
Cevni sistemi iz polimernih materialov za nizko- in visokotemperaturne odvodne sisteme v zgradbah - Polipropilen (PP) - 2. del: Navodilo za ugotavljanje skladnosti

Plastics piping systems for soil and waste discharge (low and high temperature) within the building structure - Polypropylene (PP) - Part 2: Guidance for the assessment of conformity

Kunststoff-Rohrleitungssysteme zum Ableiten von Abwasser (niedriger und hoher Temperatur) innerhalb der Gebäudestruktur - Polypropylen (PP) - Teil 2: Empfehlungen für die Beurteilung der Konformität

Systemes de canalisations en plastique pour l'évacuation des eaux-vannes et des eaux usées (a basse et a haute température) a l'intérieur de la structure des bâtiments - Polypropylene (PP) - Partie 2: Guide pour l'évaluation de la conformité

Ta slovenski standard je istoveten z: ENV 1451-2:2001

ICS:

23.040.20	Cevi iz polimernih materialov	Plastics pipes
91.140.80	Drenažni sistemi	Drainage systems

SIST ENV 1451-2:2002**en**

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST ENV 1451-2:2002

<https://standards.iteh.ai/catalog/standards/sist/c4ff193f-3660-4bc4-8e9d-5d99d872dfe3/sist-env-1451-2-2002>

EUROPEAN PRESTANDARD
PRÉNORME EUROPÉENNE
EUROPÄISCHE VORNORM

ENV 1451-2

June 2001

ICS 23.040.01; 91.140.80

English version

Plastics piping systems for soil and waste discharge (low and high temperature) within the building structure - Polypropylene (PP) - Part 2: Guidance for the assessment of conformity

Systèmes de canalisations en plastique pour l'évacuation des eaux-vannes et des eaux usées (à basse et à haute température) à l'intérieur de la structure des bâtiments - Polypropylène (PP) - Partie 2: Guide pour l'évaluation de la conformité

Kunststoff-Rohrleitungssysteme zum Ableiten von Abwasser (niedriger und hoher Temperatur) innerhalb der Gebäudestruktur - Polypropylen (PP) - Teil 2: Empfehlungen für die Beurteilung der Konformität

This European Prestandard (ENV) was approved by CEN on 10 May 2001 as a prospective standard for provisional application.

The period of validity of this ENV 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 ENV can be converted into a European Standard.

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

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

	Page
Foreword	3
1 Scope	4
2 Normative references	4
3 Definitions, symbols and abbreviations	5
3.1 Definitions	5
3.2 Abbreviations	6
4 Requirements	7
4.1 General	7
4.2 Testing and inspection	7
Bibliography	15

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST ENV 1451-2:2002](https://standards.iteh.ai/catalog/standards/sist/c4ff193f-3660-4bc4-8e9d-5d99d872dfe3/sist-env-1451-2-2002)

<https://standards.iteh.ai/catalog/standards/sist/c4ff193f-3660-4bc4-8e9d-5d99d872dfe3/sist-env-1451-2-2002>

Foreword

This European Prestandard 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 Prestandard can be used to support elaboration of national third party certification procedures for products conforming to EN 1451-1.

This European Prestandard is a part of EN 1451 for plastics piping systems in the field of soil and waste discharge (low and high temperature) within the building structure made of polypropylene (PP), which consists of the following Parts:

Part 1: Specifications for pipes, fittings and the system

Part 2: Guidance for the assessment of conformity.

NOTE It is permitted to keep conflicting national standards in force (in parallel to the ENV) until the final decision about the possible conversion of the ENV into an EN is reached.

This Part of EN 1451 includes a bibliography.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this European Prestandard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST ENV 1451-2:2002

<https://standards.iteh.ai/catalog/standards/sist/c4ff193f-3660-4bc4-8e9d-5d99d872dfe3/sist-env-1451-2-2002>

1 Scope

This Part of EN 1451 gives guidance for the assessment of conformity to be included in the manufacturer's quality plan as part of the quality system.

