

# **Chapter II**

## **Regulatory and technical reference in the construction sector**

in the construction sector .....	7
II.1. Definition.....	7
II.2. General diagram of the structuring of regulatory building documents.....	7
II.2.1. Regulatory and Legislative Texts (Level 01) .....	8
II.2.2. The Regulatory Technical Reference (Levels 02 and 03).....	8
II.2.2.1. Regulatory Technical Design Documents “DTR-C” (Level 02). .....	8
II.2.2.2. Regulatory Technical Execution Documents “DTR-E” (Level 03) .....	8
II.2.2.3. The Normative Technical Reference (Level 04).....	9

## **II.1. Definition**

Building regulations are documents established by an official body (administration or responsible authority). They represent the different rules, laws and standards that organize the procedures and stages, before, during and after the completion of a construction. A building project requires, in addition to technical skills, a good knowledge of the regulatory framework governing the act of building (the rules in force), and this in order to comply with the requirements in terms of: *Safety* , *Sustainability* , *Hygiene* , and the level of *Comfort* compatible with social and environmental requirements during construction and throughout the service life of the building.

In this regard, the regulatory and technical framework contains provisions aimed at ensuring these requirements which must be respected by the various stakeholders in a construction project.

## **II.2. General diagram of the structuring of regulatory building documents**

The system of regulatory documents covering the field of construction on a technical level provides answers to the following two main questions:

- *What are the requirements that the final product must meet?*

- *How to meet these requirements?*

To answer these two questions, the regulatory and technical framework in Algeria goes through four levels. Since the answer to the first question must take into account socio-economic conditions, and is largely based on political decisions, the corresponding documents are said to be "higher order" (Level 01), they have a legislative character and are promulgated by the highest authorities of the State.

As for the answer to the second question, that is, "how to meet the requirements?", it is provided by documents of a technical nature. They are of a lower order compared to the previous documents (Levels 02, 03 and 04) and are generally developed by the institutions or bodies responsible for standardization and technical regulation, in cooperation with professional entities.

### **II.2.1. Regulatory and Legislative Texts (Level 01)**

The first question is answered by regulatory and legislative texts, known as "higher order". They are decided by high state authorities. These are:

- **Laws**: These are written and general rules voted on according to the legislative procedure by parliament (National Assembly and Senate). A law can be adopted at the initiative of parliament (this is then called a bill) or of the government (draft law). It is binding on everyone once it has been promulgated by a presidential decree. Before its promulgation, it is likely to be subject to a constitutional review exercised by the Constitutional Council, we can cite: the law on compliance of construction, the law on urban planning, the labor law, the public procurement code, etc. ).

- **Decrees** : they represent regulatory acts signed either by the President of the Republic or by the Prime Minister. Decrees known as "decrees in the Council of State" can only be issued after consultation with the latter. In the hierarchy of standards, the decree is below the laws with which it must necessarily comply. It must be published, after signature and possibly countersignature, in the Official Journal.

- **Orders:** An order is an administrative act of general or individual scope (specific to an operation or a geographical area). Orders can be taken by ministers (ministerial or interministerial orders), Wali, mayors, etc.

- **Circulars and instructions:** In the civil service, a circular or instruction is a text emanating from a ministry and intended to give an interpretation of a text of law or a regulation (decree, order), so that this text is applied uniformly across the territory. These are recommendations; they only apply to civil service agents).

### **II.2.2. The Regulatory Technical Reference (Levels 02 and 03)**

The answer to the second question is found in documents of a technical regulatory nature. They are of a lower order than the Regulatory and Legislative Texts, they are drawn up by the institutes responsible for technical regulation in cooperation with professional bodies (see Appendix III). These are:

#### **II.2.2.1. Regulatory Technical Design Documents “DTR-C” (Level 02)**

These are the documents that define the methods for verifying whether the adopted technical solutions correspond to the requirements set out in the level 1 documents, and specify the general principles during the development of building projects. In the structure of the adopted regulatory documents, it is expected that these documents will come out in the form of standards or design and calculation rules. In the case of requirements whose satisfaction can be demonstrated by calculation, these documents specify the values of the basic calculation parameters (overloads, external temperatures, etc.) and indicate the design principles and rules, where appropriate, they can be supplemented by some examples of solutions ensuring the satisfaction of the requirements in question.

#### **II.2.2.2. Regulatory Technical Execution Documents “DTR-E” (Level 03)**

These documents deal with requirements (see Annex IV) relating to:

- The choice of materials used in the work,
- The materials, installations and accessories used in the works, storage, etc.,
- The preparation and manufacture of composite materials (composition, formulations) and their installation (assembly, tolerances, protection, etc.), the general and specific conditions of execution,
- The construction provisions and rules to be respected,
- Quality control operations of the work,
- The method of receiving the works (provisional or definitive depending on the case),

#### **II.2.2.3. The Normative Technical Reference (Level 04)**

These are documents whose purpose is to define the performances or describe the qualities of the materials, products and components to be used for the execution of the works. These are the Algerian Execution Standards (see some examples in Appendix V). They are developed by the committees directly attached to the IANOR (Algerian Institute of Standardization). In general, a quality standard should provide information on:

- The definition of products and the terminology used,
- The scope of application,

## Chapter II Regulatory and technical framework in the construction sector

- The classification, designation,
- The characteristics common to all products,
- The specific characteristics of certain types of products,
- Specifications of geometric, chemical, mechanical characteristics, tolerances,
- Control tests,
- The conditions of packaging, delivery, storage,
- References (i.e. other standards to consult).

Another aim of the standardization of construction products is to reduce the variety of products through typification and dimensional coordination. This allows, on the one hand, the substitution of one element for another, and on the other hand, the reduction of the variety of products in order to concentrate manufacturing, increase series, and therefore allow increases in productivity and lower costs.