

Endesa Pavilion

case study
By Bingbin Zhou

Location: Barcelona, Spain



Architect: Institute for advanced architecture of Catalonia (Iaac)

Owner: Smart City Expo, Barcelona, Spain

Year of completion: 2012

Climate: Mediterranean Climate

Material of interest: Timber, Solar panels

Application: Exterior & Interior

Properties of material: Wood was chosen as the primary material for the project due to its organic qualities as an exhaustible natural resource as well as its easy workability. Ultimately, the pavilion is shielded from solar radiation in the summer months and then consumes solar radiation throughout the winter. Indirect sunlight produces a subtle ambiance in the interior. Designed to be fabricated using CNC machines, mathematical equations determined the precise orientation of the panels for the most beneficial solar penetration.

Material used: Timber, Solar panels

Sources:

architect website: <http://www.iaac.net/>