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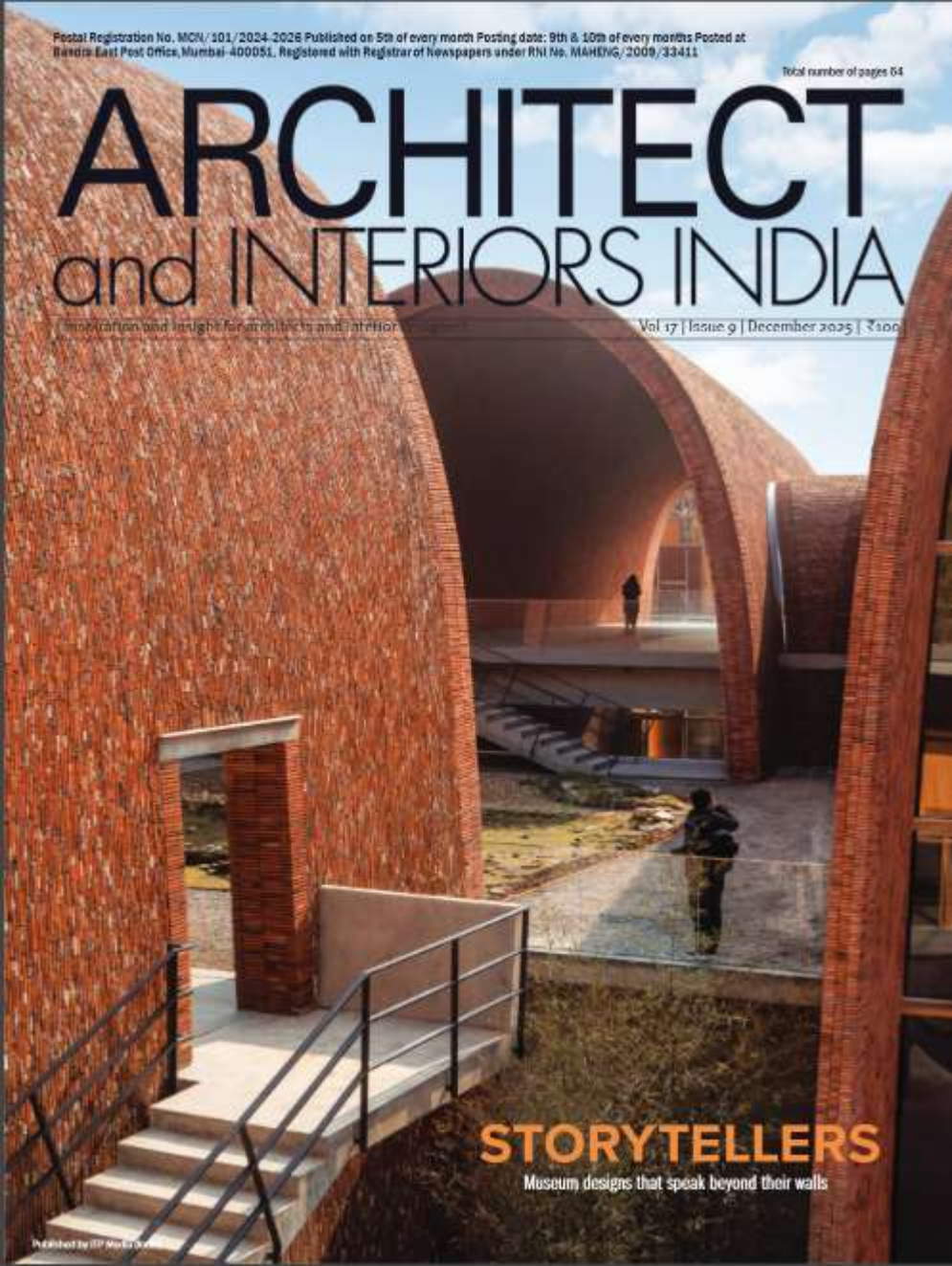

STORYTELLERS

Museum designs that speak beyond their walls

Published by

PHOTO COURTESY: DS2 ARCHITECTURE.

