

Ben Gurion Terminal 3

Tel Aviv, Israel

2

MOSHE SAFDIE AND SKIDMORE, OWINGS & MERRILL HAVE CREATED A TRAVELERS' OASIS IN ONE OF THE WORLD'S MOST HEAVILY SECURED AIRPORTS.

By Andrea O. Dean

Architect: Skidmore, Owings & Merrill (landside)—David Childs, FAIA, Roger Duffy, AIA, Marilyn Taylor, FAIA, T.J. Gottesdiener, FAIA, Hamid Kia, AIA, Michael Keselica, Ross Wimer, AIA, Guy Punzi, Reiner Bagnato, AIA, Herb Lynn, AIA; Moshe Safdie & Associates (airside)—Moshe Safdie, FAIA, Irit Kohavi, Michael McKee, Michael Guran, Isaac Franco, AIA, Hugh Phillips, Michael Joyce, Michael Kim, Craig Jacobs

Associate architects: Karmi Architects, Lissar Eldar Architect (landside); TRA (airside)

Consultants: Arup, Kahan, Muller Yaron Maller (structural engineering); Arup, B. Schor & Co., Dani Hahn, Lean Engineering, Y. Leshem Shachak (mechanical, communications, fire engineering); TAMS Consultants, Yoni, D. Bar-Akiva (electrical); TAMS, Yosha, Abraham Schwartz (plumbing)

General contractor: Arenson

Size: 2.9 million square feet (including parking), 24 gates

Cost: \$1 billion

Completion date: 2004

Sources

Modified-bitumen roofing: Siplast

Curtain wall: Alcan Deutschland (panels); Guardian (glass)

Stone: Jerusalem stone (walls, local source); Indian stone (tiles)

For more information on this project, go to Building Types Study at www.archrecord.com.

In a nation surrounded by unfriendly neighbors, the thoroughness of security at Israel's Ben Gurion International Airport is legendary. Terminal 3 handles all of Israel's overseas air traffic, replacing Terminal 1, an outmoded remnant from the 1930s British Mandate over Palestine. Because the project's construction, begun in 1998, coincided with the four years of violent Intifada (the Palestinian uprising), it became a symbol of hope and the future.

The project was so large—2.4 million square feet, with an eventual capacity of 16 million passengers a year—that the Israel Airport Authority thought it best to hedge its bets by hiring two separate design teams. The New York City office of Skidmore, Owings & Merrill (SOM, with Karmi Architects of Jerusalem) was charged with overall planning and conceptual design and with responsibility for a structure that handles landside ticketing and arrivals functions. Israel-born architect Moshe Safdie's Cambridge, Massachusetts, firm (with now-closed TRA Associate Architects) designed a linking structure and the airside departure areas and gates. During the three-year design phase, the teams met at least monthly to shape the work into a coherent whole.

RECORD contributing editor Andrea O. Dean lives in Washington, D.C.

Program

SOM and Safdie sought to avoid the generic appearance of many large international airports, in part by reflecting the country's culture and climate. Roger Duffy, SOM's principal in charge, wanted Terminal 3 to embody the dichotomy of daily life in Israel, "a modern society imbued with a sense of ancient history and culture." The extensive security procedures increase passenger wait time and tension, so Safdie and his team focused on making the passenger experience both calming and welcoming. Since Israel is both the actual home for many passengers and also the symbolic home for many Jews, the airport authority and the architects paid particular attention to dignifying the departure and arrival processes—experiences that can be particularly wrenching given the nation's short, violence-soaked history.

Solution

By car, a white dishlike cap identifies the terminal from a distance. An upper-level drop-off ramp is separated by a gap (a precaution against vehicle explosions) over a lower-level train station (section, page 160). Across from the terminal, a garden of native plants, including seven mentioned in the Bible, sets the stage. It's wrapped by the parking structure. Arcaded passageways take the passenger along the garden into the terminal, which is clad

