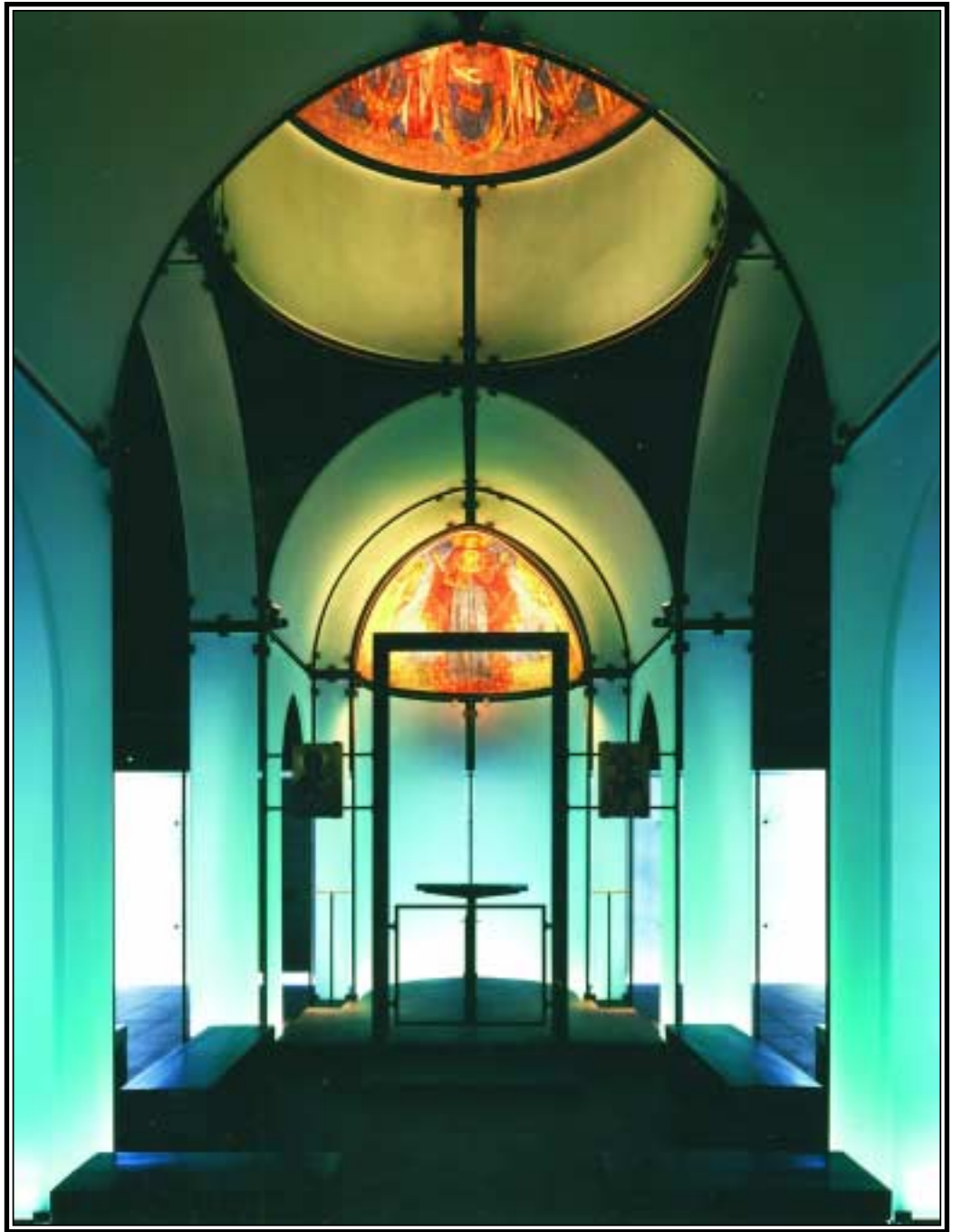


The chapel is contained within a steel shell, which in turn is contained within a concrete box. As a whole, the design represents a metaphoric reliquary box. Photo right and opposite top by Paul Warchol Photography. Photo opposite bottom by Jock Pottle/ESTO



Innovative Design and Excellence in Architecture with Steel

Regional Winner

Byzantine Fresco Chapel Museum



When the Byzantine Fresco Foundation was approached about purchasing two 13th century artworks, they were suspicious. Indeed, it turned out that the pieces were stolen from a chapel in Cypress. After contacting the rightful owner—The Church of Cypress—the foundation made arrangements to “ransom” the pieces. Since the origi-

nal chapel is in the Turkish-controlled part of Cypress, the church and Cypriot government gave approval to the foundation to restore and display the pieces in Houston on a long-term loan arrangement.

The question was, however, in what type of structure to display these important historic and religious artifacts. An early design by one architect called for creating a larger-scale replica of the original chapel. However, that design was rejected since it was felt by the foundation that the replica architecture would overwhelm the authentic artworks.

Francois deMenil, a New York-based architect was familiar with the project due to his family’s involvement with the foundation and offered his design services. His innovative solution was to create an ephemeral Byzantine-inspired structure to hold the frescoes, enclose that structure in a black box and further enclose that room inside a larger building.

“The exterior of the building is a mediating box that handles the transposition from the new city to the old artwork,” deMenil explained. Though basically a rectangle in plan, the concrete walls do reflect the shape of the chapel within. A wonderful architectural touch is the exposed steel roof beams, which turn downward prior to reaching the perimeter walls. “It’s an indicator that another structure is contained within the outside building.”

