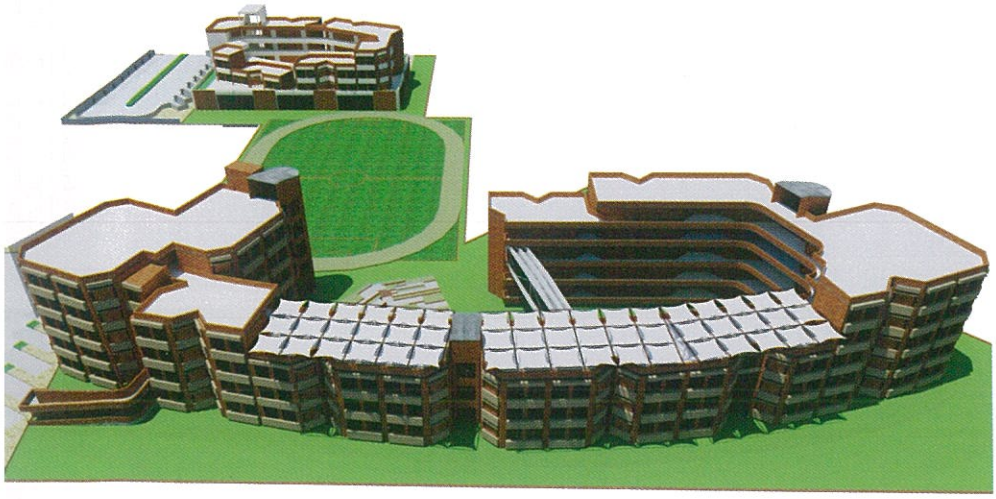
THE HDFC SCHOOL GURGAON



Fast facts

Client: HDFC Education Development Services Pvt. Ltd.

Architect: Studio for Habitat futures (ShifT) New Delhi

Structural Consultant: Skeleton Consultants Pvt. Ltd., Noida

Proof Consultant: Mehro Consultants, New Delhi

Current status: Completed

PROJECT BRIEF

Based on the aesthetics and elegancy of the project, Design of HDFC School was proposed by the Architects Studio Shift of Delhi led by Ar. Sanjay Prakash and Ar. Mayank, Ar. Shivani. The building is located in Sushant Lok phase–III, Gurgaon. The proposed building is of 7 levels with one basement and is irregular and unsymmetrical in plan shape. The **built-up area** of the building is **approx. 70000 sft. In phase-I.**

The construction was done with keeping in mind the strength, economy, durability and mostly the effect on environment. The architecture of building mainly focuses on the environment friendly and does not affects the surroundings of site.

Considering surrounding landscape into the account, two level of foundation and various types of retaining walls are introduced in the project. It was a difficult task to perform, but the uniqueness of idea made it possible.

Structural Geometrics

The irregularity of structure made it more difficult to analyze and design. The modeling and designing of the structure is done in the ETABS software. The shape of the building caused the torsion in the building due to which shear walls are introduced in the design. Even after the high torsion in the building,the grade of concrete & steel quantity in columns and beams are not much. The columns are cast in various shapes including rectangular, square, circular and irregular shape.The building is located in zone-4 of earthquake and due to irregular shape, dynamic analysis was done.

The excavation for the structure was done carefully, so that the trees located near the boundary of construction are not disturbed. Raftshave been designed in the SAFE software with pedestals. The permanent and temporary retaining walls are constructed on the site. Contiguous piles wall was constructed to save trees on the site. Various type of retaining wall are used in this project, cantilever, propped, double propped. The structure consisted of two parts and combined with use of expansion joint of 50 mm. the basement of structure contains water tank and pump room.

A circular stair case also enhance the grace of the structure. Circular stair case made on a single shear wall& one stair case on the brick walls are used. Solar panels are being installed on the terrace for the cause of environment.The various key points of design and construction in this project boosts the aesthetic and sharp view of the structure as well as the productivity of design.

Salient features

- Irregular and unsymmetrical shape o building
- Earthquake Zone-4 with importanc factor of 1.5
- Split levels of raft.
- Variety of retaining walls
- Solar panels on the roof
- Circular stair case on shear wall an stair case on the brick wall

Er. Md. Mueez Khan & Mr. Deviprasad led b Er.(Dr) Abhay Gupta

Contact:
Skeleton Consultants Pvt. Ltd.
A-75, Second Floor, Sector-5,
Noida –201301
Tel: 0120-4222642
Email: skeletondelhi@skeleton.in