

STRUCTURAL ENGINEERING

Structural engineering covers the conception, planning, designing, drawings and construction for all types of structures, that support their own weight and the loads they carry, and that resist extreme forces from wind, earthquakes, temperature. Bridges, buildings, and many kinds of projects are included with this speciality. They also plan and design, and visit projects sites to make sure work is done properly. Professional engineers work as a team at any given project under the overall control of an architect for a building structure. Do not think that structural engineers' work is mechanical or routine in nature. It is useful to consider his position in building construction where the parties involved are:

- the client (or organization), who has a need for a given building and will finance the project;

- the architect, who produces proposals in the form of building plans and models (or a computer simulation) to meet the client's requirements, who controls the project and who engages consultants to bring the reposes into being.

- consultants (structural, mechanical, electrical, heating and ventilating), who carry out the detail design, prepare working drawings and tender documents and supervise construction;

- contractors, who carry out fabrication and erection of the structural framework, floors, walls, finishes and installation of equipment and services.

The structural engineers work as the members of a team, and to operate successfully it is necessary to have knowledge, experience and the ability to do their work with great responsibility. They make decisions about materials, structural form and design methods to be use. They are responsible for safety and must ensure that the consequences of failure due to accidental causes are limited.

Ответьте на вопросы:

1. Что включает структурная инженерия?
2. Какие стороны задействованы в строительстве зданий?
3. Какие функции выполняет архитектор?
4. Какие функции выполняют консультанты?