



## Is “Realty” Green?

### Observations from a residential property expo in Pune

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Most cities in India are witnessing a surge in residential project expansions. In the city of Pune, we have been witnessing the redevelopments of old buildings and new project developments across the city. Our visual perception suggested that most of these buildings are not using sustainable materials for construction and rarely did we spot a certified green building. To gather some insights on the current residential buildings market, we surveyed about 40 residential projects showcased in the Pune property expo. In this article, we briefly summarized key observations and recommendations for the developers based on the conversations with sales representatives and project brochures.

#### Introduction

India's building sector is expanding rapidly. Residential buildings account for about 25% of the total electricity consumption in India<sup>1</sup>. A better design of buildings can reduce the energy consumption by 25-50%<sup>2</sup>. Additionally, features like rainwater harvesting, solar photovoltaic or water heaters installations, and EV charging infrastructure can further reduce the resource use. There are green building rating systems already in place which certify buildings in categories like silver, gold, platinum or 3 star, 4 star, 5 star based on their environmental performance. In spite of the guidelines around green building practices, general awareness about implementation and their significance remains sporadic. Hence, the penetration level of green building features still remains unclear.

We visited the Pune Property Expo organized by Confederation of Real Estate Developers' Association of India (CREDAI) in January 2025 to gather insights on the awareness and adoption level of green building practices in residential projects. We surveyed about 30 developers covering approximately 40 different residential projects which included large townships as well as standalone buildings.

#### Overview of Projects Assessed

About 10% of the projects we assessed were Indian Green Building Council (IGBC) pre-certified at gold or platinum levels. The advertisement material for these projects, like brochures and banners, only had the IGBC logo printed with no information on the green features planned to

<sup>1</sup> [https://cea.nic.in/wp-content/uploads/general/2024/GR\\_2024.pdf](https://cea.nic.in/wp-content/uploads/general/2024/GR_2024.pdf)

<sup>2</sup> <https://beeindia.gov.in/en/energy-conservation-building-code-ecbc#:~:text=ECBC%202017%20is%20one%20of,as%20compared%20to%20conventional%20building.>

achieve that rating. Only a couple of project brochures (out of the pre-certified ones) mentioned lighting system automation, roof insulation and use of certified green construction materials, as mere add-ons to the technical specifications. When inquired, sales representatives struggled to explain the specifics of their respective green certifications, highlighting the need for capacity building of sales representatives. Also, some developers had marketed their IGBC Member logo on the project brochures however the actual projects were not certified. This raises concerns over marketing strategies adopted for green building advertisements. For an uninitiated consumer, the translation of these ratings may be unknown. Hence, if uniformity is maintained in the information disclosure format by standardizing it across all the rating systems, it will help home buyers to make a more informed decision.

Summary of percentage of projects marketed with various green features provision covering all the surveyed projects is given in Table 1 below. It gives us a sense of 'how much' and 'what kind of' information is readily available related to amenities/building services to homebuyers through brochures and/or interactions.

*Table 1. Extent of information provided through project brochures to homebuyers*

	Building Services/Amenities typically promised by the Developer	Share of projects brochures at CREDAI expo which provided information
1.	Solar PV or Solar Water Heating System	34%
2.	Waste & Water Management	15-20%
3.	Rainwater Harvesting	18%
4.	EV Charging Facility	10%

Source: Prayas (Energy Group)

It is evident from Table 1 that there was no consistency in reporting information related to building services or amenities. Particulars such as size or output were also not reported. With respect to electric vehicles, we found that most of the developers (out of the 10% as mentioned in table 1) provide 30 to 40 % of the total parking spaces with EV charging-ready infrastructure. All green building rating systems include additional points for provision of EV charging in projects<sup>3</sup>.

