

Project Description

The design for this contemporary Pavilion represents the fallen North Star accompanied by a number of smaller stars from the Sky in dialogue with the sun on the earth's axis of rotation. It is an interpretation of the Client's theme of Sky and a way of expressing such a complex sphere with elements such as sun, moon, stars and clouds which all add to the dramatic effects of colour, day, night, texture, rain, sunshine etc.

It was about creating a unique space within the site (Museum Gardens) that will intrigue and invite visitors to appreciate the role the sky and its elements in the perception of architectural structures, our well-being and the world around us as a whole.

The sundial element of the open Pavilion works by casting a shadow over the thin cut grid lines on the sundial platform surface in relation to the gnomon or thin rod on the Northern Star tip which is set to True North and correct latitude in the Museum. This indicates the time by apparent position of the Sun across the sky as it cast a shadow creating an angle and aligns with different cut hour-lines on the surface indication the hours of the day specifically in the Museum Gardens. This movement of the sun in fact means it directly measures the sun's hour-angle by the shadow of the edge parallel to the axis of the Earth's rotation. The shadow on the Sky Pavilion sundial is longer in the afternoon as the Sun is lower in the sky, however at midday it is shadow is shorter as the Sun is at the highest position in the sky, this is why the shadow on the Sky Pavilion sundial would be affected by the seasons of winter, autumn, spring and summer.

Project Detail

Project Title: Triumph Pavilion 2015: Sky Pavilion

Client: ArchTriumph

Architectural Design: Nonscale Co, Tokyo, Japan

Site Total area: 10,520 Square Metres

Total Permitted Build area: 100 Square Metres

Pavilion Gross Floor area: 62 Square Metres

Pavilion Height: 4 Metres

Materials: Steel Composite, Untreated Mild Steel, Plywood and Timber

Location: Museum Gardens, Cambridge Heath Road, London E2 9PA, United Kingdom
(next to the V&A Museum of Childhood)

Status: Completed

Project Start Date: 12 January 2015

Project Complete Date: 04 June 2015

Cost: £25,000

Triumph Pavilion 2015 Project Team

Design

Nonscale Co., Tokyo, Japan

Principle: Masaki Morinobu

Project Director: Takumi

Yoshioka

CG and 3D Modeling: Yusuke

Aizawa

Assistant: Risa Tadauchi, Ankur

Podder, Tsuyako Gushi

Contractor

Koichi Yamano, Tokyo, Japan

Project Coordination & Management

ArchTriumph, London, United Kingdom

Structural Engineering

Ejiri Structural Engineers,

Tokyo, Japan

Principle: Norihiro Ejiri

Project Engineer: Haruhide

Kusumoto

UK Engineering Advisory

Structure Workshop, London, UK

UK Architectural Advisory

D N Izoulet, London, UK

Laser Cutting

Taiyo Kogyo, Fukushima, Japan

Cut and Construct, London, UK

Anchoring

SpiraFix, Newport, UK

Project Curator *K B Stowe, London, UK*

Sponsors:

ArchTriumph

Suslight Industry Co., Japan