

# 'We use stone like it has never been used before!'

**Ruchika Grover**, Director, Odyssey Stone Architecture & Design, speaks to **Remona Divekar** on the landmark project **Indira Gandhi International Airport, New Delhi**, highlighting how natural stone can bring a value addition to architecture, and act as a design stone element. The project also enhances the innovative way of using natural stone as an architectural and a design element -- setting an ideal example of reinvention of the traditional stonework.

In the making of the **Indira Gandhi International Airport, Terminal 3, New Delhi**, Odyssey Stone Architecture & Design prides itself to be associated with the world-class terminal. The airport claims to be India's second-busiest airport (after Mumbai) and the most important aviation hub.

Built in just 37 months, the terminal is designed to serve over 34 million passengers a year, cited as 'a new benchmark for completing major projects' in India. Terminal 3 is the first airport building in India to receive **Leed Gold** rating.

Sustainable design strategies include the use of natural light, interior finishes with high recycled content and battery-powered vehicles for moving travelers between terminals. The water management and treatment programme features more than 300 rainwater harvesting pits.



The challenge that we faced in this project was to meet the timelines and at the same time adhering to the strict quality control standards. We are happy that we were able to meet both.

**Tell us about your other projects. Design wise do you have plans to introduce new components in your work henceforth?**

We primarily target high-end residential and commercial hospitality sector. Apart from high-end residential, we have done Hyatt Regency Pune, Kempinski New Delhi, ITC Fortune Hotel New Delhi, Ritz Carlton Bengaluru (work in progress), Dusit Deverana New Delhi and others.

We have identified seven areas of growth for our company which not only helps us further specialise in what we offer, but also makes it easier for our clientele to understand the potential and versatility of stone. These are: Architectural/masonry, bath design/tubs/basins, façade/building frontage, hardscape,

internal stone/mosaics/inlays, stone furniture/accessories, sculpture/lattice/relief work.

We are also planning to develop our own collections/offering in each of these segments, besides offering customised solutions for the discerning customer. India has abundant reserves of stone, but somehow the Indian material is not given its due credit in India.

We innovate with stone, and for the retail market, we have developed various in-house designed collections that maximise stone's tactility as a material and use it like it has never been used before.

For example, The Crosta collection is a Dimensional Stone series, which creates a play of shadows on the stone. The collection has been developed keeping in mind the Indian stone, but not in the traditional Indian way. Another example is a series of Origami-inspired water features for internal and external spaces and also for gemstone chandeliers.

**Tell us about the initial designing stages of this world-class mega airport terminal.**

The structure is designed for wind velocity of 50 m/sec and seismic zone V, considering design as per IS-800 incorporating each and every requirement of MEP services and interfaces needs. Every cutouts, cleats, brackets connection, etc. have been in-built at design stage to avoid field modification.

Facade framing for the entire T3 Terminal, using box sections, has been fabricated to meet architectural need of the airport. The initial design development took about one and a half years.

Every minute detail was discussed to ensure that the planter boxes and the water features were completely functional, maintenance-free and aesthetically pleasing before finalising the design.

**When did you begin working on this project, and when was it completed?**

We began work on the project in January 2010 and it was completed in May 2010.

**How did you plan landscaping, and what is the USP of these designs?**

We have not undertaken the landscaping for the IGI airport. The architects of this mega project were EDAA/AECOM Hong Kong and the Indian architects were Beyond Built. The hardscape work which was in our scope included 750 RMT of fixed planters in steel gray granite, a landscape deck and planter benches.



The primary design idea was to innovate with stone as a material, enhance its capability and provide an efficient system. The movable planter boxes are completely self-sufficient and drip-free, equipped with a HDPE tray, pond liner and a slotted galvanised mild steel (GMS) framework.

The GMS framework was clad with steel gray granite. The slotted framework enabled flexibility with the height of the plants and planters placed inside the boxes by moving the HDPE trays up or down.

The pond liner ensures that the water does not drip out onto the floor. Each planter box weighs between 120 and 450 kg and can be moved easily with the help of forklift. Similarly, all the water features are made with solid stone pieces of 80-100mm instead of stone slabs to ensure that there is no leakage, and saline deposits over time.

**How much time did it take for completion? What type of stone was used there?**

The actual time duration taken by us was four months for completion of the work, but we had to remain at the site till the complete handover of all the other activities which went on for another six months. The different types of stones used were Sapphire Brown Granite, Steel Gray Granite, Raw Silk Ivory and Lavender Blue Granite.

**How was your experience working on the project? What were the challenges you overcame?**

The experience was overwhelming. It felt great to have some contribution, albeit minor, in the construction of the IGI airport that has been named the world's second best airport in the 25-40 million passengers category by the Airport Council International.

