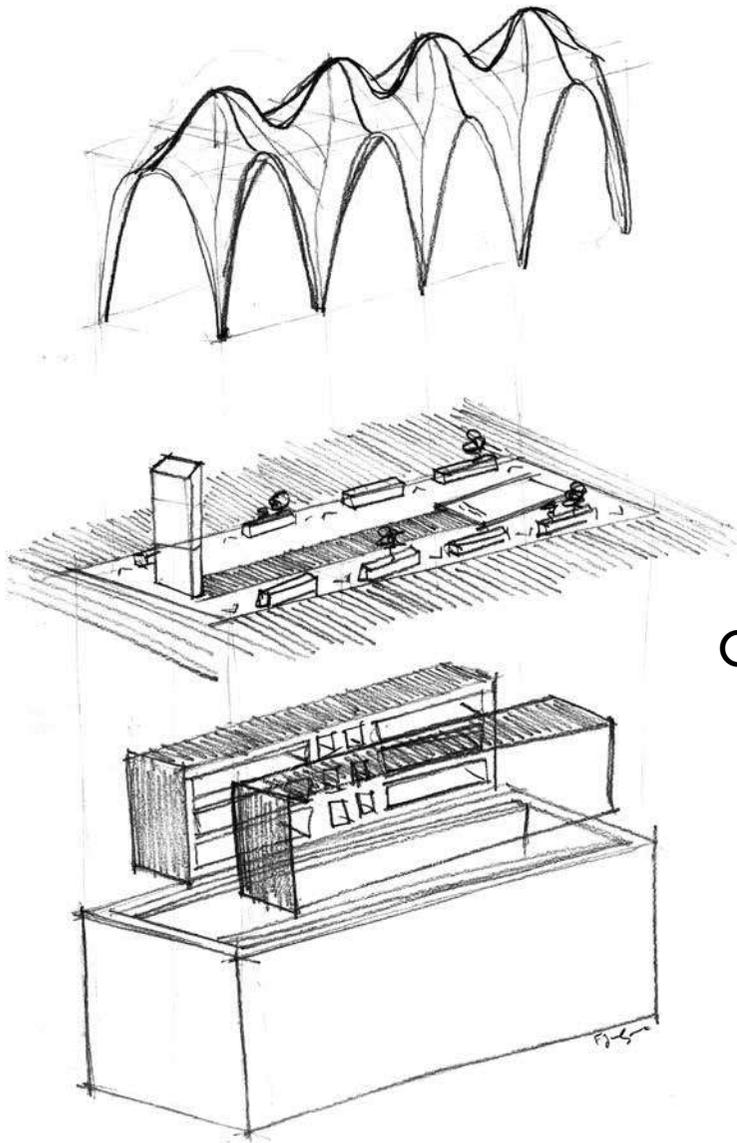


MAUSOLEUM
REMEMBERING
THE PAST BY
CELEBRATING
SIMPLICITY

VILLAREAL, SPAIN

Camilla Mileto y Fernando Vegas
Arquitectos



■ CONCEPT SKETCH OF COMPONENT VOLUMES AND THEIR PROPORTION OF THE WHOLE PROJECT

ZOOM



The mausoleum of the Soriano Manzanet family in Villareal in the province of Castellón, Spain, has a threefold narrative. It tells the stories of José Soriano, founder of the ceramic tile manufacturing company, Porcelanosa, to whom the chapel is dedicated, of the architect-builder Rafael Guastavino, a fellow Valencian who exported the tumbrel vault technique to the United States at the end of the 19th century, and lastly, of the family members, architects and craftsmen who helped design and build it.

In 1956 at the age of 25, José Soriano set up Porcelanosa, a ceramic tile company that would become a world leader in its sector. 15 years after his untimely death in 2000 in a car accident, the family commemorated him with this mausoleum in the Villareal cemetery.

In doing so they also make reference to the memory of a much less well-known compatriot who was nonetheless key to making Valencian and Mediterranean building techniques internationally recognized: Rafael Guastavino, who in the late 19th century took to America the tumbrel, or Guastavino, vault - vaults made exclusively of extremely thin bricks or tiles that are exceptionally tension and fire resistant. Still today, the most important public buildings in New York and Boston boast original tumbrel vaulting. Back in Spain, the technique was taken up by Catalan Modernism, namely by Gaudí and his contemporaries.

