

Amendment 2 of answer to the Mandate M131 work programme of CEN/TC 165

Note: *There are currently no other active WIs in the CEN/TC 165 Work Programme for harmonized ENs ("hENs") under Mandate M131 (see end Note).*

Document identification: CEN/TC 165 N 2339

Technical Committee CEN/TC 165 "Wastewater engineering"

Date: 2013-11-11

Documents	Reference Number	Date of issue
Mandate number	M131	1999-02-29
Original answer to the Mandate	CEN letter	2000-05-25 CEN/TC 165 Doc N_893E dated 2000-03-12
Commission's acceptance	ENTR/G-2/EB D(01)	1999-02-09 CEN/TC 165 Doc N_0800
1 st Amendment of the answer to the Mandate	CEN/TC 165 Doc N_2009	2010-12-09 to CCMC
2nd Amendment of the answer to the Mandate	CEN/TC 165 Doc N_2339	2013-11-11

List of changes:

Clause of the original document	Reason for the change (short description)	Supporting information (if relevant)
Clause 0 General comments	Need to update this list.	See new general comments.
Content		

<p>I</p> <p>Vitrified clay pipes and fittings and pipe joints for drains and sewers</p>	<p>EN 295-1:2013, EN 295-4:2013, EN 295-5:2013 and EN 295-7:2013 were revised according to the templates following the provisions required by the CPD 89/106. Due to the replacement of the CPD by the CPR 305/2011 and the new templates provided by CEN for Annex ZA and clauses on AVCP an amendment of EN 295-1:2013, EN 295-4:2013, EN 295-5:2013 and EN 295-7:2013 is necessary to adapt adapt the hEN to the CPR provisions as DoP for example, and provide an example DoP</p> <p>Together with the amendments, the supporting standard EN 295-2:2013, Vitrified clay pipe systems for drains and sewers - Part 2: Evaluation of conformity and sampling will be amended to change the title to Vitrified clay pipe systems for drains and sewers - Part 2: Assessment and verification of constancy of performance –AVCP and to adapt adapt the content to the new template.</p>	<p>CEN/TC 165 Decision 498</p> <p>An amendment will be drafted to the harmonized EN 295-1:2013, EN 295-4:2013, EN 295-5:2013 and EN 295-7:2013</p> <p>UAP procedure proposed for the amendment.</p> <p>For durability, the TC considers that vitrified clay piping systems are products of known and stable stable performance for which experience has been accumulated over a long period of time. The relevant requirements such as durability of crushing strength, durability of tightness and durability of joint assemblies will be added to the statement given in amendment 1 of the answer to M131 (see CEN/TC 165 Document N2009).</p>
<p>VI</p> <p>Flexible couplings, bushes and adaptors</p> <p>(a new clause VI shall be added)</p>	<p>CEN/TC 165 discovered that there is a market need for additional Family 4 products for flexible couplings, bushes and adaptors for use with pipes and fittings in drainage and sewerage systems.</p>	<p>CEN/TC 165 Resolutions 440 and 441/2010</p>

The proposed amendments are shown yellow marked.

MANDATE on "Pipes, tanks and ancillaries not in contact with water intended for human consumption" (M131) – 2nd Amendment to the reply from CEN/TC 165 "Wastewater engineering"

0) General comments from CEN/TC 165 related to the answer to the mandate

0.1) Requests for clarification on the scope of the mandate concerning the products and allocation of work:

None

0.2) Requests for clarification on the intended use:

None

0.3) Information on products under the scope of the mandate which are the subject of other CEN/TCs - Information on the organisation of the work between TCs:

None

0.4) Information on issues concerning the scope and intended uses included in the mandate, for work has yet been started in the TC, or for which the TC cannot provide a standard:

see 1st amendment (CEN/TC 165 document N 2006)

0.5) Specific requests for additions to the mandate of products, materials, intended uses, essential characteristics, etc.:

See the relevant individual items.

0.6) Liaison with other TCs for certain horizontal tests - Information on the organisation of the work between the TCs:

None

0.7) Other issues which the TC considers necessary for the comprehension of the answer to the mandate:

see 1st amendment (CEN/TC 165 document N 2006)

VI FLEXIBLE COUPLINGS, BUSHES AND ADAPTORS

VI.1 Harmonized product standard:

EN 16397-2, Flexible couplings – Part 2: Characteristics and testing for metal banded flexible couplings, adaptors and bushes

EN 16397-2 (WI 00165235)

Availability:

Stage 20.60: available
 Stage 30.99: available
 Stage 45.99: 2013-12

(i) **Title:** Flexible couplings – Part 2: Characteristics and testing for metal banded flexible couplings, adaptors and bushes

(ii) **Scope:**

This European Standard specifies the materials and dimensions for metal banded flexible couplings and adaptors and bushes for use with pipes and fittings in drain and sewer systems, usually operated under gravity and periodic hydraulic surcharge, both above and below ground inside or outside buildings and intended to connect pipes for:

- Repair of damaged pipelines,
- Connecting pipes of different materials and/or diameters,
- Jointing short/cut lengths of pipe,
- Jointing specific pipe systems,
- Jointing post-inserted preformed junctions

The coupling consists of a moulded or extruded rubber sleeve with two stainless steel clamping bands with or without a shear band. The clamping bands enable the sleeve to form a seal with the pipes to be joined. The shear band gives resistance to shear forces. Connections may be made between pipes which cannot be satisfactorily joined by a coupling alone, of dissimilar sizes or material, by using an appropriate bush or bushes with the coupling or by using an appropriate adaptor (see VI.3.9.2).

(iii) **Intended uses:**

Connections with for pipes and fittings in drain and sewer systems, usually operated under gravity and periodic hydraulic surcharge, both above and below ground inside or outside buildings.

