

FOSSIL MYSTERIES

Uses Innovative Exhibition Design

FOSSIL MYSTERIES covers 9700 sq. ft. of the Museum's second level, incorporating both the original building (5500 sq. ft.) and the new wing (4200 sq. ft.). (The original 61,140 sq. ft. building, designed by William Templeton Johnson, opened in 1933; the new 90,000 sq. ft. wing, designed by Richard Bundy and David Thompson, opened in 2001.)

The design and installation of *FOSSIL MYSTERIES* gave the Museum the opportunity to restore and lighten up the south entrance to its original "grand entry." This included taking out walls and uncovering one of the original windows and the ornate grill work over the original window above the south entrance.

The 1970's acoustic-tile drop ceiling was removed to reveal the original cast-concrete waffle ceiling, with a gain of 3' in ceiling height. The walls and ceiling were painted in the original white color. The new HVAC system was rerouted to be concealed. The flooring is the original, colored cast concrete laid down in a grid pattern to mirror the waffle ceiling. The distressed finish of the floor holds memories of past exhibitions.

Just as *FOSSIL MYSTERIES* incorporates the old and new sections of the building, the exhibition itself has a balance of traditional (e.g., dioramas) and contemporary exhibition approaches (e.g., computer-controlled interactives).

Rather than dissect the exhibition with walls, exhibition designer Michael Field created a modern, dynamic, open floor plan for *FOSSIL MYSTERIES* with the use of natural and artificial lighting, varied ceiling heights, wall shapes, paint colors, and flooring. This open plan allows visitors to see the whole picture of the exhibition. And, in contrast to exhibitions designed in a linear, sequenced floor plan, visitors can go directly to areas that interest them; parents can see where kids are; and visitors can keep the rest of their group in sight.

Walls

The exhibition is divided into seven galleries by dramatic curved walls, some of which actually hang from the ceiling, creating distinct exhibit sections without forcing the visitor through a maze. The curved walls repeat the curves in the building itself as well as contrast the angles of the original building. The rippled pattern "sand drift" sheetrock wall boards are made from gypsum materials mined and processed by USG in Plaster City just east of Anza Borrego State Park, Borrego Springs, CA. The gypsum material was formed by evaporates left behind from a Miocene sea (12–21 million years ago) in the region. The effect is beach-like.

Paints

Dunn Edwards paints, saturated, rich, timeless colors found in nature (greens, blue, rust, and brown) give energy to the spaces and change the perception of the proportions of the space. Michael Field calls them his tried and true "Fiesta Ware plate colors."

Floor coverings

The floors coverings change as the visitor goes through the exhibition, beginning with the original cast-concrete floors, to Mohawk nylon tile carpets to Forbo Marmolium, then back and forth from carpet to tiles to carpet. Carpeting is used to muffle the noise in the rooms with interactives. (Field describes the color of the carpet as the color you would get if you put all of the wall paint colors into a blender.) Forbo tiles (a green product made from sawdust and linseed oil) are used in various colors to create the mood for the exhibition area. For example in the Eocene area where the whole room is a prehistoric rain forest, the tile is mud-colored. In the Pliocene (when the region was under water), the tile is blue and green and inlaid in a ripple pattern to give the effect of a sculpted sea floor. Like the ceiling tiles, the carpet has a ripple pattern.

Ceiling treatments

Ceiling colors vary to create mood, and ceiling heights vary to ease the visitor's transition from one area to the next.

At the beginning of the exhibition in the Cretaceous period (when dinosaurs roamed the Earth), the original waffled ceiling of cast concrete at the south entrance has been exposed. It's the highest ceiling in the exhibition. In the adjacent Cretaceous-Tertiary Boundary (KT) area (representing the time when the dinosaurs became extinct), the tiled ceiling is lowered to create a sense of "the end." In the Eocene area right after the KT area, the tiled ceiling is higher and black, representing an opening of a new phase of life. In the Oligocene (a high-energy area depicting the region when it was a vast grassland), the ceiling is lowered and is white.

The rippled pattern "sand drift" ceiling tiles are from USG in Plaster City; the gypsum material comes from a Miocene sea floor (12–21 million years ago) in the region.

Just inside the south entrance to the building, a wing soffit hides the heating and air conditioning ducts and creates an implied ceiling, and eases the transition from the waffle ceiling to curved walls.

Lighting

LED fiber optic projectors, special-effects, natural lighting and halogen electric track lights are used creatively throughout the exhibition.

From the south entrance, visitors will enter a space flooded with natural light, and as they progress through the exhibition the lighting will become progressively darker, easing the visitor's transition from bright sunlight to indoor lighting. To brighten up the south entrance, a wall was removed, an original window exposed (covered with a neutral density filter to flood the space in soft natural light), and ornate grill work over the original window and door removed.

In the Cretaceous-Tertiary extinction area, visitors are bathed in bold red lights; blue lights on an orange wall are used to depict the end of life for the dinosaurs. In the Eocene tropical forest area, dappled light is projected onto the floor to give the effect of sunlight filtering through the thick canopy of trees, and hope for new life.

In the Ice Age area, three lower windows are covered with large wall murals to control light and to direct the visitor's attention to the displays that depict life 10,000 years ago, rather than the current life on any given day in Balboa Park. Three windows high above visitor's heads are left open to capture the natural light.

Throughout the exhibition the halogen track lighting is hung at the same height and in the same direction, further uniting the two separate wings and minimalizing visual clutter. The track light height was lowered so the Museum can use lower wattage lamps to save energy.

Otherwise unused ceiling space is put to work with a "Ring of Fire" display: an 18' diameter ceiling graphic. Visitors will look up at an enhanced satellite image of the Earth. Three thousand fiber optic lights in "magma colors" will show earthquake and volcanic activity in the southern California and Baja California region over the last 100 years.

Display cases

The new display cases are designed with a 20-year life span; the welded steel frames and legs are trimmed in powder-coated steel. All interactives sit on walnut pedestal bases, laminated with Forbo Marmolium.

Accessibility

The exhibition went through a series of mockups to determine the best height for all visitors. *FOSSIL MYSTERIES* exceeds American Disabilities Act guidelines and is generous in providing tactiles for the visually challenged.

Floor plan

The exhibition has two entrances and two exits; the exhibition tells a story that can be read from either entrance and the floor plan works whether the visitor comes in from the north entrance or the south entrance.

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