

Best practices by Tata Bluescope enables retail major to gain competitive advantage

Considering the quick turnaround time that businesses demand, speed is of the essence, especially for businesses that work through strategically located distribution centres. At the heart of effective operations lie best practices that promises quick turnaround and a “low or no maintenance” guarantee.

So when Trent, a retail hand of Tata group, which operates Westside and Star Bazaar, wanted to expand the Westside retail store network and distribution centres (DC) and set up a facility in Valsad in Gujarat, they had a stipulation. The building must be leak-proof and the project should be completed on time. Their interest was to ensure a swift and on-time supply of finished goods through THPL Support Services, a subsidiary of Trent Limited.

Tata BlueScope Steel was chosen to provide a complete pre-engineered building solution as the company had globally renowned safety credentials that perfectly matched their aspiration of “Zero Harm”.

Scope of work: Tata BlueScope Steel’s scope involved design, manufacture, supply and installation of the pre-engineered steel building structure with an approximate area of 100,000 sq-ft. BUTLER building systems was the obvious choice as it is globally recognised for its ability to provide timely construction with superior solution, committed to deliver buildings with leak proof systems and world-class safety standards.

Design challenges: Achieving construction timelines was a challenging task, considering interdependency of various activities involved. The project had its share of design and execution challenges:

- As per the proposed plan, the DC would interface with ten core buildings with fifty openings (in secondary) for to-and-fro movement of finished goods. Typically a warehouse would have larger openings on the ground level. Here it was necessary to have openings at heights as the goods that came in were ferried through a conveyor.
- The structure demanded an unconventional signature design arrangement followed by Trent Limited in secondary with sheeting at both end walls that came with an angle.
- The building was designed to offer a mezzanine floor that would take an entire load of the racking system as well as the stored goods. Bolting these members at that height required mechanism that would carry

Brand: BUTLER Building Systems
Roof System: FM Engineered MR-24 roof system with fibre glass insulation
Project size: 9,253m²
Consultants: STUP Consulting Services

their weight at that level.

- More so, the design was planned in anticipation for future expansion.

Construction challenges: After all the preliminary approvals & processing, the delivery of the materials started in peak monsoon. Muddy lands halted material flow temporarily, despite all the materials being ready at TBSL facility. Trent Limited insisted that project completion timelines shouldn’t change. TBSL quickly realigned resources for the PEB activities of P&S erection, roofing & cladding including manpower, equipment, tools, etc with support from the builder, to meet the deadline.

Solutions offered: BUTLER Building Systems with MR-24 roof system made from high strength COLORBOND Steel was the apt solution. MR24 Roof system provides 10 years leak proof performance warranty and guaranteed superior functionalities that include higher column-free space, a mezzanine floor supported by jack beams inside the building with shear studs for crack-free floor along with Smartdek decking profile. Value engineering helped optimise the overall design with improved economics.

The primary erection of columns & jack beams assembly of approx. 5 tonne was done safely. The challenge occurred with the secondary installation of 50 framed openings. The Building Solutions team achieved this task. This also enabled allied agencies like the civil engg. team, racking system provider, MEB etc. to carry out their part of project in time.

The wall cladding that involved a signature style architectural treatment having combination of colours of metal panels, wall light panels in the profiled-gradient at desired level was completed error free.

The outcome was a large and clear span of a state-of-the-art DC built before the promised date with best-in-class products and construction methodologies. Team work and a planning methodology along with a shared vision, led to a successful on-time completion of this project.