

Islazul Shopping Center

Carabanchel, Madrid, Spain / 2006

Structural type Owner Client Constructor Scope Architect solid slab, steel structure and ETFE IKEA Ibécica, S.A. L35

Dragados, Callfersa and Marquisa detailed design and construction support



This building designed as a shopping centre is located on the plots 5.4 and 5.3.3.i in the P.A.U. of Carabanchel in Madrid. The architectural design was undertaken by the Architect's Studio L35.

The building has a roughly triangular-shaped floor plan covering approximately 61,300m2 per floor on 5 storeys plus the roof level. The structure has two parking levels (Basements One and Two), the ground Floor which is dedicated to commercial use and car parking and Floors One and Two which are to be used for shopping outlets and leisure activities.

Due to the structures enormous dimensions, it has been divided into 16 independent modules employing expansion joints. The foundation unit has employed a direct foundation policy, with footings resting upon deep foundation units which extend until reaching a competent soil level.

The slab type employed throughout the storeys is an $8.0 \text{m} \times 8.0 \text{m}$ reinforced solid slab which is 0.35 m or 0.45 m in depth depending on the imposed loads they are exposed to in each area.

Three different materials have been employed in the roofing of the shopping centre: The hypermarket has a wooden roof structure, the cinema and bowling alley area has been roofed with a steel beam and purlin structure whilst the fashion hall and the entrance lobby to the shopping centre have employed ETFE, which is a Teflon-based material which offers transparency, resistance and durability and is composed of pressurized air-cushions set on a lightweight framework so allowing the spanning of large distances. This is the first roof of such characteristics to be employed here in Spain.

268,000m2 of slabs, 34,700m2 of steel roofing and 10,000m2 of EFTE have been employed in the execution of the shopping centre.