RESPONSIBLE RECYCLING

At DS2 Architecture, the team actively integrates recycled materials across every scale of their work, from loose furniture pieces to permanent architectural finishes.

PHOTO COURTESY: VYARA TILES.

Common recycled materials include reclaimed wood and fibre composites, and recycled glass and metal in furniture and lighting.

The use of recycled materials in homes is about reflecting where they come from and also the responsibility of where they will go.

By Bindu Gopal Rao

Sajal Lamba, Co-Founder & Director, Wriver

Vandana Taluru, Founder of 4Brick Studio

Mueen Haris, Founder, DS2 Architecture.

Using recycled materials today is not about ticking a sustainability box. It is about making spaces that feel intentional, grounded and emotionally resonant. We speak to experts to tell us more.

LOOKING BACK TO LOOK AHEAD

Most conscientious designers have always believed that recycled materials carry memory and have a sustainability approach which is deeply personal and grounded in how they relate to materiality. Aneri Mehta, Co-founder of ACKM Studio, says, “Over the years, we have naturally gravitated toward four responsible materials: terrazzo, PET acoustic panels, LEED-certified lighting, and reclaimed wood. These form the backbone of our recycled and conscious design philosophy. Our recycled products span terrazzo made with reclaimed stone chips, PET acoustic panels created from recycled plastic bottles, reclaimed wood furniture and joinery, and lighting that is LEED-certified for energy efficiency and low environmental impact. One of our key examples

PHOTO COURTESY: 4BRICK STUDIO.

Best practices include testing samples and mock-ups, properly sealing terrazzo and wood, verifying certifications for lighting and timber, and balancing expressive recycled textures with calmer palettes for visual harmony.

PHOTO COURTESY: VYARA TILES

Recycled content is not always visually obvious, especially in terrazzo and concrete.

Mehul Jain, Managing Director, Vyara Tiles Ltd,

Aneri Mehta, Co-founder of ACKM Studio

Khushali Chawda, co-founder of ACKM Studio

is Perona at the Bangalore International Airport, which was designed and delivered as an entirely LEED-certified project — every fixture, material, and fitting aligned with global sustainability standards. Another example is our effort to reuse and transform pieces on site: old furniture is frequently sanded, refinished, reupholstered, or redesigned to give it a completely fresh identity instead of being discarded."

MATERIAL MATTERS

Common recycled materials include reclaimed wood and fibre composites, and recycled glass and metal in furniture and lighting. "Conscious material use also includes developing entirely new surfaces from industrial waste, engineered for strength, stability, and longevity so they perform as reliably as conventional materials. These recycled materials become part of the home through thoughtful application, whether as furniture, lighting, or surface finishes, where their texture, durability, and material intelligence contribute overall to how a space feels and functions," says Sajal Lamba, Co-Founder & Director, Wriver.

At DS2 Architecture, the team actively integrates recycled materials across every scale of their work, from loose furniture pieces to permanent architectural finishes. The most deployed recycled products include reclaimed timber elements sourced from demolished structures, used for ceiling accents, wall cladding, built-in storage, and

Identify right

- Clear labelling such as "post-consumer recycled" or "post-industrial recycled".
- Look for clear material declarations, environmental certificates like LEED or FSC, low-VOC ratings, and environmental product declarations.
- Certifications, e.g., GRS (Global Recycled Standard) or FSC Guidelines.
- Visual cues, especially in reclaimed timber or products with visible composite textures.

PHOTO COURTESY: VYARA TILES

Recycled materials help architects shift from a linear to a circular construction economy, where waste becomes a design resource.


PHOTO COURTESY: ACKM STUDIO.

Hybrid strategies combining recycled elements with new components for structural consistency when required can also be used.


PHOTO COURTESY: ACKM STUDIO.

