Dry Construction

A pioneering global standards in premium home construction

The Indian economy is now in its fourth year of sustained 7 per cent growth – a trend, which is likely to continue over the coming years.

The effect on the real estate (RE) sector has been a trailblazing transformation of India's top metros where RE growth has transformed skylines, business districts, neighbourhoods and suburbs of every metro.

Owed to demonetisation, REITs, RERA, and the centre's focus on manufacturing, FDI inflows in real estate and construction technology will only continue to rise over the coming years.

While brands like Panchshil Realty have seen higher-than-average capital value appreciation and absorption, smaller and medium developers are having to contend with rising expectations of a globally aware home-buyers with high expectations of product quality, service and support. Overall there is a clear market shift towards investing in leading brands with a proven track record and reputation.

Add to that issues of rising cost inflation, timely completion and construction quality and it is clear that rapid and significant transformation for real estate construction is the need of the hour.

Panchshil Realty's success however lies in the introduction of several such global practices in India through its best-in-class use of construction technology – one of them is Dry Construction Technique (DCT).

What is Dry Construction Technique?

By definition, DCT involves the use of innovation to reduce the use of water and the impact of a real estate on the environment. It also includes the use of lightweight material, structures and systems created on the principle of lightweight construction.

DCT involves the construction of interior walls, ceilings and floors using plastered or microfiber board that is joint at the time of installing. Apart from dry wall and ceiling; the façade is also done with Aluminium Composite Panels (ACP) instead of brickwork and plaster. This is a signature technique being followed in recent Panchshil projects like Yoopune (by Philippe Starck) and Panchshil Towers.

The light-weight construction technique is 8-10 times lighter than traditional brick and cement work and allows up to 70 per cent saving of construction time, while ensuring the minimal use of water (compared to traditional wet construction).

Demand for DCT

Globally DCT is projected to become a $ 79.08 billion market by 2020 (Markets & Markets 2015), growing at a pace of 5.3 per cent YoY (Research & Reports 2015). However most of the growth is now expected to come from India and China.

DCT brings together an ecosystem of global manufacturers of materials, metal frames and beams, covering, wiring, piping, insulation, structural parts, pre-fabricated panels, boards, flooring, glass, waterproofing among others across US, Europe, SEA, ANZ and now India.

Water conservation using DCT

For large-scale Panchshil projects (such as the one in Kharadi), most of the development area is covered by a network of roads. In conventional practices, concrete roads are preferred. But as these roads requires cement and plenty of water; Panchshil has opted for the more contemporary method of making roads with 'paving blocks'. These blocks are fixed on drycrush sand, which do not require the use of water. Also, during monsoons, paving blocks allow rainwater to percolate into the ground, which ultimately increases the groundwater table.

When it comes to the use of concrete, Panchshil has been an early user of curing compounds (an alternative way of curing the fresh concrete), and recently for the Trump Towers (Kalyani Nagar), the Pavilion (SB Road) and the nine (9) Panchshil Towers coming up in the Kharadi cluster.

For a better understanding, curing every 100,000 sq. metre area of concrete saves nearly 1 million litres of water, which is a marvel of modern DCT. Interestingly, Panchshil Towers is seeing an extensive use of this technique which uses high-end plasticisers and reducing the water-cement ratio, and has succeeded in saving nearly a million litres of water so far.

Global standards using light-weight techniques

A quick background on light-weight construction–the technique originated from a need to minimise the mass without compromising on the structural strength and was a prevalent process of high-technology sectors like ship-

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