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**BS 5911-1:2021**



**BSI Standards Publication**

## **Concrete pipes and ancillary concrete**

Part 1: Unreinforced and reinforced concrete pipes (including jacking pipes) and fittings with flexible joints (complementary to BS EN 1916:2002) – Specification

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Published by BSI Standards Limited 2021

ISBN 978 0 539 16553 1

ICS 23.040.50; 91.100.30

The following BSI references relate to the work on this document:

Committee reference B/505

Draft for comment 21/30412760 DC

**Amendments/corrigenda issued since publication**

Date

Text affected

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## Foreword

### Publishing information

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### Supersession

This part of [BS 5911](#) supersedes BS 5911-1:2002+A2:2010, which is withdrawn.

### Relationship with other publications

[BS 5911](#) is a series of standards for concrete drainage products.

### Information about this document

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### Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is "shall".

*Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.*

Where words have alternative spellings, the preferred spelling of the Shorter Oxford English Dictionary is used (e.g. "organization" rather than "organisation").

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## 1 Scope

BS EN 1916 specifies requirements and describes test methods for precast concrete pipes and fittings, unreinforced, steel fibre and reinforced, with flexible joints and nominal sizes not exceeding DN 1750 or WN/HN 1200/1800, for which the main intended use is the conveyance of sewage, rainwater and surface water under gravity or occasionally at low head of pressure in pipelines that are generally buried. The scope includes pipes (collectively referred to as "jacking pipes") intended to be installed by pipe jacking, microtunnelling or other trenchless technology.

This part of [BS 5911](#) specifies complementary requirements to those specified in BS EN 1916 for unreinforced and reinforced concrete pipes and fittings, with nominal sizes not exceeding DN 1500 for circular pipes with base and WN/HN 800/1200 for egg-shaped pipes. Requirements are also specified for reinforced concrete circular trench and jacking pipes with nominal sizes greater than DN 1750, but not exceeding DN 3000.

This part of [BS 5911](#) also covers circular pipes with base and egg-shaped pipes.

Steel fibre concrete jacking pipes are not manufactured in the United Kingdom and so are excluded from this part of [BS 5911](#).

*NOTE 1 The planning, design, installation and testing of drains and sewers are covered by BS EN 752, BS EN 1295-1 and BS EN 1610.*

*NOTE 2 The Pipe Jacking Association's "Guide to best practice for the installation of pipe jacks and microtunnels" [1] is a source of advice on the use of jacking pipes.*

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes provisions of this document.<sup>1)</sup> For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

[BS 3123](#), *Specification for spring calipers and spring dividers*

[BS 4449](#), *Steel for the reinforcement of concrete – Weldable reinforcing steel – Bar, coil and decoiled product – Specification*

[BS 4482](#), *Steel wire for the reinforcement of concrete products – Specification*

[BS 4483](#), *Steel fabric for the reinforcement of concrete – Specification*

[BS 4484-1](#), *Specification for measuring instruments for constructional works – Part 1: Metric graduation and figuring of instruments for linear measurement*

[BS 5204-1](#), *Specification for straightedges – Part 1: Cast iron straightedges (bow shaped and I-section)*

[BS 5204-2](#), *Specification for straightedges – Part 2: Steel or granite straightedges of rectangular section*

BS 8500-1:2015+A2:2019, *Concrete – Complementary British Standard to BS EN 206 – Part 1: Method of specifying and guidance for the specifier*

[BS 9295:2020](#), *Guide to the structural design of buried pipes*

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

BS EN 450-1, *Fly ash for concrete – Part 1: Definition, specifications and conformity criteria*

BS EN 681-1, *Elastomeric seals – Material requirements for pipe joint seals used in water and drainage applications – Part 1: Vulcanized rubber*

<sup>1)</sup> Documents that are referred to solely in an informative manner are listed in the Bibliography.