



# Guidelines on CE Marking

## 1 Introduction

It is an important goal of the European Union to guarantee the free movement of goods within Europe and to abolish technical barriers to trade. To this end, European Directives and standards have been and are being developed. The CE mark allows a manufacturer to document the conformity of their product with the relevant Directives and technical specifications. The CE mark is thus a mark of conformity, though not one of quality.

## 2 The Construction Products Directive and its implementation in national law

### 2.1 The Construction Products Directive

The Construction Products Directive was enacted in order to guarantee that construction products could also be traded freely. It created the preconditions for the harmonization of legal and administrative construction product regulations in the Member States.

#### 2.1.1 Essential requirements

According to Art. 2.1 of the Construction Products Directive, the Member States must implement all necessary measures to ensure that construction products only enter the marketplace if they are fit for use, i.e. if they exhibit such properties that the building for which they are intended will fulfil the **Essential Requirements**. According to Annex I of the Construction Products Directive, these requirements are:

- Mechanical resistance and stability
- Safety in case of fire
- Hygiene, health and the environment
- Safety in use
- Protection against noise
- Energy economy and heat retention



### **2.1.2 Harmonized standards**

The technical details for giving concrete form to the aforementioned requirements are developed by the European standardization institutes. These act on the basis of mandates (standardization mandates) from the European Commission. Standards in the form of technical regulations developed by the European standardization organizations on the basis of a mandate and publicized in the EU Official Journal are called “harmonized standards”.

## **2.2 The implementation of the Construction Products Directive in Germany**

European Directives must be implemented in national law.

### **2.2.1 The Construction Products Law, CPL (Bauproduktengesetz, BauPG)**

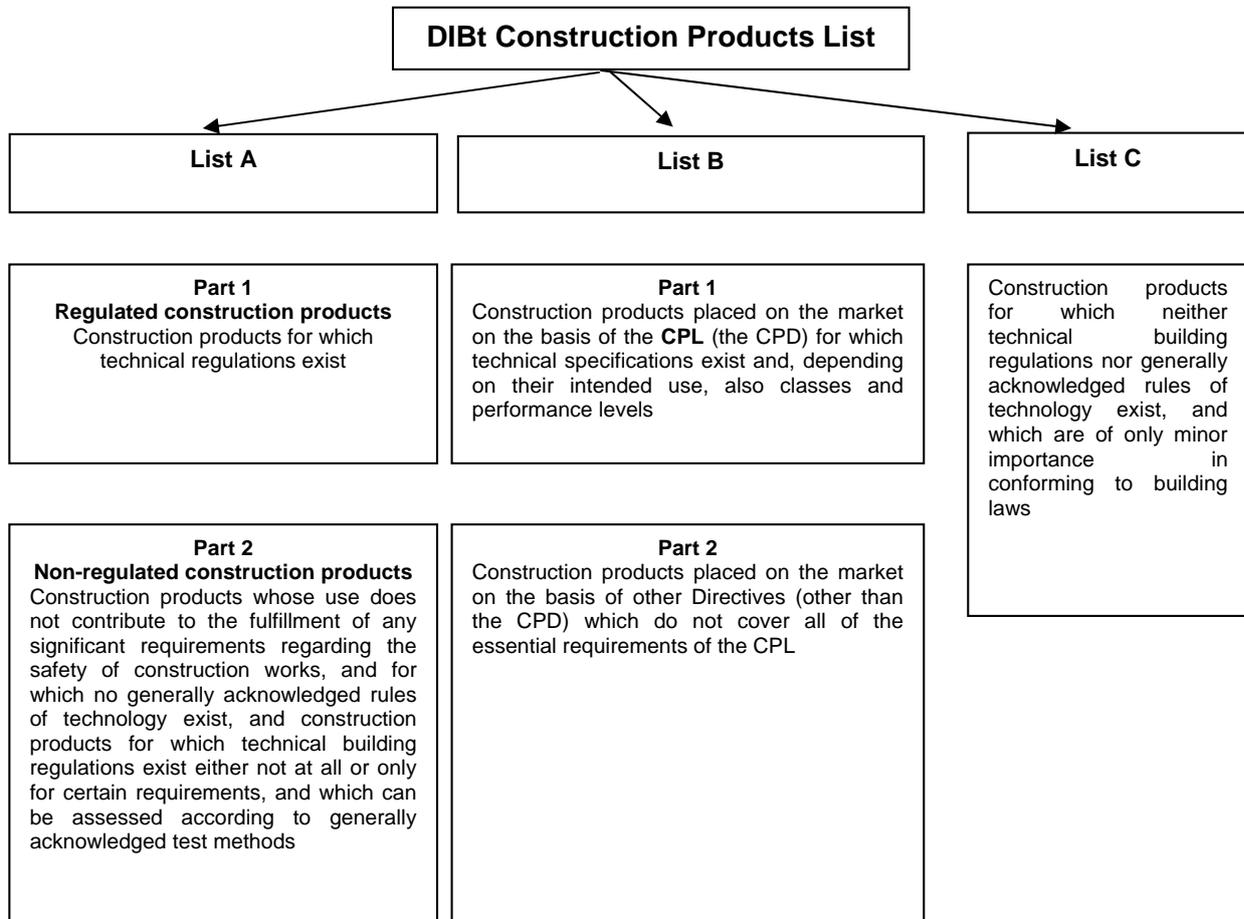
The Construction Products Directive was implemented in Germany in the form of the Construction Products Law. According to this Law, a construction product may only be placed on the market if it is fit for use. A construction product is considered fit for use if it conforms to a publicized, harmonized standard, among other stipulations. The manufacturer of a product must implement a conformity procedure in order to establish this (see 3.1.1).

