



# SAVE YOURSELF

Green buildings are the way to go if you want to live a healthier life and also save the environment

by Molly R



Both developers and consumers are increasingly committed to creating and embracing sustainable work.

The construction industry faces a significant environmental challenge in achieving the dual objectives of providing high living standards and maintaining ecological sustainability. Buildings should not only serve as shelters but also offer essential physiological comforts. These include visual comfort, enabling occupants to perform daily tasks efficiently, and thermal comfort, ensuring an appropriate indoor temperature throughout the year. These comforts can be achieved either naturally or artificially. The challenge lies in delivering these comforts without compromising the sustainability of the building process and the structures themselves.

Dhaval Ajmera, director, Ajmera Realty, says, "As developers, we are driven to promote a green and eco-friendly living. To keep our buildings green, we choose the eco-labelled products and components that helps to conserve natural resources. For example, energy-efficient appliances, LED

lighting system, recycled materials, solar panels, green roofs and high-performance windows that significantly reduces the burden on electricity. Along with this, we install water-efficient fixtures." High-performance insulation materials, such as recycled denim, cellulose, or spray foam, help maintain comfortable indoor temperatures while reducing heating and cooling energy consumption. Vegetated roofs and walls provide insulation, reduce stormwater runoff, improve air quality, and create habitat for wildlife, contributing to a healthier urban environment.

As green buildings have gained prominence over the years, both developers and consumers are focusing on sustainable green practices. To further throw light on this, India ranked third in the USGBC annual list of top 10 countries and regions in the world for LEED certification in 2023. PK Mishra, VP, planning and procurement, Sattva Group, says, "We adopt fly ash bricks as an

alternative to conventional clay bricks. It contributes to the reduction of environmental pollution and minimises the need for landfill disposal of this industrial waste. We use ethylene tetrafluoroethylene (ETFE) roofing at podium for exterior cladding, which reduces the temperature by 4° C."

While the aspiration to achieve Gold and Platinum certifications is noble, it is not devoid of challenges. Rohit Mohan, chief design and sustainability officer, Godrej Properties, says, "The foremost hurdle lies in the initial investment required for integrating sustainable features. Despite the long-term cost savings, the upfront expenditure often deters developers from embracing green practices wholeheartedly. Additionally, stringent regulatory standards and the need for specialised expertise pose logistical challenges. Government schemes or incentives could benefit developers and buyers, encouraging the implementation and maintenance of Platinum-rated buildings."

## WHAT TO LOOK FOR

The present moment represents an unprecedented opportunity for green building initiatives across residential, commercial, industrial, and manufacturing sectors. Both developers and consumers are increasingly committed to creating and embracing sustainable work and living environments. This trend is only expected to grow, promising a future characterised by even greater dedication to sustainability in construction and lifestyle choices. Harleen Oberoi, sr. VP, head, project management, Tata Realty and Infrastructure, says, "Energy-efficient features and renewable energy integration translate to lower energy bills over the building's lifespan. Additionally, high-performance materials and systems often require less frequent maintenance compared to conventional building components, further reducing long-term operational costs. The value proposition of green buildings extends beyond just cost savings. These buildings are increasingly

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sought after by tenants and buyers, which can potentially command higher rental rates and property values."

Green building technology might be applied in the planning, procurement, design, construction and operation stages, which shape the construction industry in many countries. Aayushman Jain, director, Siddha

Group, believes, "The optimal design of green buildings needs to be considered in all aspects, otherwise any deviations in design can lead to higher total energy consumption and result in a burden on the environment. The main economic challenges of promoting green buildings include the high initial costs and high capital investments and the high investment required for research and development to benchmark innovative practices."

In addition, the use of green buildings requires collective efforts from all participants and stakeholders to thoroughly understand the technical guidelines and regulations of green buildings and to promote green building implementation. Furthermore, green building evaluation policies need to be further improved according to regional economic development differences. In the construction of green buildings, the iteration of new and emerging technologies can lead to information bias among all parties involved