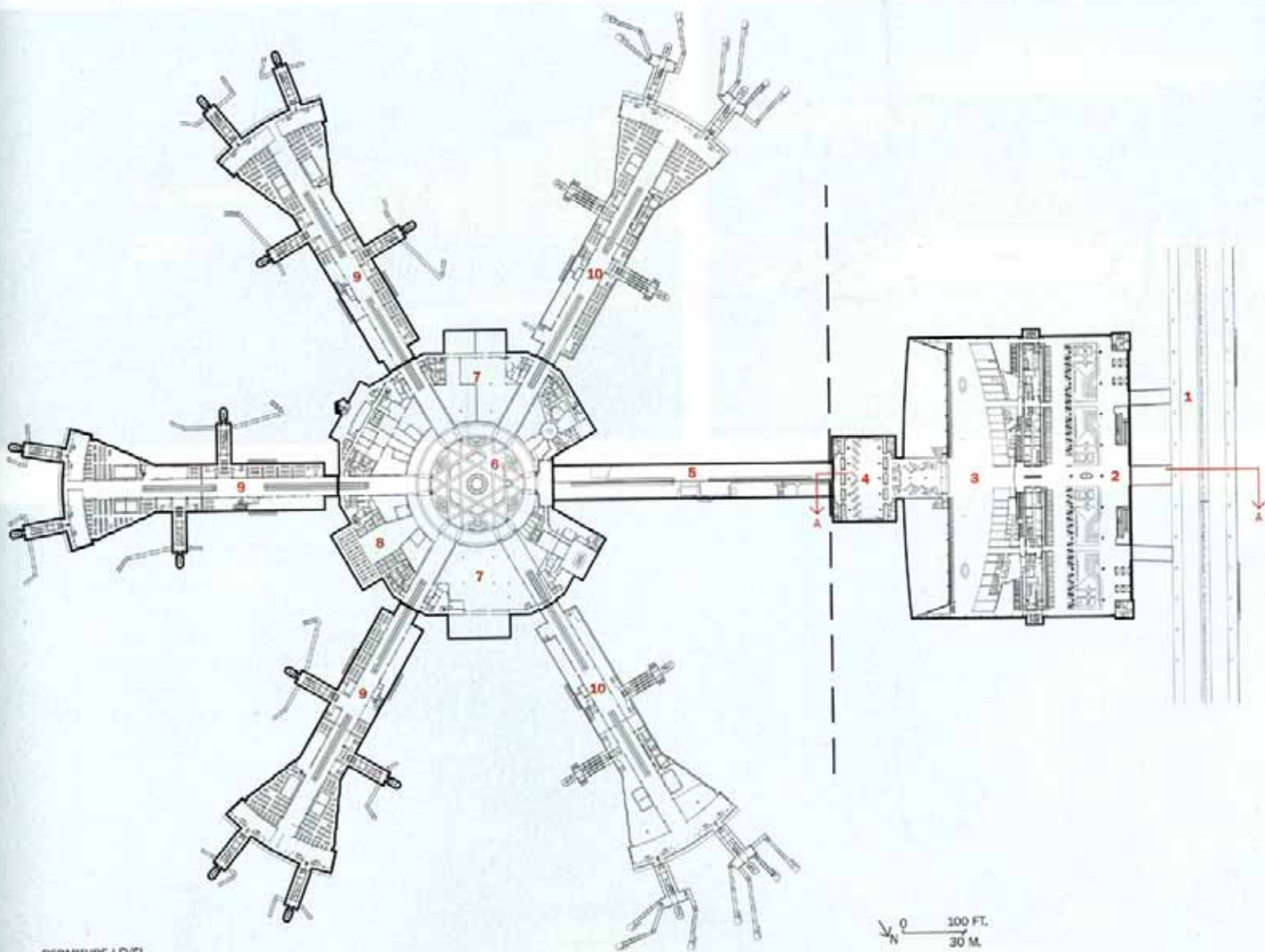
PHOTOGRAPHY: © ALAN KARCHMER/ESTO





A dishlike roof crowns a rotunda from which gates radiate, signaling Terminal 3 from a distance (below). It is the focal point of the airside link (top right) and concourse designed by Safdie & Associates. A garden outside the SOM-designed landside terminal welcomes passengers (top left).

