CASE STUDY IN CONSTRUCTION PRODUCT REGULATION

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Construction Product Regulations

- Since July 1\textsuperscript{st} 2013 any construction product placed on the market within the European Economic Area must have a CE mark.
- A Construction product is any product which is produced and placed on the market for incorporation in construction work.
- Only products that have a harmonised standard (hENs) or a European Assessment Document (EAD) are covered under the scope of the CPR.
Harmonised Technical Specifications

Harmonized product standards (hENs)
• Conflicting National standards (e.g. I.S. or BSs) must be withdrawn
  • All hENs have an Annex ZA which demonstrates how to comply with the CPR
  • It lists the regulated product characteristics
  • It references back to specific clauses in the standard
  • It sets out the roles for the manufacturer and the notified body (if required)
• Explains the process for CE Marking
• hENs shall include technical details necessary for the implementation of a system of “assessment and verification of constancy of performance”
Where a manufacturer wants to have a CE marking on their product but the product is not a hENs, they can request a European Technical Assessment (ETA).

What is a ETA?

ETA is the documented assessment of the performance of a construction product in relation to its characteristics in accordance with its technical details necessary for the implementation of the system of “assessment and verification of constancy of performance”
Assessment & verification of constancy of performance

• Systems are defined in Annex V of the EU CPR. They depend on the tasks of the manufacturer and the involvement of the certification body or testing laboratory.
• The following systems are provided for;
  • system 1+ and 1 (involving a product certification body),
  • system 2+ (involving a factory production control certification body),
  • system 3 (involving a testing laboratory)
  • system 4 (purely tasks to be carried out by the manufacturer).
### Assessment & verification of constancy of performance

#### Table 1: Description of AVCP systems and levels

<table>
<thead>
<tr>
<th>Procedures for CE Marking</th>
<th>AVCP level</th>
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<tbody>
<tr>
<td></td>
<td>1+</td>
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<tr>
<td><strong>Manufacturer</strong></td>
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<tr>
<td>Determination of product type</td>
<td></td>
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<tr>
<td>Factory Production Control (FPC)</td>
<td>X</td>
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<tr>
<td>Further testing of samples</td>
<td>X</td>
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<tr>
<td>Declaration of Performance</td>
<td>X</td>
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<tr>
<td>CE Marking</td>
<td>X</td>
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<tr>
<td><strong>Notified Body</strong></td>
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<tr>
<td>Determination of product type</td>
<td>X</td>
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<tr>
<td>Initial Inspection of the Factory Production Control (FPC)</td>
<td>X</td>
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<tr>
<td>Continuous Surveillance, assessment &amp; evaluation of FPC</td>
<td>X</td>
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<tr>
<td>Audit testing of samples</td>
<td>X</td>
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<tr>
<td>Product and Factory Production Control Certification</td>
<td>X</td>
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<tr>
<td>Factory Production control Certification</td>
<td>X</td>
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<tr>
<td>EC Certificate</td>
<td>X</td>
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</table>
Assessment & verification of constancy of performance

- A certificate of constancy of performance of the product (product certification)
- A certificate of constancy of the factory production control (FPC certification)
- Basically both certificates ensure a precise and reliable declaration of performance (DoP) with one assessing the construction product and the other assessing the factory control
Who is responsible for CE marking

• Manufacturers of a product must demonstrate a construction product complies with the requirements of CPR
• Manufacturers must make a Declaration of performance (DoP)
• Importers and/or distributors must ensure construction products bear the CE marking and are accompanied by the correct documentation
Third Country construction products

• If a construction product is *produced* in a third country, the manufacturer according to the EU CPR is some one who:
  
  • a) Is established in the EU, in the EEA or in another state which is bound by contract to the EU CPR, markets the product under their name or trademark and manufactures the product themselves in the third country or has it designed and manufactured in the third country;
  
  • b) Is established in a third country, markets the product under their name or trademark and manufactures the product themselves in the third country or has it designed and manufactured in the third country.
Who is responsible for Market surveillance in Ireland

• A Building Control Authority is Market Surveillance Authority (MSA)
• S.I. 225 of 2013 Regulation
• Regulation 10(1)(a) market surveillance authority shall be… a building control authority in respect of products placed on the market, or as the case may be, made available on the market, within its functional area.
• Regulation 10(2)(a) “a market surveillance authority shall be responsible for market surveillance of construction products placed on the market ….within functional area and shall take such steps as are necessary for this purpose.
Statutory Powers of MSA’s

