

Enabling operational excellence through on-site crimping of KLIP-LOK® 700



Project: Roofing for Joka-BBD Bagh Metro Rail

Location: Kolkata, West Bengal

Customer: Rail Vikas Nigam Limited

Solution: LYSAGHT KLIP-LOK® 700 concealed fix system

Background:

LYSAGHT® has successfully executed more than 3 lakh square meter of roofing for major Metro projects across the country. The brand's profiles like KLIP-LOK® 700 and TRIMDEK® 1015 are installed at prominent projects such as DMRC, Chennai Metro, Kochi Metro, and Bangalore Metro to name a few. With this expanse and experience; LYSAGHT® has established itself as a preferred choice for roofing applications in this segment.

Kolkata Metro is the second busiest metro system in our country with an average of 700,000 commuters on a daily basis.*

Railway Vikas Nigam Limited (RVNL) through Metro Rail Transport, has been expanding its reach in Kolkata, providing best transport facilities for ever increasing population of travellers with customer friendly and modern infrastructure. As part of its further expansion for line Joka-BBD Bagh, RVNL partnered with Tata BlueScope Steel for all its roofing requirements.

RVNL was looking for a solution that would be sustainable with great weather-ability and wind uplift. A roofing solution that would be thermally efficient and offers great performance during rain with quick installation. Apart from the curved sheets that offered great design aesthetics; adding contemporary and modern facelift to this erstwhile colonial city.

* As per 2016 data

Both engineering and operations team along with RVNL officials studied the complete feasibility of the project. LYSAGHT KLIP-LOK® 700 with concealed fix roofing was recommended. This is the most advanced concealed fix roofing system that offers great spanning capability along with superior aesthetics due to its pronounced ribs. It is fixed with a specially designed clip (no piercing required) that ensures leak-proof performance. Manufactured from high strength ZINCALUME® or COLORBOND® steel; this profile has been a design favourite for prestigious projects within the infrastructure space.

Challenges

Crimping of KLIP-LOK® 700

The proposed station structure required curved profiles, for which crimped profiles were recommended. The risk of damage is high if crimped profiles are transported to site and also as the profiles cannot be stacked, it increases the overall cost of transportation.

Solution

Onsite Crimping

The operations team swiftly identified onsite crimping as an apt solution that would not only optimise the logistical cost, but also avoid any damage to profiles in transit. This procedure ensured immediate installation thus avoiding stress cracks.



Challenges

Adhering to Timeline

Timely supply of materials to multiple stations attached to this route was another challenge. Being a 100% crimping job, the production output was low.

Solution

Planning and co-ordination within engineering, supply chain and production planning teams ensured adherence to strict project deadlines and reduced further delays.



Value engineering by LYSAGHT® team helped optimize steel usage. Excellent project management ensured on-time delivery, enabling customer delight.