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CASE 3

Project: INDIA GLYCOLS LTD CORPORATE OFFICE
Location: Noida
Size: 391,700 sq ft
Architect: Morphogenesis
Structural consultants: Sahni & Associates Ltd
Structural contractor: Bhayana Builder

Manit Rastogi,
Principal Architect,
MORPHOGENESIS.

Design:

India Glycols's corporate office echoes the fact that a workplace should manifest itself as a flexible and integral part of an employee's life rather than stand separately as an entity representing hours of confinement. Recognising that offices are synonymous with social activity, the built form branches out from a central spine serving as the common activity zone. Overall, the office was conceptualised as a solid perimeter with a fluid interior. But the interface between in and out is purposely blurred to enhance the vibrancy and creativity of the space and address the environmental and socioeconomic concerns associated with modern offices without taking away from its intrinsic functionality. The built form's narrow 8-m floor plate coupled with a stacking system generates a variety of open spaces - courtyards, verandas, terraces, green roofs - that optimise the use of natural light, thereby completely mitigating the need for artificial lighting during the day. Internal reflectures also help distribute daylight. Courtyards replete with water bodies (drip-irrigated using recycled water from the sewage treatment plant) allow evaporative cooling, thereby reducing dependence on artificial cooling means while keeping solar ingress out and controlling the inner temperature. The shaded outer façade with air cavity construction and very small external slit windows further contribute to inner climate control by allowing only diffused daylight into the office environs. Energy consciousness thus dictates the internal spatial layout. Rather than overlay an environmental layer, passive design techniques employed throughout the scheme practically demonstrate how green design features can reduce the heat load and promote water conservation.

Key materials used:
Glass: Saint Gobain (clear glass)
Lighting: All local lighting
Carpets: Flotex from Consolidated Carpet Industries Ltd
External cladding: Faveton Ceramic Tiles
Furniture: Wipro
Air conditioning: Carrier
BMS: Schneider
Flooring: Locally available Italian marble (limited areas)
Elevator: Mitsubishi

What drove the choice of inner and utility building and materials?

"Climate and environmentally sensitive design informs all design processes," says **Manit Rastogi, Principal Architect, Morphogenesis.** "The intent is to minimise the demand on non-renewable resources and maximise the utilisation efficiency of these resources when in use. Ecological or environmentally sensitive design is not an external 'layer' that can be applied to design; it is inherent and integral to the process, from concept to completion and to the full lifecycle of the building. The most effective approach would be to build with local materials in a manner that responds to the local climate while remaining economically viable."

The shaded outer façade with air cavity construction and very small external slit windows allow only diffused daylight into the office environs.