

This is a preview of "BS 5911-4:2002+A2:20...". Click here to purchase the full version from the ANSI store.

Concrete pipes and ancillary concrete products —

**Part 4: Specification for unreinforced
and reinforced concrete inspection
chambers (complementary to
BS EN 1917:2002)**

ICS 23.040.50; 91.100.30; 93.030

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British Standard

The preparation of this British Standard was entrusted to Technical Committee B/505, Wastewater engineering, upon which the following bodies were represented:

British Plastics Federation

Chartered Institution of Water and Environmental Management

Clay Pipe Development Association

CPSA — Concrete Pipeline Systems Association

Institute of Cast Metals Engineers

Institution of Civil Engineers

LOTAG — London Technical Advisors Group

METCOM

ODPM represented by BRE

Water UK

This British Standard, having been prepared under the direction of the Engineering Sector Policy and Strategy Committee, was published under the authority of the Standards Policy and Strategy Committee on 18 November 2002

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Amendments issued since publication

The following BSI references relate to the work on this British Standard:

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The several parts of BS 5911 specify requirements for various types of precast concrete pipe and ancillary concrete products such as manholes, inspection chambers and street gullies.

BS 5911-4 has been prepared under the direction of Technical Committee B/505. It is a revision of part of the content of BS 5911-2. BS 5911-4 was prepared to complement, and to be used in conjunction with, BS EN 1917. In order not to create any barrier to trade, products under the scope of this British Standard are specified as conforming to "BS EN 1917 and BS 5911-4 or equivalent".

BS 5911-4:2002+A2:2010 supersedes BS 5911-4:2002+A1:2004, which is withdrawn.

BS EN 1917:2002 does not contain all the requirements for inspection chambers in the existing national specifications of CEN members because complete agreement could not be achieved. BS 5911-4 contains requirements from BS 5911-2 that could not be agreed upon for inclusion in BS EN 1917.

A1 The requirements for cementitious content and cement groupings have been aligned with the provisions of BS 8500-1:2006 and BRE Special Digest 1 [1] insofar as they relate to precast concrete pipeline systems. **A1**

The start and finish of text introduced or altered by Amendments No. 1 and No. 2 is indicated in the text by tags **A1** **A1** and **A2** **A2**. Minor editorial changes are not tagged.

Amendment A2 introduces the following principal changes:

- all references to other standards have been updated;
- Table 1 has been removed, and Table 2 and Table 3 have been replaced to align with BS 8500;
- Figure 1 has been updated;
- the straightness test (**D.3**) has been removed.

For an enquiry or order to be fully understood it is essential that the manufacturer be given the information set out in Annex A of this part of BS 5911.

Product certification. Users of this part of BS 5911 are advised to consider the desirability of third party certification of product conformity with this British Standard. Appropriate conformity attestation arrangements are described in BS EN 1917. Users seeking assistance in identifying appropriate conformity assessment bodies or schemes may ask BSI to forward their enquiries to the relevant association.

BSI Committee B/505, whose constitution is shown in this British Standard, takes collective responsibility for its preparation under the authority of the Standards Policy and Strategy Committee. The Committee wishes to acknowledge the contribution of the following organizations:

The British Precast Concrete Federation;

The Concrete Society;

The Institution of Highways and Transportation.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 13 and a back cover.

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1 Scope

BS EN 1917 specifies requirements and describes test methods for precast concrete inspection chambers, designed to be used for inverts not exceeding 2 metres deep, of circular, rectangular (with or without chamfered or rounded corners) or elliptical cross-section, unreinforced, steel fibre and reinforced, with nominal sizes or nominal lengths not exceeding DN 1250 or LN 1250, respectively. The intended use of BS EN 1917 is to permit access to, and to allow aeration of, drain or sewer systems for the conveyance of sewage, rainwater and surface water under gravity or occasionally at low head of pressure, mainly installed in areas subjected to vehicular and/or pedestrian traffic.

This part of BS 5911 specifies complementary requirements to those in BS EN 1917 for unreinforced and reinforced concrete inspection chambers of circular and rectangular cross-section (with or without chamfered or rounded corners), as provided for in that European Standard. This part also specifies requirements for inspection chamber units less than or equal to DN 1000 or LN/WN 1000/675 not exceeding 1 metre depth to invert. The inspection chambers are mainly intended for installation in areas outside the highway and where vehicle loading is restricted.

The scope of BS EN 1917 includes steel fibre concrete inspection chambers, which are not manufactured in the United Kingdom although this was at one time contemplated. Therefore, they have been excluded from this part of BS 5911.

The scope of BS 5911-2 originally included inspection chamber covers. However, these have been excluded from this part of BS 5911 because they now come under the scope of BS EN 124.

^{A2} BS EN 752 ^{A2}, BS EN 1295-1 and BS EN 1610 deal with the planning, design, installation and testing of drains and sewers.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

^{A2} Text deleted ^{A2}

^{A1} Text deleted ^{A1}

BS 3123, *Specification for spring calipers and spring dividers.*

^{A2} Text deleted ^{A2}

BS 4027, *Specification for sulfate-resisting Portland cement.*

BS 4035, *Specification for linear measuring instruments for use on building and civil engineering constructional works — Steel measuring tapes, steel bands and retractable steel pocket rules.*

^{A2} BS 4449, *Steel for the reinforcement of concrete — Weldable reinforcing steel — Bar, coil and decoiled product — Specification.* ^{A2}

^{A2} BS 4482, *Steel wire for the reinforcement of concrete products — Specification.* ^{A2}

^{A2} BS 4483, *Steel fabric for the reinforcement of concrete — Specification.* ^{A2}

BS 4484-1, *Specification for measuring instruments for constructional works — Part 1: Metric graduation and figuring of instruments for linear measurement.*

^{A2} BS 7979, *Specification for limestone fines for use with Portland cement.* ^{A2}

^{A2} BS 8500-2:2006, *Concrete — Complementary British Standard to BS EN 206-1 — Part 2: Specification for constituent materials and concrete.* ^{A2}

^{A2} Text deleted ^{A2}

BS EN 197-1, *Cement — Part 1: Composition, specifications and conformity criteria for common cements.*

^{A2} BS EN 197-4, *Cement — Part 4: Composition, specifications and conformity criteria for low early strength blastfurnace cements.* ^{A2}

^{A2} BS EN 450-1, *Fly ash for concrete — Part 1: Definition, specifications and conformity criteria.* ^{A2}

BS EN 934-2, *Admixtures for concrete, mortar and grout — Part 2: Concrete admixtures — Definitions, requirements, conformity, marking and labelling.*

^{A1} BS EN 1008, *Mixing water for concrete — Specification for sampling, testing and assessing the suitability of water, including water recovered from processes in the concrete industry, as mixing water for concrete.* ^{A1}

BS EN 1917:2002, *Concrete manholes and inspection chambers, unreinforced, steel fibre and reinforced.*