



Associação Nacional dos Industriais de Prefabricação em Betão

**CIRCULAR N.º 081/2014**

**Assunto: Separadores de via prefabricados - Separadores de via betonados "in situ"**

Caros Associados,

Foi sempre posição da ANIPB, em diversas reuniões sobre a normalização e marcação CE, que os separadores de via prefabricados e o elemento separador de via betonado "in situ" deveriam responder às mesmas exigências que os separadores prefabricados têm de obedecer para a marcação CE, à qual são obrigados pela norma harmonizada EN 1317-5.

Tal situação veio agora a ser contemplada – BOA NOTÍCIA!

Juntamos informação obtida através da Associação Congénere espanhola ANDECE.

Apresentamos os nossos cumprimentos e os votos de um bom fim-de-semana.

Prº Presidente da Direção

(José Barros Viegas)

Lisboa, 10 de outubro de 2014

De: Alejandro

Assunto: Marking of in situ made concrete barriers

Dear colleagues

After a long time waiting a clarification about whether in-situ concrete road restraint systems would have or not the CE marking, the European Commission has defined a clear position over this matter: such systems should be considered as a construction product under the CPR, so that CE marking is mandatory.

## 2. Road restraint systems

In addition to the general outline on in-situ products, presented above, the following arguments speak for considering in-situ concrete road restraint systems as construction products under the CPR:

- these systems are manufactured by a mobile production unit on site of the road according to a proprietary design,
  - the performance of the systems affects the safety (basic work requirement 4) of the road (the road being the construction work in this case),
  - the performance of the in-situ concrete road restraint systems can be assessed by applying EN 1317-5,
  - the manufacturer can affix the CE marking on the accompanying documents in line with CPR Art. 9(1) (e.g. on the drawings which are the basis for producing the in-situ road restraint systems),
- 4
- the CE marking can be affixed before placing the product on the market in line with CPR, Art. 9(3). In this case "placing on the market" is the moment when the manufacturer signs a contract with a (road) authority to produce and to install a specific system on a road.

For the above reasons, one should consider that in-situ concrete road restraint systems based on a proprietary design which are placed on the market and which are covered by EN 1317-5 are construction products under the CPR. Therefore the in-situ road restraint systems which as such are commercialised to be installed on the road, should be CE marked on the basis of EN 1317-5 and their manufacturers should issue a DoP (except in case of derogations of Art. 5 CPR).

*I think it is such a good new the fact that all road restraint systems have CE marking as a way to ensure the same level of requirements.*

