

BS 4660:2022



BSI Standards Publication

**Thermoplastics ancillary fittings of  
nominal sizes 110 and 160 for below  
ground gravity drainage and sewerage —  
Specification**

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# Contents

	<b>Page</b>
<b>Foreword</b>	<b>ii</b>
Introduction	1
1 Scope	1
2 Normative references	1
3 Terms, definitions, symbols and abbreviations	3
<i>Figure 1 — Example of an adaptor</i>	3
<i>Figure 2 — Examples of adjustable fittings</i>	4
<i>Figure 3 — Examples of gullies</i>	5
<i>Figure 4 — Typical channel fittings</i>	7
4 Materials	8
4.1 General	8
4.2 Additional requirements for exposed fittings	8
5 General characteristics	8
5.1 Appearance	8
5.2 Colour	9
5.3 Adhesives	9
5.4 Elastomeric joint rings	9
6 Geometrical characteristics	9
6.1 General	9
6.2 Dimensions	9
7 Mechanical characteristics	10
<i>Table 1 — Mechanical characteristics of ancillary fittings</i>	10
8 Physical characteristics	10
8.1 Injection moulded ancillary fittings	10
8.2 Fabricated ancillary fittings	10
<i>Table 2 — Physical characteristics of fabricated ancillary fittings</i>	11
9 Performance characteristics	11
9.1 General	11
<i>Table 3 — Fitness for purpose requirements for ancillary fittings</i>	11
9.2 Classification by area of installation	12
10 Marking and additional documentation	12
10.1 General	12
<i>Table 4 — Minimum required marking of ancillary fittings</i>	13
10.2 Additional documentation	13
<b>Annex A</b> (informative) <b>Guidance on quality control testing</b>	<b>14</b>
<i>Table A.1 — Applicability of requirements and test methods</i>	14
<b>Annex B</b> (normative) <b>Method of test for the impact resistance of gully grates and covers</b>	<b>15</b>
<b>Annex C</b> (normative) <b>Method of test for water seal</b>	<b>16</b>
<b>Bibliography</b>	<b>18</b>

## Summary of pages

This document comprises a front cover, an inside front cover, pages I to IV, pages 1 to 18, an inside back cover and a back cover.

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# Foreword

## Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 30 April 2022. It was prepared by Subcommittee PRI/88/1, *Plastics piping for non-pressure applications*, under the authority of Technical Committee PRI/88, *Plastics piping systems*. A list of organizations represented on these committees can be obtained on request to the committee manager.

## Supersession

This British Standard supersedes [BS 4660:2000](#), which is withdrawn.

## Information about this document

This is a full revision of the standard, and introduces the following principal changes:

- the scope has been updated to clarify the intended use, to include additional products and to delete products that are covered by other European standards;
- relevant clauses have been updated to specify which materials may be used for the manufacture of products;
- test method references in the tables and all the annexes in this document have been updated; and
- references to relevant European standards are included and requirements specified under appropriate clause headings.

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**Product certification/inspection/testing.** Users of this British Standard are advised to consider the desirability of third-party certification/inspection/testing of product conformity with this British Standard. Appropriate conformity attestation arrangements are described in BS EN ISO/IEC 17065. Users seeking assistance in identifying appropriate conformity assessment bodies or schemes may ask BSI to forward their enquiries to the relevant association.

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

Particular attention is drawn to the following:

- PD CEN/TS 1046, BS EN 1610 and BS EN 752, which provide guidance and requirements on storage, handling and installation.

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## Introduction

Ancillary fittings can be manufactured by various methods, e.g. injection moulding, rotational moulding or fabricated from components made to other standards.

*NOTE* Ancillary fittings can be subject to national safety regulations and/or local provisions.

Guidance on quality control testing is given in [Annex A](#).

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## 1 Scope

This British Standard specifies requirements for ancillary fittings of nominal sizes 110 and 160 installed underground in non-pressure drainage and sewerage systems, manufactured from unplasticized poly(vinyl chloride) (PVC-U), polypropylene (PP), polypropylene with mineral modifier (PP-MD) or polyethylene (PE) and intended for use for:

- a) non-pressure underground drainage and sewerage outside the building structure (application area code “U”); and
- b) non-pressure underground drainage and sewerage both buried in ground within the building structure (application area code “D”) and outside the building structure.

*NOTE* This is reflected in the marking of products by “U” and “UD”.

This British Standard also covers the jointing of the ancillary fittings to the pipework system.

The ancillary fittings, which are designed to be buried in the ground, can be installed to a maximum depth of 6.0 m from the ground level (with the exception of gullies and channel fittings) and are intended for use in pedestrian and vehicular trafficked areas.

The ancillary fittings covered in this British Standard are:

- 1) adaptors;
- 2) adjustable fittings;
- 3) gullies (only intended for installation at ground level); and
- 4) channel fittings (only intended for installation within a manhole or inspection chamber).

*NOTE 1* Attention is drawn to the ancillary fittings (access fittings and rodding points) specified in BS EN 13598-1.

*NOTE 2* Pedestrian and vehicular trafficked areas are as defined in BS EN 124-1 and BS EN 1253-1.

Ancillary fittings conforming to this British Standard also conform to the general requirements in BS EN 476.

*NOTE 3* Products conforming to this British Standard can be used with pipes, fittings and other components conforming to any of the plastics product standards listed in [Clause 2](#), providing their dimensions are compatible.

*NOTE 4* Products conforming to this British Standard can be installed in underground applications without additional static calculation.

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## 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 3412](#), *Methods of specifying general purpose polyethylene materials for moulding and extrusion*

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