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NSAI Standards

Irish Standard
I.S. EN 1852-1:2018

Plastics piping systems for non-pressure underground drainage and sewerage - Polypropylene (PP) - Part 1: Specifications for pipes, fittings and the system

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National Foreword

I.S. EN 1852-1:2018 is the adopted Irish version of the European Document EN 1852-1:2018, Plastics piping systems for non-pressure underground drainage and sewerage - Polypropylene (PP) - Part 1: Specifications for pipes, fittings and the system

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 1852-1

January 2018

ICS 93.030

Supersedes EN 1852-1:2009

English Version

Plastics piping systems for non-pressure underground drainage and sewerage - Polypropylene (PP) - Part 1: Specifications for pipes, fittings and the system

Systèmes de canalisations en plastique pour les branchements et les collecteurs d'assainissement enterrés sans pression - Polypropylène (PP) - Partie 1: Spécifications pour tubes, raccords et le système

Kunststoff-Rohrleitungssysteme für erdverlegte drucklose Abwasserkanäle und -leitungen - Polypropylen (PP) - Teil 1: Anforderungen an Rohre, Formstücke und das Rohrleitungssystem

This European Standard was approved by CEN on 20 November 2017.

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European foreword

This document (EN 1852-1:2018) 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of an identical text or by endorsement, at the latest by July 2018, and conflicting national standards shall be withdrawn at the latest by July 2018.

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

This document supersedes EN 1852-1:2009.

In this revised document, the following changes have been made:

— updating in accordance with the new template;

— updating of normative references;

— clause 5.1has got a new title "PP final compound" and an additional requirement for the maximum allowed content of minerals have been introduced ;

— thermal stability (OIT) requirement is made valid in general;

— two new dimensions have been introduced in Tables 2 to 6 – 560 mm and 710 mm;

— three new dimensions have been introduced in Table 3;

— Annex A for pipes S-series 11,2 has been deleted;

— a new Annex A for utilization of non-virgin PP material has been added.

The System Standards are based on the results of the work 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).

The System Standards 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 1852 consists of the following parts, under the general title *Plastics piping systems for non-pressure underground drainage and sewerage – Polypropylene (PP):*

— *Part 1: Specifications for pipes, fittings and the system* (the present standard)

— *Part 2: Guidance for the assessment of conformity* (CEN Technical Specification)

This part of EN 1852 includes Annex A (normative) “Utilization of non-virgin PP materials”, Annex B (informative), “General characteristics of PP pipes and fittings” and Annex C (informative), “Product standards of components that can be connected to components conforming to this standard”.

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Plastics piping systems made of PP with mineral modifiers (PP-MD) are covered by EN 14758-1 [1].

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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1 Scope

This part of EN 1852 specifies the requirements for solid wall pipes with smooth internal and external surfaces extruded from the same compound/formulation throughout the wall, fittings and the system of polypropylene (PP) piping systems 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".

This standard covers PP materials without mineral modifiers.

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

NOTE 1 Solid wall multilayer pipes with different formulation throughout the wall and foamed core pipes are covered by EN 13476-2 [1] (see also CEN ISO/TR 27165 [2]).

This standard covers a range of nominal sizes, and pipe series and gives recommendations concerning colours.

NOTE 2 It is the responsibility of the purchaser or specifier to make the appropriate selection from these aspects, taking into account their particular requirements and any relevant national regulations and installation practices or codes.

In conjunction with CEN/TS 1852-2, it is applicable to PP pipes and fittings, their joints and to joints with components of other plastics and non-plastics materials intended to be used for buried piping systems for non-pressure underground drainage and sewerage.

The fittings can be manufactured by injection-moulding or be fabricated from pipes and/or mouldings.

NOTE 3 Pipes, fittings and other components conforming to any of the plastics product standards listed in Annex C can be connected to pipes and fittings conforming to this standard, when they conform to the requirements for joint dimensions given in Clause 6 and to the requirements of Table 14.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 12099, *Plastics piping systems — Polyethylene piping materials and components — Determination of volatile content*

EN ISO 472, *Plastics — Vocabulary (ISO 472)*

EN ISO 580, *Plastics piping and ducting systems — Injection-moulded thermoplastics fittings — Methods for visually assessing the effects of heating (ISO 580)*

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