

Karin Dom Foundation

New Building Proposal

Summary:

Total Underground Floor Area: 755 sqm

Total Above Ground Floor Area: 1566 sqm

Total Landscaped Area: 1572 sqm

Grand Total Building Area: 2321 sqm

Underground Parking Spaces: 21

Site:

The new building for Karin Dom is conceived as a large house which will provide a homely environment for children and their families. The proposal aims to create a local landmark while being consistent with its surroundings.

A unique and distinctive geometry is proposed. However, it fits well within its context as it is sober, familiar and discreet.

The proposal is optimally placed respect to the sun and following the natural shape of the site. The main volume (above ground program) is splitted in 4 pieces arranged on top of the basement volume which protrudes the soil generating a large terrace in close relationship with a garden surrounding the facilities. The garden guarantees privacy creating a living barrier.

Volumetric Composition:

00. The proposal's characteristic shape is composed of two main volumes,

01. The first one is the basement, a monolithic box that protrudes the soil generating a large terrace in close relationship with a garden surrounding the facilities. The garden guarantees the privacy of the facilities and creates a living barrier. On the other hand, the terrace can be used as an outdoors playground as well as for gatherings or events involving the local community.

02. The second volume (above ground program) has a distinctive and yet familiar shape that exceeds the boundaries of the basement volume while complying with the maximum building ratio.

03. The shape is splitted in 4 pieces and arranged on top of the basement volume. The "cracks" generated between the 4 pieces create a sort of "gills" that allow daylight in without producing overheating.

04. Preserving 36 (44%) of the existing trees and planting more, the surrounding garden that wraps the plot is conformed.

Structure

The structure is mixed. The basement Volume consists of a conventional cast in place concrete grid. The main Volume's structure is metallic. There is a main framing system composed of two large beams, and a secondary framing system cantilevering more or less according to the shape of each floor slab. Once the main structure (all floor slabs) is built, an additional structure is attached to the slab edges, this structure would support the slanted walls of the facade.

According to the structural system proposed an estimated cost of Euro 600 per sqm is established. Therefore the total construction cost for this project is estimated in Euro 1.392.600. This values are estimated and must be updated with a detailed architectural and structural design to be precise.

Bioclimatic strategies

- The "cracks" generated by the volume allow a controlled amount of daylight in, guaranteeing excellent visibility indoors with natural lighting.
- Cross Ventilation is provided by the building's geometry preventing overheating during warm seasons.
- The monolithic Volumes of the proposal prevent heat loses during cold seasons, reducing operational costs during winter.