

Finnish comments on harmonised product standard EN 1916:2002 + AC:2006 *Concrete pipes and fittings, unreinforced, steel fibre and reinforced*

Finnish authorities and experts have found many deficiencies in EN 1916:2002 + AC:2006 *Concrete pipes and fittings, unreinforced, steel fibre and reinforced*. We ask the Commission to start actions so that these deficiencies can be corrected as soon as possible. EN 1916 is under revision in CEN TC 165 but unfortunately the latest draft does not include solutions on these problems. There seems to be similar deficiencies in EN 1917 *Concrete manholes and inspection chambers, unreinforced, steel fibre and reinforced* standard which shall be also corrected.

The deficiencies found are the following:

Foreword:

7th paragraph: It is not possible to open internal market for construction products if the situation as described in the paragraph exists in the harmonised product standard.

"When the text of this European Standard was approved, complete agreement could not be achieved for all requirements in the existing national specifications of CEN members and so it includes only those requirements and associated test methods for which a consensus could be reached. Consensus was achieved on the requirements for quality control."

Standard has to be improved and the above text shall be deleted.

CEN TC has the task to agree on the common European verification methods for all harmonised characteristics given in the mandate based on Member States regulations. It is not acceptable that the standard writes do not develop verification methods for all harmonised characteristics.

According to the information we have received other national marks or approvals are required in addition to the CE-marking. These products are not necessary regulated by the Member States. Use of these products are under rules and conditions imposed by public bodies or private bodies acting as a public undertaking or acting as a public body on the basis of a monopoly. See article 6(1) of the CPD and also article 8(5) of the CPR.

1 Scope

1st paragraph: Nominal sizes of the pipes shall be increased up to 2000 mm.

Table 1:

Table 1 shall be modified as follows:

Characteristic	Exclusions
Materials	Specifications where relevant European Standards have not yet been published.
Concrete	Types and value(s) of minimum content of cement plus any pozzolanic or latent hydraulic addition, according to serviceability conditions. None
Finish	Limitations on size of blemishes.

Geometrical characteristics	<ul style="list-style-type: none"> — nominal sizes; — internal dimensions with tolerances; — tolerances on the wall thickness; — tolerances on the internal barrel length; — deviation from straightness and from squareness of ends.
Joints and joint seals	<ul style="list-style-type: none"> — the choice of method from those listed in 4.3.4.2 for demonstrating the durability of joints; — provisions for interchangeability; — requirements for additional testing where watertightness of the joint assembly is dependent upon an internal pressure.
Crushing strength	Specific strength classes and corresponding minimum crushing loads.
Longitudinal bending moment resistance	None.
Watertightness	None.
Special requirements for steel fibre concrete pipes, reinforced concrete pipes, jacking pipes and pipes with inlet	<ul style="list-style-type: none"> — strength class exceeding class 165 for steel fibre and reinforced concrete units; — value(s) of minimum concrete cover for reinforced concrete units; — limitations on the spacing of reinforcement; — relationship between internal and external reinforcement cages; — requirements for weld testing of reinforcement cages; — tolerances on the external diameter of jacking pipes; — jacking pipe collars of materials other than weldable structural steel plate, stainless steel plate or reinforced plastics.
Marking	<ul style="list-style-type: none"> — symbols or letters for identifying the material of a unit; — symbols or letters for identifying serviceability conditions other than normal conditions as stated in 4.3.8.
<p>NOTE Provisions for the following are also outside the scope of this European Standard:</p> <ul style="list-style-type: none"> - units with nominal sizes greater than DN 2000 or WN/HN 1 200/1 800; - units with a bore other than circular or egg-shaped; - lifting facilities; - resistance to high pressure jetting; - circumstances other than those stated; - any receiving inspection by, or on behalf of, the purchaser. 	

Concrete:

- Concrete and its constituents shall be specified according to EN 206-1.
- > Add to 4.1 Materials and 4.2 Concrete to relevant clauses.