The architects called to interpret the family's wishes, Camilla Miletto and Fernando Vegas, are very knowledgeable about Guastavino having studied his work at length. **Once the idea of using the tumbrel vault had been accepted, dialogue started between the client, architects, craftsmen and builders, leading to the realization of a joint project.**

The family wanted the mausoleum to be an architectural reflection of José Soriano the man - a sociable, honest, open minded and humble person whose entrepreneurial genius was coupled with a genuine social conscience that led him to provide the best for his workers. So right from the first 3D models, the mausoleum was conceived as an open accessible space, a vaulted portico symbolic of Soriano's warm cordiality. His honesty and humility are reflected in the simplicity of design: simple clean lines uncluttered by any decorations or special finishes that would have concealed the underlying structure.

The portico comprises a single vault with four interlinked hyperbolic paraboloids forming a continuous, fluid, sinuous surface made up of layers of terracotta tiles. The apparent simplicity of structure and construction technique is, however, misleading. It meant that attention to every detail - from the choice of materials down to the actual craftsmen to hire - had to be of near maniac proportions.

The ceramic tiles were handmade. This allowed the architects and the family to have a say in all production variables, such as the type of clay - all-important for the color and granularity of the final product - the type of fuel to fire the tiles, their size and shape. Local artisans expert in the traditional tumbrel vault technique were chosen to do the actual building. No formwork was used, only simple metal guides to ensure the correct curvature was followed. The structure was designed to be built with bricks (mainly entire) to avoid any seals or trimmed pieces. Terracotta, gypsum and white cement were the only materials used. Fiberglass rods were added at the springings to strengthen the structure in the event of earthquakes.

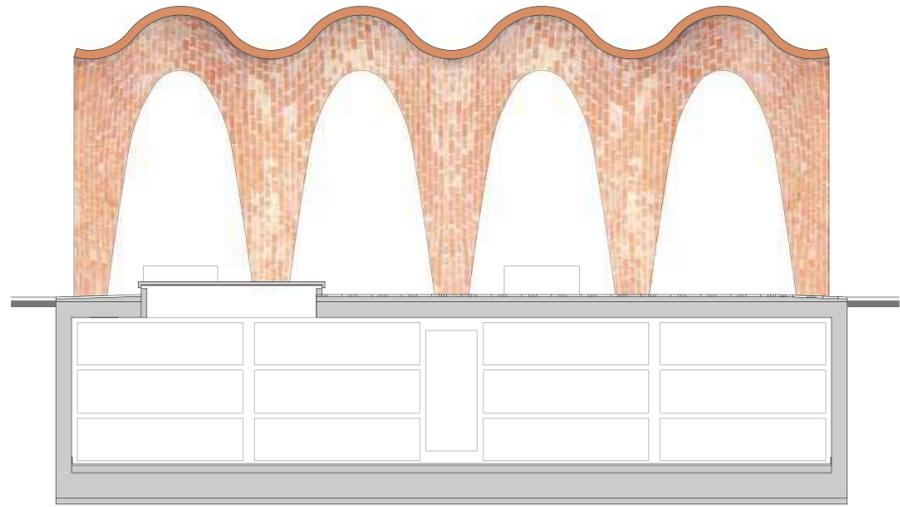
Fifty different shapes of cenia stone floor tiles - repeated four times for each arch - echo the pattern above. Benches and plantholders are respectively solid or hollowed out blocks of the same stone. Like a funeral carpet, the central paving is covered with ceramic tiles whose curves - designed by ceramist Enric Mestre - also recall the sinuous patterns above. Mestre also designed the monolith, or headstone, and the ceramic panel on the upper part of the mausoleum. Beneath the cenia slab, which can be slid aside in one piece, is the crypt, entirely lined with Porcelanosa tiles.

The explicit reference to Guastavino and his vaults, a centuries-old building tradition in the area of Valencia, as well as the work of local craftsmen speak of the same deep love of and pride in one's homeland that Guastavino and Soriano both shared, and which allowed them to export the ancient know-how and beauty of their land.



