Vol.2 Issue 11

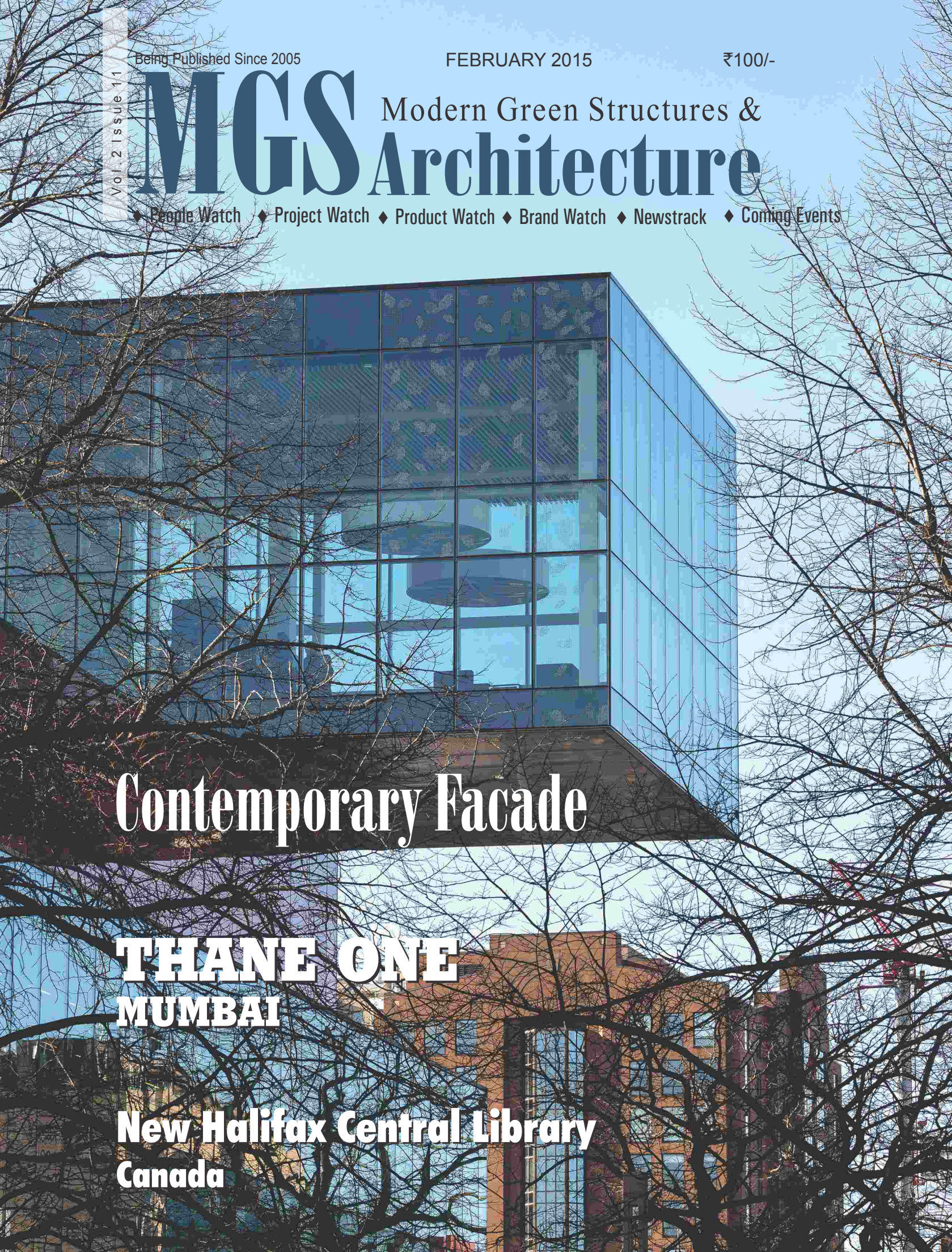
Being Published Since 2005

FEBRUARY 2015

₹100/-

MGS Modern Green Structures & Architecture

♦ People Watch ♦ Project Watch ♦ Product Watch ♦ Brand Watch ♦ Newstrack ♦ Coming Events



Contemporary Facade

THANE ONE
MUMBAI

New Halifax Central Library
Canada

Thane One, Mumbai

ADIL Limited venture, Thane One is a landmark IT/ITES business hub built to LEED Platinum standards. Designed by Bentel Associates Realty Design Consultants (a joint venture between ICS Group, India and Bentel international, South Africa) the project has won the Asia Pacific Property Award in the Office Architecture category.

Towering above the rapidly changing skyline of Thane, this edifice is a true architectural marvel. It stands as a shining beacon of excellence and technological prowess. With a location that offers exceptional connectivity it is perfectly poised to provide world-class office solutions to its elite clientele.

