# Construction Products Regulation (CPR) applies also to HVAC products

According to the new Construction Products Regulation (CPR) "construction product" means any product or kit which is produced and placed on the market for incorporation in a permanent manner in construction works (buildings and civil engineering works) or parts thereof and the performance of which has an effect on the performance of the construction works with respect to the basic requirements for construction works.

**Keywords:** construction product directive, CPD, construction products regulation, CRP, CE marking, declaration of performance, DoP.



JORMA RAILIO
Chair of REHVA Technology and
Research Committee
jorma.railio@gmail.com

ost of HVAC products are used in buildings, in order to provide healthy and comfortable indoor environment without wasting energy. Therefore, HVAC products can generally speaking be regarded as construction products.

According to the Regulation, construction products are subject to obligatory CE marking, which means that CE marking is affixed to construction products for which the manufacturer has drawn up a declaration of performance (DoP) and thus taking a responsibility for the conformity of the product.

However, in order to be able to declare the product conformity, the product must be assessed according to a harmonized European Standard (generally) or European Technical Assessment. In the case of HVAC products, this is today possible for still very few products, like radiators or fire and smoke dampers.

More on http://ec.europa.eu/enterprise/sectors/construction/legislation/ (called "CPR front page" hereafter in this article)

## From Directive (CPD) to Regulations (CPR)

The Construction Products Directive 89/106/EEC, of 21 December 1988 was published in the OJ No L 40 of 11 February 1989.

The Directive, however, left a lot of freedom to Member States in its implementation. For example, CE marking was not compulsory in all Member States, the preparation of European Standards to support the implementation of CPD was also very slow, and so also the progress towards a single European market was too slow.

Finally, the Construction Products Regulation (EU) no. 305/2011 (CPR) was adopted on 9 March 2011. CPR is replacing the Construction Products Directive 89/106/ EEC (CPD) is laying down harmonized conditions for the marketing of construction products.

Some elements of the CPR came into force on 24 April 2011. The first changes apply to notified bodies and technical approval bodies and the way in which they operate. The full legislation relating to manufacturers, importers and distributors came into force on 1 July 2013, when the CPD was replaced.

The provisions of the new Regulation seek to:

- Clarify the affixing of CE marking: By affixing the CE marking to a construction product, for which the manufacturer has drawn up his Declaration of Performance, manufacturers indicate that they take responsibility for the conformity of that product.
- Introduce simplified procedures enabling costs borne by enterprises (especially SME's, some further simplifications to micro-enterprises under certain circumstances), to be reduced and to impose stricter designation for organisations responsible for assessing the performance of construction products and the verification of the products' constancy.

The implementation of the CPR does not impose any additional technical requirements on products. However the requirements for CE marking and the accompanying documentation have changed and must now comply with the requirements of Article 9 of the CPR.

#### The Declaration of Performance (DoP)

The Declaration of Performance gives the product manufacturer the opportunity to deliver the information about the **essential characteristics** (those characteristics of the construction **product** which relate to the basic requirements for construction **works**) of his products. Declarations of Performance (DoP) must be available, for each product, product family or any other grouping of products decided by the manufacturer. If the product had been placed on the market before the 1<sup>st</sup> July 2013, it can be later made further available without a DoP. Annex III of the CPR specifies the items to be included in the DoP.

In addition to a DoP generated under the CPR, CE Declaration of Conformity may still be required according to other applicable EU Directives such as Electromagnetic compatibility, Low voltage, Machinery, ATEX, etc.

The manufacturer shall draw up a DoP when a product covered by a harmonised standard (hEN) or a European Technical Assessment (ETA) is placed on the market. See http://ec.europa.eu/enterprise/sectors/construction/declaration-of-performance/index\_en.htm for further information.

### Basic requirements for construction works

According to Annex I of the CPR, "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."

The basic requirements are otherwise the same as in the replaced CPR, but a new requirement on sustainability has been introduced.

- 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

## Harmonized product standards under the CPR

Page http://ec.europa.eu/enterprise/policies/europeanstandards/harmonised-standards/construction-products/ gives a full and updated list of all harmonized European Standards under the CPD and CPR.

Harmonized products standards are available for e.g. radiators and convectors, wastewater products, chimneys, sanitary appliances, gas boilers, smoke ventilators, smoke control dampers and fire dampers.

For many products, especially in the field of ventilation, standards may exist but developed on voluntary basis without a standardization mandate from EU, and thus these standards are not harmonized standards.

Each harmonized product standard shall include Annex ZA, which is the mandatory part of the standard for the CE marking purposes. Annex ZA also transforms all or part of a European product standard into a harmonized European product standard.

Only product standards include Annex ZAs; supporting standards do not. The Annex ZA identifies those clauses of the standard which cover the essential characteristics included in the mandate and considered in the answer to the mandates prepared by the TC and accepted by the Commission. Alternatively, the Annex ZA may refer to similar clauses in another standard.

For products not covered or not fully covered by a harmonized European product standard, a European Technical Assessment (ETA) can be requested by the product manufacturer. More information about ETA can be found at http://www.eota.eu/en-GB/content/what-is-an-eta/18/

#### **National CPR product contact points**

Under the Construction Products Regulation (Art. 10) Member States shall give information on rules and regulations for construction products. These product contact points had to be established by 1 July 2013. A link to the product contact points can be downloaded at the CPR front page. ■