PERFECT

IIT Madras is one of India's pioneer institution in the field of technical education. Being a residential institute with over 12,000 plus inhabitants, the management wanted to further expand Boy's hostel for its increasing number of occupants. IIT Madras wanted to expand vertically with a roof extension on top of a 55-year-old RCC building, preferably with light gauge framing system.

EZYBUILD® Solution SMARTBUILD® with LYSAGHT TRIMDEK®

SMARTBUILD® is the most advanced, light gauge framing system that offers superior features such as strength, design flexibility and a speedy construction process. The high strength frames and trusses promises long term durability and is an ideal solution for roof top extensions on RCC structures.

Flexible enough to extend over existing structures; it offers precision engineering as compared to any other solution. IIT Madras, being an academic institute par excellence;

wanted to execute this extension devoid of disturbance to the existing set-up.

Challenges

Safety concern such as working at height, unplanned parapet removal and hindrances faced due to RCC solar pedestal. The Project had to be completed within 100 days.

Solution

- 3 mts. safety net was provided to curtail accidents.
- Scaffolding from ground to third floor was installed.
- Careful planning to ensure minimum damage of the roof structure while removing the Solar panels.
- Quick design of structural members, swiftness in material supply, adequate resource planning with skilled construction and installation team enabled fast, efficient and wellengineered solution.

Customer Testimonial

With ease of construction and swiftness in project delivery; Tata BlueScope has truly lived upto its brand promise. Their high strength light gauge systems have helped us optimize the existing structure. We were able to reduce concrete dead-load and increase load carrying capacity for accommodating a greater number of students within the same structure. The entire project was constructed without disturbing the existing set up and with great safety precautions.

Six buildings with SMARTBUILD® roof extension have qualified several structural tests like metal strength, thermal conductivity, acoustics etc. to name a few. Tata BlueScope Steel ensured safe and secure working conditions without affecting the regular curriculum of students and the surrounding flora and fauna of the pristine IIT Madras campus.

Mr. P. K. Dharmaraj,

Executive Engineer (Civil), IIT Madras

