

The Landport Passenger Terminal Building

Dera Baba Nanak, Kartarpur Corridor, Punjab, India

The Kartarpur Corridor between India and Pakistan connects the historic gurdwaras of Dera Baba Nanak in Gurdaspur District of Punjab (India) with Gurdwara Darbar Sahib, Kartarpur, in the Narowal District of Punjab (Pakistan). The Government of India recently set up a Landport Terminal Building at Dera Nanak in Punjab to serve the Indian Sikh pilgrims travelling to the Darbar Sahib in Kartarpur, Pakistan via the Kartarpur Corridor.

Design & Built Form

Delhi-based architecture firm Creative Group undertook the project's designing, landscaping, sculptures, art works, paintings, and other services. The aim was to design a Green, Smart and Sustainable facility, one that would resonate with the culture, heritage, topography, and social fabric it belongs to.

The project has been envisioned as a homage to the great Guru Nanak Devji, while creating sensitivity to Art & Architecture by symbolizing the universal message of oneness and humanity. This was achieved through various elements of visuals, dimensions, spaces, and volume, to establish an environment that is spiritually empowered, and emotionally and soulfully connected.



“A building should not be treated as a mass of brick and concrete but as a living organism that breathes and embodies nature”

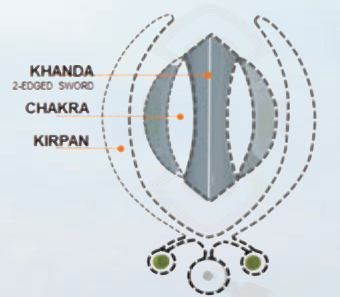
Prof. Charanjit Singh Shah,
Principal Architect, Creative Group

Intelligent planning, efficient zoning and building strategies mark the success of the project. The built form, originating from the religious symbol Khanda of Sikhism, gives a unique identity to the Terminal Building. The story of Guru Nanak and historically significant sculptures are incorporated in the design. The gateway crowning the port is composed of five petals, symbolizing the 5 vows of Sikhism.

The design elements depict Guru Nanak's journeys (Udasis) in India, Pakistan and to many other countries. Guru Nanak's universal message of oneness of God and truthful living is conceptualized by the Mool Mantra (Ek Onkar Satnam) and has been extensively expressed within the Landport building and in the landscape.

Key Architectural Interventions

Wall of Fame: The Wall of Fame showcases the journey of Guru Nanak Devji since his birth, episodes of his realizations, and his journey towards enlightenment. His various Udasis or travels covering more



'THE KHANDA' :
Symbol of Peace, Oneness & Universal Harmony





Fact File

Project : Passenger Terminal Building (Landport)
 Location : Kartarpur
 Client : Landport Authority of India, New Delhi
 Year : 2019
 Site Area : 17 acres
 Built Area : 20,000 sqm
 Employers : M/s Landports Authority of India, New Delhi
 Architects & MEP Consultants : M/s Creative Group,
 New Delhi
 Structural Consultants : M/s Technical Project
 Consultants Pvt. Ltd., Noida
 Contractors : M/s Shapoorji Pallonji And Company
 Private Limited

than 40,500km across the globe are depicted through Modern Art.

Prefab Construction: The frame of the building is constructed entirely of steel. Trusses and steel sections create large open spans. The cladding on the roof is of Aluminum Standing Seam while some areas have zinc cladding.

Landscaping: The landscape is lined with stone blocks that have the words of the Guru carved on them. Statues depicting the three principles of Guru Nanak, namely Naam Japna (focus of God), Kirat Karni (honest living), and Vand Chakna (sharing) have been embedded in the landscape, as also the verses and teachings of great saints like Kabirdas, Parmanand, Jaidev, and Ravi Das.

Zoning: The design is divided into 6 zones. The movement within the Landport building is mostly unilateral. This was done to ease the passenger flow as the building caters to 10,000 users a day. This makes all the necessary checks smooth and efficient. In the evening, the passenger flow direction is reversed. Hence, the same type of areas can be used, which has helped in optimizing the built-up area of the facility.

Socio-Enviro Aspects

The project is a perfect example of local engineering, and it addresses all the socio-enviro aspects of the construction stream. The design respects the natural topography of the site, and the construction was done without disturbing the existing contours and trees on the site.

