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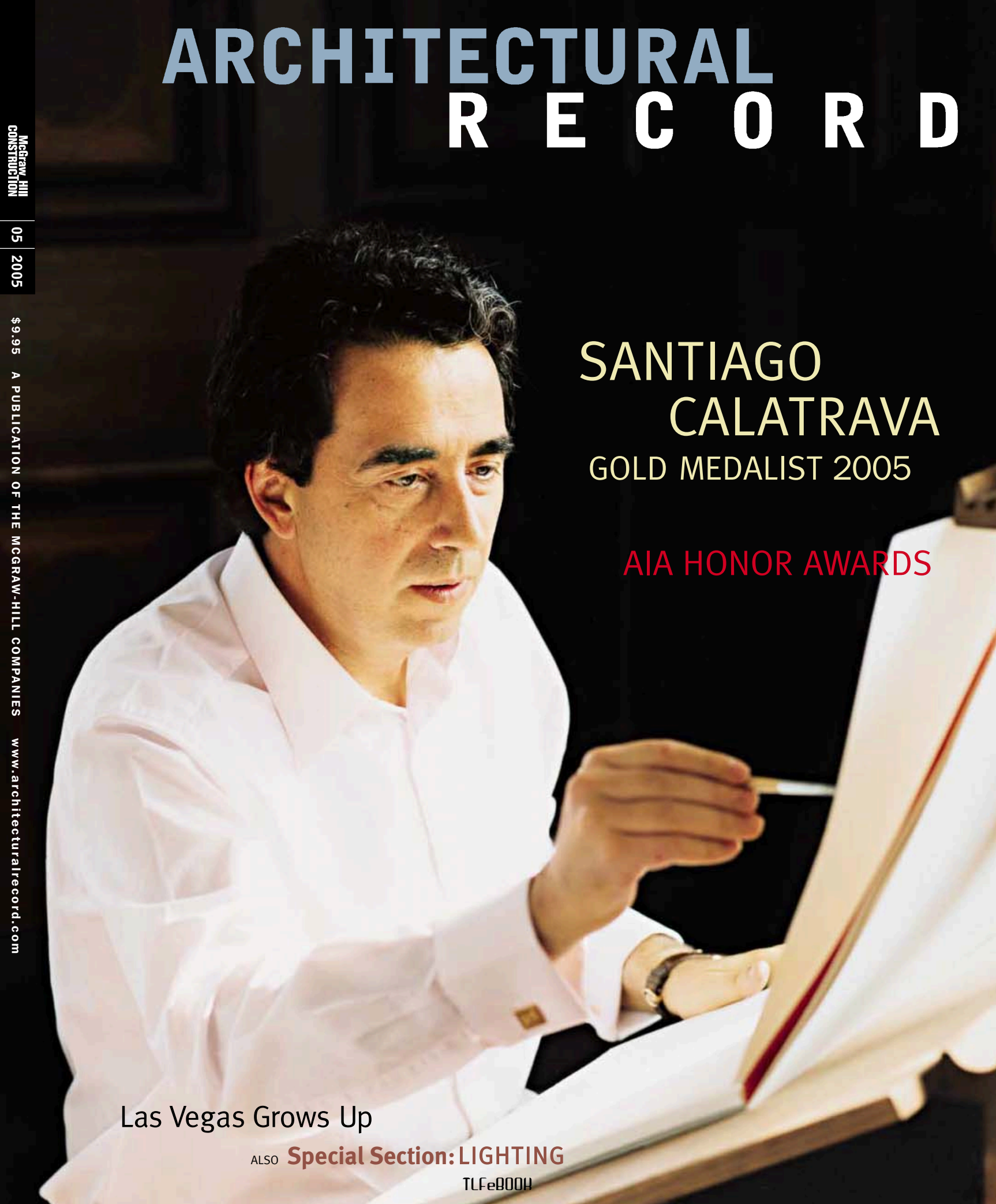

SANTIAGO CALATRAVA
GOLD MEDALIST 2005

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Leaf Chapel
Kobuchizawa, Japan

