



National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 13598-1:2003

ICS 93.030

**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
INCLUDING SHALLOW INSPECTION
CHAMBERS**

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English version

**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 including shallow inspection
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 pour raccords auxiliaires y compris les
chambres d'inspection 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

This European Standard was approved by CEN on 3 March 2003.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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EN 13598-1:2003 (E)

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Foreword

This document (*EN 13598-1:2003*) has been prepared by Technical Committee CEN/TC 155 "*Plastics piping systems and ducting systems*", the secretariat of which is held by NEN.

This draft standard is a supplementary standard for System Standards 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 Organisation for Standardisation (ISO).

They are supported by separate standards on test methods and by European Standards for thermoplastic underground drainage and sewerage systems, 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.

This European Standard consists of the following parts under the general title "*Plastics piping systems — Thermoplastic ancillary fittings for non-pressure underground drainage and sewerage — Unplasticized poly(vinyl chloride) (PVC-U), polypropylene (PP) and polyethylene (PE)*":

- *Part 1: Specification for ancillary fittings including shallow inspection chambers (the present standard)*
- *Part 2: Specification for thermoplastics manholes and deep inspection chambers (a specification is under preparation)*
- *Part 3: Guidance for the assessment of conformity (a Technical Specification is under preparation)*

This European Standard includes a bibliography.

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 March 2004, and conflicting national standards shall be withdrawn at the latest by March 2004.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

EN 13598-1:2003 (E)

1 Scope

This European Standard specifies the definitions and requirements for ancillary fittings of unplasticized poly(vinyl chloride) (PVC-U), polypropylene (PP), and polyethylene (PE) intended to be used in non-pressure underground drainage and sewerage systems, conforming to EN 476:

- a) outside the building structure (application area code "U"), reflected in the marking of products by "U", and
- b) both buried in ground within the building structure (application area code "D") and outside the building structure (application area code "U"), reflected in the marking of products by "UD".

It also specifies the test parameters for the test methods referred in this standard.

The ancillary fittings covered by this standard are the following:

- sealed access fittings;
- rodding point covers;
- rodding tees;
- mechanical saddles;
- inspection chambers for shallow non- roadway applications to a maximum depth of 1,25 m.

NOTE 1 Inspection chambers as defined in 6.1.3 of EN 476:1997 have a riser with a DN/ID less than 800 mm.

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

The jointing can be with:

- elastomeric ring seal joint;
- cemented joint for PVC-U;
- welded joint for PP and PE.

NOTE 2 Pipes, fittings and other components conforming to any of the plastics products standards listed in clause 2 can be used with ancillary fittings conforming to this standard, provided they conform to the requirements for joint dimensions given in clause 6 and to the requirements of Table 5.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 295-3:1991, *Vitrified clay pipes and fittings and pipe joints for drains and sewers — Part 3: Test methods.*

EN 476:1997, *General requirements for components used in discharge pipes, drains and sewers for gravity systems.*

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

EN 681-2, *Elastomeric seals — Material requirements for pipe joint seals used in water and drainage applications — Part 2: Thermoplastics elastomers.*

EN 681-3, *Elastomeric seals — Material requirements for pipe joint seals used in water and drainage applications — Part 3: Cellular materials of vulcanized rubber.*

EN 681-4, *Elastomeric seals — Material requirements for pipe joint seals used in water and drainage applications — Part 4: Cast polyurethane sealing elements.*

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