

Case Study

Leak-proof Roof System enables Nivea to meet their productivity goals !



Client:	Nivea India Pvt. Ltd.
Brand:	BUTLER® Building Systems
Roof System:	MR-24® Roof System
Special Features:	Leak-proof roof system with 10 years leak-proof warranty*
Total Area:	10,397 square meters
Consultant:	L&T Technology Services Ltd.

Brief about the Client:

Beiersdorf AG, parent company of Nivea is one of the world's leading international skin care companies. With more than 130 years of experience in skin care and with one of the world's most modern skin research centers, Beiersdorf stands for innovative and high-quality cosmetic products.

Scope of the Project:

Nivea India wanted to set up its first manufacturing plant in India for a range of creams and lotions at Gujarat Industrial Development Corporation at Sanand.

Nivea India awarded the contract for design, manufacture, supply and erection of the 10,397 sq.mt. industrial buildings to Tata BlueScope Building Solutions with performance based bonus. The project was scheduled in the monsoon season and required to be completed in mutually agreed time frame.

Key Project Requirements:

- 10 years Leak-proof Warranty was desired
- 48.0 clear span to facilitate process requirements
- On-time project completion without compromising Quality, Safety and Leak-proof performance

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Challenges:

Roof System: To ensure a long term leak-proof roof performance with 80 no. of openings in the roof for fixing of turbo vents and with skylights in 4% of the total area.

Timelines: To complete the project in mutually agreed schedule during the monsoon season.

Solution Offered:



Leak-proof Roof System

Considering all the project requirements stated above, our team proposed a BUTLER® Building System with MR-24® Roof system, which is the best leak-proof solution available for critical industrial applications. Building Solutions Team made our customer aware about the advantages of the exceptional features of MR-24® Roof System which are never equaled, never surpassed in its history of 45 Years.



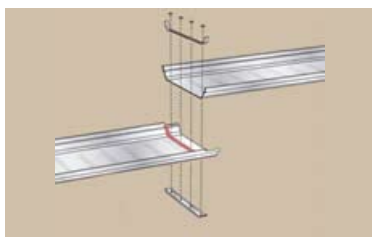
Side Laps

- Involves 360 degree double lock seaming of side lap. 180 degree is seamed at site by Roof Runner® to achieve a greater leak-proof assurance.
- Pre-punched purlins for fixing of roof clips helps in better alignment of side laps, faster installation and superior aesthetics.



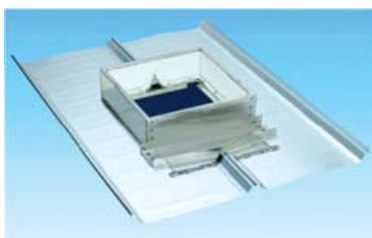
Roof Clip

- 32.5 mm clip movement of in both directions abolishes roof expansion joint till 250 feet of panel length.
- Centering arrangement in Roof Clip ensures thermal movement in both directions.
- Triangular bar with thin cadmium coating in clip assembly helps in reducing friction and provides greater sensitivity to thermal movement



End Lap Design

- Pre-punched panels ensures tighter and neater end laps
- Splice position exactly above purlin ensures that the joint does not weaken due to foot traffic.
- Only two MR-24® panels are joined at end laps and staggered end lap splices helps in reducing chances of leakages



Roof Curbs

- Internal flange design of curb conceals fasteners with curb, that helps in eliminating the possibility of leaks
- Diverter Flashings at Roof Curbs prevents ponding on the high side of the roof curbs.
- Curbs are secured to roof sheet and not to purlins, this ensures uninhibited thermal movement of entire roof system.

Valley Gutter and Header Pipe System: Stainless steel valley gutter and fully engineered M.S. header down take pipe system ensures effective drainage of rain water from the roof.

Quality Assurance at Site: 100% supervision by a dedicated MR-24® roofing team ensured consistency in the quality of workmanship at site.

Timelines

- The Nivea project was classified as a White glove project, a well-established Tata BlueScope Building Solutions process which involves double checking methodology to eliminate errors at any stage.
- The White Glove Methodology ensured 'Delivery in full and on-time' without any errors at any stage. The entire project was completed without any site claims or urgent material request.
- At an early stage of the project our team requested the customer to provide PCC floor and 4,000 sq.mt. of elevated laydown area with compacted soil to facilitate safe equipment movement, this helped our team work continuously even in the monsoon season.

Project Milestones and Performance:

- Roof sheeting was completed in 125 days from start date of project.
- No leakages were observed in the MR-24® roof system

Results:

MR-24® Roof installed at site has no leakages and is thus enabling Nivea to work continuously without any work stoppages and achieve their set production targets to meet their business goals.

The elaborate product design and the impeccable installation of the MR-24® Roof System has resulted in a leak-proof building. The leak-proof performance is providing greater assurance to Nivea that their state of art machinery and property is well protected and their operations team is able to work continuously to achieve productivity goals.

The safe and on-time completion of our engineered steel buildings in the first phase of the project has helped Nivea to start this factory extremely quickly, it is the fastest in the history of Beiersdorf.

Nivea India Project Team was impressed with our project planning and execution capabilities. The project was handed over on-time and with no compromise on the quality and service.

The management of Nivea India has announced to pay us the bonus of 10 lakh rupees for our superior performance in completing the project on-time and meeting the commitments given to them.



Janardhana Rao

PC Director India
Nivea India Pvt. Ltd.

Customer Feedback:

The on-time completion of our engineered steel buildings in the first phase of the project has helped us start this factory extremely quickly, it is the fastest in the history of Beiersdorf. The elaborate product design and the impeccable installation of the MR-24® Roof System has resulted in a 100% leak-proof building. The leak-proof performance is providing us greater assurance that our state of the art machinery and property is well protected and our operations team will be able to work continuously to achieve our Productivity goals.