

Characteristics Owner Client Constructor Scope Architect

Paseo del Prado 30 Building rehabilitation

Madrid, Spain / 2021-2025

Masonry walls, columns, and steel floor slabs Ayuntamiento de Madrid Ayuntamiento de Madrid FERROVIAL technical support Alfonso Murga de Mendoza

The building is located at Paseo del Prado 30, on the corner of Calle Gobernador, and was constructed between 1925 and 1936. It consists of a semi-basement, three floors, and a rooftop tower.

Designed by municipal architect Javier Ferrero, the building was intended to house the Deputy Mayor's Office for the Congress. Its architecture is sober and simple, with exposed brick façades and stone plinths and moldings. This style aligns both with the institutional character for which the building was conceived and with an explicit nod to the Prado Museum, a key reference for all surrounding public architecture.

The structure is composed of solid brick load-bearing walls along both the main façade and the interior courtyard façades, as well as two intermediate alignments of rolled-steel columns made of paired UPN profiles, braced and riveted.

The horizontal structure consists of IPN-200 beams bolted to the columns and IPN joists resting on those beams. The slab infill is made of two layers of brick jack arches: a flat lower layer and a curved upper layer. The floor slabs do not include a compression layer.

The current foundation consists of spread footings beneath the load-bearing walls and caisson footings beneath the columns.

The consolidation project will allow for increased floor loads (for a future cultural center and health center) and the addition of two new levels set back 3.00 m from the main façade above the existing roof.

The design calls for strengthening the floor slabs, columns, and foundation. For the slabs, the original joists will be converted into composite members by adding shear connectors and a concrete compression layer, and the main beams will be reinforced. The columns will be strengthened by adding two additional UPN profiles to the existing section at all levels. Finally, the foundations of both the walls and the columns will be reinforced with micropiles.

The new levels, as well as the areas housing elevators and staircases, will be built with a steel structure and lightweight composite-deck slabs.



