



Steinhardt Museum of Natural History, Tel Aviv, Israel

Tel Aviv's Wooden Treasure Chest: Wrapped in a wooden façade resembling Noah's Ark, the new Steinhardt Museum of Natural History creates a new city landmark.

Housed inside a symbolic wooden treasure chest, that doubles as the cladding for the museum's collection, Tel Aviv University's Steinhardt Museum of Natural History—with more than 5 million specimens collected over the past century—is the largest, most active center for biodiversity research in the Middle East.

Making a splash with its Noah's Ark-looking façade, Kimmel Eshkolot Architects' concept was two-fold: beckon museum patrons and passersby to come inside and explore, while also providing a climate-controlled space for the archeological specimens.

"The collections are the heart of the building and we wanted it to

be exposed to the city and to the university," explains Limor Amrani, architect, Kimmel Eshkolot Architects, Tel Aviv.

They did so by connecting it to the façade of the building and covering it with wood to give a warm feeling. Although it is only 8-mm thick, the high pressure laminate (HPL) cladding, manufactured by

Prodema, combined with its concrete backing, creates a thermally insulated envelope. It also helps create a sense of continuity for visitors. "Although the public cannot enter inside the collections (they must glimpse of the specimens behind fire-rated glazing), we really wanted them to be present inside the museum and we wanted patrons and

passersby to feel the magnitude of it from every side," Amrani explains.

For the exterior, low-E glazing was specified at the top of the building on the east and west side where offices and research areas are situated, and in the curtainwall on the ground floor lobby. On the east façade, narrow, recessed windows were

designed to help filter in the light from the low angled sun.

Facing the university's botanical gardens, HPL panels, this time in shades of gray and bluish/green, were also used to clad the exterior and blend into the gardens. On the north and west elevations Grey Travertine stone was chosen for the auditorium.



Photos courtesy: Amit Geron

PROJECT SPECS

Project: Tel Aviv University

Location: Tel Aviv, Israel

Architect: Kimmel Eshkolot Architects

Design Team: Michal Kimmel Eshkolot, Etan Kimmel, Ilan Carmi, Limor Amrani

Architect in Charge: Limor Amrani

Structural Engineering: S.BEN-ABRAHAM Engineering

Construction Manager: E.D. Rahat Engineering Coordination and Management Ltd. Eliezer Rahat, Daniel Rahat