Kind regards

Alejandro Lopez Vidal

Director Técnico



**Assunto:** FW: Marking of in situ made concrete barriers  
**Anexos:** Road restraint systems - CE marking.pdf

**De:** Alejandro [<mailto:alopez@andece.org>]

**Enviada:** segunda-feira, 6 de Outubro de 2014 14:19

**Para:** 'Poul Erik Hjorth'; 'Martin Clarke'; 'Horst Zimmermann'; 'CERIB : Normalisation'; 'ADAMCZEWSKI, Gregory'; 'BEINISH Hervé'; 'BERNARDEAU Gilles'; 'BRANDWEINER Gernot'; 'DANO Eddy'; 'KUBECZKO Paul'; 'LEBRUN Marc'; 'LORENA Anipb'; 'Mathias TILLMANN'; 'Colin Nessfield'; 'PETERSON Markus'; 'RIMOLDI Alessio'; 'SKJELLE Arne'; 'Stef MAAS'; 'SUIKKA Arto'; 'TOTH Zsuzsa'; 'WAGNER Emmanuel'; 'WELLING Willem'; [sfernandez@andece.org](mailto:sfernandez@andece.org); 'Colin Nessfield'; 'Tony Walker'; 'BEINISH Hervé'; 'CERIB : Normalisation'; [g.adamczewski@il.pw.edu.pl](mailto:g.adamczewski@il.pw.edu.pl); [jose.barros.viegas@vodafone.pt](mailto:jose.barros.viegas@vodafone.pt); 'BERNARDEAU Gilles'; [brandweiner@voeb.co.at](mailto:brandweiner@voeb.co.at); [martin.clarke@britishprecast.org](mailto:martin.clarke@britishprecast.org); [ed@febe.be](mailto:ed@febe.be); [gerry.farrell@irishconcrete.ie](mailto:gerry.farrell@irishconcrete.ie); [tuomo.haara@rakennusteollisuus.fi](mailto:tuomo.haara@rakennusteollisuus.fi); [bart.hendrikx@febe.be](mailto:bart.hendrikx@febe.be); [poh@danskbyggeri.dk](mailto:poh@danskbyggeri.dk); [jkostrzewski@s-p-b.pl](mailto:jkostrzewski@s-p-b.pl); [kubeczko@voeb.co.at](mailto:kubeczko@voeb.co.at); 'LEBRUN Marc'; [anipb@netcabo.pt](mailto:anipb@netcabo.pt); [sma@febe.be](mailto:sma@febe.be); [colin.nessfield@britishprecast.org](mailto:colin.nessfield@britishprecast.org); [markus.peterson@svenskbetong.se](mailto:markus.peterson@svenskbetong.se); [pott@betonverband-nord.de](mailto:pott@betonverband-nord.de); [john-erik.reiersen@bnl.no](mailto:john-erik.reiersen@bnl.no); [ar@bim.eu](mailto:ar@bim.eu); [filipe.saraiva@pavicentro.pt](mailto:filipe.saraiva@pavicentro.pt); [arne.skjelle@bnl.no](mailto:arne.skjelle@bnl.no); [tillmann@fdb-fertigteilbau.de](mailto:tillmann@fdb-fertigteilbau.de); [zt@bim.eu](mailto:zt@bim.eu); 'WAGNER Emmanuel'; [welling@bfbn.nl](mailto:welling@bfbn.nl); [zimmermann@steine-erden-by.de](mailto:zimmermann@steine-erden-by.de)

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In addition to the general outline on in-situ products presented above, the following arguments speak for considering in-situ concrete road restraint systems as construction products under the CPR:

- o these systems are manufactured by a mobile production unit on site of the road according to a proprietary design,
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EUROPEAN COMMISSION  
ENTERPRISE AND INDUSTRY DIRECTORATE-GENERAL

Sustainable Growth and EU 2020  
Sustainable Industrial Policy and Construction

AG 001/03

Brussels, 19 September 2014  
ENTR/B1/LK

*Discussion Paper for the Advisory Group meeting of 3 OCT 2014:*

**Construction Works and Construction Products**  
**in the framework of the CPR**

**Objective:**

The objective of this paper is to help clarify the concepts of - and initiate discussion on construction works and construction products. These are often misinterpreted and bring confusion to stakeholders in the field of construction impacting the uniform implementation of the CPR. This paper will also attempt to analyse a few concrete examples.

**Background and Discussion:**

Setting the foundation for this discussion, Construction Products Regulation (EU) 305/2011 (CPR) and the Interpretative Documents on Essential Requirements No.1-6 developed under the CPD (hereinafter ID) define both terms:

*Construction Works*

"*Construction works* means buildings and civil engineering works." (CPR Art. 1(3))

The IDs also say under clause 3.1: "*Construction works* means everything that is constructed or results from construction operations and is fixed to the ground. This term covers both buildings and civil engineering works."

→ **Interpretation:** Scaffolding would not be a construction works as it is not fixed to the ground.

→ **Examples of construction works** (list from the IDs): dwellings; industrial, commercial, office, health, educational, recreational and agricultural buildings; bridges; roads and highways; railways; pipe networks; stadiums; swimming pools; wharfs; platforms; docks; locks; channels; dams; towers; tanks; tunnels.

### *Construction products*

Under the 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 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.” (CPR Art. 1(1))

The IDs also say under clause 3.2:

“‘Construction product’ refers to products which are produced for incorporation in a permanent manner in the works and placed as such on the market. They include materials, elements and components (single or in a kit) of prefabricated systems or installations which enable the works to meet the essential requirements.”

“Incorporation of a product in a permanent manner in the works means:

- that its removal reduces the performance capabilities of the works (basic requirements); and
- that the dismantling or the replacement of the product are operations which involve construction activities.”

This argument has been reproduced in the ECJ judgement on case C-185/08 (para 52).

→ **Interpretation:** Any product that is not incorporated in a construction works in a permanent manner is not considered a construction product under the CPR. Products may also be covered by other legal acts (e.g. regulations or directives) in addition to the CPR.

→ **Example:** carpets, in comparison to permanently installed fitted carpets (*moquettes*) are not considered construction products under the CPR.