■ METALWORK MODEL OF TUMBREL VAULT EVIDENCES ITS SLENDER LIGHTWEIGHT STRUCTURE

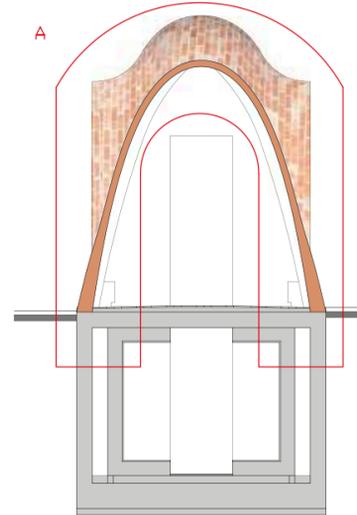
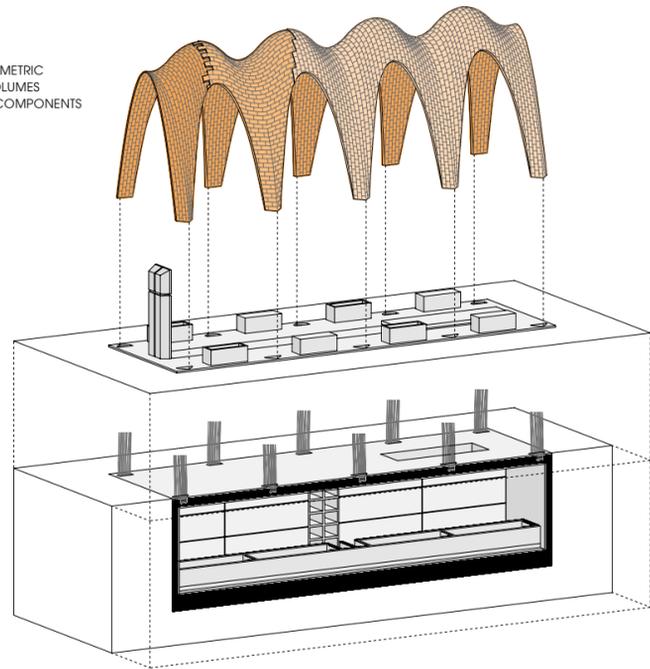




■ YY SECTION - SCALE 1:100



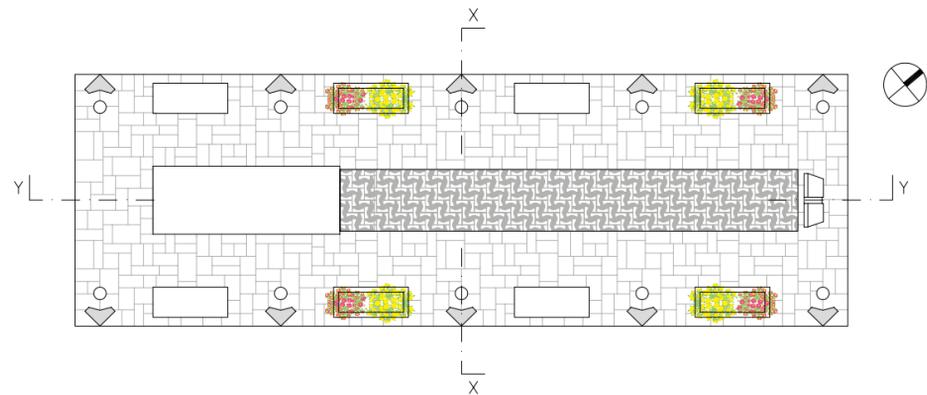
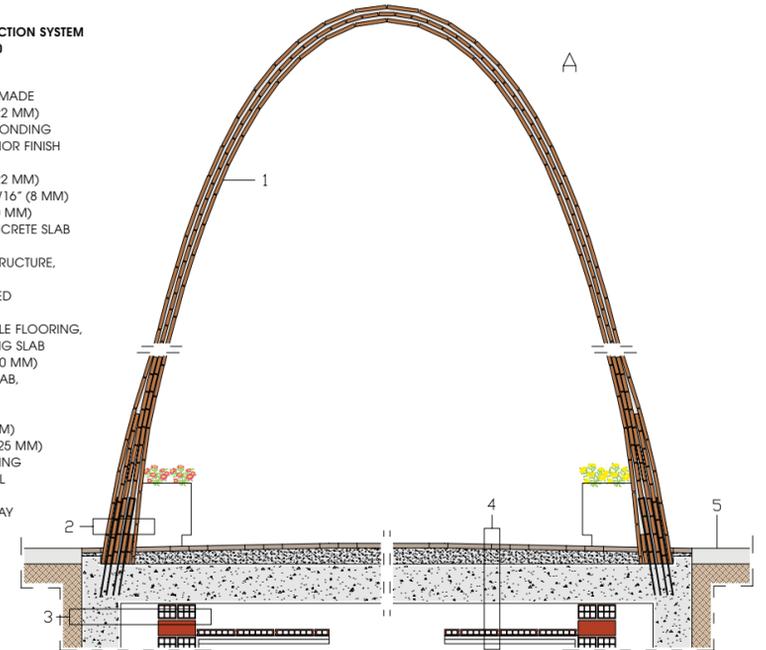
■ EXPLODED AXONOMETRIC VIEW SHOWING VOLUMES AND STRUCTURAL COMPONENTS