Contractors: Rom-Geves, Shitufit

Landscape Architecture: Braudo Maoz

Lighting Design: Shiri Ziv



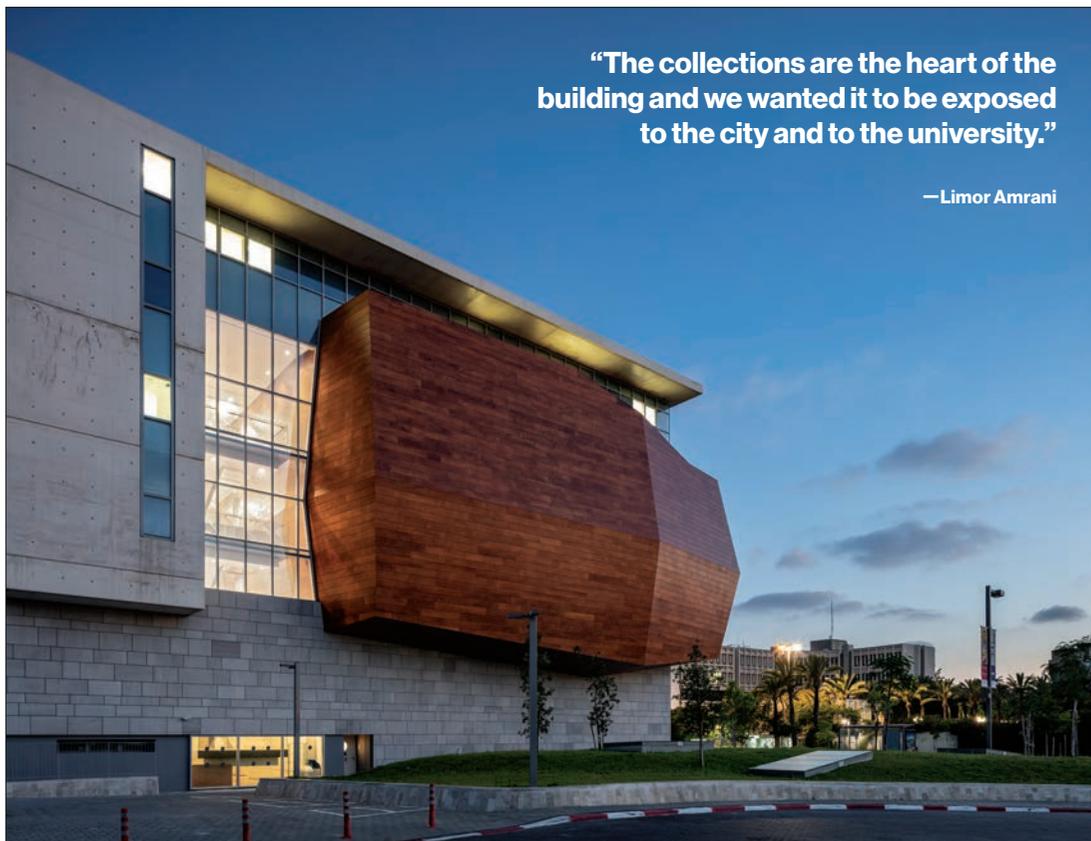
WOOD PANELS

Although only 8-mm thick, the High Pressure Laminate is thermally insulated and protects the collections from the hot Mediterranean sun.

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—Limor Amrani

WOOD CHEST-LIKE EXTERIOR

Tel Aviv University's new Steinhardt Museum of Natural History features a Noah's-Ark looking wooden box, that both houses its collection of animals, and beckons patrons and passersby to come inside and have a look.



COLORS

Facing the university's botanical gardens, the architects selected shades of gray and bluish-green high pressure laminate panels to clad the exterior and blend into the gardens.



NARROW WINDOWS

On the east façade, in areas where research occurs, narrow, recessed windows help filter in the light from the Mediterranean sun.



