

## ATHENS – SPORTS HALL

### DESCRIPTION

The circular building has a diameter of about 114m. The roofing is composed of a double curvature tension structure, network cables having in plan, a 4x4 metre grid.

The cable structure, or the suspended roofing, consists of an orthogonal mesh network, whose saddle surface has a total negative curvature with shape similar to a hyperbolic paraboloid. The cables that support the 77 mm high corrugated steel roof covering, are anchored to a box section ring bordered structure made of pre-stressed concrete.

The ring is, in its turn, supported by 32 trestles made of pre-stressed concrete.

The sports complex has been designed for a capacity of about 15,000 spectators.

In plan it has the shape of an inverted truncated cone, whose geometry derives from the solution adopted to solve the problem of the visibility of the spectators.

**Service provided:** Structural design of the roof

**Client:** Athletics General Secretariat

**Year:** 1983 - 1987

**Dimensions:** Seats 15.000, Parking 5.000 m<sup>2</sup>

**Amount of works:** € 3.000.000

