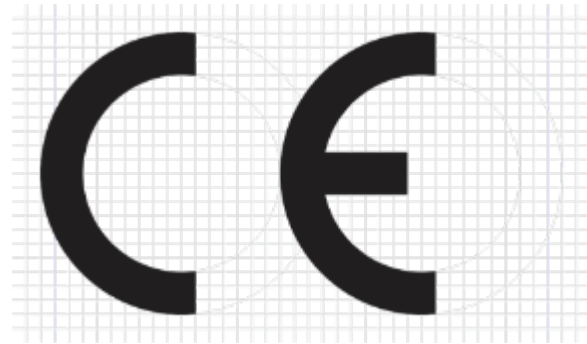


IPHA Technical Seminar 2015

October 21-22, Malmö - Sweden

CE-marking



Stef MAAS

FEBE

Belgian Precast Association



INTERNATIONAL PRESTRESSED
HOLLOWCORE ASSOCIATION

in cooperation with



CE-marking: background

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.

Source: CPR annexe 1

CE-marking: background

BASIC REQUIREMENTS FOR CONSTRUCTION WORKS

1. Mechanical resistance and stability
2. Safety in case of fire
3. Hygiene, health and the environment
4. Safety and accessibility in use
5. Protection against noise
6. Energy economy and heat retention
7. Sustainable use of natural resources

CE-marking: background

BASIC REQUIREMENTS FOR CONSTRUCTION WORKS

- **Basic requirements** must be translated in **essential characteristics** on product level.
(See CPR art. 3)
 1. The **basic requirements** for **construction works** shall constitute the basis for the preparation of standardisation mandates and harmonised technical specifications.
 2. The **essential characteristics** of **construction products** shall be laid down in harmonised technical specifications in relation to the basic requirements for construction works.

CE-marking: background

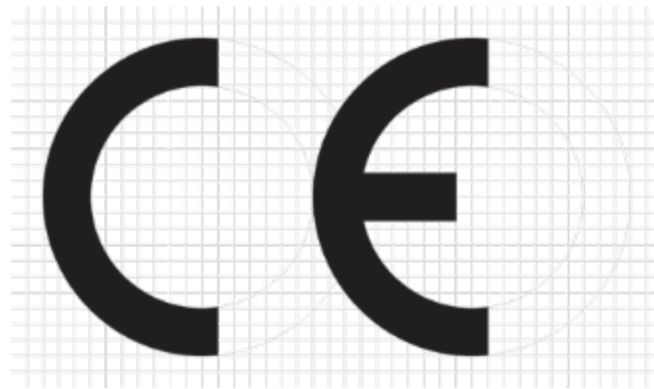
BASIC REQUIREMENTS FOR CONSTRUCTION WORKS



CE-marking: background

HARMONISED STANDARDS

- Harmonised European Standards provide a solid **technical basis** for manufacturers for testing the performance of their products.
- Using these standards the manufacturer will be in position to make the **declaration of performance** (DoP) of his product as defined in the Construction Products Regulation (CPR) and to affix the **CE marking**.



CE-marking: background

HARMONISED STANDARDS

The harmonised European standards on construction products together with the relevant horizontal standards on assessment methods for:

- resistance on fire, reaction to fire, external fire performance, noise absorption,
- construction products in contact with drinking water,
- release of dangerous substances into indoor air, soil and (ground)water,
-

create a common European technical language.

CE-marking: background

HARMONISED STANDARDS

A **common** European technical **language** to be used by all actors in the **construction sector** to:

- express **requirements** (regulatory authorities in Member States);
- declare the product **performance** (manufacturers);
- verify **compliance** with such requirements (design engineers, contractors);

CE-marking: philosophy

- By means of **TT** (TC), the producer declares the **product type** (set of **essential characteristics**)
- By means of **FPC** the producer guarantees that the **performance** of the products is **permanently** in line with the essential characteristics related to the product type;
- By means of the **DoP**, the producer **communicates** with the market about the performances of his products;
- By means of the **CE-label**, the **producer** confirms he has drafted a DoP and he takes **full responsibility** for the declared performances.

CE-marking: philosophy

Hollow Core (AVCP 2+)

■ The manufacturer shall :

- determine the **product-type** on the basis of type testing (including sampling), type calculation, tabulated values or descriptive documentation of the product;
- carry out **factory production control**;
- test **samples** taken at the factory in accordance with the prescribed test plan;
- choose a **notified body** (your choice, 1 for whole of Europe)
- draft a **DoP**
- affix the **CE-marking**

CE-marking: philosophy

Hollow Core (AVCP 2+)

- **The notified factory production control certification body shall :**
 - decide on the issuing, restriction, suspension or withdrawal of the certificate of conformity of the factory production control on the basis of the outcome of the following assessments and verifications carried out by that body:
 - initial inspection of the manufacturing plant and of factory production control;
 - continuing surveillance, assessment and evaluation of factory production control.

CE-marking: relevant documents

- Construction Products Regulation (CPR)
 - (EU) No [305/2011](#)
- Commission delegated regulations
 - (EU) No [157/2014](#) + [FAQ](#)
 - (EU) No [568/2014](#) + [FAQ](#)
 - (EU) No [574/2014](#) + [FAQ](#)
- Standards
 - EN 1168
 - EN 13369
- Visit commission's [CPR website](#)
- Visit commission's [CE website](#)

DoP on website
AVCP
Drawing up a DoP



CE-marking: evolution of hEN

Harmonised standards in 5Y systematic review

- Introduction of **light-weight** concrete
- References to **new common rules** (EN 13369)
- Introduction of new **annex ZA** (imposed)
- Introduction of new **annex Y**, listing all clauses related to structural design.

CE-marking: challenges in the near future

New annex ZA

- No examples of labels included
 - Role for associations
 - IPHA
 - BIBM
 - ...
 - No simplified label
 - Impact on actual way of working
 - Provisions in CPR will govern

- No example of DoP included
 - Good guidance in
 - Delegated Regulation (EU) [No 574/2014](#)



CE-marking: challenges in the near future

New annex ZA

- 4 methods (1,2,3a,3b) are not formally included
 - Hollow core
 - Method 1
 - Method 3b
 - Pragmatic solution
 - Methods will be explained in an additional line in table ZA.1
 - Discussion with CEN about value of old guidance paper L
 - Will 4 methods survive?

CE-marking: challenges in the near future

Ongoing discussions

- CPR
 - Double declaration
 - DoP
 - Label
 - Classes and threshold values
 - Voluntary quality marks

CE-marking: challenges in the near future

Ongoing discussions

- Eurocode & harmonised product standard
 - EC2 – chapter 10 : Prefabrication
 - Possible way forward (TBD)
 - Rearrangement of design related clauses
 - Particular precast items in a chapter about detailing
 - Design clauses in harmonised standards
 - When passing systematic review
 - Identification of design clauses
 - Move/copy towards EC where possible



CE-marking: good to know

- CE marking
 - concerns Hollow Core **Slabs**
 - does **not** Concern Hollow Core **Floors**
- CE does **not** mean **made in Europe**
- DoP's are not supposed to travel with the planks
- For Hollow Core (AVCP 2+) CE-marking **can not** be considered as quality assurance!

CE-marking: Urban legend



THANK YOU
For your attention