• What are the powers of a MSA
• Regulations 12 -14 of S.I. 225 of 2013 sets out the powers of a MSA
• What are they…
  • Request/require technical information
  • Take records, photos or information for evaluation, examination or inspection
  • Request/require explanations
  • Take samples for testing
  • Bring persons/equipment on site
  • Respect confidentiality (not public files)
When to take action

• When a product does not meet declared performance

• When a product presents a risk to the fulfilment of the basic requirements

• When a product complies but presents a risk to health and safety

• When a product has no/incorrect CE marking/ DoP
What action can be taken

• Notice in writing - to direct economic operator to take corrective action within a specified period (reg 14(1))
• Notice in writing - to alert economic operator of an imminent request to the Minister (reg 14 (2) and 14(3))
• Minister issues direction in writing to prohibit / restrict / withdraw / recall product
• Minister informs Commission and other Member States
• Minister makes a public notice on the direction
Case Study of CPR

- One off dwelling self build
- Inspect in July 2013
- Traditional build
- Cut roof
- Timber for roof supplied locally
- 90% of roof timbers erected on day of inspection
- Defect in timber rafters, split and warped
Case Study in CPR
Two Hats Over Lap

- Building Control Regulation: compliance with Part D

- Market Surveillance: who put product on the market
Building Regulation Part D

- Demonstrate compliance with Part D of the second schedule to the building regulation 2013
- Timbers were removed from roof within a week of inspection: no longer a building regulation issue
Market Surveillance

- Identify if product is covered under hENs
- Two types of timbers used, solid timber and finger jointed
- Identify what markings are on the timbers
  - Solid timber “0402 Tvarskog C16 M CE”
  - Finger jointed “TVARSKOG SWEDEN GS C16 BS4978 KD S0070 EW/ER”
- Solid timber has a hENs
Economic Operator

- Search where product came from via builder/owner
- Letter sent under regulation 12(3)(a) of S.I. 225 of 2013 to the timber importer (economic operator) requesting certificate of conformity
Response to request

- Response from EO was not certificate of conformity
Case Study CPR

- Lack of knowledge of economic operator
- Letter sent to EO stating information submitted was not what was requested
- Further request for the Cert of Compliance
- EO informed that if information was not given then file would be referred to DOE. Potential risk.
- EO supplies declaration of conformity for the solid timber
Finger Jointed Timber

- However, information on the finger jointing is not consistent with the markings.

- Final request sent asking that the markings on the timbers are correct.

- Timber not a hEN but must comply with Irish standards IS193:2006, IS44:1998 & BS5268-2
30th October 2013

Re: Finger Jointed Timber

A Chara,

1. I am writing in connection with the marketing and use of finger jointed timber for structural purposes in Ireland.

2. Finger jointed timber for use in construction works should be produced in accordance with EN 385:2001 *Finger jointed structural timber – Performance requirements and minimum production requirements*. This standard contains recommendations for the manufacture of finger joints in structural softwood, the method for determining its strength and sets out the tasks of a third party certification body where such a body is required.

3. If finger jointed timber is to be incorporated into construction works, care should be taken that the structure is designed in accordance with the appropriate design standards e.g. Eurocodes, taking into consideration the characteristics of the product e.g. strength class, type of glue, joint efficiency and level of third party involvement with regard to factory production control.

4. Finger jointed timber is a candidate harmonised European product standard (FprEN 15497-Structural finger jointed solid timber - Performance requirements and minimum production requirements) and will therefore, in due course, fall under the scope of Regulation (EU) No 305/2011 of the European Parliament and of the Council laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC (known as the Construction Products Regulation or “CPR”). The CPR requires construction products covered by a harmonised European product standard to have Declarations of Performance drawn up by the manufacturer and to be affixed with the CE marking before they can be placed on the market.

5. In the meantime, it is essential that all stakeholders, building control authorities, distributors, designers, specifiers and builders continue to ensure that the supply, specification and use of all materials in construction works comply with the requirements of Part D of the Building Regulations / Technical Guidance Document D – Materials and
Workmanship (2013) and are ‘proper materials’ within the meaning of the regulations, i.e. they are fit for the use for which they are intended and for the conditions in which they are to be used.

6. Any advice or clarification in relation to the above matters may be e-mailed to buildingstandards@environ.ie or, alternatively, may be addressed in writing to the Architecture / Building Standards Section, Department of the Environment, Community and Local Government, Custom House, Dublin 1.

Yours sincerely,