■ XX SECTION - SCALE 1:100

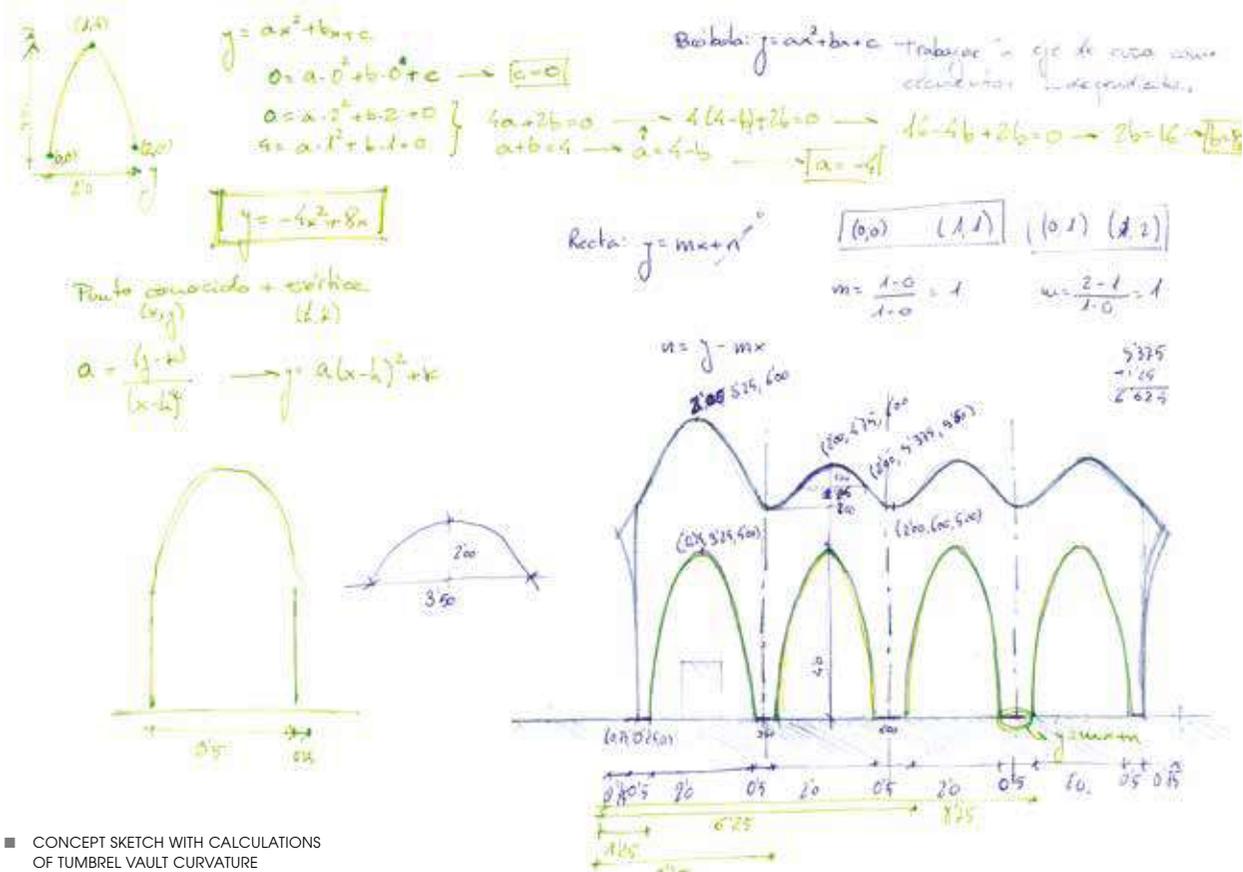
DETAIL A: COVERING CONSTRUCTION SYSTEM
VERTICAL SECTION - SCALE 1:40

- 1- ROOF ARCH CONSISTING OF THREE LAYERS OF HANDMADE 7 7/8 X 4 X 7/8" (200X100X22 MM) TILES WITH WHITE CEMENT BONDING AGENT AND GYPSUM INTERIOR FINISH
- 2- ROOF CONSISTING OF 7 7/8 X 4 X 7/8" (200X100X22 MM) HANDMADE TILES WITH Ø 5/16" (8 MM) CONNECTORS EVERY 2" (50 MM) SET INTO REINFORCED CONCRETE SLAB
- 3- EARTH, 9 7/8" (250 MM) REINFORCED CONCRETE STRUCTURE, 9 1/2" (240 MM) AIR SPACE, 9 1/2" (240 MM) PERFORATED BRICK CURTAIN WALL
- 4- 1 1/4" (30 MM) CERAMIC TILE FLOORING, 4" (100 MM) MAX H BEDDING SLAB FORMING SLOPE, 9 7/8" (250 MM) REINFORCED CONCRETE SLAB, 6 1/4" (160 MM) AIR SPACE, HORIZONTAL SUPPORTING STRUCTURE OF 1 5/8" (40 MM) HOLLOW FLAT BLOCKS, 1" (25 MM) GYPSUM PLASTER, SUPPORTING BRICK STRUCTURE (PARALLEL TO PLANE OF SECTION)
- 5- CONCRETE BLOCK DRIVEWAY

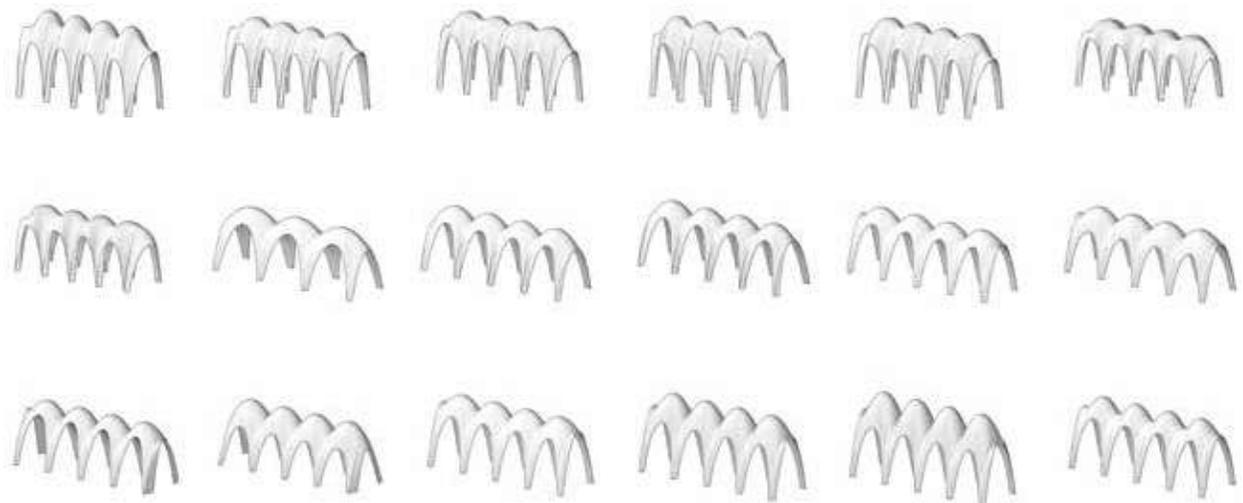


