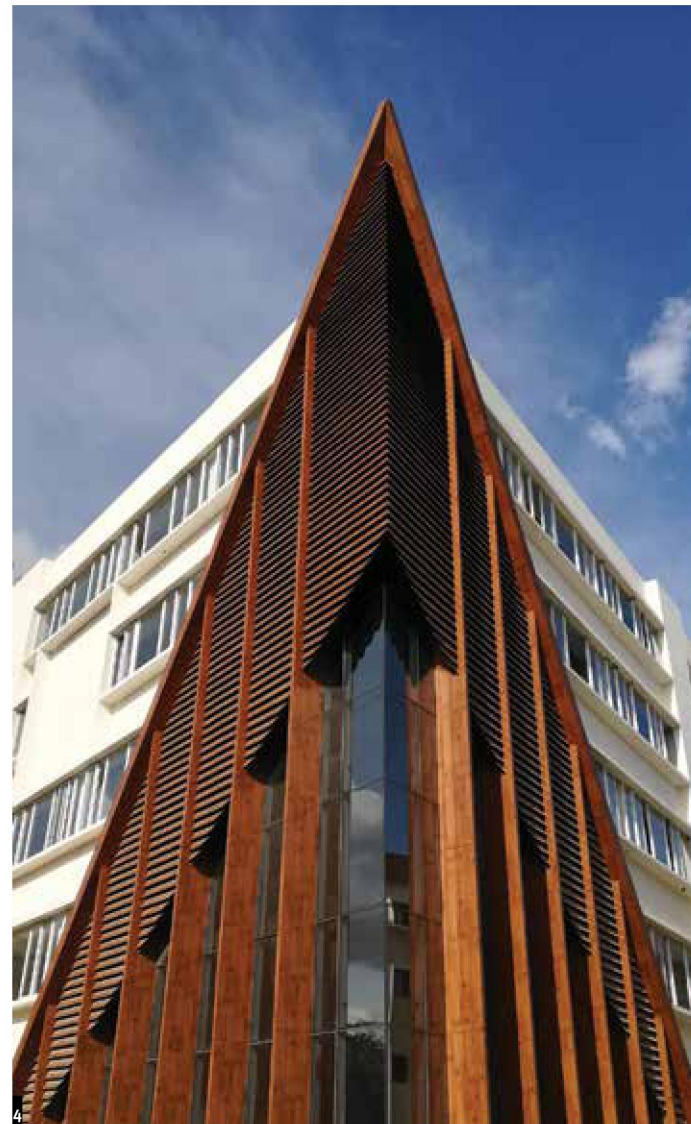
HPL can be used as a cladding material for buildings. These are sturdy, water-proof, and termite-proof. Another

advantage HPL has over laminates is, that it can directly be cladded onto a surface, whereas laminates must be pressed on the ply first. HPL can be used for facades, kitchens, libraries, wardrobes, wall paneling and can even be used on doors, granting a unique texture and detailing," says Sumit Dhawan, founder & principal architect at Cityspace' 82 Architects. Regular laminates require a substrate to be applied onto.

HPL's also have better strength and durability as compared to regular laminates. They are not only used for decorative purposes but also used for facades and cladding. Also, HPL comes in a variety of colours, grains, and patterns. This variety cannot usually be found in regular laminates.

Khozema Chitalwala, principal designer, Designers Group explains, "HPL confers numerous possibilities. It can be used in external facades, partitions, toilet partition walls, screens, office cubicles, ceilings with screenings, louvers, fins, and more.

HPL is a crafty material. We once fabricated a stunning headboard of HPL for one of our projects as it offered the textures and patterns that perfectly complemented the design of the room. We have also experimented with HPL in the form of wardrobe shutters and cabinets in other projects." This material comes in 1200mm x 2400mm panels in a variety of thicknesses, such as 6mm, 8mm, 10mm and 25mm.



VERSATILITY MATTERS

With exceptional applicability and easy maintenance, these laminates take centre stage for interior installations. Their advantageous uncomplicated customisation helps make it possible for HPL to create panels with purpose-made designs and special decor to suit the application needs.

Both aesthetic and functional aspects of its application on the interior surfaces can be easily considered with the abundance of its choices in patterns and finishes.

Robin Sisodiya, founder, ASRO Arcade adds, "they are the most sought after for being zero maintenance and weatherproof, making them suitable to be used on exterior facades. Unlike other surfacing products, they can be bent to take a certain shape around a subject making it a paragon in inventive designs.