Building Form

The developer's passion for greener environment, the brief that spelled environment friendly and sustainable development, inspired Bentel to go with simple yet effective building forms – well suited for the office planning. The neutral concrete drapes gel well with the environment, while the colors play visual anchors. The balanced play of the form finish concrete with glass renders a contemporary Architectural styling to the development, yet incorporates design, construction and operational practices that significantly reduce or eliminate the negative impacts of development

on the environment and occupants. The façade responds well to the basic climatic conditions, respect the sun path and hasten operating efficiencies.

Design Brief

The proposal was to develop a large corporate destination that becomes the focal point of the city – the corporate park will accommodate a series of usages so that office goers enjoy a healthier and more productive environment while they work.

Main Requirements

- To design a cost effective building in the longer run with lowered operational value
- Building design should be environment friendly and sustainable at the same time

and also be practical from operational perspective
- There should be feel at home office environment to enhance productivity of occupants
- The built environment should blend with nature as compared to conventional artificial environs

Occupancy

Majority of office spaces with a combination of usages like retail and recreation to form a cohesive mixed use development.

Planning

The circulation strategy for the complex within the three multi storeyed towers is extremely simple yet effective. A peripheral ring road encompasses the three building zones allowing hassle free drop offs and exits. It also allows for smooth ingress into the parking structures. The ring road is wide enough to allow traffic in both directions, thus also facilitating the service required by the various usages of the building. The peripheral ring road also

allows for central green plazas which are free of any vehicular traffic and provide to its users a quality outdoor environment. The pedestrian circulation for the complex is thus more concentrated in the Central internal plazas, which offer informal and serene outdoor environment, which is also useful for informal meeting/ gathering places, casual F&B outlets, eateries, ATMs and other promotions/ event spaces.

Design

The distributed massing of the development leads a sense of quality outdoor spaces which the occupants can relate to and are less harsh on the inhabitants. The relation in the heights of the built form also corresponds to the 'Vaastu' principles, with the owner's den sitting at the tallest/ heaviest S-W corner. The location of the service cores is planned in such a manner so as to face the South and Western directions which impart maximum heat gain. The raised bases (podium), the green walls, wind scoops, cross ventilation, solar shading, solar collectors and solid facades on the South and West are few of the fundamentals of the planning which contribute to Green or Sustainable Architecture.

In line with the clients, passion towards the existing flora and fauna on site, the master plan was developed in a way that saved almost all major trees there. The building block placements and the Architectural form is a reflection of the process in which all the existing tree boulevards are being retained as it is, without compromising the functionality and quality of the built environment.

Energy conservation:

Care is taken to ensure that the building embraces environmental–friendly principles in keeping with the new international standards for buildings worldwide. Adopting systems for efficient use and reuse of natural resources and electricity will bring down the operational costs considerably. This includes the choice and use of local materials, overall energy

efficiency and concepts for recycled water conservation and refuse disposal. Latest construction techniques and methods were deployed as per prevalent best practices in the industry.

Lighting and ventilation:

The use of natural light is an important factor in creating a comfortable energy efficient space. In the daytime, one can expect adequate natural light and ventilation to reduce the use of artificial light. The built form façade is a blend of solid concrete masses on the South and West so as to cut down radiation from these directions in summer, and structural glazing embracing those faces which do not attract direct radiation. The structural glazing houses shading screens or louvers to negate the solar radiation. At the same time, good lighting design spreads beyond the realm of visual appeal and strive to lower the energy costs and heat gain. Daylight harvesting and natural daylight scaling shall form an integral part of detailed lighting design.

Heating, Cooling, air quality and the environment

The best of the industry practices in the service shall be used to conserve energy. An integrated air-conditioning system shall be designed/ proposed to maintain the temperature, humidity and indoor air quality, within desired and comfortable conditions with proper air distribution within the work area.

Key Features

- Multiple landscaped terraces & balconies
- Seismic Zone 3 Earthquake resistant design
- Grand Entrance Lobbies
- Floor-to-ceiling height of minimum 12 feet
- 8 Meter minimum Column to Column Distance on one grid
- Heat-resistant glazing
- Ramp access for the Physically Challenged

Tenant provisions include

- Connected Power Load of 7.5 W/sq.ft. with wiring up to Distribution Board
- High Side Air Conditioning (in the form of chilled water tap points)
- Fibre optic (backbone) for voice and data
- Wet Area for toilet and pantry
- 100% Power Generator Back up
- 24 hrs Facility Management
- Multi-level Car Park with over 1,000 bays

- Electric Vehicle charging stations & car pooler parking
- Sewage and Effluent Treatment Plant for treating and reusing water
- 6 High Speed Intelligently controlled elevators

Security

- 24 x 7 CCTV recording with 7-day backup
- Common Reception with Intercom System
- Automated boom barriers at the entry/ exit points.
- Public Address System

Fire-fighting & Safety

- Emergency medical facility on site
- Pressurized fire escape staircases and designated exits at every level
- Smoke detectors, alarms and fire fighting equipment at all levels
- Designated refuge areas
- Glazed facade designed to meet International standards
- Auto dialer for fire brigade