



Confederation of Indian Industry

GREEN

BUILT-ENVIRONMENT

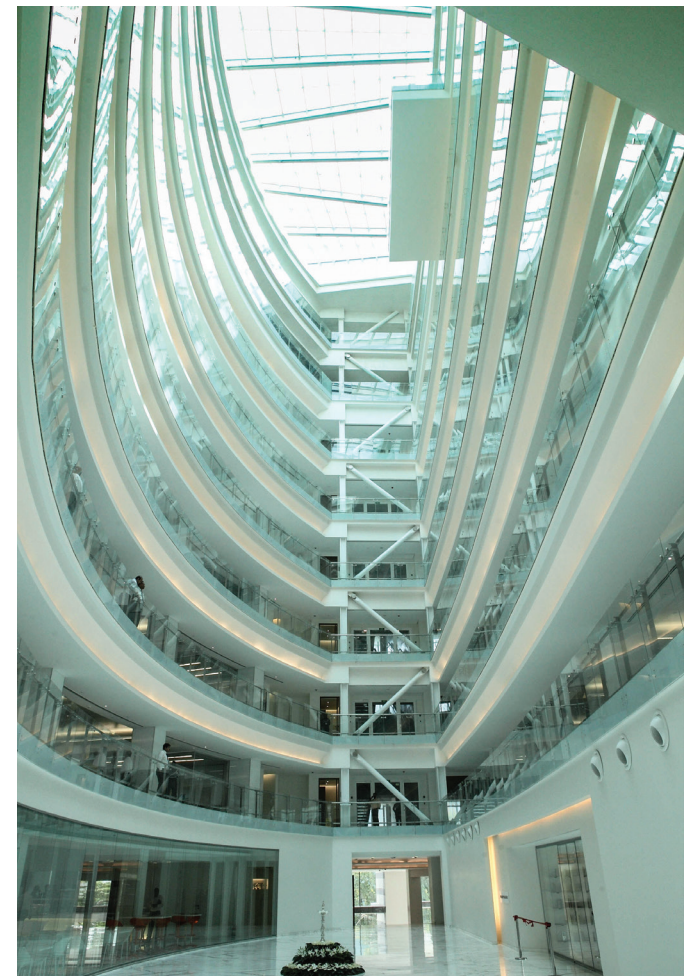
Champions Redefining India's Sustainability Landscape

VOLUME IV



“Showcasing our ethos and our commitment to sustainability, our headquarter building has not only successfully set the standards for the corporate architecture, but also enhanced the efficiency and overall work space environment for all users.”

- Mr. SAJJAN JINDAL, Chairman, JSW Group



Location: BKC, Mumbai, Maharashtra, India

Area: Built Up- 5,50,000 SF

Promoter: Jindal Steel Limited

Architect: INI Design Studio

Green Building Consultant:
Prime Consultant - INI Design Studio
Sub Consultant - Ankoor Sanghvi

MEP Consultant: Prime Consultant - INI Design Studio
Sub Consultant - Pankaj Dharkar & Associates (PDA)



Building Use

- 10-11 hours approx. per day



Water Management

- RWH and storage system ensures reduction in the final runoff by 25%
- 30% water efficiency



Energy Efficiency

- Daylight factor of 2% in minimum 75% occupied space
- 90% of the occupied spaces having direct lines of sight to perimeter glazing
- 50 kWp rooftop solar system



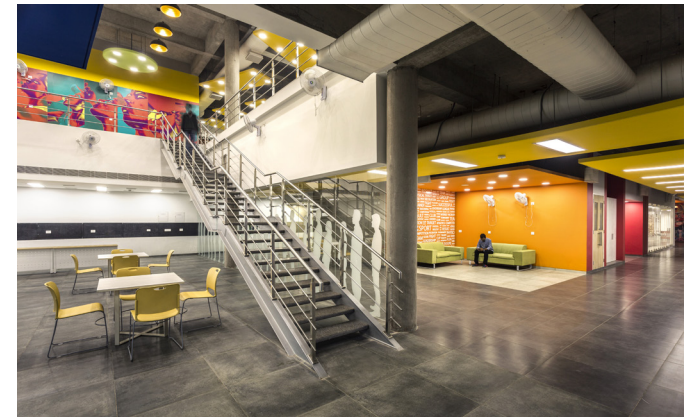
Resource Management

- 70% of the construction material was regionally manufactured
- Low emitting materials and finishes that significantly lower the air toxins
- Sensors to monitor the CO2 levels are installed in return air duct of AHU



JSW HEADQUARTERS

Rating System : Green Core & Shell
Green Certification : Platinum



“It has been our vision to embed sustainability in all aspects of our university and set a benchmark for our students, colleagues and other users. The IGBC gold certification for Indoor Sports Complex is an important step in that direction.”