(iv) **The essential characteristics according to the mandate which will be dealt with in the above standard will be: (see 0.7.4 b)**

ER	Mandate	The essential characteristics according to the mandate which will be dealt with in the above standard by:
ER 2/1	Reaction to fire	Relevant (see 0.7.1 and VI.3.9.3)
ER (3+4)/1	Crushing strength	Not relevant
ER (3+4)/2	Internal pressure	Not relevant
ER (3+4)/3	Maximum load for admissible deformation	Not relevant
ER (3+4)/4	Dimensional tolerances	– For rubber components: ISO 3302-1, Class M3 – For extruded rubber: ISO 3302-1, Class E3 – For type2 couplings: minimum dimensions
ER (3+4)/5	Tightness: Gas and liquid	Dealt with by: – watertightness, – airtightness.
ER (3+4)/6	Resistance to high temperature (for heating networks)	Not relevant

<u>ER (3+4)/7</u>	<u>Impact resistance (for gas networks)</u>	<u>Not relevant</u>
<u>ER (3+4)/8</u>	<u>Weldability (for gas networks)</u>	<u>Not relevant</u>
<u>ER (3+4)/9</u>	<u>Penetration resistance (for gas networks)</u>	<u>Not relevant</u>
<u>ER (3+4)/10</u>	<u>Electrostatic behaviour (for fuel networks)</u>	<u>Not relevant</u>
<u>ER (3+4)/11</u>	<u>Release of dangerous substance</u>	<u>Covered in the hEN using CEN/BT wording</u>
<u>ER 6/1</u>	<u>Thermal insulation (related to energy conservation)</u>	<u>Not relevant</u>

(v) Durability:

The durability of all characteristics under (iv) is ensured by the product passing the relevant test method for each characteristic as well as the durability characteristic of the material used (see VI.3.6).

(vi) Other aspects:

The harmonized products standard will also contain:

- a reference of the Commission's decision on AoC, as amended
- clauses on assessment and verification of constancy of performance
- AVCP guidance on performance characteristics to be stated in the labelling accompanying the CE marking and on the way of expressing the declared values of these characteristics

VI.2 Supporting standards (see 0.7.2)

The following work items, prENs or ENs and other CEN deliverables, including the Commission Decision on CWT, are referred as test or calculation methods for the determination and classification of the performance of the essential characteristics required by the mandate and indicated in VI.1 (iv) and (v) above. For all the others the relevant test methods are to be given within the standard referred in VI.1:

<u>ER</u>	<u>References</u>	<u>Availability</u>
<u>2/1</u>	<u>Commission Decision 96/603/EC, as amended</u>	<u>Available</u>
	<u>EN 13501-1, Fire classification of construction products and building elements – Part 1: Classification using test data from reaction to fire tests</u>	<u>Available</u>
<u>(3+4)/4</u>	<u>EN 16397-1 (WI 00165208), Flexible couplings - Part 1: Performance requirements</u>	<u>2014-09</u>
	<u>EN ISO 9445:2010, Continuously cold-rolled stainless steel – Tolerances on dimensions and form.</u>	<u>Available</u>
	<u>ISO 3302-1:1996, Rubber – Tolerances for products – Part 1: Dimensional tolerances.</u>	<u>Available</u>
	<u>EN 295-1:2013, Vitrified clay pipe systems for drains and sewers — Part 1: Requirements for pipes, fittings and joints</u>	<u>Available</u>
<u>(3+4)/5</u>	<u>EN 16397-1 (WI 00165208), Flexible couplings - Part 1: Performance requirements</u>	<u>2014-09</u>

VI.3 Additional information, comments and remarks

3.1 Deviations from a performance approach in the product standard:

None

3.2 Requests for clarification on the scope of the mandate concerning the product in VI:

None

3.3 Requests for clarification on the intended uses concerning the product in VI:

None

3.4 Requests for clarification on the essential characteristics for the intended uses included in the mandate concerning the product in VI:

None

3.5 Information on essential characteristics required by the mandate concerning the product in VI:

None

3.6 Explanation of the state of the art concerning durability issues:

Flexible couplings, bushes and adaptors are products of known and stable performance for defined end-use applications with respect to their established durability for which experience has been accumulated over a long period of time. The prescribed framework of requirements and test methods for the mandated performance characteristics will reflect the current state of the art, which is known to facilitate the durability of units during an economically reasonable working life when installed according to their intended use. Consequently there is no need for a further test method for the specific assessment of durability.
Durability of water tightness is ensured by withstanding an internal pressure of 100 kPa for which the test methods are specified in EN 16397-1.

3.7 Information on other Directives under which the product in VI falls, and compliance conditions:

None

3.8 Specific requests for additions to the mandate of materials, intended uses or essential characteristics concerning the product in VI:

None

3.9 Other issues which the TC considers necessary for comprehension of the answer to the mandate:

3.9.1 The standard for the product under VI.1 will supersede the requirements for metal banded flexible couplings and adaptors in the proposed EN 295-4 (see I.2.1), an amendment of which is programmed to precede it.

3.9.2 Standards for sealing materials, used with the products under VI, are prepared by CEN/TC 208.

3.9.3 Components used for couplings, bushes and adaptors are considered not to have a significant impact on the reaction to fire performance because they comprise only a small proportion of the pipe system. The surface which could be exposed to fire is the inside of the pipe and from there the area of a unit which could be exposed to fire via the joint gap between adjacent pipes is very small.

For use below ground, the outside of the unit is buried and therefore not relevant and the class of reaction to fire is the same as the class for the constituent pipe material. For use above ground the class of reaction to fire performance shall be declared. This shall be either Class A1 or F where there are no national regulatory requirements.