Indeed, a second, plate steel box exists inside. A skylight spans the space between the outside and inside

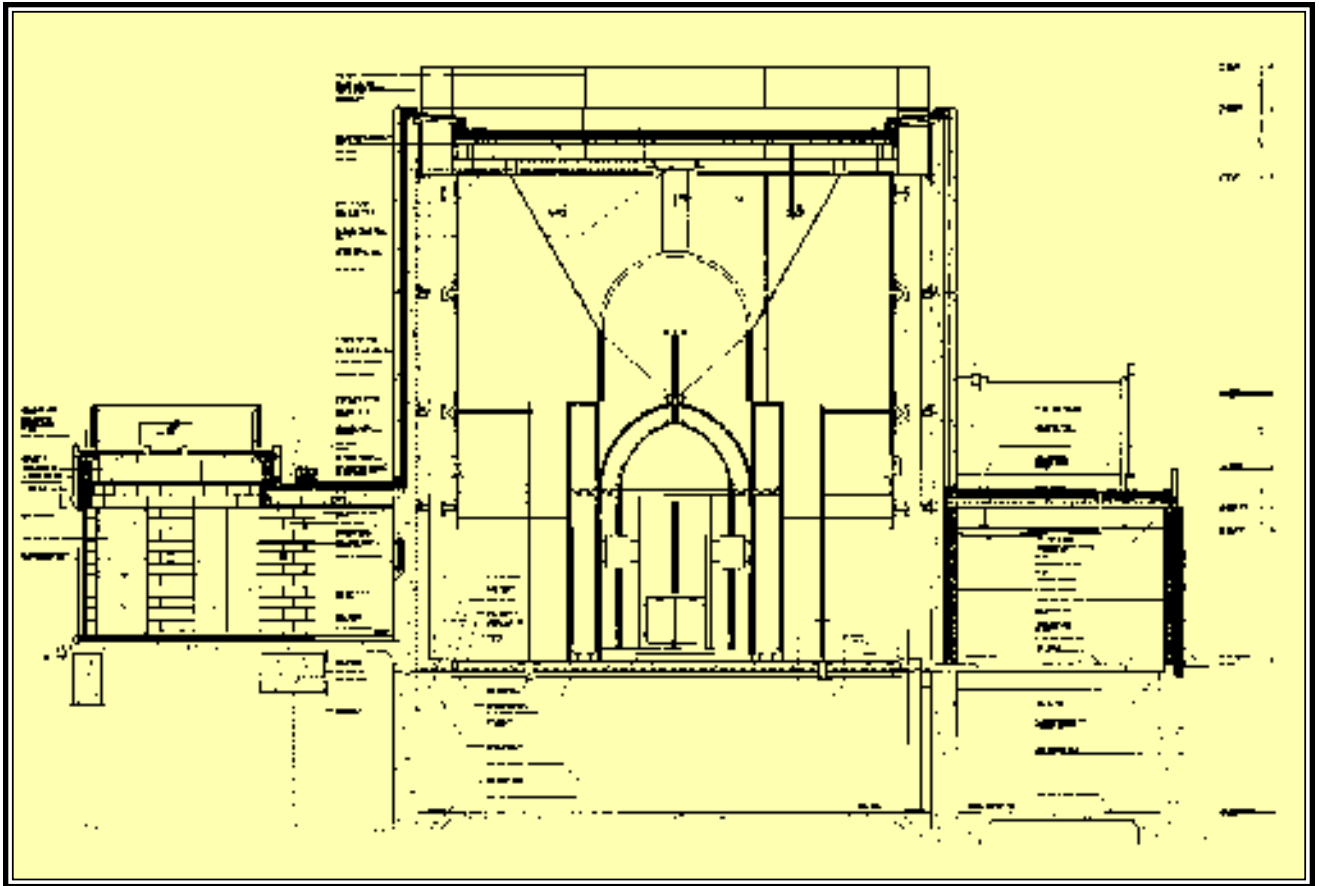


Photo by Paul Warchol Photography

buildings, bringing daylight in to “dematerialize” the concrete shell. Finally, inside the steel room is the Greek Orthodox chapel itself. While the shape is clearly reminiscent of Byzantine chapels, its use of materials is like no other. The walls are opaque glass supported on steel rod and pipe.

“There’s a progression of material from rough to opaque to ephemeral, from rubble stone on the outside, to concrete, to steel to glass. It’s appropriate for a journey from the profane to the sacred,” deMenil explained. The transposition of the relics to a contemporary site is accomplished through a metaphoric reliquary box: a steel liner embedded in a mediating concrete shell. A reliquary box derives from the tradition of housing sacred objects in small casket-like cases, sometimes one within another. The dislocation/relocation of the sacred works is addressed through an inversion of material presence. The ethereal soul is solidified and made opaque in the restored frescoes.

The steel rod and pipe were critical to the design, according to deMenil. “There is a connective tissue required to connect the dome element to the apse. We needed a material with a certain amount of presence, but also one that would not be overpowering.” Also, the black-painted steel marvelously reflected the black space around the chapel.

The rod and pipe are welded together and steel “shoes” hold the glass in place.

The structural steel elements of the surrounding structure are integral to the building’s concept and design. Exposed roof beams derive their geometry from the structure of the glass and steel chapel within. They are carried by exposed interior pipe columns that brace the exterior concrete walls and support the plate steel reliquary box.

Project Team

Project: Byzantine Fresco Chapel Museum, Houston

Architect: Francois deMenil, Architect, PC, New York City

Owner: Byzantine Fresco Foundation, Houston

Structural Engineer: Ove Arup and Partners, New York City

Façade Engineer: ARUP Façade Engineering, London

Architectural Metal Conservator: Robert Pringle, New York City

Glass Consultant: Carpenter Norris Consulting, New York City

Architectural Lighting: Fisher Marantz Renfro Stone, New York City

General Contractor: W.S. Bellows Construction Corp., Houston