

Colombo Center Roofs

Lisbon, Portugal / 1997

Structural type Characteristics

Owner Client Scope Architect membrane structure

ferrari precontraint 1002 fuotop T2 PVC membrane with Tensegrity structure

Sonae

Comercial Maritima

detailed design and construction support

Fernando Silva



The roof of the Colombo Shopping Centre was built over an already existing swimming pool, with a covered surface area of 3,100m2. The main condition required in the design was simple dismantling of the structure.

The tensegrity-type structure consists of two cable frames: an upper pressure cable, a lower suction cable and a central shore. The cables are anchored to masts stayed to the existing structure.

Each cable frame covers a span of 15.0m.

In order to permit manual assembly and dismantling of the structure, the central shore was made of epoxy fiberglass.