Recycled materials can be integrated into almost every layer of a home.

custom furniture. Recycled metal, such as steel, off-cuts into custom hardware, lighting frames, structural bracing elements, and railing systems and upcycled construction debris, such as broken tiles, rubble, or brick fragments, is used as textured feature walls or mosaic surfaces. "These materials are not simply afterthoughts or token 'green add-ons' but are fundamentally integrated into our design language to actively reduce landfill-bound waste. One such project nestled in Kudlu Gate on Hosur Road in Bengaluru, designed by DS2 Architecture, is PopWorks, an extraordinary example of adaptive reuse, transforming an existing industrial warehouse into a high-performance office facility," says Mueen Haris, Founder, DS2 Architecture.

DURABILITY DETAIL

One of the key questions with recycled materials is about durability. Durability is fundamental to sustainability, and these materials reduce the need for frequent replacements. Mehul Jain, Managing Director, Vyara Tiles Ltd, says, "At FreeForm, many of our terrazzo floors, both cement-based and epoxy, use recycled aggregates. Clear, mirror, and coloured glass chips, as well as stone off-cuts, are sourced as scrap and processed in our own crushing unit into controlled sizes for flooring. In many cases, the base screeds and precast products also use supplementary cementitious materials (SCMs), further reducing the cement footprint. Recycled content is not always visually obvious, especially in terrazzo and concrete. It usually must be declared by the manufacturer, either in the technical data or on the drawing/ specification. In our terrazzo systems, almost all mixes that contain glass or stone chips will be a recycled component."


PHOTO COURTESY: VYARA TILES

Lighting can be LEED-certified and use energy-efficient systems, while surfaces can use reused stone offcuts and recycled glass.

PHOTO COURTESY: ACKM STUDIO.

The main responsible materials include terrazzo, PET acoustic panels, LEED-certified lighting, and reclaimed wood.

