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STEEL
CONSTRUCTION
SUMMIT



STEEL DAY
MUMBAI

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STEEL
STRUCTURES
& METAL
BUILDINGS

nerve of steel construction

STEEL EXPRESSIONS



Function
Public Space

Client
Shiromani Gurudwara
Parbhandhak Committee

Architect
Renu Robin Design Studio

Structural Consultant
Skeleton Consultant Pvt. Ltd.

Tonnage
Steel Domes 40MT

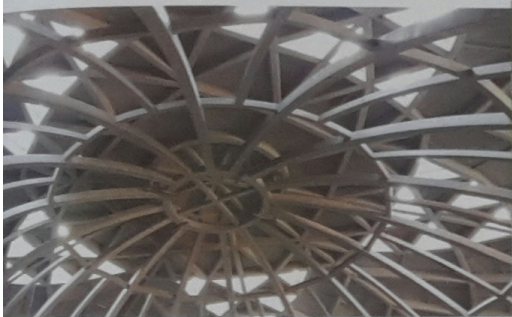
Status
Ongoing

Image Courtesy
Skeleton Consultant Pvt. Ltd.

FLOATING SPACE



ICSS COMPLEX, SGPC,
NEW DELHI



DESIGN INTENT

The Gurudwara Rakabganj Sahib is a historic Gurdwara near Parliament House in New Delhi. Inception of this project leads to construct an auditorium in the premises of Gurudwara, glorifying the sacred principles of the community with the indigenous blend of today's time. An innovative auditorium was created giving the sense of floating light space within the core of the building itself. This illusion was created with the help of the hanging columns. It led to create an open space for gathering on the ground floor leading up to the auditorium structure with ramps, making the building barrier free. The innovative dome on top again gives a new outlook to the existing dome of the main Gurudwara building. The project consists of auditorium, gallery, and VIP lounges along with amenities.

STEEL SIGNIFICANCE

Due to requirements of erection-friendly structure in the existing building and time constraints, steel was a unanimous choice by the design team. This building shall be mainly used for exhibition purpose; hence, architects deployed an innovative concept of shell type of dome construction along with other amenities/services to meet the civic project requirement. The lower frame of dome is erected as hemispherical dome having 16.6m diameter and 7.5m height. Area inside the dome shall be utilized as auditorium. The entire auditorium has been housed inside a big hall which had 225mm thick concrete slab earlier and a large opening of 22m diameter is cut at roof level and covered with steel dome structure. The benefits considered for the design of dome is the ability to cover the large distance with minimum thickness. Structural steel hollow tube sections have been used for the construction of dome.

STEEL SECTIONS

Steel dome curved pieces were fabricated and erected; steel brackets are specially designed.