"They offer a wide range of innovative design possibilities in a variety of colours and textures that can add a touch of luxury to living spaces. They are available in sheet sizes of 4' X 8' and can be customised as per the requirements. This laminate is a common choice for flat surfaces such as countertops or flooring due to its durability. Due to its availability in various colours and textures, they can be used on any surfaces.

"For instance, in a residence designed by us in Gurgaon, we have used a dark wooden colour HPL sheet in the facade to create a contrast of the light and dark facade colour palette."



5. & 6. In a residence designed by ASRO in Gurgaon, the designers have used a dark wooden colour HPL sheet in the facade to create a contrast of light and dark colour palette.

7. Sumit Dhawan, founder & principal architect, Cityspace' 82 Architects.

8. Robin Sisodiya, founder, ASRO Arcade.

9. Ashwani Khanna, AVP marketing, FunderMax.

10. Parul Mittal, Director, Greenlam Industries Ltd.

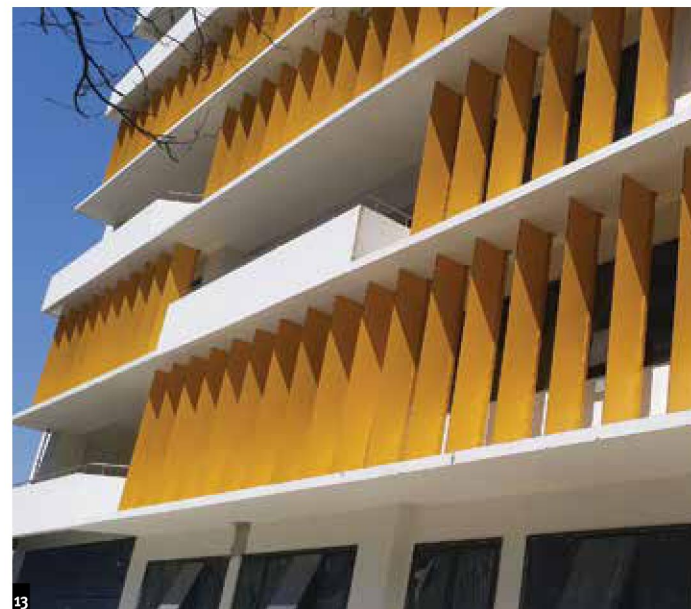




11



12



13

TECH TALK

Aatika Manzar, founder director, Aatika Manzar Designs explains, "High pressure laminates have evolved quite a lot in the recent years. They have now become one of the most used materials in construction of both indoor and outdoor spaces. HPL is a descendent and finer form of the original plastic laminate. It is made by a curing process where the resins are converted into plastic resulting in the paper sheets transforming into a single laminated sheet with very extremely good qualities."

Technology also plays an important role in the manufacturing stage. The Original FunderMax panels are manufactured using patented NT technology and are in accordance with EN438-6, EN438-7 and CE certified. "Properties of FunderMax panels include optimal light fastness, flame retardant and resistance to scratches, solvents, impact, bends, frost and heat. These features make the panels highly robust and



14

long lasting and help cut down energy bills," says Ashwani Khanna, AVP marketing, FunderMax.