### *Link between Construction Works and Products*

“The basic requirements for construction works [list 1-7 below] set out in Annex I to the CPR shall constitute the basis for the preparation of standardisation mandates and harmonised technical specifications.” (CPR Art. 3(1))

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

The link between basic requirements for construction works (essential requirements under the CPD) and the concept of construction product has been further illustrated in the ECJ judgement on case C-185/08:

- This case concerned inter alia the applicability of the (then) CPD to certain types of anchor devices intended for securing personal protective equipment

- o the CE marking can be affixed before placing the product on the market in line with CPR, Art. 9(3). In this case "placing on the market" is the moment when the manufacturer signs a contract with a (road) authority to produce and to install a specific system on a road.

For the above reasons, one should consider that in-situ concrete road restraint systems based on a proprietary design which are placed on the market and which are covered by EN 1317-5 are construction products under the CPR. Therefore the in-situ road restraint systems which as such are commercialised to be installed on the road, should be CE marked on the basis of EN 1317-5 and their manufacturers should issue a DoP (except in case of derogations of Art. 5 CPR).

### 3. *Wind turbines*

#### Facts:

- o Today, wind turbines are subject to Machinery Directive (MD) 2006/42/EC and must be CE marked under it, including the tower which is an integral part of the system.
- o One of the essential requirements of the MD is the stability of the machine → the obligatory CE marking under the MD also covers the *stability* of the wind turbine. The application of the CPR, in addition to the MD, would not cover additional performance aspects.
- o hEN 50308:2004 (*Wind turbines – protective measures – requirements for design, operation and maintenance*) covers the whole wind turbine system (rotor, generator and tower) and is the basis for the CE marking of wind turbines.
- o The project EN 50308:2013 has not been adopted yet.
- o It seems that (at least the large) wind turbine manufacturers have been doing well without any subjection to the CPR of the tower separately.

Today, wind turbines seem to be placed on the market as a complete, finished system together with the supporting tower. The tower is considered an integral part of the machine (i.e. the wind turbine) and the MD applies. Also, hEN 50308:2004 covers the whole wind turbine system (rotor, generator and tower) and is the basis for its CE marking.

Today, manufacturers can - and some do already use EN 1090 or other standards (e.g. Eurocodes for wind loads) to check the satisfaction of stability requirements under the MD. This does however not imply that the wind turbine system or any part of it are construction products under the CPR. It is thus not EN 1090-1 that provides for the CE marking of neither the wind turbines nor the towers. Consequently, although EN1090-1 contains wind turbines in its scope, they (and the towers) are not construction products under the CPR and therefore the CE marking under the CPR is not possible.

This interpretation also corresponds to the current view on lifts, which contain components potentially usable also for other construction purposes (cf. lift landing doors). Here the Lifts Directive applies to the whole structure including its components, even when commercialised separately. Thus, in this case the CPR is not applied to lift landing doors.

The question for the future remains however what will happen if towers are placed on the market separately from wind turbines (e.g. to be assembled from various components). This is where we would like to solicit Member States' opinion.

#### 4. *Non-structural fences, railings and balustrades*

Non-structural fences, railings and balustrades are permanently fixed to - but usually do not structurally support - a building or civil engineering work. In fact they are fixed on the building. To clarify: Their failure would not mean the building itself would be at risk of collapsing. Therefore, these products are not structural products and are not covered by the mandate under which the EN 1090-1 was elaborated. Only fences and balustrades which have a structural role are covered by the mandate and EN 1090-1. These structural fences and balustrades must be CE marked on the basis of the said harmonised standard.

However, fences and balustrades *do* influence basic requirement 4 for construction works - Safety and accessibility in use:

*The construction works must be designed and built in such a way that they do not present unacceptable risks of accidents or damage in service or in operation such as slipping, falling, [etc.]*

Thus, non-structural fences, railings and balustrades are considered construction products under the CPR but they may not be CE marked on the basis of EN 1090-1 which as clarified above corresponds to the mandate for structural products only.

A harmonised standard for 'Precast concrete products - Elements for fences' already exists (EN 12839:2012), therefore, for the relevant products, the DoP needs to be drawn up and the CE marking affixed under this standard.