### **2.2.2 The Model Building Regulation, MBR (Musterbauordnung, MBO)**

As the Construction Products Directive governs not only the free movement of construction products but also their use, the Model Building Regulation enacted by the conference of German state construction ministers (ARGEBAU) was amended with respect to the use of construction products. The background to this move is that, in Germany, legislative competence in construction law lies with the individual Federal states. The amendments to the MBR were then incorporated into the building regulations of the individual Federal states.

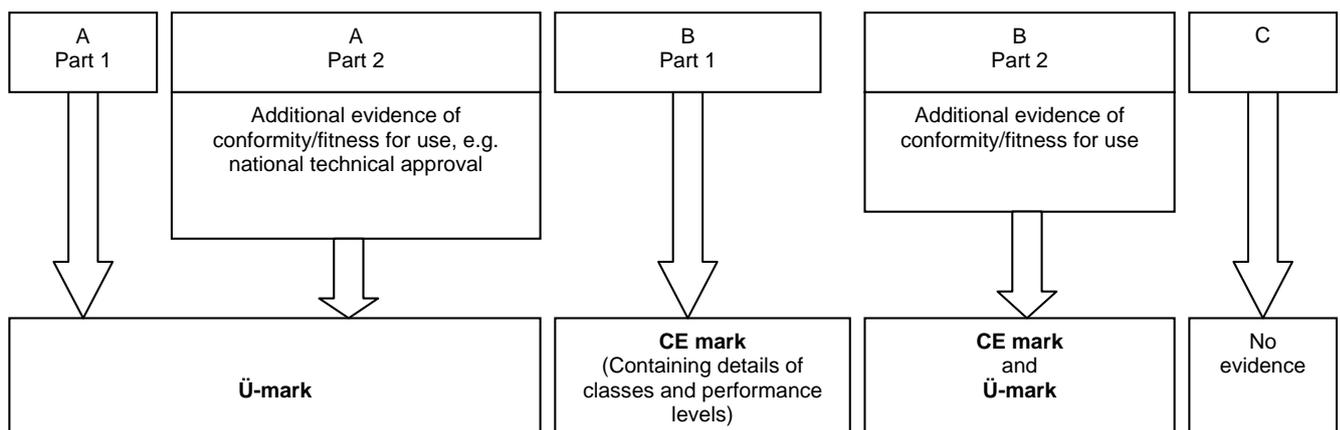
### 2.2.2.1 The Construction Products List

The Construction Products List of the German Institute for Building Technology (Deutsches Institut für Bautechnik, DIBt) – to which the MBR refers – is of considerable importance regarding the use of construction products:



### 2.2.2.2 Verifications of applicability

For the above categories of construction products, the following verifications of applicability are required:





### 3 The CE mark

#### 3.1 The road to the CE mark

As stated in 2.2.1, a construction product may only be placed on the market and freely traded if it is fit for use. A construction product is considered fit for use if it conforms to publicized, harmonized standards (among other requirements).

##### 3.1.1 Conformity procedure

A procedure for attesting conformity must be implemented to demonstrate that a construction product fulfils a particular publicized harmonized standard. This procedure can consist of the following components (cf. § 8 para. 2 sentence 1 of the CPL):

- Initial type test of the construction product by the manufacturer/a testing body
- Tests of samples taken at the factory, carried out by the manufacturer or a testing body according to a predetermined test plan
- Audit testing of samples taken at the factory, in free trade or on the building site by the manufacturer or a testing body
- Tests of samples from a batch due to be delivered or already delivered, by the manufacturer or a testing body
- Continuous internal control of production by the manufacturer (factory production control)
- Initial inspection of the factory and of factory production control (FPC) by a surveillance body

If the above components are combined, this produces a range of different procedures for attesting conformity. In total there are 6 conformity systems. The respective system to be applied is specified in the harmonized standard. The following table shows which task must be performed by whom for the respective procedures:

Conformity procedure	Manufacturer task			Notified body task				
	FPC	Initial type test	Further tests	Inspection of the FPC	Initial type test	Initial inspection of the factory	Continuous third-party control	Audit testing
1	x			x	x	x	x	
1+	x		x	x	x	x	x	x
2	x	x		x		x		
2+	x	x	x	x		x	x	
3	x				x			
4	x							



This table shows that, for example, for procedure 3, an initial type test by a notified body and factory production control are both required.