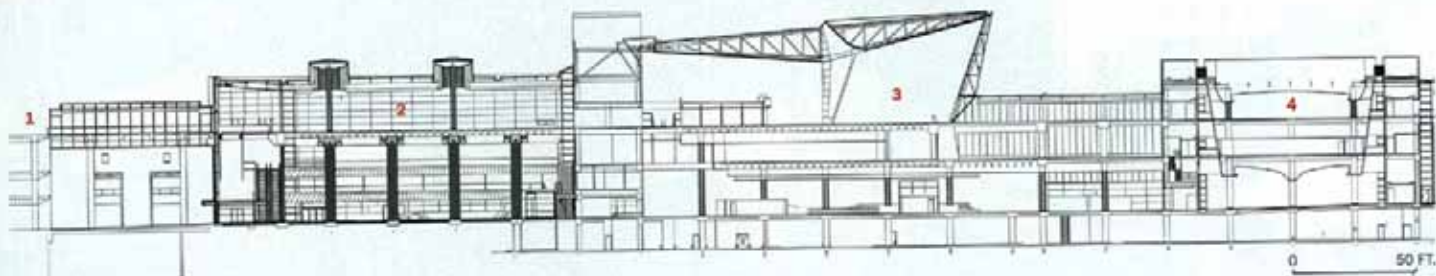




DEPARTURE LEVEL

0 100 FT.
30 M.

- | | | |
|---------------------------------------|----------------------------------|----------------------|
| 1. Drop-off and parking | 4. Security/ passport control | 7. Retail |
| 2. Ticketing/ preliminary security | 5. Link | 8. Food court |
| 3. Departure hall | 6. Rotunda | 9. Gate concourse |
| | | 10. Future concourse |



SECTION A-A

0 50 FT.
15 M.



SOM separated access roads from the terminal itself as a precaution against vehicle explosions (top). The gap brings daylight into the multilevel landside departure and arrivals areas as well as a garden over a rail platform. The exterior wall facing the tarmac is also beefed up for blast-resistance (right). Steel members are used for long-span areas, with the main structure poured-in-place concrete.





in the same Jerusalem stone as the Wailing Wall.

Departing passengers pass through ticketing and undergo a preliminary security interview, which takes place against a 27-foot-high wall of Jerusalem stone, and then emerge to a soaring, glazed departure hall overlooking the tarmac. The hall looks poised for flight with its curving metal roof, angled stanchions, and blast-resistant floor-to-ceiling windows. Nontraveling friends and family are welcome in this hall, since the area precedes final passenger screening and passport control.

Israeli security depends more heavily on personal contact than on the machines that America's Transportation Security Administration favors. A handprint-recognition system speeds regular, preregistered passengers. But most are interviewed at the handbaggage X-ray machines by security personnel staring the passenger straight in the eye. The questions can be cursory, or quite elaborate if the answers raise concerns.

After this stressful experience, Safdie's glass-enclosed link to the airside concourse opens to calming panoramic views as it ramps down at a 5-degree slope, crossing a sloping ramp for arriving passengers, who, though physically isolated, are visible. "They feel the movement; it's a continuous experience," says Safdie.

Irit Kohavi, Safdie's Israeli principal, further wanted to "de-stress" the experience, she says, by bringing in lots of natural light and using calming colors, shapes, and water. The connector leads to the duty-free rotunda, beneath that iconic, dish-shaped roof.