- Mrs. KIRAN NADAR, Trustee, Shiv Nadar Foundation



Location: Shiv Nadar University (SNU), Greater Noida, Uttar Pradesh

Area: Built Up- 1,16,000 SF

Promoter: Shiv Nadar Foundation

Architect: INI Design Studio

Green Building Consultant: Kalpakrit Sustainable Environments Private Limited

MEP Consultant: INI Infrastructure & Engineering



Building Use

- 12 hours



Water Management

- Rainwater harvesting system
- Wastewater treatment and reuse
- Water efficient plumbing systems



Energy Efficiency

- Passive architecture principles to minimize direct solar gain, regulate indoor temp. and provide adequate shading
- Glass façade in the north brings in ample diffused sunlight that lights up the interiors during the day time
- AAC Blocks to generate thermal mass
- 200 kW solar power generation



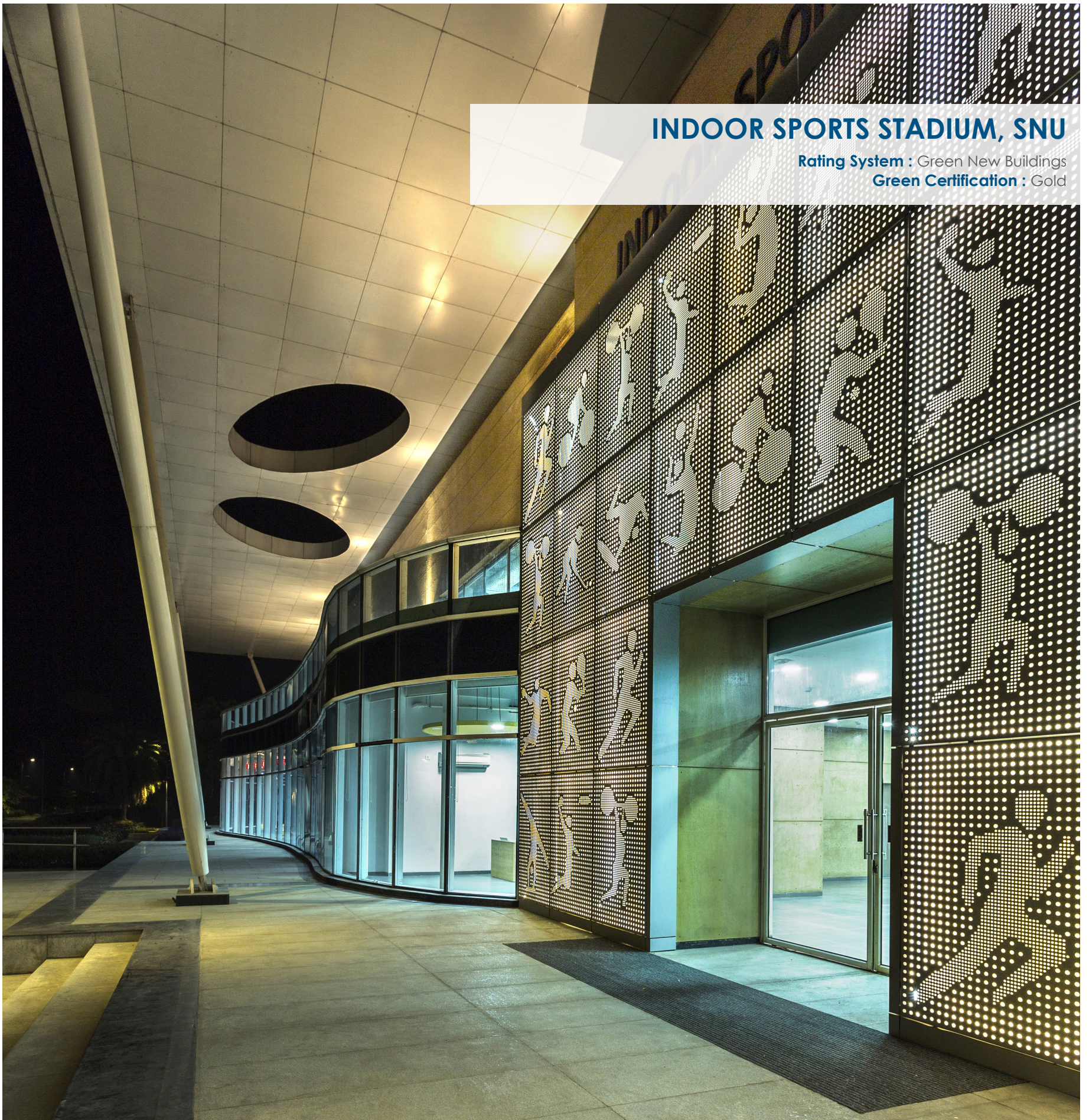
Resource Management

- Use of eco-friendly refrigerants in HVAC systems



INDOOR SPORTS STADIUM, SNU

Rating System : Green New Buildings
Green Certification : Gold





“Through this project the aim was to develop Rajkot as a smart, livable and iconic city with inclusive growth and sustainable development, by providing integrated infrastructure and empowering ecosystem.”