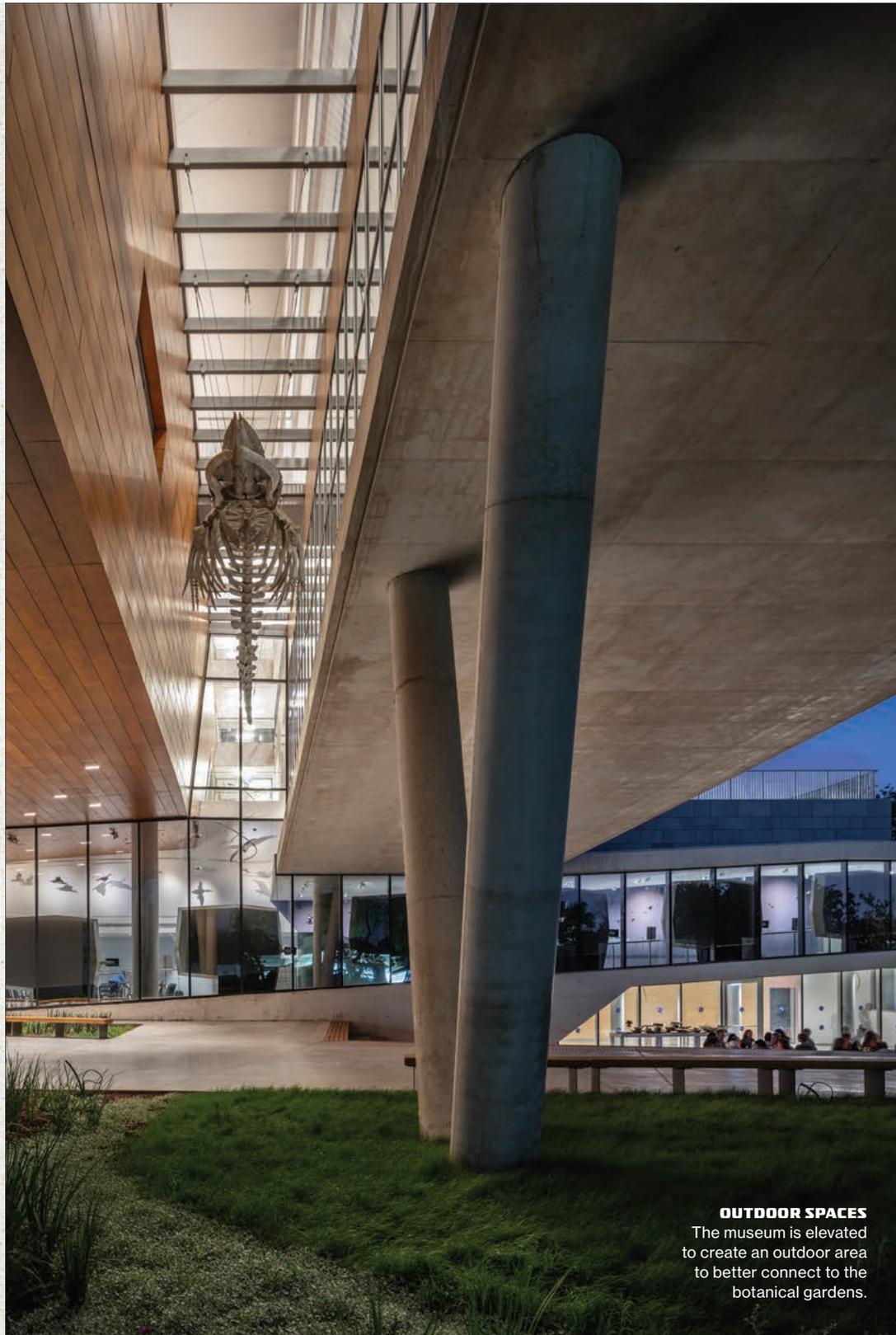
Creating an Outdoor Space

Because the museum itself is only 2,500 sq. meters, the firm was interested in maximizing the space. The architects' solution was to utilize every meter of space internally and extend the lobby to the outdoors. They did so by cantilevering over a former parking lot, which was recreated in the form of a 14,000-sq.-m underground parking garage for museum visitors, staff and students.

The cantilevered space creates a breezy, shaded outdoor space, which is used for tours, educational exhibition or simply as a pleasant spot to relax.

From a structural perspective, transformation beams and columns were used to support the pair of floating overhead structures. The wooden "chest" is supported by a thicker floor, while the other portion of the building, underneath the researchers' office space, is partially supported by a thinner floor.

To compensate for the thinner floor on the east side of the facility, two transformation beams, 120-cm high, are hung over the 18-m span between columns using small steel columns. Supporting the wooden chest on the west side is an 80-cm.-thick transformation floor constructed from ribs of concrete.



OUTDOOR SPACES

The museum is elevated to create an outdoor area to better connect to the botanical gardens.

RAMPED UP

The exhibition of the museum span across a diverse path which is partially exposed to daylight in ramps that open to the main atrium, and in part, positioned within darker spaces.

The ramps allow visitors to walk up to the treasure box while experiencing the different spaces of the building—certainly a novel experience for the staff, as the collection had never been on display to the public before. In fact, even though researchers have a separate circulation path to access the collection, within the treasure box, visitors and researchers see each other in a series of designed encounters, note the architects.

SUPPORTIVE BEAMS

Transformation beams and columns, as highlighted here, provide the structural support for the building, which is cantilevered over an open space.



The building is located at the entrance to the university's botanical gardens, creating a new entrance to pull people in from the street, perhaps for a joint visit.

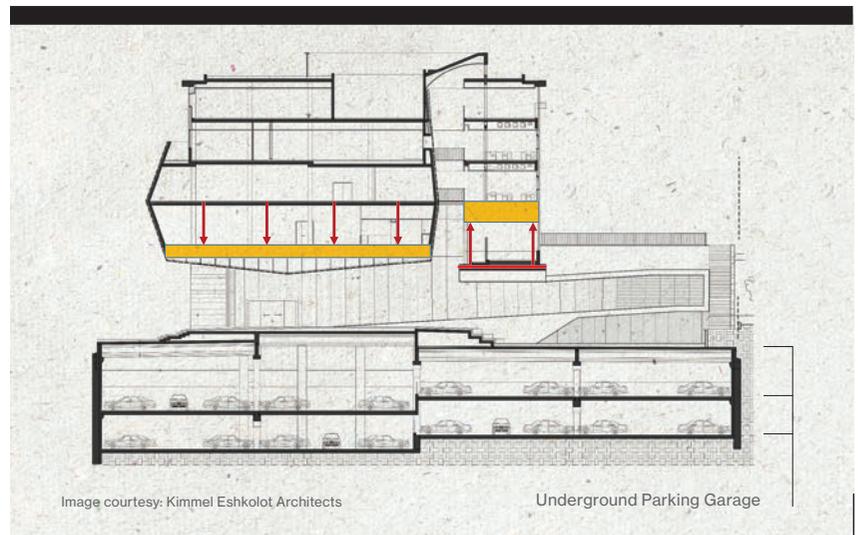


Image courtesy: Kimmel Eshkolot Architects

Underground Parking Garage

INTERIOR. EXTERIOR. SUPERIOR.

