# TECHNICAL SPECIFICATION SPÉCIFICATION TECHNIQUE TECHNISCHE SPEZIFIKATION

# **CEN/TS 14758-3**

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#### **English Version**

Plastics piping systems for non-pressure underground drainage and sewerage - Polypropylene with mineral modifier(s) (PP-MD) - Part 3: Guidance for installation

Systèmes de canalisations en plastique pour les branchements et les collecteurs d'assainissement enterrés sans pression - Polypropylène avec des modificateurs minéraux (PP-MD) - Partie 3 : Guide de pose Kunststoff-Rohrleitungssysteme für erdverlegte Abwasserkanäle und -leitungen - Polypropylen mit mineralischen Additiven (PP-MD) - Teil 3: Empfehlungen für die Verlegung

This Technical Specification (CEN/TS) was approved by CEN on 11 September 2005 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

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## CEN/TS 14758-3:2006 (E)

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#### **Foreword**

This Technical Specification (CEN/TS 14758-3:2006) has been prepared by Technical Committee CEN/TC 155 "Plastics piping systems and ducting systems", the secretariat of which is held by NEN.

This Technical Specification is a Part of a System Standard 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 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 14758 consists of the following Parts, under the general title *Plastics piping systems for non-pressure underground drainage and sewerage — Polypropylene with mineral modifier(s) (PP-MD)* 

- Part 1: Specifications for pipes, fittings and the system
- Part 2: Guidance for the assessment of conformity
- Part 3: Guidance for installation (this Technical Specification)

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this CEN Technical Specification: Austria, Belgium, 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 Scope

This Technical Specification, together with ENV 1046 and EN 1610, provides a material-specific set of guidelines for the installation of piping systems made of polypropylene with mineral modifier(s) (PP-MD) in the field of non-pressure underground drainage and sewerage.

- outside the building structure (application area code "U");
- both buried in ground within the building structure (application area code "D") and outside the building.

This is reflected in the marking of products by "U" and "UD".

#### 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.

ENV 1046:2001, Plastics piping and ducting systems — Systems outside building structures for the conveyance of water or sewage — Practices for installation above and below ground

EN 1610:1997, Construction and testing of drains and sewers

EN ISO 178, Plastics — Determination of flexural properties (ISO 178:2001)

EN ISO 9967, Plastics pipes — Determination of creep ratio (ISO 9967:1994)

## 3 Choice of stiffness (SN) series

#### 3.1 General

PP-MD pipe is a flexible pipe.

When loaded a flexible pipe deflects and presses into the surrounding material. This generates a reaction in the surrounding materials which controls deflection of the pipe. The amount of deflection, which occurs is limited by the care exercised in the selection and laying of the bedding and side fill materials.

#### 3.2 Pipes

#### 3.2.1 Standard procedure

The choice of the stiffness (SN) series may be made:

- when the same class of pipe has previously proved to be satisfactory in the same condition;
- or based on local practice (place of installation, usual installation procedure and experience);
- or based on local regulation;
- or based on Tables 1 and 2 of ENV 1046:2001;
- or based on structural design.