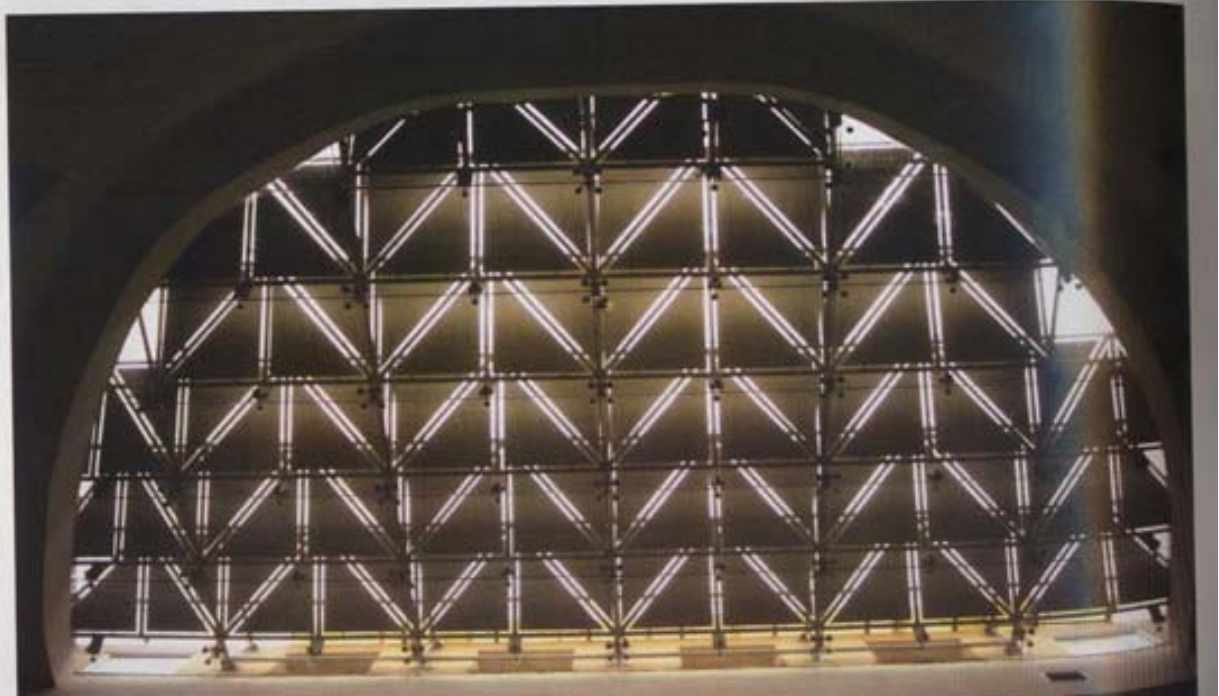


DESIGN WITH NATURE

The office of Spectral Services Consultancy in NOIDA is a perfect example of living in harmony with nature.



Delhi August into the courtyard of a multistoried office, where all I can hear are faint typing sounds and a slight whirr of an air conditioner (or so I think). "This is an office of a 150 employees?" I muse. The reception area is bright, very bright, and I look up expecting to see high intensity halogens and tubes. What greets me instead is a massive skylight with a variety of panels, smack in the middle of the ceiling, high above the seven floors. "Dr. Jain will see you now," the lady at the reception announces, making my reverie. I turn towards the lift, but not before admiring the beautiful optical illusion clock placed besides the reception.

Dr. PC Jain, Chairman and Managing Director of Spectral Services Consultancy, design and architecture firm, greets me with a wide smile. Dr. Jain is also the Chairman of the Indian Green Building Council (IGBC) and a staunch follower of eco-friendly living, a cause that he has espoused for several decades. This consultancy has naturally filtered down into office space as well. "Everything that you will see in this building has been designed in a way so as to create the least impact on the environment," he says, giving me an overview of the structure. "The skylight I saw earlier makes more sense now. From the furniture, which is bamboo, to a substitute, to the flooring which is bamboo, and the carpeting made from recycled material, everything is eco-friendly," affirms Dr. Jain.

"Let's take a walk," he adds.



"FROM THE FURNITURE, WHICH IS NOT WOOD BUT A SUBSTITUTE, TO THE FLOORING WHICH IS BAMBOO, AND THE CARPETING WHICH IS DONE FROM

The message to go green is omnipresent at Spectra

skylight actually acts as a light catcher: its permanently inclined louvers minimise direct radiation, and their angles ensure that there is no ingress of direct sunlight, thereby avoiding the glare on workstations. This also keeps the area cool, in turn reducing the load on air conditioning."

As we walk on, the building reveals large glass windows which are a staple feature of the structure. Dr. Jain enlightens me on how the building, spread over a 16,000 sq. ft., has been constructed to primarily face the North-South direction, the best orientation for the Indian subcontinent. And tapping on the walls, a visibly proud Dr. Jain emphasises that 7.7 percent of the building material is reused or salvaged. "Like the fly ash that has been used in the construction of the walls," he says. "And the broken china mosaic tiles on the roof and construction debris that has been used as the sub-base for flooring."

Energetic Endeavours

We take the stairway, the walls of which have been designed with actual blueprints, and descend to a lower floor. It is a work area where employees are busy pouring over their designs. This ergonomically designed space has no barricades or cubicles separating workstations, thereby making the space seem large and fluid. Large posters with morale boosting messages stare down from plain, white walls. Dr. Jain tells me it's an attempt by his daughter, Payal, a fashion designer, to keep the employees



with the architecture of the building.

Leaving a Mark

Dr. Jain has ensured that every aspect of a green building was incorporated into this office structure, an effort which has earned Spectral Services Consultancy a LEED Platinum by the USGBC rating in 2007. Keeping in mind the requirements of a green building, Spectral also ensures that its employees get 30 percent more fresh air than the level prescribed. "High CO2 levels have a negative effect on employee productivity. So, at specific areas in all the floors, there are CO2 sensors installed that check its levels. Whenever a certain high level is detected, ducts release fresh air into the room," explains Dr. Jain.

We move on to survey the lower levels by taking the stairs all the way to the bottom. Dr. Jain clarifies that it's another attempt to reduce the load on energy by not using the elevators – employees here have been asked to take the stairs instead. As we arrive at the pantry, the area gets more cheery with snakes and ladders and chessboard 'motif'ed tables and chairs. We walk out to the backyard, and I notice how broken pieces of glass have been used to accessorise flower pots – another example of Spectral's reduce, reuse and recycle mantra.

"...AT SPECIFIC AREAS IN ALL THE FLOORS, THERE ARE CO2 SENSORS INSTALLED THAT

harvesting and sewage treatment plant – Spectral is a zero water discharge building. "Essentially, the in-house sewage treatment plant helps in recovering the treated water for gardening and in flushing, and through the rainwater harvesting, we make sure that we harness water." My eyes wander to the bamboo being grown on the side walls. "It's a rapidly renewable resource that we have planted," smiles Dr. Jain.

A green building is, rightly, Dr. Jain has managed to erect a structure that might as well bode as a wake up call for builders and developers. With all its green facets, Spectral Services Consultancy serves as a perfect example to be emulated.

by: preetika mathew



The square of the skylight from outside (top) and inside (below)