2 **KLEIN-DYTHAM ARCHITECTURE SETS A WALL OF A WEDDING CHAPEL IN MOTION AT A RESORT IN THE JAPANESE ALPS.**

By Clifford A. Pearson

Architect: *Klein-Dytham Architecture—Astrid Klein, Mark Dytham, Yoshinori Nishimura, Yukinari Hisayama, project team*
Executive architect: *Hoshino Resort Architects—Shozo Miyawaki*
Client: *Risonare Resort*
Landscape designer: *Studio On Site—Hiroki Hasegawa, Chisa Toda, Kazutaka Tanbe*
Lighting designer: *Ice—Masanobu Takeishi, Michiru Tanaka*
Engineers: *Arup Japan—Tatsuo Kiuchi, Yuji Kusawake, Keiko Katsumoto (structural); Tetens Engineering—Yutaka Murase, Ryoichi Teshigawara (mechanical, electrical)*
General contractor: *Rinkai Nissan Kensetsu—Hiroki Kanno, Fumihiko Kobayashi, Chiaki Kobayashi*

Size: *550 square feet*
Cost: *Withheld*

Sources
Hydraulic rams: *Kawasaki Heavy Industries*
Glass-roof film: *Lintec*
Polycarbonate lens cap: *Kyoraku*
Fabric scrim: *Taiyo Kogyo*
Furniture: *Waazwiz*

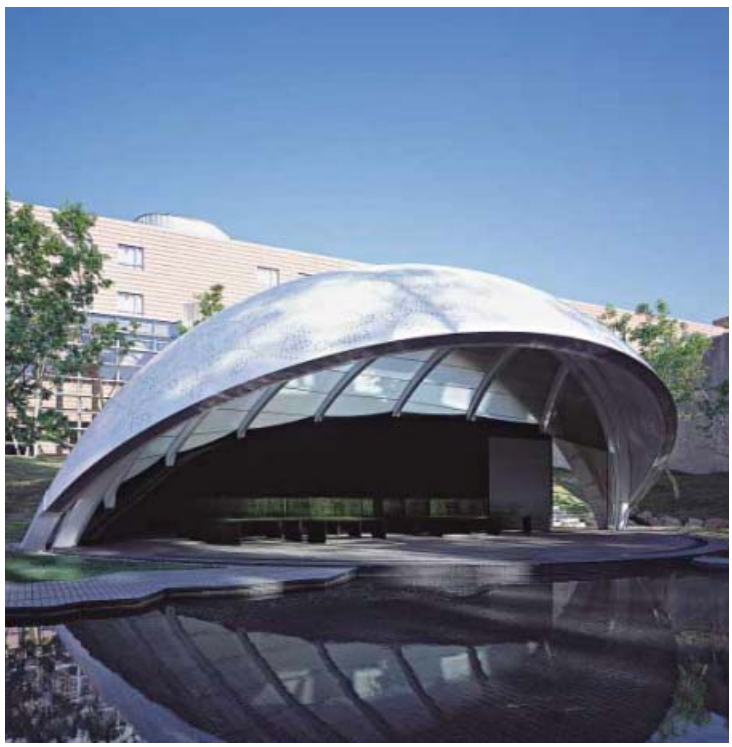
For more information on this project, go to Projects at **www.architecturalrecord.com**.

Theatrics have always played an important role in church architecture. Soaring naves, mysterious lighting, and bold murals have helped fill pews for hundreds of years. Now Klein-Dytham Architecture has taken this strategy into the 21st century, using its own form of stagecraft to add drama to a small wedding chapel in the Japanese Alps. Because the 550-square-foot chapel sits in the garden of a resort hotel and is as much a business as a sacred space, architects Astrid Klein and Mark Dytham could take liberties that might not be appropriate for other religious buildings. Their client, after all, was a businessman who owns hotels and a brewery, not a church leader or congregation. "He knew we are media-savvy and would design something that would attract attention in the magazines," says Dytham.

Program

Part of the sprawling Risonare resort (designed by Mario Bellini during the economic bubble of the 1980s), the chapel needed to have its own identity and at least the semblance of spirituality. But because people of many different faiths would get married there, it needed an ecumenical design with no iconography associated with any particular religion or sect.

Instead of accommodating a specific liturgical program, Klein-Dytham had to design a chapel that would orchestrate a procession of experiences in a manner both efficient and memorable. Given an attractive garden setting, the architects decided to make nature an important theme of their design.