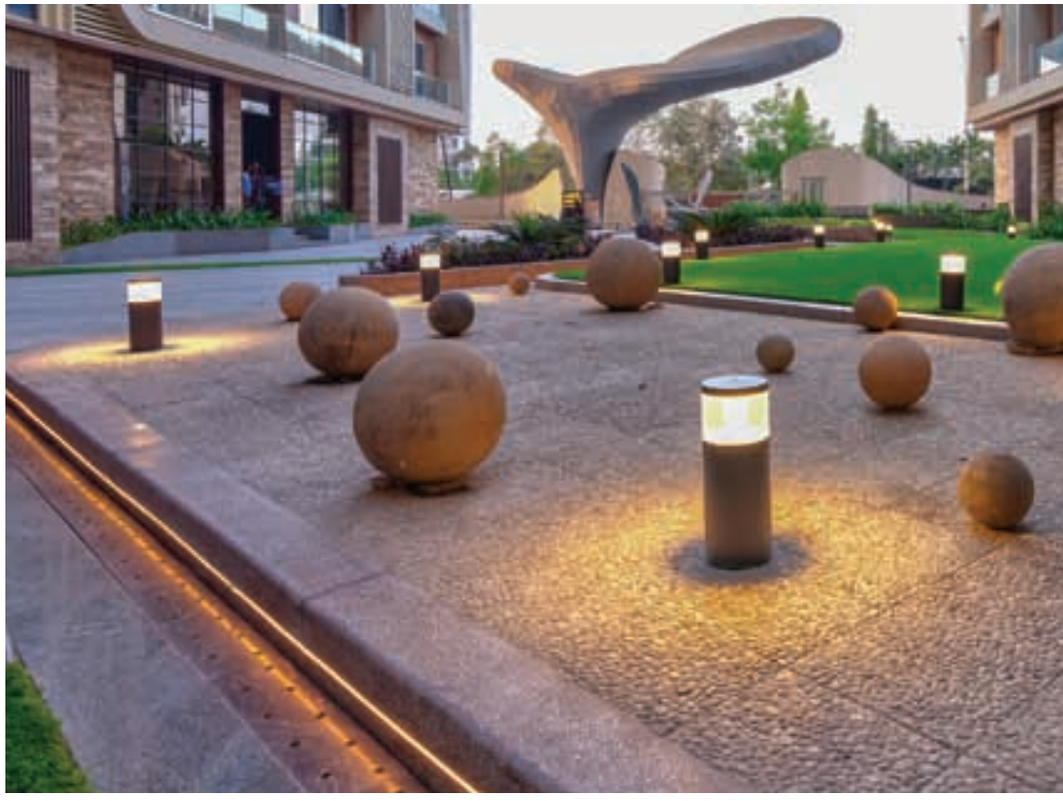

PHOTO COURTESY: VYARA TILES

Most recycled materials become part of the home through thoughtful application.

Recycled materials can be integrated into almost every layer of a home. For flooring, use terrazzo with recycled chips or reclaimed wooden planks. For walls and ceilings, use PET acoustic panels and recycled fibre boards. For furniture, use reclaimed wood pieces, upcycled furniture, and reupholstered seating. Lighting can be LEED-certified and use energy-efficient systems, while surfaces can use reused stone offcuts and recycled glass. “In recent projects, we’ve used full-home terrazzo flooring, created checkered stone-inlay floors at Ekya using mixed offcuts, and designed a powder bathroom entirely from waste marble fragments arranged into a beautiful mosaic-like palette,” says Aneri.

BEST PRACTICES

Best practices include testing samples and mock-ups, properly sealing terrazzo and wood, verifying certifications for lighting and timber, and balancing expressive recycled textures with calmer palettes for visual harmony. Vandana Taluru, Founder of 4Brick Studio, says, “One of the best practices is to bring recycled materials into the project from the concept stage so they shape the design intentionally. You can also reuse waste produced on or around the site to reduce impact and strengthen the project’s connection to its context.” Once you identify where reclaimed or recycled finishes can be used before detailed drawings begin, test small samples for finish, texture, and compatibility with your visual language. Consider moisture and wear just as you would with conventional materials. Educate clients on natural imperfections and that they add character and are part of the material beauty. Hybrid strategies combining recycled elements with new components for structural consistency when required can also be used. Costing can be on par with standard materials or higher. Reclaimed wood can be 10–20 per cent higher due to treatment and sourcing. Recycled-chip terrazzo is comparable to standard terrazzo, while PET acoustic panels are priced similarly to high-quality acoustic boards. LED lights have a higher upfront cost but deliver significant long-term savings in energy and maintenance.

IMPACT ON AIR QUALITY

As the chatter on air quality gains momentum, recycled materials can make the difference. Recycled materials generally improve indoor air quality when they replace synthetic products. However, their impact depends on the processing standards. “Properly refinished reclaimed wood has low VOC emissions compared to new engineered boards containing adhesives. Recycled metals and glass are inert, while recycled plastics must be vetted for stabilisers and additives. Upcycled textiles need to be cleaned and treated to remove dust, mould spores, or chemical residues from earlier use,” opines Mueen. When sourced responsibly, recycled materials can significantly reduce off-gassing, contributing to healthier interiors. Khushali Chawda, co-founder of ACKM Studio, avers, “PET acoustic panels are low-VOC and non-shedding. Reclaimed wood has already released most of its natural VOCs over time. Terrazzo is inert once sealed, and LEED-certified lighting reduces heat, emissions, and off-gassing. Together, these choices contribute to healthier, calmer indoor environments.”

IN CONCLUSION

Recycled materials help architects shift from a linear to a circular construction economy, where waste becomes a design resource. They introduce storytelling value to a project by integrating recycled content that improves LEED and GRIHA points, making them a strategic choice for future-ready buildings. With growing interest in carbon-neutral design, recycled materials play a key role in reducing carbon, an increasingly important metric for responsible architecture. A&I