Geometrical characteristics:

- Dimensions and tolerances for internal dimensions of the pipe and for wall thickness shall be covered in this standard. Tolerances are related to structural characteristics. Tolerances can be given e.g. proportional to dimensional ranges.
- > Add to 4.3.3 Geometrical characteristics to relevant clauses
- Tolerances on the wall thickness shall be covered in this standard. Tolerances are related to structural characteristics.
- > Add to 4.3.3 Geometrical characteristics to relevant clauses
- Tolerances for the internal barrel length shall be covered in this standard. Tolerances are related to structural characteristics. Tolerances can be given e.g. proportional to dimensional ranges.
- > Add to 4.3.3 Geometrical characteristics to relevant clauses
- Deviation from straightness and from squareness of ends shall be covered in this standard. These characteristics are directly linked to watertightness and durability of the joints. Deviations are related to structural characteristics.
- > Add to 4.3.3 Geometrical characteristics to relevant clauses

Special requirements for steel fibre reinforced concrete pipes, reinforced concrete pipes, jacking pipes and pipes with inlet:

Rules how to define minimum concrete cover shall be added to this standard

. -> Add to 5.2.2. Concrete cover

- Limitations for spacing of the reinforcement as well as the relationship between internal and external reinforcing cages have to be added to this standard.

-> Add to 5.2.1 Reinforcement

- Tolerances on the external diameter of jacking pipe shall be covered in this standard. Tolerances are related to structural characteristics. Tolerances can be given e.g. proportional to dimensional ranges.

-> Add to 5.3 Jacking pipes to relevant clauses.

4.1 Materials

Table 3:

Reference to EN 206-1 covers most of these items.

Cement

- Cement shall be according to EN 197-1.

Aggregates

- Aggregates shall be according to EN 12620.

Mixing water

- Mixing water shall be according to EN 1008

Additions

There is no need to specify additions in this standard since requirements are given in EN 206-1.

Admixtures

Admixtures shall be according to EN 934-2.

Steel fibres:

- Steel fibres shall be according to EN 14889-1.

Reinforcing steel:

- Reinforcing steel shall be according to national standards valid in the place of use until EN 10080 is available as harmonised product standard.

4.2 Concrete

See the comments after Table 1.

4.3.3 Geometrical characteristics

See the comments after Table 1.

4.3.9 Durability

Durability of the joint material shall be verified and declared in the CE-marking.

5.2.1 Reinforcement

Limitations for spacing of the reinforcement as well as the relationship between internal and external reinforcing cages have to be added to this standard.

5.2.2 Concrete cover

Rules how to define minimum concrete cover shall be added to this standard.

5.3 Jacking pipes

Tolerances on the external diameter of jacking pipe shall be covered in this standard. Tolerances are related to structural characteristics. Tolerances can be given e.g. proportional to dimensional ranges.

7.2.4 Further testing of samples taken at the factory

Note shall be modified as follows and made as normative text in clause 7.2.3 Factory production control, *During factory production control the manufacturer is allowed to choose to carry out air or vacuum testing instead of hydrostatic testing for watertightness when correlation can be established between the reference test method (hydrostatic) and FPC test method (vacuum).*

8 Marking

Item e) shall be deleted. There is no need to mention notified body or any other third party in the normative text since the attestation of conformity system for pipes is system 4.

Annex J Task for a product certification body

This normative Annex shall be deleted. There is no need to mention notified body or any other third party in the normative text since the attestation of conformity system for pipes is system 4.

Annex ZA

Latest version of the model Annex ZA template developed by CEN consultants shall be followed. This includes the text concerning No Performance declared NPD-option which is now missing from the standard.

Table ZA.1

'New proxy characteristic 'Dimensional tolerances of the product' shall be added to the list of essential characteristics. This characteristic is related with the strength characteristics.

ZA.3 CE-marking

The following information shall be added to the information accompanying the CE-marking:

- Nominal size of the product

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- Relevant product dimensions and their tolerances
- Information when the pipe includes integrated seal or seal is supplied separately
- Dimensions and their tolerances relevant to joints
- Concrete cover of the reinforcement

Figure ZA.1

CE-marking examples given in Figure ZA.1 shall be updated since they do not follow the rules given in clause ZA.3.

One example shall be given on the CE-marking when on the label or package including reference to the complete CE-marking given on the commercial documents.

Another example shall be given on CE-marking information on the commercial document including identification of the product. This CE-marking example shall include declared values/classes for all characteristics listed in clause ZA.3.

EN 1917 Concrete manholes and inspection chambers, unreinforced, steel fibre and reinforced

There seems to be similar deficiencies in EN 1917 Concrete manholes and inspection chambers, unreinforced, steel fibre and reinforced standard.

We ask that the Commission will take this item on the agenda of Queries group meeting and further on the agenda of PG and SCC meetings.

With best regards,

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Head of the Finnish Delegation to SCC