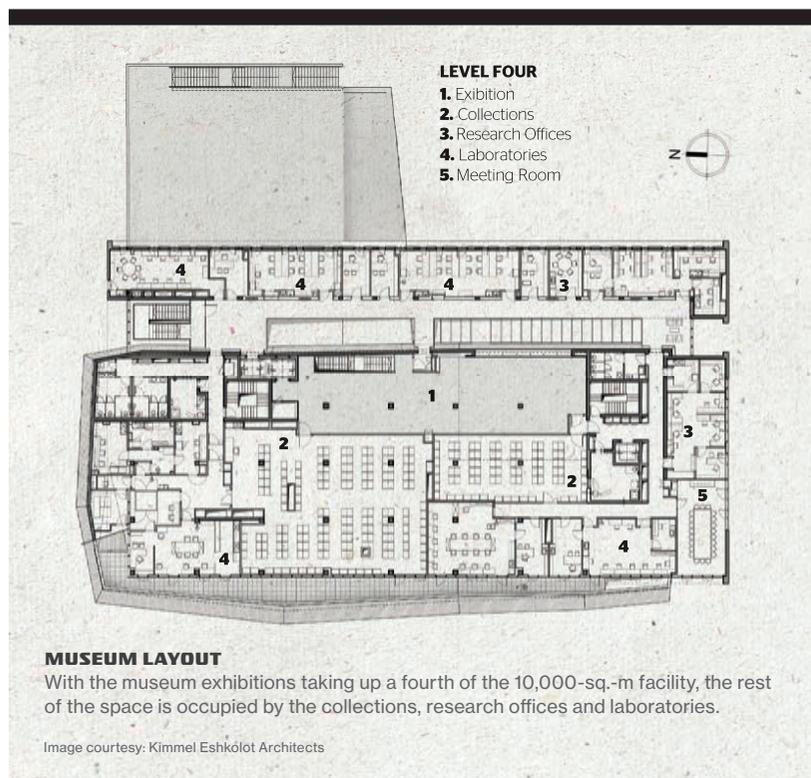
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Circulation Flow

In order to support fluid movement inside the space, slightly inclined ramps naturally lead patrons through the museum while doubling as additional exhibition space. As patrons make their way through the exhibits, the wooden chest is viewed from all angles. At certain points, building occupants can touch the wood laminate. Amrani explains “concrete walls cast onsite aren’t always completely straight, so you need this secondary construction in order to create level cladding.” Steel rails connect the wood veneer to the concrete, which is then backed by plastic with insulation sandwiched in between.



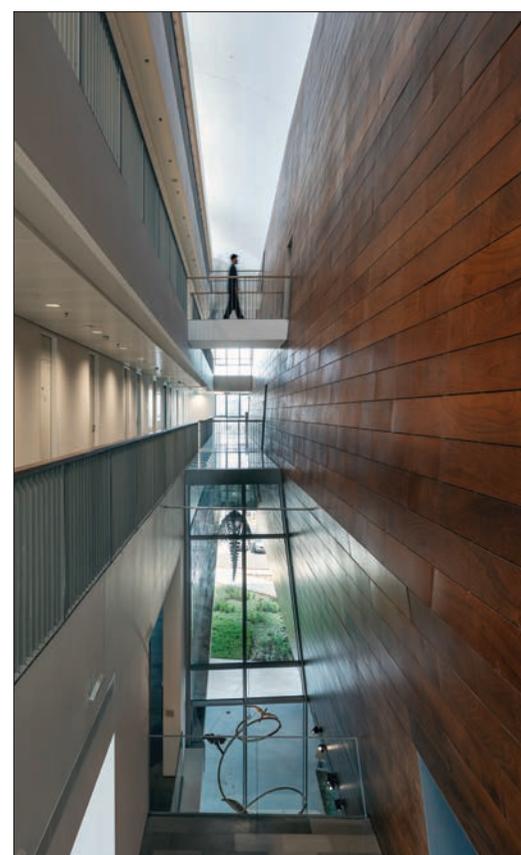
↳ Slightly inclined ramps lead patrons through the exhibition space.

Research Spaces

Beyond the exhibition are several floors dedicated to the collections, research staff office space and laboratories. “Bridges connect the researchers to the wooden chest where they have direct access to their collections,” explains Amrani. “They can go in, take the artifact and then return it when they’re finished.”

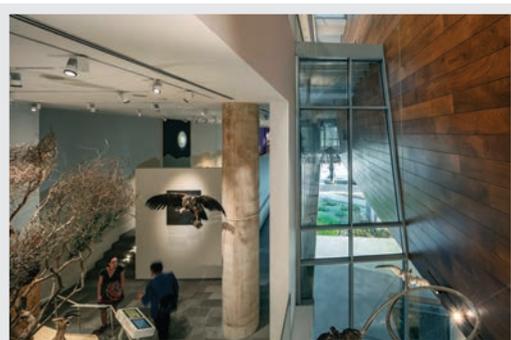
A large vertical skylight, recessed from the ceiling, fills the atrium with light, particularly during the morning hours, providing the researchers with a brightly-lit workplace.

While the interior itself is well designed, with a respectable number of exhibits, it’s the wooden cladding which is really drawing attention. “There’s nothing like it in Israel,” Amrani concludes.



BRIDGE OF LIGHT

A light-filled atrium provides bridges giving researchers easy access to the collections.



COLLECTIONS

Although visitors are only afforded a glimpse of the museum’s collections behind the wood cladding, the wooden façade is viewed throughout the facility, making its presence felt.