

The Learning Home

In designing a new building for the Karen Dom foundation, the key tenet was to create a space where children with special needs could come together, along with families and providers, in an equal setting that encourages play and growth. The 100 year old villa that the foundation currently functions out of served as an important starting point in the conception of this space. The villa setting provides multifaceted areas from rooms, to balconies to verandahs etc encouraging freedom to explore and the comfort of domesticity in a learning environment. The main task of this design was to retain this atmosphere of informality and flexibility while providing an efficient space for a growing community.

Spatial Configuration

A large lobby functions as the core of the structure and serves as an expanded 'family room' in this new 'house', creating a space for collaborators to come together and directing them towards different functions.

An interwoven plan creates a playful integration of solids and voids that allows for collective interaction, while providing spaces for individual learning. The building modules are arranged as layers of baffles in a wooded site, forming a series of courtyards that gradually transform into more enclosed spaces. This layering allows for each programmed space to have a dedicated sphere of supporting functions and adjacent spillover courtyards and verandas. These open to sky spaces serve multiple programmes from recreation, therapy, sports, staff court, visitor's court, entrance court and vocation training etc ensuring users come into daily contact with nature. The interconnected common-spaces of the centre stimulate informal activities to help increase interaction amongst the children. Served spaces are arranged in order to achieve passive-surveillance by orienting therapy rooms around the reception in the main lobby, and by placing the reception between the admin and main entrance foyer. Simplicity of form, linear layout, and familiar elements makes the project easily approachable, with verandahs and courtyards completing a legible rectangular foot print and instilling a sense of order.

Nature and the outdoors serve as another underlying component in arranging the space. The building grid transforms organically to accommodate the existing tree locations on site, with the series of courtyards formed in order to save the optimum numbers. A continuous connection with nature is achieved through these courtyard and light towers ensuring no spaces is disconnected from natural light and allowing it to filter into the building like sunlight through a canopy of trees.

Structural Efficiency

Inverting the outline of the surrounding tree foliage the building takes on a pyramidal shape along the section, the footprint of the building reduces with each subsequent floor, with this structure helping in keeping the construction cost to a minimum. The ground floor covers the majority of functions as it also carries the maximum footfall with the top floor entirely treated as recreational floor containing seminar hall and cafeteria. The smaller span of the building keeps structural costs low and allows openings on opposite sides for cross ventilation. A central lobby, consolidated toilets and least number of passageways further keep the built up area to a minimum, while reducing the running cost and increasing communication between any two functions. A sloped roof caps this entire structure allowing the form to dip down to human scale with a higher volume signaling entry and enclosing the seminar halls. Here the roof becomes not just a sheltering device but transforms into a light source through playful openings that punctuate the volume. This single roof form unifies all the three floors into one, with the horizon treated as an important surface in construction.

The Tactile Envelope

An interior strategy of soft, indirect natural light is used so that a therapeutic environment with no harsh shadows is formed. The proportion of the envelope is worked out in such a manner that is sensitive to the scale of children and retains a single storey edge making the structure less intimidating. White concrete is used to form the structure to provide a sense of unity and purity, with the exposed concrete functioning as an economical option requiring very little maintenance and no additional finishes. Corner of all walls are kept curved for wider views, to soften harsh edges and to increase tactile sensitivity. All surfaces that will be touched, such as the flooring, window frames, furniture etc are crafted out of wood providing the children with a familiar, comforting texture.

Approximate value for implementation of the competition project: Euro 1,350,000 (One Million Three Hundred and Fifty Thousand Euro)