

STEEL  
CONSTRUCTION  
SUMMIT



STEEL DAY  
MUMBAI

STEEL  
STRUCTURES  
& METAL  
BUILDINGS

SSMB.IN

nerve of steel construction...

Anniversary  
SPECIAL

ME &  
STEEL

# the steel Maestros





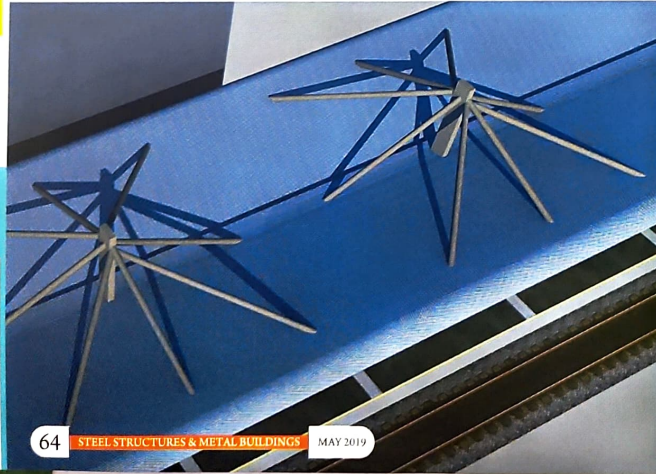
**HARIHARAN IYER**  
ASSOCIATE DIRECTOR  
AECOM INDIA PVT LTD

Around fifteen options were studied to obtain the current design with key attributes as cost to Completion, execution friendly & Bird free cover to platform. Accordingly numbers related to cost & time area were analysed, by close coordination with client & contractor. The complete transformation of the station is happening due to the same which will definitely provide better look to the station.

Client: Bansal Pathways Pvt. Ltd.  
& IRSDC  
Architect & Structural Consultant:  
AECOM India Pvt Ltd  
Steel Supplier: Tata Steel  
Steel Fabricator: Bansal Laboratories,  
Equipment's Private Limited  
Steel Tonnage: 875MT (Approx.)  
Status: Ongoing

## REDEVELOPMENT OF HABIBGANJ RAILWAY STATION, BHOPAL

The cover of the platform with an area around 27000 Sqm. structure is designed with spacing of columns of 18m c/c & columns being balanced cantilever. Hanger members are provided to convert cantilever frame to T&C Couple thereby optimizing the sections. At every 6m Rafters supported by Hangers are provided to reduce the span for Purlins. The overall consumption of system including Steel (UB) Columns is around 32.5Kg/M2. The design is contrasted with existing design of platform cover shelter that is used in Indian Railways. The new design is sleek, free from bird menace and permits better lighting and clutter free layout which will promote better visibility of signages.



**KUMARPAL R. TRIVEDI**  
ASSOCIATE PROFESSOR  
A. D. PATEL INSTITUTE OF TECHNOLOGY

## INNOVATIVE USE OF STRUCTURAL STEEL

Steel is a most widely used engineering material. Apart from being strong and durable against all types of loads and conditions, steel also provides flexibility in creativity. Structural steel, being a versatile construction material, is used by architects and engineers to create innovative and appealing designs. Structural steel has always allowed the architects to express their creativity freely. Without compromising on safety aspect (Strength), the slenderness of steel elements gives grace to the structure. Structural steel also gives an option of non-linear elements, which in turn further increases the aesthetic appeal of the structure. The innovative side-plate moment connections have resulted in reducing beam and column sections. Another innovative solution is in the form of girder-slab system where composite slab of steel-flat concrete gives additional benefits of ducting space and vibration resistant floor.



**GANESH S. KAME**  
PROFESSOR-CIVIL ENGINEERING  
M. H SABOO SIDDIK COLLEGE OF ENGINEERING

## INNOVATIVE USE OF STRUCTURAL STEEL

Structural steel is not just for skyscrapers, large industrial buildings and business centers. There are many reasons why steel makes an attractive building option from start to finish, not the least of which are sustainability, affordability, and durability. Steel is a versatile building material, which has led to its inclusion in nearly every stage of the construction process from framing and floor joists, to roofing materials. Architects and designers like steel's ability to let their artistic imaginations grow supreme, while still having the ability to design and construct a building that is both safe and resilient.

An area where hybridization of steel with wood is coming into practice with the idea of steel's versatility and woods beauty. As a result, many construction companies offer hybrid steel/wood buildings, which take advantage of the strength, durability and support benefits offered by steel, paired with the insulating and aesthetical properties of wood.