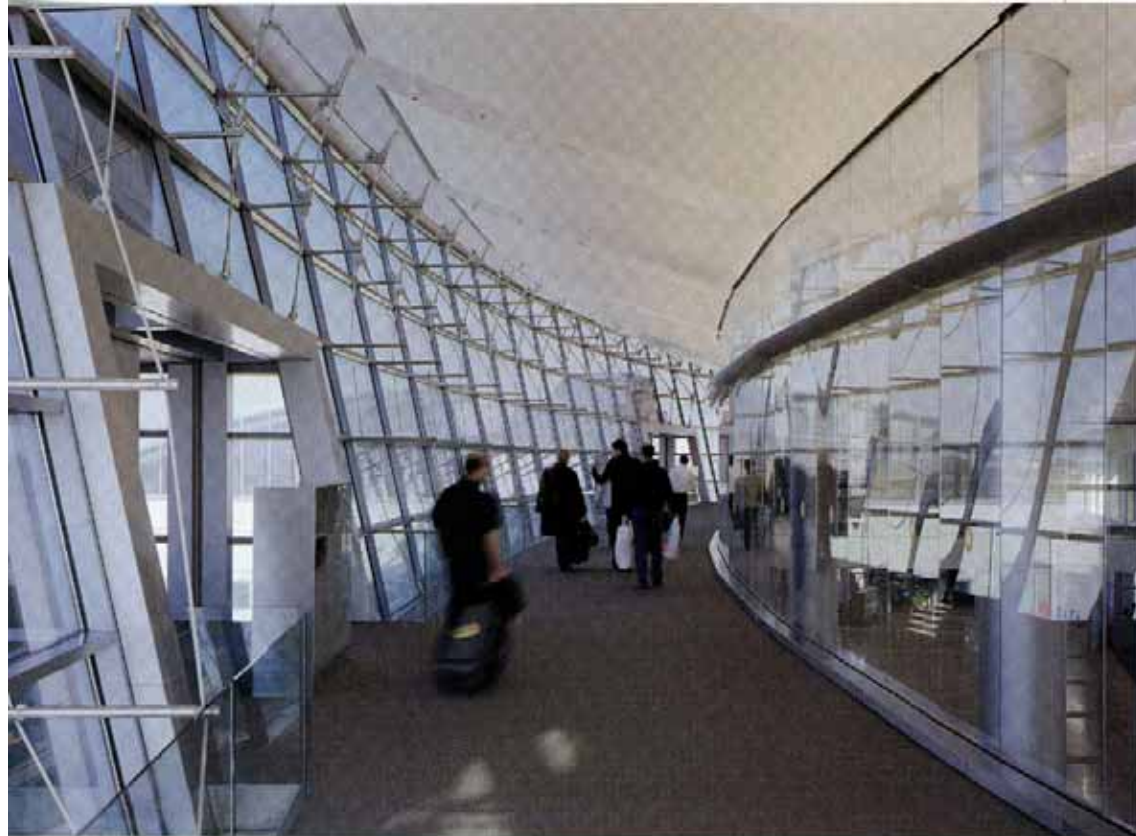
To non-Israeli's, the space may seem immoderately large, but it is what the client wanted. Extremely high sales taxes make tax-free goods especially attractive to residents, and departing passengers are even allowed to store tax-free goods until they return. Also immoderate in size and design are the rotunda's six arches. They surround an inverted dome that collects rain-





A generous departure hall accommodates extended-family good-byes (opposite, top). Clerestories light the retail rotunda (opposite, bottom left). Water streams from an oculus to create a serene place within the bustle of the duty-free area (opposite, bottom right). A link concourse choreographs the physical separate movement of departing and arriving passengers (above and right).





water, which periodically streams into the rotunda in the winter to create a serene place within the bustle of the duty-free area.

Arriving passengers, after exiting their aircraft, get a dramatic glimpse of the Judean hills before proceeding along a glazed corridor, crossing above the departure gates and duty-free rotunda. Often such corridors are windowless, but officials permitted Safdie to clad the corridor in clear glass. "There is a welcoming aspect to transparency," he says, "and for security purposes, it's better to have people visible than not."

The culmination of the process is a dramatic 40-foot-high arrival hall big enough to permit emotional, extended-family reunions. Sixth-century mosaics deepen the sense of welcome with a physical connection to ancient history.



Commentary

As a new national gateway, Terminal 3 abounds in symbol: It blends ancient materials and building conventions with modern, airy spaces; trades endless, confusing corridors for a sense of procession; and enlivens the process by at least visually uniting incoming and departing passengers. That makes it a pretty good model for most new airports. The marriage of Safdie and SOM proves architecturally to be a smooth one. Though each area has a distinct design temperament, the use of glass, metal, and concrete is almost seamlessly consistent. Safdie's work is less predictable: The rotunda is theatrical, but the terminal as a whole is elegantly detailed; the structure is the architecture. With the exception of that dramatic dish, the exterior is mundane. The upper-level drop-off also disappoints by offering a sawed-off view of the building and little sense of occasion. Once inside, however, the generosity of the departure lobby and the arriving-passenger greeting hall is exemplary. Being greeted by excavated 6th-century mosaics is far more welcoming than the usual anonymous signage. ■

The "sterile" arrival corridor leading from the gates (top) allows passengers to see out but not mix with others until they have suc-

cessfully negotiated customs and immigration. The light well outside the landside terminal enlivens the atrium that links the

ticketing hall (opposite, upper level) with the arriving-passenger greeting hall (above), scaled to permit emotional reunions.

