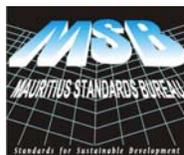

Plastics piping systems for non-pressure underground drainage and sewerage – Structured-wall piping systems of unplasticized poly(vinyl chloride) (PVC-U), polypropylene (PP) and polyethylene (PE) –

Part 1: General requirements and performance characteristics

ICS 23.040.20; 93.030



**Mauritius Standards Bureau
Moka**

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National foreword

This Mauritian Standard is identical with the European Standard **EN 13476-1:2007(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) – Part 1: General requirements and performance characteristics*. 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:

European Standards	Corresponding Mauritian Standards
EN 13476-2,	MS 13476-2:2007 , <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 external surface and the system, Type A</i>
EN 13476-3,	MS 13476-3:2007 , <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 3: 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 13476-1:2007) 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 specified applications. 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 (this standard);*
- *Part 2: Specifications for pipes and fittings with smooth internal and external surface and the system, Type A;*
- *Part 3: Specifications for pipes and fittings with smooth internal and profiled external surface and the system, Type B;*
- *Part 4: Assessment of conformity (CEN/TS);*
- *Part 5: Guidance for installation (CEN/TS).¹*

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.

¹ The feasibility of this project is under study.

Introduction

Due to the variety in materials, pipe constructions, application areas and classes, several combinations are possible.

The purchaser or specifier may select between these possibilities by designating the pipe and fitting he or she prefers to use for each case, as described in Annex C, Designation of pipes and corresponding fittings, taking into account any particular requirements and relevant national regulations and installation practices or codes.

PREVIEW

1 Scope

This European Standard, together with EN 13476-2 and EN 13476-3, specifies the definitions and general 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 to be used for non-pressure underground drainage and sewerage systems.

This standard is applicable to:

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

In conjunction with EN 13476-2 and EN 13476-3 it 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 specifies general aspects and gives guidance concerning a national selection of requirement levels and classes where part 2 and part 3 of this standard provide options.

EN 13476-2 and EN 13476-3 specify material characteristics, dimensions and tolerances, test methods, test parameters and requirements for pipes with smooth internal and external surfaces, Type A, and pipes with smooth internal and profiled external surfaces, Type B.

This standard, together with EN 13476-2 and EN 13476-3, covers a range of pipe and fitting sizes, materials, pipe constructions, stiffness classes and tolerance classes and offers 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 Pipes, fittings and other components conforming to any plastic product standards referred to in clause 2 can be used with pipes and fittings conforming to this standard, when they conform to the requirements for joint dimensions given in part 2 and part 3 of this standard and to the performance requirements given in Clause 9.

NOTE 3 For dimensions larger than DN 1200 OD/ID this document may serve as general guideline 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 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 13476-2:2007, *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*