It is a great example of holistic architecture. The built form is contemporary, but has its roots and essence embedded in Sikhism. Passive design strategies have been used to make the Passenger Terminal sustainable and eco-friendly. It has been Gold Rated by GRIHA and has also won the ASSOCHAM GEMS Platinum Green award.



“Our impulse is to sensitize our designs towards passive strategies of green architecture. Not only do we try to derive our inspiration from nature, but we also let the building breathe with nature”

Ar. Gurpreet Singh Shah,
 Creative Group





“The Indian devotees can now visit the Gurdwara Darbar Sahib at Kartarpur in Pakistan very conveniently via the Kartarpur Corridor. We, at SP E&C, are honoured to have played a role in bridging the divide through the construction of a state-of-the-art Passenger Terminal Building at Dera Nanak, Punjab.”

Subodh C Dixit, Executive Director, Shapoorji Pallonji Engineering & Construction

Shapoorji Pallonji E&C (SP E&C) was appointed as the Construction Contractor for the Passenger Terminal Building (PTB) and other associated works at Dera Nanak, Kartarpur Sahib Corridor, Punjab, in June 2019, after a competitive bid process. The construction work commenced soon thereafter.

SP E&C's scope of work included construction of the PTB, Security Block, Utility Blocks A & B, Toilet Block A, BSF Room, Guard Room, ESS Block, STP, WTP, Watch Tower, Vehicle Parking Areas, etc. It also included Civil, Structural & Finishing works, Electrical, Mechanical, Plumbing, Fire-Fighting, Fire-Alarm,

HVAC, Security, external development works including roads, footpaths, kerbs, drains, water features, etc. and sculptures viz., Lotus, Langar Sewa, SS Sheet with Etching, Logo of LPAI, Acrylic Painting of Guru Nanak Dev Ji, and Ek Omkara Symbol.

Construction Highlights

The state-of-the-art Passenger Terminal Building is designed to handle 2,000 passengers per day and has a built-up area of about 250,000 sqft in the first phase. The overall height is 25 m and the maximum column-free span is 20 m.

It is set up over a land area of 17 acres and is equipped to provide adequate immigration

and customs clearance facilities to process the smooth movement of approximately 5,000 devotees per day. The building is fully air-conditioned and disabled-friendly. The complex includes kiosks, cloakrooms, and ample parking space.

The Government of India was keen to commission the PTB to coincide with the 550th birth anniversary of Guru Nanak Dev. Accordingly, SP E&C developed a robust project delivery plan filled with contingency plans for almost every conceivable issue. The site mobilisation and construction of the PTB were undertaken on a fast-track basis.





About 325 roof trusses were fabricated offsite at a fabrication facility at Delhi. This ensured that the roof trusses were fabricated and ready by the time the substructure works were completed. About 770 fabricated segments were then transported to the site before being assembled and erected at heights ranging from 10m up to 30m.

About 65 Mobile Cranes, Man Lifts, and Scissor Lifts of varying capacities were used to ensure parallel working on all the work fronts, and to meet the tight timeline. About 1,800 workmen and 140 supervisory personnel were deployed at the peak of the project.

The project involved a good amount of architectural finishing and MEP works. This required careful attention to details and meticulous execution of the architectural finishes. SP E&C managed about 35 specialist sub-contractors on the project and implemented efficient quality control to achieve high standards of architectural finishes. Although the construction involved many high-risk activities, the SPCPL team established a robust HSSE monitoring system and work processes to ensure an incident-free site.

The construction of the PTB was completed as per the priorities set by the

Government in less than six months' time. The facility was inaugurated, as scheduled, on the 550th birth anniversary of Guru Nanak Devji in November 2019 by the Honourable PM, Shri Narendra Modi. The overall facility was commissioned in Dec 2020 with additional passenger amenities and facilities.

With the commissioning of the Kartarpur Corridor, a long-standing demand of Sikh community to provide a hassle-free corridor to Gurdwara Darbar Sahib at Kartarpur in Pakistan has been fulfilled. Indian devotees can now visit the place conveniently and without facing visa-related issues. ●