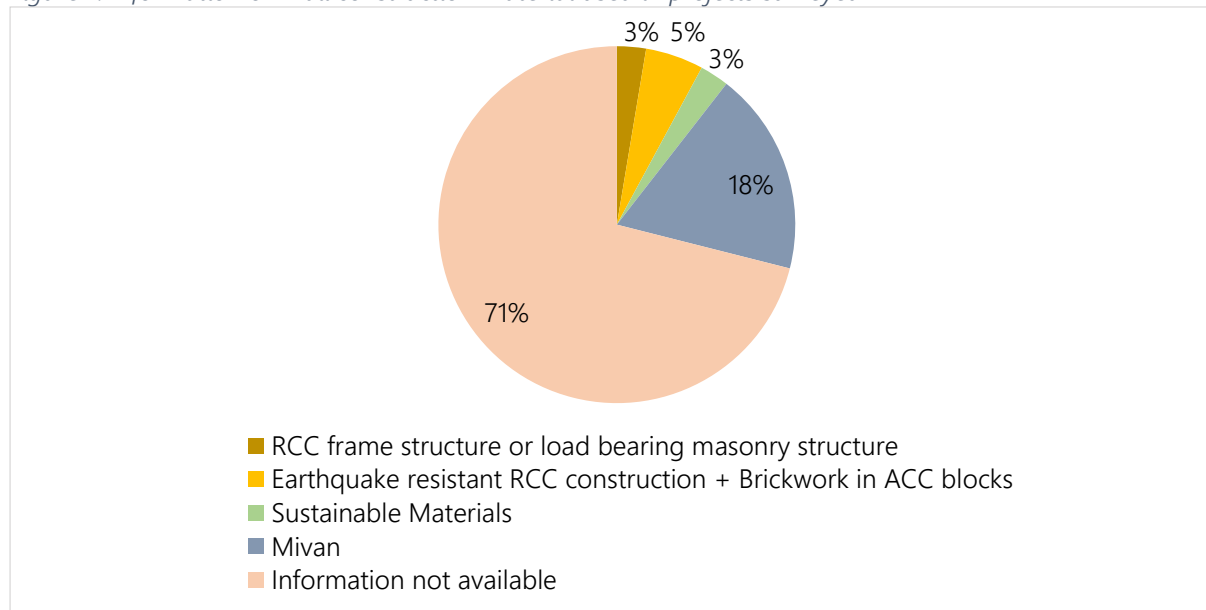
We looked at the information provided on the construction of the building, as it has a lifetime impact on user comfort. Since comfort largely depends on the indoor thermal comfort, building envelope plays a crucial role in this context. This means that construction materials have to be chosen consciously to improve indoor thermal comfort. Of the projects we surveyed, it was

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<sup>3</sup> Indian Green Building Council (IGBC): Green Parking Facility, Sustainable Design (SD) Credit 5 Pg. 36 [https://igbc.in/frontend-assets/html\\_pdfs/abridged/IGBC%20Green%20Homes%20Rating%20System%20Ver%203.0.pdf](https://igbc.in/frontend-assets/html_pdfs/abridged/IGBC%20Green%20Homes%20Rating%20System%20Ver%203.0.pdf)  
 Green Rating for Integrated Habitat Assessment (GRIHA): Sustainable Site Planning, Criterion 1 Green Infrastructure Pg. 43 [https://www.grihaindia.org/sites/default/files/pdf/Manuals/GRIHA\\_Volume\\_1\\_Inside\\_Pages.pdf](https://www.grihaindia.org/sites/default/files/pdf/Manuals/GRIHA_Volume_1_Inside_Pages.pdf)  
 Leadership in Energy and Environmental Design (LEED): Location and Transportation (LT) Credit - Electric Vehicles Pg. 47 [https://build.usgbc.org/bd+c\\_guide](https://build.usgbc.org/bd+c_guide)

observed that developers generally preferred the Mivan<sup>4</sup> wall construction technique which reduces the need for masonry work and helps in faster project completion. However, if mivan is not supplemented with insulating material, thermal comfort in such constructions is compromised<sup>5</sup>. This in turn increases the demand of electricity used by space cooling systems. We sampled 38 projects, of which 27 had no information on the material used for wall construction. Out of the remaining projects, 7 projects used Mivan, 2 used Earthquake resistant RCC construction + Brickwork in ACC blocks, 1 used sustainable materials and 1 mentioned RCC frame structure or load bearing masonry structure. None of the projects using Mivan provided any information regarding insulation material being used.

Figure 1. Information on wall construction material used in projects surveyed



Source: Prayas (Energy Group)

Window is another important component of the building envelope. Heat ingress through windows can be prevented if energy efficient options such as double glazed units or low-e (emissivity) glass are used. Most of the brochures only specified the material of the window frame, like windows with powder coated aluminium or unplasticized polyvinyl chloride (uPVC) section along with mosquito nets. The sales representatives also did not have any knowledge about details of wall material or glass type or glazing.

