

ICS

English version

## Smart CE marking for construction products

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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## European foreword

CWA Smart CE marking for construction products was developed in accordance with CEN-CENELEC Guide 29 “CEN/CENELEC Workshop Agreements – The way to rapid agreement” and with the relevant provisions of CEN/CENELEC Internal Regulations - Part 2. It was agreed on 2018-05-07 in a Workshop by representatives of interested parties, approved and supported by CEN following a public call for participation made on 2017-11-08. It does not necessarily reflect the views of all stakeholders that might have an interest in its subject matter.

The final text of CWA Smart CE marking was submitted to CEN for publication on 2018-06-07. It was developed and approved by:

- Construction Products Europe
- AENOR
- ArcelorMittal Flat Carbon Europe SA
- coBuilder International
- ECAP – European Consortium of Anchors Producers
- ECSPA – European Calcium Silicate Producers Association
- EFCC - European Federation for Construction Chemicals
- EMO – European Mortar Industry Organisation
- Eurogypsum AISBL
- FEICA – Association of the European Adhesive and Sealant Industry
- FIEC – European Construction Industry Federation
- Ideal Standard International
- NVTB Bouwmaterialen – Dutch construction products
- ProductIP B.V.
- PU Europe
- SBS – Small Business Standards
- Wienerberger AG

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The Workshop participants have made every effort to ensure the reliability and accuracy of the technical and non-technical content of CWA Smart CE marking, but this does not guarantee, either explicitly or implicitly, its correctness. Users of CWA Smart CE marking should be aware that neither the Workshop participants, nor CEN can be held liable for damages or losses of any kind whatsoever which may arise from its application. Users of CWA Smart CE marking do so on their own responsibility and at their own risk.

## Introduction

Construction Products Europe AISBL represents the interests of all European construction products manufacturers, from SMEs to multinational companies. It was established in 1988 as an AISBL, a non-profit making organisation under Belgian law.

Construction Products Europe identified during the drafting process of Regulation (EU) No 305/2011 [1], usually called Construction Products Regulation or CPR, the need to make the Declaration of Performance (DoP) requested by the regulation available online.

The European Commission published some years later the Commission Delegated Regulation (EU) No 157/2014 [2] allowing manufacturers to make available the declaration of performance of their products on websites. The explanatory memorandum of the document included a reference to machine readable formats:

*"When declarations of performance are made available on an Internet site, due care is to be exercised when ensuring its appropriate upkeep and maintenance, so as to avoid as far as possible its unavailability owing to malfunctioning of the information technology systems in place. The information is to be displayed preferably using semantic web technologies making sure that it is displayed in a human readable format, like HTML, and a machine readable format, like XML. The schema for the machine readable format should preferably use standard or widely used data schemas, so that the information is interoperable with most architectural tools."*

Manufacturers widely benefited from this option but the most commonly format used was pdf. This situation reduced the usability of the content of the declaration of performance.

Construction Products Europe discussed during the last years the development of a harmonised XML format to deliver declarations of performance. The goal is the implementation of the proposal already suggested in the Commission Delegated Regulation. This action was tested in a proof of concept for six harmonised standards. The outcome was very positive and received the support of construction products manufacturers, contractors, authorities and other stakeholders in the construction chain. The research covered extensive discussions with CEN/TC 442 experts dealing with Support Data Dictionaries.

This document contains guidance on how harmonised XML formats may be developed as part of the harmonised product standards related to the CPR. Availability of these formats together with the information already available in the standards will allow manufacturers to easily deliver the requested and compulsory information in a way easily managed both by humans and machines. The action will also push the development of electronic tools (mainly BIM tools) and will facilitate the use of current CE label and DoP in a "smart way" by creating the digital connection between the construction product and the regulatory information related to it.

Making a DoP available on a website according to the Smart CE marking XML formats for each specific standard, when available, is an option for manufacturers. Benefits from this approach will not change any legal obligations from the CPR (e.g. availability of the document for at least 10 years).

## 1 Scope

Smart CE marking for construction products aims to digitalise mandatory construction products information provided in the declaration of performance (DoP) according to Regulation (EU) No 305/2011 [1]. When available for their standards, manufacturers will have the option to make their DoP available in their websites in XML format (human and machine readable), the files will be accessible through the link included in the CE marking. This link will allow the use of "smart" devices connected to internet (mobile phones, tablets, computers, etc) to use this information through internet browsers, applications or software.

Harmonisation will be achieved through the development of XML formats for each harmonised product standard. This document provides guidance on how these formats should be developed to properly establish a consistent digital information environment.

CEN/TC 442 work was used as input for the development of this document. CEN/TC 442 Product Data Templates will cover a wider scope than Smart CE marking for construction products. The structure of Smart CE marking formats forms a part of Product Data Templates.

## 2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

### 2.1

#### **AVCP**

Assessment and Verification of Constancy of Performance of construction products in relation to their essential characteristics is carried out in accordance with Commission Delegated Regulation (EU) No 568/2014 [4].

[SOURCE: Regulation (EU) No 305/2011 [1], article 28(1)]

### 2.2

#### **class**

a range of levels, delimited by a minimum and a maximum value, of performance of a construction product.

[SOURCE: Regulation (EU) No 305/2011 [1], article 2(7)]

### 2.3

#### **Declaration of Performance**

#### **DoP**

The declaration of performance shall express the performance of construction products in relation to the essential characteristics of those products in accordance with the relevant harmonised technical specifications.

[SOURCE: Regulation (EU) No 305/2011 [1], article 6(1) and Delegated Regulation (EU) 574/2014]

### 2.4

#### **element**

Content between the opening and the closing tag, including them. They are complex if contain other elements and simple if not.