■ GROUND FLOOR PLAN - SCALE 1:100





■ CONCEPT SKETCH WITH CALCULATIONS OF TUMBREL VAULT CURVATURE



■ ABACUS ON THE BASIS OF WHICH POSSIBLE TUMBREL VAULT VARIANTS WERE ASSESSED

CREDITS

Location: Villarreal, Spain - **Client:** Soriano - Manzanet Family - **Completion Date:** 2015 - **Architect:** Camilla Mileto y Fernando Vegas Arquitectos - **Design Team:** M. Soledad García Sáez, Lidia García Soriano, F. Javier Gómez Patrocinio, Elías Hurtado Pérez - **Supervision:** Salvador Tomás Márquez - **Ceramic Work:** Enric Mestre Estellés - **Cupola:** Salvador Gomis Aviño - **Contractor:** Construcciones Angose

Consultants

Structure: Adolfo Alonso Durá - **Lighting:** Elías Hurtado Pérez

Suppliers

Bricks: Anticfang - **Stone:** Inmar Stone Group - **Gypsum:** Placo Saint-Gobain - **Concrete:** Holcim - Ceramic: Porcelanosa Group

Lighting: Bega

Text by Caterina Testa

Photography by Vicente A. Jiménez courtesy of Camilla Mileto y Fernando Vegas Arquitectos