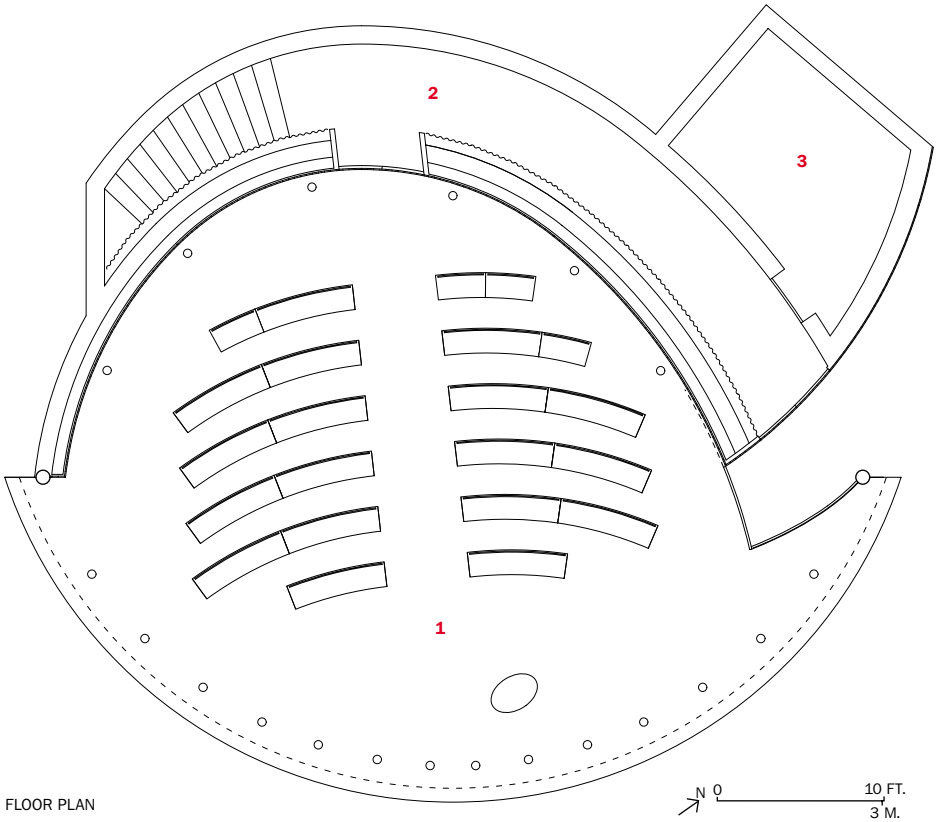
PHOTOGRAPHY: © KATSUHISA KIDA

Solution

After the client mentioned the idea of a pergola in an early meeting, Klein and Dytham started exploring designs structured like a pair of leaves. At first they thought about making both leaves out of glass, but soon realized a backdrop offering views of the rolling garden would prove distracting to guests during the wedding ceremony. So they developed one leaf as a veil, a perforated metal surface that would allow light in but block views.

With this notion in mind, the architects decided to translate into built form the climactic moment of every wedding—when the groom raises the bride's veil and kisses her. Using quarter-inch-thick steel panels welded together and attached to a tubular steel frame, Klein-Dytham created a curving wall that slides up and out of the way just as the new-

