TECHNICAL SPECIFICATION
SPÉCIFICATION TECHNIQUE
TECHNISCHE SPEZIFIKATION

CEN/TS 1456-2:2003

April 2003

ICS 23.040.01, 93.030

English version

Plastics piping systems for buried and above-ground drainage and sewerage under pressure - Unplasticized poly(vinyl chloride) (PVC-U) - Part 2: Guidance for the assessment of conformity

Systèmes de canalisations en plastiques pour branchements et collecteurs d'assainissement enterrés et aériens avec pression - Poly(chlorure de vinyle) non plastifié (PVC-U) - Partie 2: Guide pour l'évaluation de la conformité

Kunststoff-Rohrleitungssusteme für erdverlegte und nicht erdverlegte Abwasserdruckleitungen - Weichmacherfreies Polyvinylchlorid (PVC-U) - Teil 2: Empfehlungen für die Beurteilung der Konformität

This Technical Specification (CEN/TS) was approved by CEN on 29 February 2003 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.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

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Ref. No. CEN/TS 1555-7:2003 E

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Foreword

This document (CEN/TS 1456-2:2003) has been prepared by Technical Committee CEN /TC 155, "Plastics piping systems and ducting systems" the secretariat of which is held by NEN.

This specification can be used to support elaboration of national third party certification procedures for products conforming to EN 1456-1.

This 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 1456 consists of the following Parts, under the general title *Plastics piping systems for buried and above-ground drainage and sewerage under pressure — Unplasticized poly(vinyl chloride) (PVC-U)*

— *Part 1: Specifications for piping components and the system*

— *Part 2: Guidance for the assessment of conformity (this specification).*

This Technical Specification includes a Bibliography.

At the date of publication of this specification, Systems Standards for piping systems of other plastics materials used for the same application are the following:

NOTE: All listed System Standards have reached the Enquiry stage or are under preparation.

prEN 13244, *Plastics piping systems for buried and above-ground pressure systems for water of general purposes, drainage and sewerage — Polyethylene (PE)*

prEN 14364, *Plastics piping systems for drainage and sewerage with or without pressure — Glass-reinforced thermosetting plastics (GRP) based on unsaturated polyester resin (UP)*

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, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

The System Standard, of which this is Part 2, specifies the requirements for a piping system and its components when made from unplasticized poly(vinyl chloride) (PVC-U). The piping system is intended to be used for buried and above-ground drainage and sewerage under pressure.

For material, piping components and their fitness for purpose requirements and test methods are specified in EN 1456-1.

This Part of EN 1456 gives guidance for the assessment of conformity of products covered by EN 1456-1. It can be used integrally and/or be used for inclusion of conformity assessment in the manufacturer's quality plan as part of the quality system for attestation purposes. The use of this Technical Specification does not necessarily imply the involvement of a third party.

It can also be used to support the elaboration of national third party certification procedures for products conforming to EN 1456-1. It is the responsibility of the manufacturer to choose or not to choose for the involvement of a third party for certification purposes.

1 Scope

This Technical Specification gives guidance for the assessment of conformity intended to be included in the manufacturer's quality plan as part of the quality management system.

It includes:

a) requirements for materials, components, joints and assemblies given in EN 1456-1;

b) requirements for the manufacturer's quality management system;

NOTE 1 It is recommended that the quality management system conforms to EN ISO 9001 [1];

c) definitions and procedures to be applied if third party certification is involved.

NOTE 2 If third party certification is involved, it is recommended that the certification body is accredited to EN 45011[2] or EN 45012[3], as applicable.

In conjunction with EN 1456-1 it is applicable to PVC-U piping systems intended to be used for the conveyance of sewage and drainage under pressure at approximately 20 °C:

a) buried in the ground;

b) sea outfalls;

c) laid in inland waters and/or in ducts;

d) suspended below bridges.

This specification is also applicable to PVC-U piping systems for the continuous conveyance of sewage and drainage up to and including 45 °C as required in EN 773 [4].

NOTE 3 In this case the pressure derating factors given in Figure A.1 of EN 1452-2:1999 apply.

NOTE 4 No pressure reduction is necessary for the drainage of waste waters at short-term peak temperatures up to 45 °C (cumulated for 2 years during a service life of 50 years).

2 Normative references

This Technical Specification incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this Technical Specification only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 1452-2:1999, *Plastics piping systems for water supply — Unplasticized poly(vinyl chloride) (PVC-U) — Part 2: Pipes*

EN 1452-3:1999, *Plastics piping systems for water supply — Unplasticized poly(vinyl chloride) (PVC-U) — Part 3: Fittings*

EN 1452-4:1999, *Plastics piping systems for water supply — Unplasticized poly(vinyl chloride) (PVC-U) — Part 4: Valves and ancillary equipment*

EN 1452-5:1999, *Plastics piping systems for water supply — Unplasticized poly(vinyl chloride) (PVC-U) — Part 5: Fitness for purpose of the system*

EN 1456-1:2001, *Plastics piping systems for buried and above-ground drainage and sewerage under pressure — Unplasticized poly(vinyl chloride) (PVC-U) — Part 1: Specifications for piping components and the system*