USES GALORE

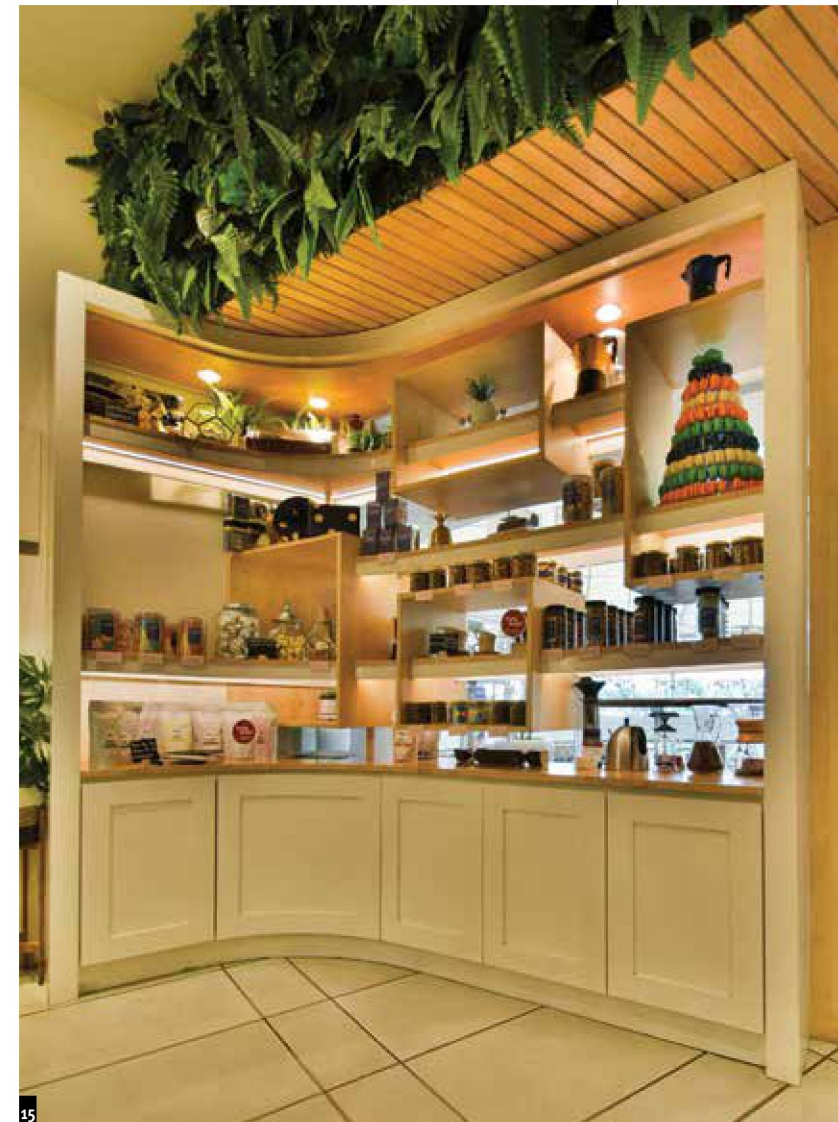
HPC can be used in kitchen counter front finish or cabinets; they can be used in furniture like table tops and tv consoles. There are times when you want to do a quick renovation of any furniture piece. It can easily be done by using HPL which can in no time change its look entirely. Any room can have a feature highlighted wall in HPL to help it stand out. Indoor areas can also have HPL flooring for durability.

"Since HPL is scratch resistant, it can be used in interior spaces for furniture like tables, tv cabinets, consoles etc. They are water resistant since it prevents infiltration, bacteria do not proliferate as it needs moisture for the same. Due to this, HPL finds itself extremely favoured in kitchen furniture as well. One can easily clean with a damp cloth without the thought of moisture spoiling the sheet. The fact that it is stain proof only adds to its advantage. HPL comes in a variety of finishes so one can choose the desired aesthetic appearance from marble to stone; shiny to satin or matt finish as well. Also, multiple textures and models are readily available in the market. It can also be used in outdoor spaces for building facades as it has high resistance to extreme temperatures and UV rays. The colour does not fade over time maintaining its homogenous uniformity," adds Manzar. HPL can be used for facades, kitchens, libraries, wardrobes and wall panelling. These can even be used on doors, granting a unique texture and detailing.

ECO EDGE

HPL is environmentally neutral and requires no special treatment. "This wood is a by-product of sawn lumber production or of sawmills. FunderMax India is also member of Indian Green Building Council (IGBC) and its products can be used in constructing green buildings," says Khanna.

"For the India market we have re-introduced ventilated façade system, developed standardized installation systems,



15

launched a host of decors, designed shading systems (Max Lato) heeding to the market demand, launched rivet less soft-fit system and durable partition system for restrooms (Max Cabina)," adds Khanna.

Today, when global warming is an extremely crucial issue, HPL is a step towards controlling environmental hazards. The low emission quotient of the sheet assures safety from pollutants indoors. "Although high-caliber HPL is easily available across the market, Greenlam Industries adheres to eco-friendly practices.

Manufacturers who comply with these sustainable practices have designated demarcation for the authenticity of certain green credentials that HPL sheets should have. A Greengard certification to affirm that there wouldn't be any risk of increased indoor air pollution or exposure to toxic emissions. The Forest Stewardship Council (FSC) certification implicates that no natural forest cover was harmed during manufacturing. Manufacturers with a substantial environmental management system (EMS) are awarded ISO 14001 certification for their products, HPL sheet with this certification determines the eco-friendly nature of the product. To monitor the production capacity while maintaining ecological practices, the Indian Green Building Council (IGBC) certifies that HPL manufactures are utilizing water and energy resources adequately," adds Mittal. HPL has so many uses that its versatility makes it appealing for both architects and interior designers. **25**



16

11, 14 & 15. Since HPL is scratch resistant, it can be used in interior spaces for furniture too.

12. & 13. The original FunderMax panels are manufactured using patented NT technology.

16. Aatika Manzar, founder director, Aatika Manzar.