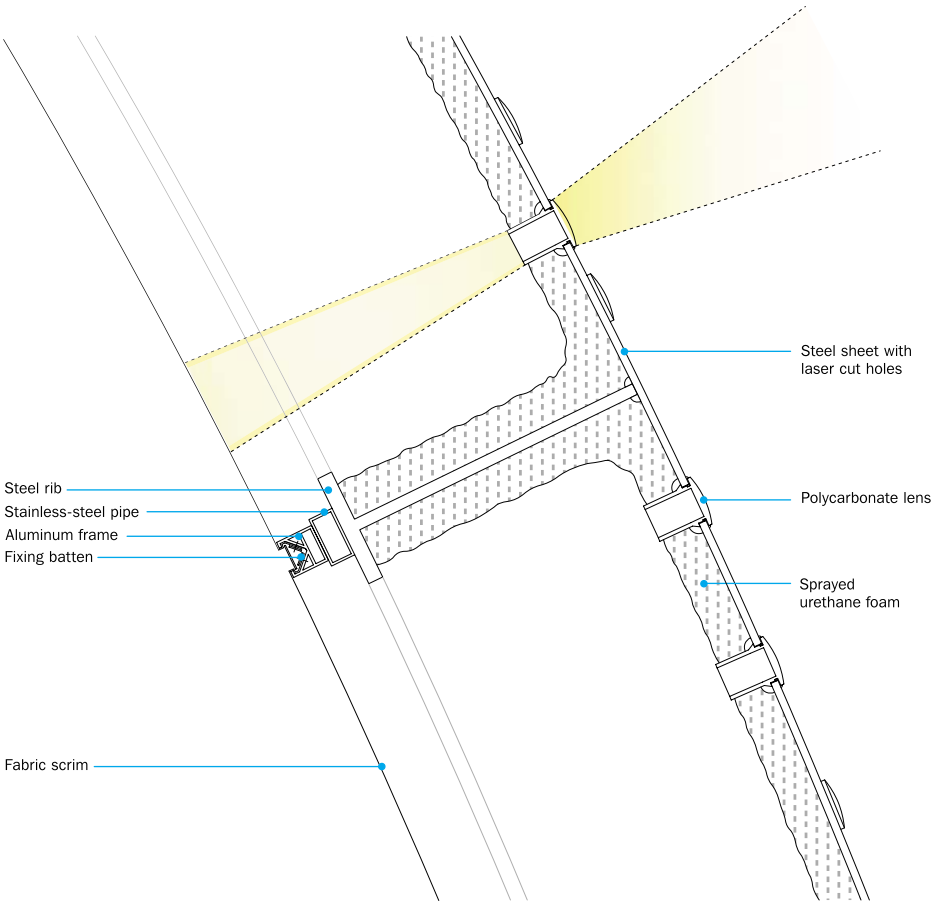
After the groom kisses the bride, the chapel's perforated-steel "veil" rises (opposite) to let the couple and their guests move to the garden for a toast and photographs (right). The architects used a freehand drawing of ivy, based on henna patterns featured in Indian wedding ceremonies, for the acrylic lenses set into the steel shell (below).



FLOOR PLAN

1. *Chapel*
2. *Corridor*
3. *Storage*

Before their dramatic exit into the garden, the bride and her father wait in a velvet-lined corridor behind the chapel (plan, left). Light from the lenses is projected onto a nylon scrim inside the dome (below). Without the scrim, the light would not read as a pattern.



SECTION THROUGH MOVABLE WALL

lyweds embrace. Arranged in a looping ivy pattern set into the 11-ton moving wall, 4,700 polycarbonate lenses project light onto a nylon scrim stretched 10 inches from the wall's inside surface. Two hydraulic rams (one at either end) lift the steel veil as if it were a roll-up garage door. "We were concerned about making the whole thing work," says Dytham. "But Kawasaki, who made the rams, said, 'We do stadium roofs that move. This is no big deal.' "

The disappearing wall not only offers a theatrical way of ending the ceremony, but serves the more prosaic function of quickly ushering guests out of the chapel and into the garden for a champagne toast. With everyone out of the building, the steel veil closes, allowing workers to prepare the chapel for the next wedding. Thanks to this careful choreography, the chapel can handle six weddings a day, running on an 80-minute cycle.

Inside the chapel, the architects used black granite for the flooring, stained-black pine for the walls, and black wood pews, so all the men in dark suits blend into the setting and allow the bride in white to stand out. Clear acrylic backrests on the pews encase translucent green "flowers" that seem to dance when sunlight hits them.

Working with Arup Japan, Klein-Dytham designed the chapel as a lightweight steel structure so it can ride out earthquakes. To minimize its visual impact on the garden when viewed from nearby hotel rooms, the architects pushed it about 12 feet into the ground and tucked it into the sloping site. A concrete basement provides space for radiant heating and cooling that is blown into the sanctuary.

Commentary

Having designed temporary structures such as construction fences and exhibitions, Tokyo-based Klein and Dytham understand that buildings exist in time as well as space. They exploited this knowledge to create a chapel in which light and movement change the visitor's experience from one moment to the next. ■

Klein-Dytham envisioned the chapel as two falling leaves, the front one made of perforated steel and the back one made of translucent glass set between tubular steel "veins" (right and below). The architects designed all the furniture and used mostly black materials (stained wood and granite) for the interior to let the bride stand out in white. The pews have clear acrylic backrests with translucent green "leaves" set within them.