- JAYESH HARIYANI, CMD, Senior Principal, INI Design Studio



Location: Rajkot, Gujarat

Area: 907 Acre

Promoter: Rajkot Smart City Development Limited

Architect: INI Design Studio

Green Building Consultant: INI Design Studio

MEP Consultant: INI Infrastructure & Engineering, Multi Media Consultants Pvt. Ltd., Facile Maven



Land Use Planning

- Poly-centric mixed use development



Water Management

- 24x7 water supply with SCADA system
- Metered distribution
- Storm water outfall to open into 3 natural lakes



Energy Efficiency

- Solar power plan
- Smart and robust infrastructure
- District cooling system
- Integrated Control and Command Center with traffic management
- NMT & BRT Network



Resource Management

- Preserving & rejuvenating 3 existing lakes
- High density development

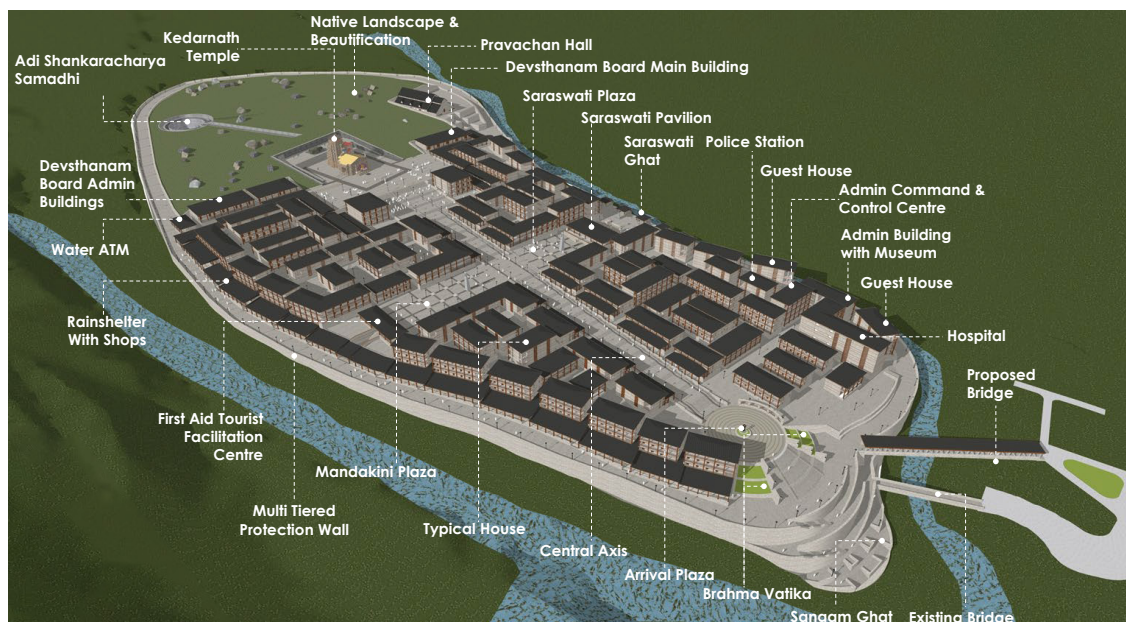


RAJKOT SMART CITY

Rating System : Green Existing Cities

Green Certification : Platinum





“The design creates a balance between various aspects such as ecology and its preservation, lively hood, land use, transportation and infrastructure striving to create one of the first smart green hill habitat.”

- JAYESH HARIYANI, CMD, Senior Principal, INI Design Studio

Location: Kedarnath, Uttarakhand

Area: 9.43 Hectare, 23.31 Acre

Promoter: CEO, Uttarakhand Tourism Development Board (UTDB)

Master Planning

Consultant: INI Design Studio

Green Building Consultant: INI Design Studio

MEP Consultant: INI Infrastructure & Engineering



Land Use Planning

- Mixed use development



Water Management

- Multi-tier river protection wall along with formation of ghats
- Water supply network with heat tracing
- Silt chambers along the surface runoff



Energy Efficiency

- Smart poles with integrated Lighting, CCTV Cameras, Wi-Fi and PA System
- ICT enabled command and control center & Early warning disaster system
- 100% renewable energy (Hydro)



Resource Management

- Minimum cut and fill strategy for terrain
- Use of regional materials like locally available stones and wood
- Construction through all-weather conditions with best practices



Construction Ongoing



Construction Ongoing



Construction Ongoing



Construction Ongoing



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