ALUMINIUM COMPOSITE PANELS ARE REDEFINING LOW-MAINTENANCE ARCHITECTURE

"ACPs have transitioned from being a novelty in façade design to a mainstay of contemporary construction—largely due to their performance, durability, and ease of upkeep."

s India's architectural landscape continues to evolve at an unprecedented pace. the focus is increasingly shifting toward materials that offer a balanced equation of form, function, and longterm value. In this context, aluminium composite panels (ACPs) have emerged not only as an aesthetically versatile material but also as one of the most reliable, low-maintenance solutions for modern infrastructure.

The low-maintenance advantage of ACPs is not a by-product of chance but a result of deliberate technological advancement. At Viva, we incorporate cutting-edge coil coating technologies and precisionengineered multi-layer protective finishes to create surfaces that can withstand the rigours of urban and climatic exposure. Coatings such as polyvinylidene fluoride (PVDF) and fluoroethylene vinyl ether (FEVE) offer superior resistance to UV rays, acid rain, industrial emissions, and moisture-conditions that typically lead to degradation in conventional cladding materials.

ACPs' non-porous, smooth finish is also less likely to attract and retain dust or grime, significantly reducing the need for frequent cleaning. This makes them particularly suitable for applications in commercial highrises, institutional buildings, public transportation hubs, and urban signage.

While ACPs require relatively little maintenance, a basic level of upkeep helps extend their performance. Regular cleaning, avoiding abrasive cleaning methods, with mild soap and water, is typically sufficient to maintain their visual appeal. In areas with heavy exposure to sunlight, UV-

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resistant panels provide additional protection against fading, retaining their original vibrancy for years. Occasional inspection of sealants and joints, especially in high-rise or coastal projects, is recommended to ensure structural soundness.

The advantages of ACP extend well beyond maintenance. Lightweight yet remarkably durable, these panels reduce structural load without compromising on strength, making them ideal for both new construction and retrofit projects. ACPs are also resistant to corrosion, impact, and weather damage, offering versatility in design.

ACPs offer higher value propositions through their contribution to sustainability. At Viva, we are proud to be India's first EPD-certified ACP manufacturer, a milestone that reflects our commitment to transparency and environmental performance. ACPs support green building efforts by contributing to LEED points and aligning with global





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standards for sustainable material use.

With minimal need for repairs, repainting, or refinishing—and with significantly reduced labour and maintenance costs-ACPs offer a compelling return on investment. Beyond durability, ACPs have emerged as the preferred material of choice due to their high degree of customisation. For instance, natural stone façades are visually impressive but also expensive. In contrast, ACPs can replicate the exact look of the same stone finish at a fraction of the cost, have easier installation, and offer significantly better resistance to environmental wear and tear.

Ultimately, the growing preference for ACPs reflects a larger industry shift towards high-performance, low-intervention materials that support both design innovation and operational efficiency. At Viva, our focus is not just on creating aesthetically appealing panels but on building products that are resilient, sustainable, and tailored for the challenges of the built environment. In doing so, we aim to support a future where architectural excellence goes hand-in-hand with long-term responsibility and reduced maintenance burdens.