The sample size of our survey is 38 projects, of which 25 had no information on the material used for windows. Out of the remaining projects, 12 projects mentioned powder coated aluminium sections with/without mosquito mesh while 1 mentioned uPVC windows with mosquito mesh.

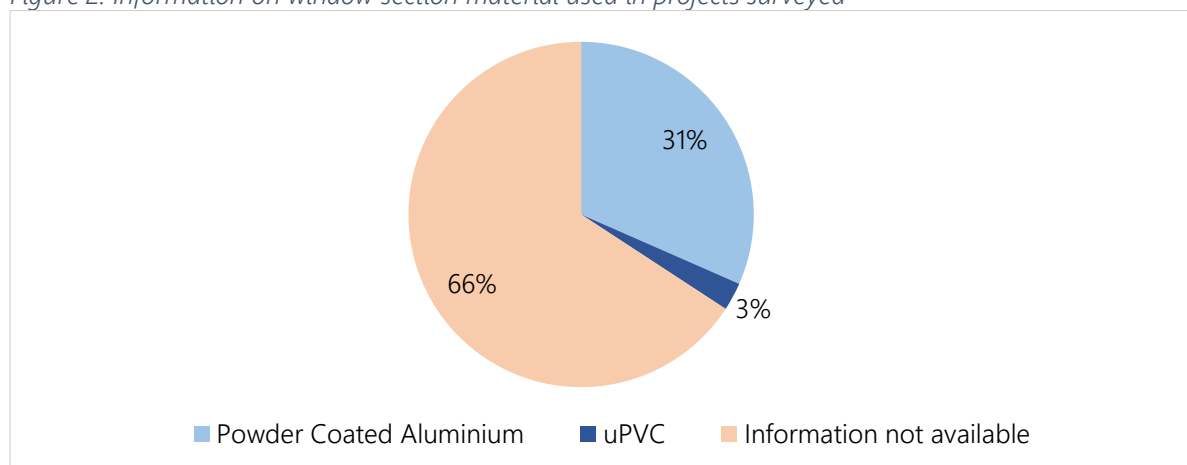
<sup>4</sup> What is Mivan Construction?

<https://economictimes.indiatimes.com/news/how-to/what-is-mivan-construction-is-it-better-than-rcc-here-is-a-brief-comparison/articleshow/106815594.cms?from=mdr>

<sup>5</sup> Heatwaves & Mivan Construction

<https://www.constructionworld.in/latest-construction-news/real-estate-news/heatwaves-and-mivan-construction/34183>

Figure 2. Information on window section material used in projects surveyed



Source: Prayas (Energy Group)

### Interactions with Sales Representatives

Conversations with some sales representatives on their knowledge about sustainability and green buildings revealed a significant lack of awareness about amenities or features provided by the developers. For example, replies by sales representatives on whether their projects were green buildings included responses like “all our projects have greenery, madam” or “all our projects are RERA certified.” This equally indicates that many consumers are also not aware and hence do not inquire about sustainable or green features in buildings. There were a few projects where the developers offered pre-installed air-conditioners. However, neither the brochure nor the sales representative had any information about the energy efficiency or star rating of the air-conditioners offered.

### Recommendations

Developers can play a critical role in increasing demand for sustainable features in buildings by effective dissemination of accurate information and marketing. With sufficient policy knowledge and market expertise, they have a clear advantage in aligning their marketing strategies towards promoting green buildings rather than focusing solely on traditional consumer preferences, thereby creating awareness and stimulating new demand. CREDAI, we believe, can champion the process of developing standardized display formats which could be made mandatory for all developers, enabling buyers to make more judicious and sustainable purchases. As per Unified Development Control & Promotion Regulations (UDCPR) of Maharashtra<sup>6</sup>, developers get incentives for constructing green buildings like 3%, 5% or 7% additional FSI based on the rating achieved at pre-certification stage. Consumers on the other hand also stand to benefit financially through lower interest rates on home loans, tax rebates, savings on electricity bills while simultaneously improving livability. Moreover, proliferation of green buildings will reduce the environmental impact of the residential sector leading to a win-win for everybody.

<sup>6</sup>UDCPR page no. 151

<https://autodcr.pmc.gov.in/SWC.Client/Downloads/Building%20regulations%20&%20related%20notifications/Updated-UDCPR-2022.pdf>

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*This article is part of an ongoing series called Power Perspectives which provides brief commentaries and analyses of important developments in the Indian power sector, in various states and at the national level.*

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