

BUILDOTECH

BUILDING TECHNOLOGY & SUSTAINABILITY

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Bricks – in conversation with nature



Building Sustainability through the Mud Path



India's first Green Warehouse

High Efficient Bathroom Systems



Clean India Show
November 24-26, 2010
NSIC Exhibition Complex
New Delhi, India



Anutone walls with Tufbloc panels enhance building value

Anutone walls for sustainable design

Consider Tufbloc, the next-generation construction panel. It enhances the value of building interiors by making them lighter, stronger, greener, and last longer! Tufbloc is high-density, fibremesh-reinforced magnesia board. It strongly resists impact so it can be safely used in pedestrian areas. It is incombustible so it can be used to clad shafts and ducts. It fully resists water so it can be clad with ceramic, stone, stucco. It highly resists noise upto 54dB so it can be used for sensitive spaces. A super board, yet easily and quickly installed by the drywall industry! In a space-saving, slimmer footprint with impeccable green credentials. Tufbloc... one green board... does it all!

Designing Sustainability

There is a new-found enthusiasm across the construction industry about a concept that most of the stakeholders are not fully conversant with: 'Sustainable design.' Lately-imported from the Western environmental and government agency forums, the concept being largely debated by the Indian architectural and construction diaspora is still far from being sustainable. However, there have been some commendable efforts both by the professional and industrial community in the country towards building a world that is free from the effects of global warming.



For the past decade, there has been a new 'energy' permeating across the global construction evolving energy-saving building models. While design professionals – exhorted by environmental and research agencies – had been asking for energy-efficient systems and solutions, product manufacturers and solution providers have been continuously exploring their R&D strengths to come up with eco-friendly offerings. Given their financial competence and R&D activism, Western professional communities have not only been able to evolve models, they have also sought to popularise those solutions.

This is why the world has seen some (r)evolutionary constructions.

With the emergence and strengthening of the Green Building Movement, the concept of sustainable design has gained more momentum resulting in some sustainable constructions - powered primarily by innovative product systems. To take just a few examples, Abu Dhabi Convention Centre; metro station in Istanbul, Turkey; Biotechhuset corporate base in Göteborg, Sweden; the Mahler symphony in Amsterdam, Netherlands.

To take some good Indian examples, Military Hospital in Jammu; ISRO facility in Bengaluru; Cisco campus in Chennai; Khalsa Heritage Museum in Ropar, Punjab; and Gautam Buddha University in Greater Noida.

It is interesting to note that all these structures exemplify a paradigm shift in design, yet strike a common genre - sustainability. Apart from being visibly aesthetic and sensibly functional, they are essentially sustainable.

With the concept of sustainable design coinciding with the reality and corporate enterprise explosion in the Middle East, the region has witnessed some astonishing constructions of the new genre. Take Abu Dhabi Convention Centre. Employing microperforated gypsum plasterboard, flat and curved, for walls and ceilings, the interiors of the facility acquired a refreshingly innovative appeal with smooth and seamless appeal. Same is the case with Biotechhuset corporate base in Göteborg where the innovative gypsum panels – esignpanel – done in micro perforations are on walls and ceilings giving a distinctly refreshing look. That they are white results in brilliant daylight views, reducing the energy consumption, besides performing 'silently' ensuring quiet ambiances.

Requirements of well-equipped transport infrastructure for an increasingly urbanising world brought in the demand for sophisticated venues. Doing the needful is the metro train station in the Turkish capital of Istanbul where metal ceilings integrate lighting, sound and air-conditioning. Similar is the case with Mahler Symphonic venue in the Dutch capital Amsterdam where Aspen metal ceilings – in quaint triangular fashion are treated to a customised framework suspension. Applied in space-framed pattern, it poses a dramatic look, intriguing the visitors.

The underlying point is use of materials that come with intensely sustainable characteristics. Aesthetic in looks, acoustic in performance and ecological in lifecycle!

Though comparatively a late beginner, Indian industry too has some stakes to claim in the global sustainable movement. The military hospital that came up in Jammu made a paradigm shift when its designers used a revolutionary material for energy-saving exteriors. Called



Strandec and developed by Bengaluru-based Anutone, the material is a fast-track green construction product. It brings unique values - fire resistance; in-built acoustics, having a naturally breathing diaphragm for comfortable interiors in all seasons. More importantly, the system brings in an exquisite thermal efficiency which downsizes carbon footprint of buildings by ensuring lower load of air-conditioning and thereby significant power savings. A case in a point is with the Khalsa Heritage Museum at Ropar in Punjab where the designers made a conscious call to employ 'natural's for its construction. Strand, an acoustical panel for architectural appeal, unique for its random swirls of fibre construction and textured surface finish. That it is a natural 'breathing' panel with timeless appeal of fibres, it contrasts sharply with the smooth surfaces of glazing, drywalls and stone floors much prevalent in today's interiors. Networking giant and driver of the Internet economy Cisco Systems, when it embarked upon building its new corporate campus in Bengaluru, its designers heralded sustainable interiors by employing artcoustic (architectural and acoustical) material. ACT KLH vinyl-wrapped wall panels had been used extensively on various walls of rooms. SLS stretched ceilings for a domed meditation hall presents a

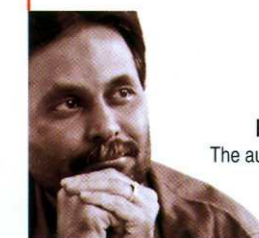
different setting altogether – albeit with similar comforting artcoustic impact – at Gautama Buddha University at Greater Noida.

Anutone, a pioneer of techno-commercial and 'green' concepts, products and systems, has actually brought to market just recently two more revolutionary product systems that are very green: Salon Series and Tufbloc.

The Salon Series transforms interior walls and ceilings, exterior walls and canopies of practically any architectural space such as office, hotel, mall and home into a refreshingly new, dynamic and eco-friendly surface. Made from 100 per cent recycled wood and thermoplastics – popularly known as 'Greenwood' – the Salon Series products are water and weather resistant, besides being Class A fire-rated and 100 per cent recyclable.

Tufbloc, on the other hand, brings a blend of 'body and beauty' to construction. The new generation building board made from high density fibremesh reinforced xylolith, Tufbloc – as the name implies – makes the application surface tough to withstand any eventuality. Going into drywalls and ceilings, shaft walls, high risk fire and high humid areas, it is relevant to practically every living space such as warehouses, data centres, banks, safe deposit locker rooms, high security areas, research labs, hospitals, kitchens, swimming pools, saunas, factories, offices, hotels, schools and malls.

That the Indian design and construction industry is now powered and driven by such concepts, the country – though a few decades behind the 'enlightened West' – is fast transforming itself into a sustainable world.



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