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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  
including shallow inspection  
chambers**

ICS 93.030



**Mauritius Standards Bureau  
Moka**

Gr 11

This national standard is the identical implementation of EN 13598-1:2010 and is adopted with the permission of CEN, Avenue Marnix 17, B-1000 Brussels, Belgium.



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*Mauritius Standards Bureau  
Villa Road  
Moka  
Mauritius*

*Telephone           + (230) 433 3648  
Fax                   + (230) 433 5051/ 433 5150  
E-mail               msb@intnet.mu*

## National foreword

This Mauritian Standard is identical with the European Standard **EN 13598-1:2010**, *Plastics piping systems for non-pressure underground drainage and sewerage – Unplasticized poly(vinylchloride) (PVC-U), polypropylene (PP), and polyethylene (PE) - Part 1: Specifications for ancillary fittings including shallow inspection chambers*. It was adopted by the Mauritius Standards Bureau on the recommendation of the **Building and Construction Standards Committee** and approval of the **Standards Council** on 25 November 2011. It was notified in the Government Gazette on **24 December 2011\***.

This edition supersedes MS EN 13598-1:2003.

The main changes compared to the previous edition are:

- a) the opening of the standard to allow the controlled use of external reclaim materials (Annex A);
- b) increased testing detail for mechanical saddles (Annex B).

For the purposes of this standard the following changes should be made:

- (i) the words “European Standard” should be replaced by “Mauritian Standard”,
- (ii) the “decimal comma” to be replaced by “decimal point”.

This 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(vinylchloride) (PVC-U), polypropylene (PP) and polyethylene(PE)*”

- *Part 1: Specification for ancillary fittings including shallow inspection chambers*
- *Part 2: Specifications for thermoplastics manholes and inspection chambers in traffic areas and deep underground installations*

\* General Notice No **3033** of 2011.

PREVIEW

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 boîtes  
de branchement

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 23 October 2010.

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.

CEN members are the national standards bodies of 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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

## Contents

Page

Foreword.....	3
<b>1 Scope .....</b>	<b>4</b>
<b>2 Normative references .....</b>	<b>4</b>
<b>3 Terms, definitions, symbols and abbreviations .....</b>	<b>6</b>
<b>3.1 Terms and definitions .....</b>	<b>6</b>
<b>3.2 Abbreviations .....</b>	<b>7</b>
<b>4 Material .....</b>	<b>7</b>
<b>4.1 General.....</b>	<b>7</b>
<b>4.2 Sealing ring retaining components.....</b>	<b>8</b>
<b>4.3 Sealing rings .....</b>	<b>8</b>
<b>4.4 Adhesives for PVC-U .....</b>	<b>8</b>
<b>5 General characteristics .....</b>	<b>8</b>
<b>5.1 General.....</b>	<b>8</b>
<b>5.2 Assemblies .....</b>	<b>8</b>
<b>5.3 Colour .....</b>	<b>8</b>
<b>6 Geometrical characteristics.....</b>	<b>8</b>
<b>6.1 General.....</b>	<b>8</b>
<b>6.2 Dimensions.....</b>	<b>9</b>
<b>6.3 Additional requirements .....</b>	<b>9</b>
<b>7 Types of ancillary fittings .....</b>	<b>10</b>
<b>8 Physical characteristics.....</b>	<b>12</b>
<b>9 Mechanical characteristics .....</b>	<b>13</b>
<b>10 Performance requirements .....</b>	<b>15</b>
<b>11 Marking .....</b>	<b>16</b>
<b>11.1 General.....</b>	<b>16</b>
<b>11.2 Minimum required marking, ancillary fittings.....</b>	<b>16</b>
<b>11.3 Additional marking .....</b>	<b>17</b>
<b>Annex A (normative) Reformulated material characteristics used for shallow inspection chambers .....</b>	<b>18</b>
<b>Annex B (normative) Testing sequence and techniques to be used when testing saddles .....</b>	<b>19</b>
<b>B.1 General .....</b>	<b>19</b>
<b>B.2 Test equipment.....</b>	<b>19</b>
<b>B.3 Procedures.....</b>	<b>20</b>
<b>B.3.1 Resistance to vertical load – Table 3 – pipe stop test.....</b>	<b>20</b>
<b>B.3.2 Mechanical strength – Table 3.....</b>	<b>20</b>
<b>B.3.3 Tightness under deformation – Table 6.....</b>	<b>21</b>
<b>Bibliography .....</b>	<b>23</b>

## Foreword

This document (EN 13598-1:2010) 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 June 2011, and conflicting national standards shall be withdrawn at the latest by June 2011.

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

This document supersedes EN 13598-1:2003.

The main changes compared to the previous edition are:

- a) the opening of the standard to allow the controlled use of external reclaim materials (Annex A);
- b) increased testing detail for mechanical saddles (Annex B).

This European 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 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* (this standard);
- *Part 2: Specifications for manholes and inspection chambers in traffic areas and deep underground installations*;
- *Part 3: Guidance for the assessment of conformity* (a Technical Specification is under preparation).

This document includes a bibliography.

According to the CEN/CENELEC Internal Regulations, the national standards organizations 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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

## 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.

NOTE 2 Deep inspection chambers and manholes for application area U are specified in Part 2 of this standard.

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 3 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 6.

## 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.

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 — Materials requirements for pipe joint seals used in water and drainage applications — Part 1: Vulcanized rubber*