



**BSI Standards Publication**

# **Plastics piping systems for non-pressure underground drainage and sewerage – Unplasticized poly(vinyl chloride) (PVC-U), polypropylene (PP) and polyethylene (PE)**

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Part 1: Specifications for ancillary fittings and shallow chambers

This is a preview of "BS EN 13598-1:2020". [Click here to purchase the full version from the ANSI store.](#)

## National foreword

This British Standard is the UK implementation of EN 13598-1:2020. It supersedes BS EN 13598-1:2010, which is withdrawn. It also partially supersedes BS 4660:2000.

The UK participation in its preparation was entrusted to Technical Committee PRI/88/1, Plastics piping for non-pressure applications.

A list of organizations represented on this committee can be obtained on request to its committee manager.

The responsible UK committee gives the following advice concerning the scope and contents of EN 13598-1:2020.

- **Main changes from previous version:** Attention is drawn to the European foreword, which lists the main changes from EN 13598-1:2010.
- **Intended use:** Attention is drawn to the intended use detailed in the scope of this standard. Whereas BS EN 13598-1:2010 covered all inspection chambers for use in shallow non-roadway applications (to a maximum depth of 1.25 m), the scope has now changed to cover the use of shallow chambers on private drains which are located in pedestrian areas above the ground water table to a maximum depth of 2.0 m from ground level to the invert of the main channel.
- **Guidance on use and installation:** Clause NA.6.4 of the National Annex to BS EN 752:2017 gives the UK guidance on access to drains and sewers, especially in respect of provision and spacing of access, clear opening size at the surface and dimensions for operational needs. Attention is also drawn to Building Regulations when applying this standard.
- **Recycled materials:** The use of recycled or reprocessed materials is encouraged in the UK. However, their use should be strictly in accordance with this standard.

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

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

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### Amendments/corrigenda issued since publication

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## Plastics piping systems for non-pressure underground drainage and sewerage - Unplasticized poly(vinyl chloride) (PVC-U), polypropylene (PP) and polyethylene (PE) - Part 1: Specifications for ancillary fittings and shallow chambers

Systèmes de canalisations en plastique pour les branchements et les collecteurs d'assainissement enterrés sans pression - Poly(chlorure de vinyle) non plastifié (PVC-U), polypropylène (PP) et polyéthylène (PE) - Partie 1: Spécifications relatives aux raccords auxiliaires et aux boîtes d'inspection de branchement peu profondes

Kunststoff-Rohrleitungssysteme für erdverlegte drucklose Abwasserkanäle und -leitungen - Weichmacherfreies Polyvinylchlorid (PVC-U), Polypropylen (PP) und Polyethylen (PE) - Teil 1: Anforderungen an Schächte und Zubehörteile und flache Kammern

This European Standard was approved by CEN on 14 March 2020.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

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## European foreword

This document (EN 13598-1:2020) has been prepared by Technical Committee CEN/TC 155 "Plastics piping systems and ducting systems", the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2020, and conflicting national standards shall be withdrawn at the latest by November 2020.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 13598-1:2010.

Compared to the previous version, the main changes are listed below:

- 1) test methods have been updated to the latest EN ISO standards where applicable;
- 2) the scope has been amended to clarify the products covered in this part and avoid confusion with the scope of part 2;
- 3) terms and definitions have been updated and also now include the product diagrams;
- 4) dimensional requirements have been updated and clarified;
- 5) the mechanical characteristics tables have been updated;
- 6) Annex A has been updated with requirements for the utilization of non-virgin materials for shallow chambers.

This document is part of a System Standard for plastics piping systems of a particular material for a specified application. There are a number of such System Standards.

System Standards are based on the results of the work being undertaken in ISO/TC 138 "*Plastics pipes, fittings and valves for the transport of fluids*", which is a Technical Committee of the International Organization for Standardization (ISO).

They are supported by separate standards on test methods, to which references are made throughout the System Standard.

The System Standards are consistent with general standards on functional requirements and on recommended practice for installation.

EN 13598 consists of the following parts under the general title *Plastics piping systems for non-pressure underground drainage and sewerage — Unplasticized poly(vinyl chloride) (PVC-U), polypropylene (PP) and polyethylene (PE)*:

- *Part 1: Specifications for ancillary fittings and shallow chambers* (this document);
- *Part 2: Specifications for manholes and inspection chambers* (under revision);
- *Part 3: Guidance for assessment of conformity* (CEN/TS under revision).

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According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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## 1 Scope

This document specifies the definitions and requirements for ancillary fittings and shallow chambers installed underground in non-pressure drainage and sewerage systems and manufactured from unplasticized poly(vinyl chloride) (PVC-U), polypropylene (PP), polypropylene with mineral modifier (PP-MD) or polyethylene (PE) intended for use for:

- non-pressure underground drainage and sewerage outside the building structure (application area code "U"), and
- non-pressure underground drainage and sewerage for both buried in ground within the building structure (application area code "D") and outside the building structure.

This is reflected in the marking of products by "U" and "UD".

It also covers the jointing of the ancillary fittings and shallow chambers to the pipework system.

The ancillary fittings covered by this standard are the following:

- sealed access fittings;
- rodding point covers;
- rodding tees;
- mechanical saddles.

Ancillary fittings according to this document are intended for use in pedestrian areas, except rodding tees and mechanical saddles which can also be used in vehicular trafficked areas.

NOTE 1 Pedestrian areas are as defined in EN 124-1.

Ancillary fittings can be installed to a maximum depth of 6,0 m from ground level, with the exception of rodding point covers.

Shallow chambers according to this document are intended for use in private drains located in pedestrian areas above the ground water table, to a maximum depth of 2,0 m from ground level to the invert of the main channel. This document covers shallow chambers with flow profile bases, and their joints to the piping system.

NOTE 2 Manholes and inspection chambers are specified in EN 13598-2 [1].

Ancillary fittings and shallow chambers complying with this document also comply with the general requirements given in EN 476.

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

NOTE 3 Products complying with this document can be used with pipes, fittings and other components conforming to any of the plastics products standards listed in Clause 2, providing their dimensions are compatible.

NOTE 4 Products complying with this document can be installed in underground applications without additional static calculation.

NOTE 5 Ancillary fittings and shallow chambers can be subject to national safety regulations and / or local provisions.