

Defining Strength

In order to make the station stand out of the crowd of the other local train stations, the Turbhe station has been designed using steel hollow sections to create an experience for the daily passengers.

Images: courtesy the designers

Few of the renowned architects in Mumbai were commissioned the task to design the new railway stations in Navi Mumbai. This was part of the City and Industrial Development Corporation of Maharashtra's (CIDCO) drive to create a fresh image for Navi Mumbai. Hafeez Contractor, known for his evolving beyond the set standards, designed the Turbhe railway station. The objective was to create a railway station that would become a "new civic symbol". Another idea that inspired the design was the fact that railway stations are gateways into a city and so keeping that in mind, a gigantic arch roof was conceptualised to symbolise a doorway to Mumbai.

Turbhe is a significant railway station on the Thane-Dharave line because of its location at the crossroads of Sion-Panvel and Thane-Belapur highways, the proximity to the MIDC industrial area and the agricultural market in Vashi. The Turbhe station also caters to four tracks on both the Thane-Vashi-Uran and Kalwa-Dharave corridors and serves the population in and around Turbhe and Sanpada. The station is spread over 15,000 sq. m. and occupies a total length of 65.4 m x 27 m, across the five platforms. It has a parking capacity for 175 cars and 250 bikes.

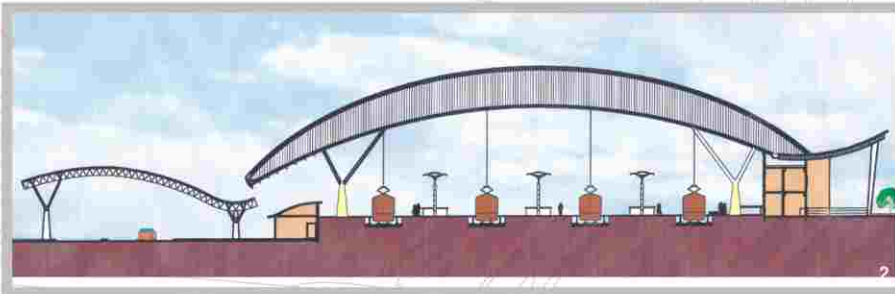
The main parking area was proposed at the northern corner of the site as a multi-level car park. Three subways - two for the commuters and one for the general public, were planned to discharge the crowd onto a pedestrian walkway. A pedestrian underpass was introduced at the northern end to cater to traffic from the MIDC area to the nodal side. The ticketing counters were positioned at the centre of the station for convenience.

A massive 84-m roof with a semi circular shape makes the station stand apart. The purlins on the roof comprises of the steel hollow sections and span across the roof. All the platforms have an innovative ribbed 'arch roof' and its sheer size and magnitude makes an impressive impact. The ribbed structure has been framed by using multiple hollow sections. The main purpose of using these sections is that they are resistant to corrosion and they are metallurgically quite stable. Large strip skylights integrated with the structural system create light-filled platform spaces. The station boast of a very contemporary and progressive look and this is visible in the materials that have been used. Australian zincalume is used for the roof. The roof is distinctive because of the clips that have been used for fixing the joints instead of the usual drilling.

FACT FILE

Project: Turbhe Railway Station
Location: Navi Mumbai
Client: City and Industrial Development Corporation of Maharashtra (CIDCO)
Architect: Hafeez Contractor
Project Area: 15,000 sq. m.

Turbhe Railway Station, Navi Mumbai



1, 4 & 5. The purlins on the roof comprises of the steel hollow sections and span across the roof. All the platforms have an innovative ribbed 'arch roof' and its sheer size and magnitude makes an impressive impact.
2 & 3. Sectional view of the placement of the purlins and trusses on the side glazing members.
6. The roof is semi circular in shape is made up of zincalume.