

## Brick by Brick

Bespoke architectural design comes at a price – a surprisingly low one for the residents of one condo in Tehran

Next door to Tehran's infamous ring roads and assailed overhead by aeroplanes on the approach to the neighbouring Mehrabad International Airport, the worn out neighbourhood of Jeyhoun is not, usually, a sought-after location for one's dream home.

The Brick Pattern House, a four storey apartment block wedged between the chaotic condos of this south western suburban sprawl, however, is so thoughtfully designed - so consciously considered - that it inspired its tenants to relocate to the neighbourhood or, at least, inspired them to move there in spite of it.

'This building has become a landmark in the area – people really like it,' says Alireza Zahed, the contractor and building's owner. 'In fact, one of the residents told me that she doesn't like the district at all. She only lives here because she loves the building.'

Easily identifiable by its oscillating brick skin, the building offers its residents a mix of affordable housing and contemporary design, while espousing an optimistic experiment in low-cost high-design urban architecture to its neighbours.

'Architecture is considered a luxury in Iran. People are afraid of consulting an architect because they think it would be expensive,' says Alireza Mashhadmirza, the architect responsible for the unusual design of the Brick Pattern House, who had worked with Zahed on previous projects. 'The message I want to spread [through the Brick Pattern

House] is that architecture is not luxury. Value can be added to architecture even with a tight budget.'

Apart from the diminutive size of the plot - which Zahed inherited from his father - this tight budget was, in fact, the only other fixed variable in his brief to Mashhadmirza. In all, the total construction cost of the project was equivalent to 180 dollars per square metre; the plot, like many others in Jeyhoun, spreads no further than 130 square metres. 'I had no idea of how I wanted the project to look. I just asked Alireza to design a beautiful house in both function and form, with as little budget as possible,' Zahed says.

Under the project's limitations, Mashhadmirza managed to not only comply with the municipalities' requirements - earthquake resistant, energy saving and acoustically sound - but deliver a natty city dwelling that keeps the bustle of Jeyhoun at bay, offering its residents an inner-city sanctuary to call home.

The building is set back from the street and accessed through a heavy, black gate that opens upon a neatly landscaped courtyard, from where creeper plants are beginning to twine their way up the building's signature façade. Each residency comprises a kitchen, two bedrooms, a bathroom and a salon space that, through the perforations in the façade, overlooks the courtyard below. Although floor space is modest - 62 square metres - natural light floods in through the salon's floor to ceiling windows, creating

John Burns



















a Tardis-like illusion that the apartments are larger than they actually are.

'Our children dislike this neighbourhood so much that they've asked us to move, but my wife and I just love this house,' says Abolghasem Hasel, one of the building's residents who left a villa – almost three times the size – in leafy Shahroud for the house in Jeyhoun. 'Sunlight, a large living room, a beautiful yard, terrace and landscape design are, for my wife and I, the requirements of a comfortable home. Fortunately this house has them all – except the terrace,' he adds.

Owing to the project's spatial and economic limits ('You can't create much more than a square box in Jeyhoun,' laments Mashhadmirza), the building's frontage offered his only canvas for creativity. Inspired by the imposing megaliths of Swiss architect Peter Zumthor and the structural undulations of Gramazio & Kohler, the architect created his own rippling, interlaced brick façade to both wrap the structure with some visual oomph and serve as a contemporary riff on the traditional mashrabiya, shrouding the units with privacy.

I always like to push the boundaries of my projects.

It makes me find creative ways of problem solving,' explains Mashhadmirza, as to why he took on a project with such little personal financial gain. 'There is an Iranian proverb which says that the people who have more difficulties in life are more successful than those who have it easy. I think this also applies to architecture.'

To this end, he designed a deceptively simple pattern of alternating correlations that flow between positive and negative with each new floor. He also devised an equally inventive construction method that, instead of requiring reams of expensive executive drawings and on-site supervision, could be conveyed to the builders on one simple side of A4 paper. 'We named this "Method 23 as everything [about the façade's construction] is associated with number 23; there were 23 rows of brick, 23 boxes of bricks, 23 sliced bricks and 23 columns of structural supports,' he explains.

The builders would, say, open the first box and find 23 bricks, which had been pre-cut and numbered. They would then consult Mashhadmirza's chart and lay the bricks according to the pattern, starting, logically, at brick number one and ending at brick number 23. They would then open the second box, which would contain 22 bricks and repeat









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ALIREZA MASHHADMIRZA













the process on top of the preceding layer; the third box would hold 21 bricks, and so on and so forth until the number on each box and the number of bricks inside was inversed.

'Obviously we needed to explain the method to the builders, but once they got the knack it became like child's play,' explains Mashhadmirza. 'This is actually quite similar to the methods followed in traditional Iranian carpet workshops, coordinating several weavers to work on the same carpet at once.'

Although the bricks are connected by armatures and secured to the structure by L profiles, the façade looks free-stacked and a little precarious. 'People always have so many questions about the house, such as "How do you clean the windows? Are the bricks fixed? Won't they fall down?" says Zahed. 'I remember one resident was so worried about the bricks' resistance that he tried to shake them to see whether they would fall.'

The building's façade has, certainly, piqued the curiosity of its neighbouring residents. Mashhadmirza's design is now a talking point around the streets of Jeyhoun and, as Zahed confirms, it seems the seeds of his message have taken root: 'I think that we've found a new way of construction that can be expanded to other projects: using the least to reach the highest.'