



The purpose of the building constructions subtask is to create the specification of requirements needed to transform an architectural concept into an actual viable building design, to facilitate the necessary decision making with regards to building constructions (in accordance with said architectural concept), and to prepare for the detailed design phase of the characteristic building constructions of the building.

TASKS TO BE COMPLETED UNTIL MID-TERM PRESENTATION

1. Preliminary Study

1.1. Architectural concept Building shape, functional arrangement, orientation and place on site, determining materials

1.2. Local environmental factors. Analysis of environmental effects and conditions based on the study of the actual building site and local area. Identification and analysis of conditions such as terrain, climate and microclimate, surroundings, soil mechanics and soil moisture, local building materials and technologies and sources of noise (both internal and external). Listing the local regulations.

1.3. Building function factors. Collect all the requisitions, effects and conditions which are based on the building's function. What constructional needs and requirements needs the building to be meet and what kind of problems, tasks and aspects have that specific building function. This requirements will not depend on the site and architectural ideas.

1.4. Constructional proposals. The student must propose at least 5 constructional solutions, references or examples (with short specification, analysis, constructional layers, etc.) for the loadbearing system, external envelope (walls, roofs, etc.) or internal partitioning constructions (walls, slabs and floors, etc.). These references should be exciting or interesting constructions which will determine the architectural solutions of the designed building.

TASKS TO BE COMPLETED WITH THE FINAL SUBMISSION

2. Constructional conception of the building

2.1. Technical description. Detailed definition of the designed building. Site description, functional analysis with main parameters, main structural requirements - calculations are only required on an individual basis, architectural concept, structural concept of loadbearing system, and subsystems as façade, roof, internal flooring, partitions etc. Structural layers arrangement should be collected at the end of the technical description with some sketches of specific structural details.

2.2. Building permit plan. These drawings are part of the architectural documentation, which consists of characteristic floorplans, characteristic section and facade views of the building at a level of detailing necessary for building permits (1:100 scale, the documentation of the necessary constructions, dimensions, labels, etc.). The plans must mirror the results of points 1 and 2. The plans must contain the layers of all constructions depicted.

2.3. Layer arrangements and structural sketches: The 10 most important layers of the building (roof, façade, floorings, etc) and sketches of the most determined structural details which characterize the architectural idea (scale 1:10).

Required format: The preliminary study must be submitted on A/4 sheets stapled or joined together. Drawings and sketches must follow the rules and conventions of technical and constructional drawings and have an acceptable overall quality in A/3 format.