### **3.1.2 Declaration of conformity**

The final stage of a procedure for the attestation of conformity is the declaration of conformity by the manufacturer; under certain conditions a certificate of conformity from a notified body may also be required. The declaration of conformity by a manufacturer confirms that the procedures prescribed to attest conformity have been implemented and have confirmed the conformity of the construction product. It must be made in writing, kept by the manufacturer, and produced if required by an agent of the relevant authority. The declaration of conformity (or the certificate of conformity) authorizes and obliges the manufacturer to use the CE mark.

### **3.2 Provisions regarding the CE mark**

The appearance of the CE mark, what information it must contain and where it must be affixed to the product are all determined by detailed specifications:

A sample of the CE mark and specifications regarding its size can be found in Annex IV of the Construction Products Directive. What information it must contain and where it can/must be affixed is stipulated in Annex ZA of the relevant product standard.

## **4 CE marking of windows and external pedestrian doorsets as per EN 14351-1**

EN 14351-1 is a harmonized standard. It – and notably its Annex ZA – contain details on CE marking for windows and external pedestrian doorsets. Table ZA.2 shows what system of conformity is to be applied for which intended use. Procedure 3 will generally need to be implemented. This consists of the following fundamental components (cf. table ZA.3b of EN 14351-1):

- Initial test (**Initial Type Test**) of the product by a notified body
- Factory production control



#### 4.1.1 ITT

An initial type test is the determination of the product characteristics of representative test specimens according to a harmonized European product standard, by measurement, calculation, or other methods described in the product standard.

**As a system supplier, VBH has had numerous initial type tests carried out in order to assist manufacturers of windows and external pedestrian doorsets! VBH makes the results of these available to manufacturers via its CE-fix project, in the form of product passports (according to the “cascading procedure”). In this way VBH helps to save manufacturers time and money!**

#### 4.1.2 Factory Production Control (FPC)

A general definition of FPC can be found in Annex III of the Construction Products Directive. According to this, FPC means (...)

*“(...) the permanent internal control of production exercised by the manufacturer. All the elements, requirements and provisions adopted by the manufacturer shall be documented in a systematic manner in the form of written policies and procedures. This production control system documentation shall ensure a common understanding of quality assurance and enable the achievement of the required product characteristics and the effective operation of the production control system to be checked.”*

Further details can be found in Clause 7.3 of EN 14351-1.

## 5 Outlook: The new EU Construction Products Regulation

The new Construction Products Regulation No. 305/2011 of 9.3.2011 was published in the Official Journal of the European Union on 04.04.2011. The majority of the provisions in the new Regulation, particularly those parts relevant to manufacturers, will not enter into force until 01.07.2013 – the end of the transition period. The new Regulation will apply uniformly throughout the European Union, with no need for any national implementing legislation. In Germany, however, current national legislation must be amended at both a Federal level (Construction Products Law) and Federal state level (Model Building Regulation/individual states' building regulations). This process is still ongoing.

The new Construction Products Regulation will bring about various changes in CE marking, although the basic procedure will stay the same. It is likely that test reports drafted prior to 01.07.2013 will remain valid after this date. It should be noted that the



Construction Products Regulation contains a new “essential requirement” (in future: “basic requirement”), namely: “sustainable use of natural resources”. The current procedure for attesting conformity will be replaced by a procedure for the “assessment and verification of constancy of performance”. This means, for example, that a manufacturer of a construction product covered by a harmonised standard will need to prepare a declaration of performance when placing that product on the market. The declaration of performance will be based on the same systems for attesting conformity as before, for example the initial type test (ITT) and factory production control (FPC).

All relevant changes to the CE-fix system platform will be made in sufficient time in such a way as to meets your practical needs.

In case of any questions, please do not hesitate to contact the VBH system advisers.

**As part of its support to manufacturers of windows and external pedestrian doorsets, VBH provides them with FPC documentation via the CE-fix project. This has been developed in collaboration with the ift Rosenheim and complies with the requirements of EN 14351-1 for FPC.**