

Designing affordable spaces without compromise



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The term 'affordable housing' instantly makes one think of inferior quality bland looking constructions with no soul. Fortunately, changing times have introduced visionary architects to the industry that are trying to help change this perception. Following are eight points coined by Gaurav Sanghavi of Pentaspace Design Studio to design affordable spaces with maximum efficiency.

Affordable designs with an element & purpose

It is not necessary for affordable homes to have to look affordable. As designers, we can incorporate elements in affordable projects without adding any overall cost to the project. For one of our projects – Nilaya, the *chajjas* and sun breakers were designed in a diagonal position so that the neighbouring building apartments won't look into each other. This differentiator not only enhanced the privacy of the inhabitants but also added aesthetics to the low-cost budgeted project.

Façade to be fused with the surrounding

Slight change in designing the façade can help change the complete look of the building. For instance, in August Enclave, the facade was designed to tone down the massing and make the building lighter with vernacular impression to complement the surrounding buildings and context. Geometric patterns used in repetition over floors create a sense of rhythm and generate interest in the facade. Recessed windows help maximize shade on the opening, bringing in light but cutting off the heat.

Using materials wisely

Affordability means efficient use of resources and optimization of aperture sizes by maintaining the window to wall ratio at 50:50. As the sill height of the windows increase, the cost of the aluminium, glass and the railing is reduced. Moreover, cutting cost in areas that don't require spending like using *kota* in the stairwell from the first floor as well as the lift lobbies of the upper floor gave us opportunity to reduce the cost and spend in areas like the ground floor lobby. Instead of using M.S. railing on the staircase, we casted R.C.C. pardi to further reduce the cost.

Maximizing natural light and ventilation

Creating a provision for ample light and free flowing breeze only requires better planning. Simply by maximizing windows in habitable spaces while leaving the non-habitable spaces, like toilets, towards the inside can create a huge impact. A well-designed open lobby area can even allow the building to breathe. The structure can be kept as lean as possible to avoid floating of columns to minimise cost of construction.

The requisite amenities

Since affordable projects often don't have ground space, amenities can be offered across the building and on the terrace. In Nilaya, we created activity spaces around the stairwell and landing like wall library, art wall, chalk board on the wall, and puzzle wall for children. The terrace is designed with community sit out spaces, gazebo, jogging/walking tracks. These community spaces add to the fabric of the area and the residents.

Avoiding delays

The time taken to create a building starting from land acquisition, encroachment hurdles and government clearances to planning, designing, creating, and delivering plays a vital role in defining the cost of a building. In simple terms, more delays equal to more costs incurred. The number of factors and entities involved in each construction project and sudden changes in government policies don't make things any easy either.

The following factors can help expedite the process –

- Land parcels in close proximity to urban transport infrastructure that can accommodate mass-housing projects
- Site readiness free from all encumbrances and clear work-fronts for all activities
- Availability of all building permits and sanctions prior to commencement of construction
- Availability of funds with the developers or project promoters to ensure smooth cash flows and work progress.
- Avoiding design changes during the construction process; this affects the progress of construction work.
- A high degree of modularity of designs that ensures a higher repetition of formwork and higher productivity of mobilised resources.