

Perot Museum of Nature and Science

Dallas, TX



Site View



Main Lobby



Theater

Basic Information

Name: Perot Museum of Nature and Science

Location: 2201 N Field St, Dallas, TX 75201

Occupancy Type: Public Museum

Size: 180,000 ft²

Number of stories above grade: 5

Dates of construction: 05/2010 – 12/2012

Primary Project Team

Owner: Perot Museum of Nature and Science

Architect: Morphosis Architects

Associate architect: Good Fulton & Farrell

Lighting Consultant: Office for Visual Interaction

General contractor: Balfour Beatty Construction

Structural Engineer: Datum Engineers

MEP Engineer: Buro Happold

Architecture

The site of the building incorporated rock panel and drought-resistant grasses to reflect two of the most typical Texas ecologies: forest and desert. Cubical tower with iconic 'tree bark' texture was built on such a site, demonstrating the coexistence of nature and science.

Electrical

Power is supplied through two 480Y/277V, NEMA type 1, 3 pole switch boards fed through utility. Total balanced load is 4880A. A 750 KVA generator was prepared to provide 812 Amps power supply in case of emergency situation.

Lighting

High output metal halide floodlight was the major luminaire used for facade lighting of the Museum. In the open lobby area, fluorescent luminaire was applied to create an energy efficient lighting scheme with halogen spot light used to provide visual emphasis on exhibits. In the theater space, liner LED luminaire was used to match the existing curvature of acoustic panel.

Structural

The cubical tower was supported by concrete columns. Columns were placed away from the building perimeter to save space for a curtain wall on ground level that sunk from the tower perimeter. In the gap between ground level curtain wall and building perimeter, V shaped concrete column was built to handle horizontal loads.

Yucheng Lu
Lighting / Electrical