#### 5. *Supporting structures for machines or tanks*

A supporting structure supports a machine or tank but generally not the building. It also commonly has no impact on the fulfilment of any other basic work requirements for construction works. Therefore such a supporting structure is not a construction product and the CE marking under the CPR is not possible in this case.

However, if the supporting structure also supports part of the building and is a structural part of it, only in this particular case the supporting structure would affect basic work requirement 1 (mechanical resistance and stability) and would be considered a construction product under the CPR.

to the roofs of buildings (cf. para 40). The ECJ had to answer whether these anchors were considered construction products.

- After addressing the issue of “permanent incorporation” in paras 51 – 53, the Court proceeded to analyse the function of the product. In this context, the Court referred to point 4 of Annex I to the CPD (comprised in point 4 of Annex I to the CPR) and concluded that since these anchor devices were intended to ensure the safety of roof workers, they had a bearing on the safety of these buildings as construction works (cf. paras 54 – 56). The operational *petitum* of the ECJ judgement was:

*“3. Anchor devices, such as those at issue in the main proceedings, which are part of the construction work to which they are secured in order to ensure the safety in use or in the functioning (operation) of the roof of that work are covered by” [the CPD].*

For these reasons, and taking into account the similar setting between construction products and basic requirements for construction works under the CPR, one arrives to the following interpretation:

→ **Interpretation:** Any product that does not have an effect on the fulfilment of at least one basic requirement for construction works is not considered a construction product under the CPR. Inversely, in the ECJ judgement, the anchors at hand *are* securely fixed to the building and linked to safety in use and thus *are* considered construction products under the CPR.

→ **Example:** Fitted book shelves do not have an effect on the performance of the construction works with respect to any basic work requirement and are therefore not construction products under the CPR.

Furthermore, construction products (including kits) may be CE marked, but construction works cannot.

### *Products manufactured in-situ*

Construction practices often foresee the manufacturing of construction products which are supplied together with their design and assembly instructions to be installed as such into construction works (buildings, roads, bridges etc.) and in close vicinity of the construction site or on the site itself (in-situ). Typical examples of such cases are windows, products for facades (lintels, ETICS, in-situ thermal insulation products, sandwich panels, etc.), certain types of road restraint systems, and other bridge, road or building elements commercialised as kits. Usually, when the final assembly takes place at the destination, the transport of the individual components is easier.

One can find several examples of harmonised standards having been approved and cited for such products (e.g. *EN 14064-1:2010 - Thermal insulation products for buildings - In-situ formed loose-fill mineral wool (MW) products*).

The fact that in-situ made products are not a priori excluded from the CPR is also indirectly proven by the additional conditions in-situ made products have to comply with in order to benefit from the derogations foreseen in Article 5(b) of the CPR.



When examining the concept of construction product, the foremost attention should thus not be paid to the location of its manufacturing. More importantly, in order to qualify as a construction product, the item has to be commercialised "for incorporation in construction works". If for example the constructor purchases separately the frame of a window and the insulating glazing unit to make the window himself as part of the construction operations, such a window is not "placed on the market" by anybody and therefore cannot be CE marked under the CPR. However, if he purchases a finished window, either directly from the factory or if it is assembled on site by a subcontractor or he purchases a kit assembled by his own workers, such items are construction products and shall be CE marked (except in case of derogations of Art. 5 CPR). Similar examples can be found for other business models and other kinds of construction services offered.

### **Examination of specific cases:**

#### *1. Anchors*

Several types of anchors have been identified. They can be subdivided into two categories:

1. Removable anchors which a worker may bring along in order to connect them to the building for maintenance purposes, i.e. not intended to be permanently incorporated in the building. These types of anchors fall under the Personal Protective Equipment Directive (PPED).
2. Anchors permanently incorporated into the building without the intention to be removed on a regular basis, usually placed on the market as a kit <sup>(1)</sup>, and having an impact on basic work requirement 4 - Safety and accessibility in use. Such devices are typically part of a building. Such anchors fall under the CPR (c.f. ECJ judgement on case C-185/08).

<sup>(1)</sup> Note: The kit is composed of an anchor base fixed (glued, welded, bolted etc.) to the building permanently, to which the other part necessary to make the anchor complete is bolted (e.g. the anchor device or anchor line).

#### *2. Road restraint systems*

In addition to the general outline on in-situ products presented above, the following arguments speak for considering in-situ concrete road restraint systems as construction products under the CPR:

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