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

**Part 2: Specifications for pipes and fittings with smooth internal and external surface and the system, Type A**

ICS 23.040.20; 93.030



**Mauritius Standards Bureau  
Moka**

Gr 17

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## National foreword

This Mauritian Standard is identical with the European Standard **EN 13476-2:2007(E)**, *Plastics piping systems for non-pressure underground drainage and sewerage – Structured-wall piping systems of unplasticized poly(vinyl chloride)(PVC-U), polypropylene (PP) and polyethylene (PE) – Specifications for pipes and fittings with smooth internal and external surface and the system, Type A*. It was adopted in 2009 by the Mauritius Standards Bureau on the recommendation of the **Building and Construction Standards Committee** through its Subcommittee on **Plastics Pipes and Fittings**. It was approved by the Standards Council on 13 November 2009 and was notified in the Government Gazette on 29 January 2010\*.

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' should be replaced by the 'decimal point'.

The following Mauritian Standards are identical to the European Standards, which are referenced in the adopted standard:

<b>European Standards</b>	<b>Corresponding Mauritian Standards</b>
<b>EN 13476-1,</b>	<b>MS 13476-1:2007</b> , <i>Plastics piping systems for non-pressure underground drainage and sewerage – Structured-wall piping systems of unplasticized poly(vinyl chloride)(PVC-U), polypropylene (PP) and polyethylene (PE) – Part 1: General requirements and performance characteristics</i>
<b>EN 13476-3,</b>	<b>MS 13476-3:2007</b> , <i>Plastics piping systems for non-pressure underground drainage and sewerage – Structured-wall piping systems of unplasticized poly(vinyl chloride)(PVC-U), polypropylene (PP) and polyethylene (PE) – Part 2: Specifications for pipes and fittings with smooth internal and profiled external surface and the system, Type B</i>

\* **General Notice No. 222 of 2010.**

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PREVIEW

## Foreword

This document (EN 13476-2:2007) 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 2007, and conflicting national standards shall be withdrawn at the latest by November 2007.

This standard is a part of a System Standard for plastics piping systems of particular materials 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 13476 consists of the following Parts under the general title Plastics piping systems for non-pressure underground drainage and sewerage — Structured-wall piping systems of unplasticized poly(vinyl chloride) (PVC-U), polypropylene (PP) and polyethylene (PE)

- *Part 1: General requirements and performance characteristics;*
- *Part 2: Specifications for pipes and fittings with smooth internal and external surface and the system, Type A (this standard);*
- *Part 3: Specifications for pipes and fittings with a smooth internal surface and profiled external surface and the system, Type B;*
- *Part 4: Assessment of conformity (CEN/TS);*
- *Part 5: Guidance for installation (CEN/TS).<sup>1</sup>*

For pipes and fittings which have conformed to the relevant national standard before May 2007, as shown by the manufacturer or by a certification body, the national standard may continue to be applied until May 2009.

National standards specifically for pipes and fittings for the transport of surface water are not considered to be conflicting with this standard and may thus be allowed to coexist.

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, 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.

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<sup>1</sup> The feasibility of this project is under study.

## **Introduction**

This standard provides optional choices for impact resistance (see Annex G and Annex H) and ring flexibility, see Annex I.

As appropriate, the individual countries may select between those options in their national forewords.

PREVIEW

## 1 Scope

This part of EN 13476, together with EN 13476-1, specifies the definitions and requirements for pipes, fittings and the system based on unplasticized poly(vinyl chloride) (PVC-U), polypropylene (PP) and polyethylene (PE) structured-wall piping systems that are intended to be used for non-pressure underground drainage and sewerage systems.

This part is applicable to pipes and fittings with smooth internal and external surfaces, designated as Type A.

It specifies test methods and test parameters as well as requirements.

This part is applicable to:

- a) structured-wall pipes and fittings, which are intended to be used buried underground outside the building structure; reflected in the marking of products by "U";
- b) structured-wall pipes and fittings, which are intended to be used buried underground both outside (application area code "U") and within the building structure (application area code "D"); reflected in the marking of products by "UD".

This part is applicable to structured-wall pipes and fittings with or without an integral socket with elastomeric ring seal joints as well as welded and fused joints.

This part covers a range of pipe and fitting sizes, materials, pipe constructions, stiffness classes, application classes, and tolerance classes and gives recommendations concerning colours.

NOTE 1 It is the responsibility of the purchaser or specifier to make the appropriate selections from these aspects, taking into account their particular requirements and any relevant national regulations and installation practices or codes.

NOTE 2 For dimensions larger than DN 1200 OD/ID this document may be applied regarding appearance, colour, physical and mechanical characteristics as well as performance requirements.

## 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 476, *General requirements for components used in discharge pipes, drains and sewers for gravity systems*

EN 580, *Plastics piping systems — Unplasticized poly(vinyl chloride) (PVC-U) pipes — Test method for the resistance to dichloromethane at a specified temperature (DCMT)*

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

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

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

EN 727, *Plastics piping and ducting systems — Thermoplastics pipes and fittings — Determination of Vicat softening temperature (VST)*

EN 728, *Plastics piping and ducting systems — Polyolefin pipes and fittings — Determination of oxidation induction time*