

▼B*ANNEX I***BASIC REQUIREMENTS FOR CONSTRUCTION WORKS**

Construction works as a whole and in their separate parts must be fit for their intended use, taking into account in particular the health and safety of persons involved throughout the life cycle of the works. Subject to normal maintenance, construction works must satisfy these basic requirements for construction works for an economically reasonable working life.

1. Mechanical resistance and stability

The construction works must be designed and built in such a way that the loadings that are liable to act on them during their constructions and use will not lead to any of the following:

- (a) collapse of the whole or part of the work;
- (b) major deformations to an inadmissible degree;
- (c) damage to other parts of the construction works or to fittings or installed equipment as a result of major deformation of the load-bearing construction;
- (d) damage by an event to an extent disproportionate to the original cause.

2. Safety in case of fire

The construction works must be designed and built in such a way that in the event of an outbreak of fire:

- (a) the load-bearing capacity of the construction can be assumed for a specific period of time;
- (b) the generation and spread of fire and smoke within the construction works are limited;
- (c) the spread of fire to neighbouring construction works is limited;
- (d) occupants can leave the construction works or be rescued by other means;
- (e) the safety of rescue teams is taken into consideration.

3. Hygiene, health and the environment

The construction works must be designed and built in such a way that they will, throughout their life cycle, not be a threat to the hygiene or health and safety of workers, occupants or neighbours, nor have an exceedingly high impact, over their entire life cycle, on the environmental quality or on the climate during their construction, use and demolition, in particular as a result of any of the following:

- (a) the giving-off of toxic gas;
- (b) the emissions of dangerous substances, volatile organic compounds (VOC), greenhouse gases or dangerous particles into indoor or outdoor air;
- (c) the emission of dangerous radiation;
- (d) the release of dangerous substances into ground water, marine waters, surface waters or soil;
- (e) the release of dangerous substances into drinking water or substances which have an otherwise negative impact on drinking water;

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- (f) faulty discharge of waste water, emission of flue gases or faulty disposal of solid or liquid waste;
- (g) dampness in parts of the construction works or on surfaces within the construction works.

4. Safety and accessibility in use

The construction works must be designed and built in such a way that they do not present unacceptable risks of accidents or damage in service or in operation such as slipping, falling, collision, burns, electrocution, injury from explosion and burglaries. In particular, construction works must be designed and built taking into consideration accessibility and use for disabled persons.

5. Protection against noise

The construction works must be designed and built in such a way that noise perceived by the occupants or people nearby is kept to a level that will not threaten their health and will allow them to sleep, rest and work in satisfactory conditions.

6. Energy economy and heat retention

The construction works and their heating, cooling, lighting and ventilation installations must be designed and built in such a way that the amount of energy they require in use shall be low, when account is taken of the occupants and of the climatic conditions of the location. Construction works must also be energy-efficient, using as little energy as possible during their construction and dismantling.

7. Sustainable use of natural resources

The construction works must be designed, built and demolished in such a way that the use of natural resources is sustainable and in particular ensure the following:

- (a) reuse or recyclability of the construction works, their materials and parts after demolition;
- (b) durability of the construction works;
- (c) use of environmentally compatible raw and secondary materials in the construction works.