

## NEW BUILDING INTERNATIONAL ARCHITECTURE COMPETITION KARIN DOM SCHEMATIC DESIGN

### Overview

The aim of the project is to deliver a new contemporary and functional building to fulfill the needs of the Karin dom Foundation, while aspiring to save the existing environment. The edifice consists of 5 levels (1 underground and 4 above-ground) and it is designed as a compact rectangular volume with dimensions 16x40m for the 3 above-ground floors. The 4<sup>th</sup> level has the smallest footprint as it only accommodates the Montessori center, while providing it with a direct access to the rooftop terrace which serves as an additional playground. The depth of 16m allows a spacious configuration of central communication zone, whilst inviting the natural light to enter from setbacks in the volume on the south-west and north-east facades. The vertical communication is arranged by 2 elevators and single straight staircases with 2 evacuation doors per floor; however, the parking can be accessed by only one of the lifts. The main entrance of the parking space is via a 14% ramp that was provided for both cars and pedestrians. The garage itself is on a partial slope of 4% based on the natural topography of the terrain in order to situate the swimming pool on the ground floor inside the building volume.

### Architecture and materials

Situating of the building along the north-east building boarder line is a logical consequence of the natural setting of the plot. The aim is to protect majority of the existing vegetation, while providing a good amount of natural lighting into the building and ensuring enough free area for playgrounds and gardens on the south-west part of the plot. The architecture of the monolithic volume consists of a simple and clear structure with functional setbacks providing air and light. The punched window façade is characterized by a bright rough plaster in a “broom brushed” way. The large windows have wooden frames creating a warm and comfortable environment to its occupants. Above the compact building volume the Montessori Center stands out with its timber skin serving as a shading layer to large glazing. The mono-pitched roof could be used for installing solar panels on the south and skylights on the north slopes.

### Functional program

Distributing the program through the levels of the building is made in a consistent and practical way. The ground floor accommodates all the functions that require direct access – the Reception, Toy library and Medical Center as well as the Physio and Hydrotherapy units which are interconnected. The next level accommodates to the following premises: Center for Diagnostics and Therapy, Early Intervention Center and Center for Family-Mediated Intervention. It also has two large green terraces and recreational corners along the communications. On the second floor are situated the more administrative departments like the Training center, Administration and the Staff rooms. This floor is dedicated to the professionals and volunteers who are taking care of all the children. The top level is devoted to the Montessori Center which contrasts with its light timber structure and beautiful views towards the yard and treetops. It is expected to cause larger flow of people in morning hours;

therefore, a second elevator is implemented into the structure. The rooftop playground will be open for all of the building's occupants, although, it will be mostly used by the Montessori groups.

#### Cost efficiency

Designing the building with typical, cost effective and commonly used materials like the monolithic concrete structure and bright plaster façade will release budget for investing in high quality wooden windows, green terraces and good sun shading. Estimated cost of the project: 1 500 000 €

All parts of the building and the surrounding area are wheelchair accessible. The project is designed according to all active building regulations in Bulgaria. The project includes:

593,42m <sup>2</sup>	Floor area underground
1819,64m <sup>2</sup>	Total floor area above-ground
1310,41m <sup>2</sup>	Total landscaped area
22	Parking spaces