Using nature as a basis for design, the stations are designed as organic structures which grow and reach out to its surroundings. The basic inception of the internal structure is inspired from the skeletal profile of an organism. The passengers inside the terminals shall be charmed by the sheer beauty in which simple pure geometries are transpired into self-supporting structures. Whereas, the outer shell also manifested from the skeletal core, wraps around the station as its outer structural skin. This synergy of organic architecture and structural composition mirrors the beauty of an organism which is self-sustainable in nature.

Acting as a gateway, which forms the first point of contact to a territory, the stations with their diverse structural form reflect the aspirations of people for growth, modernization and opportunities. The architecture conveys boldness through its structure and simplicity in planning. The station architecture challenges the conventional perception of not only how a railway station is perceived but also Indian infrastructure at large. They impart an identity to the region acting as a landmark for its people to relate to.
A conventional roof truss system is adopted for the terminal at Bamandongri. The trapezoidal module in plan with two arched trusses spanning diagonally is used as a single element using different permutations to achieve a simplistic form. The multiplication of a simple module to form primary and secondary trusses results into a self-supporting roofing structure. The juxtaposition of these primary and secondary trusses, divides the large surface area resulting into an interesting interplay of skylight.

- Site Area – 113 Hectare (Approx.)
- Typical truss span – 45m
- Column Grid – (15x32)m
- Platform Area – 18,500 Sq. m.
- Commercial Area – 2350 Sq. m.
- Total Built-up Area – 26,500 Sq. m.

“Dynamism achieved by intelligently using different permutations of a simplistic form”
The railway terminal at Kharkopar is an interesting combination of tetrahedral modules forming a basic roofing web system. Combination of voids and enclosures result into a 3D mesh lending an artistic impression mesmerizing, commuters and visitors alike. The space frame wraps around the entire length of the platform, resting on a steel portal frame spanning across the shorter side of the railway station. An effective system of environmental control inside the building is another outcome of the three dimensional structure as solid triangular panels at regular interval provides sun-screens – a modern equivalent of the traditional jali. Natural lighting and ventilation strategies are optimally monitored through the sun-screen panels. The covered volume of the platform by the stepped roof profile acts as an effective cover to cut down the harsh heat of the sun and also provides space for alternative commercial settlement. A monumental archway protruding over the booking office and ticket counters produces a visually welcoming and inviting façade to the passengers.

- Site Area – 100 Hectare (Approx.)
- Typical truss span – 32m
- Column Grid – (15x16)m at periphery and (15x32)m at centre
- Platform Area – 18,500 Sq. m.
- Commercial Area – 4,765 Sq. m.
- Total Built-up Area – 30,690 Sq. m.

“Monumental gateways charm commuters at Kharkopar Station”
A dynamic potent roof skin formulated on portal frame structure dominates the Targhar railway station. Simplest in sketch and most organic in form, the architects designed a simple yet suave monolithic roofing composition. The structural skeleton of the system has been evolved from the purest architectural geometry of an arch. The system has been generated in steel portal made up of a built-up box section of simple arches joined together. Drawing inspiration from an organic skeleton, the terminal gives the built form a human touch and feel, which helps the observer in relating to the same. The dynamic, homogeneous form descends at both ends of the station. The massive volume at the centre endears a complete wholesome feeling to the terminal, whereas the free floating ends impart an airy light-weighted quality to the structure. The travelers are delighted to a beautiful panoramic view of the surrounding cityscape at the heart of the terminal.

- Site Area – 137 Hectare (Approx.)
- Typical truss span – 32m
- Column Grid – (15x16)m at periphery and (15x32)m at centre
- Platform Area – 18,500 Sq. m.
- Commercial Area – 2,430 Sq. m.
- Total Built-up Area – 24,740 Sq. m.

“Volumetric interplay of the monolithic structure, imparts architectural clarity”