This prestandard includes:

- a) requirements for materials, components, joints and assemblies given in EN 1451-1;
- b) requirements for the manufacturer's quality system;

NOTE 1 It is recommended that the quality system conforms to EN ISO 9001, as applicable.

- 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 or EN 45012, as applicable.

This Part of EN 1451 is applicable to solid-wall piping systems made of polypropylene (PP) in the field of soil and waste discharge (low and high temperature)

- inside buildings (application area code "B") and
- inside buildings and buried in ground within the building structure (application area code "BD").

2 Normative references

This European Prestandard 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 European Prestandard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 1451-1 : 1998

Plastics piping systems for soil and waste discharge (low and high temperature) within the building structure – Polypropylene (PP) – Part 1: Specifications for pipes, fittings and the system

EN ISO 8402

Quality management and quality assurance – Vocabulary (ISO 8402 : 1994)

ISO 48 : 1994

Rubber, vulcanized or thermoplastic – Determination of hardness (hardness between 10 IRHD and 100 IRHD)

3 Definitions, symbols and abbreviations

For the purposes of this prestandard the definitions, symbols and abbreviations given in EN 1451-1:1998 apply together with the following.

3.1 Definitions

3.1.1

certification body

an impartial body, governmental or non-governmental, possessing the necessary competence and responsibility to carry out certification of conformity according to given rules of procedure and management.

3.1.2

inspection body

an impartial organization or company, approved by a certification body as possessing the necessary competence to verify and/or to carry out initial type testing, audit testing and inspection of the manufacturer's factory production control in accordance with the relevant European Standard.

3.1.3

testing laboratory

a laboratory which measures, tests, calibrates or otherwise determines the characteristics of the performance of materials and products.

3.1.4

quality system

the organizational structure, responsibilities, procedures, processes and resources for implementing quality management [see EN ISO 8402].

3.1.5

quality plan

a document setting out the specific quality practices, resources and sequence of activities relevant to a particular product or range of products.

3.1.6

type testing (TT)

tests performed to prove that the material, component, joint or assembly is capable of conforming to the requirements given in the relevant standard.

3.1.6.1

preliminary type testing (PTT)

type testing carried out by or on behalf of the manufacturer.

3.1.6.2

initial type testing (ITT)

type testing carried out by or on behalf of the certification body for certification purposes.

3.1.7

batch release test (BRT)

a test performed by the manufacturer on a batch of components, which has to be satisfactorily completed before the batch can be released.

3.1.8

process verification test (PVT)

a test performed by the manufacturer on materials, components, joints or assemblies at specific intervals to confirm that the process continues to be capable of producing components conforming to the requirements given in the relevant standard.

NOTE Such tests are not required to release batches of components and are carried out as a measure of process control.

3.1.9

audit test (AT)

a test performed by or on behalf of a certification body to confirm that the material, component, joint or assembly continues to conform to the requirements given in the relevant standard and to provide information to assess the effectiveness of the quality system.

**3.1.10
indirect test (IT)**

a test performed by the manufacturer, different from that specified for that particular characteristic, having verified its correlation with the specified test.

**3.1.11
witness testing (WT)**

testing accepted by a certification body for initial type testing and/or audit testing, which is carried out by or on behalf of the manufacturer and supervised by a representative of a certification body, qualified in testing.

**3.1.12
material**

a defined type of polymer or additive or constituent thereof.

**3.1.13
compound (blend)**

a recipe which defines types of polymer, additives and constituents at specified dosage levels.

**3.1.14
material batch or compound batch**

a clearly identifiable quantity of a particular material or compound.

**3.1.15
production batch**

a clearly identifiable collection of units, manufactured consecutively or continuously under the same conditions, using material or compound conforming to the same specification.

**3.1.16
lot**

a clearly identifiable sub-division of a batch for inspection purposes.

**3.1.17
sample**

one or more units of product drawn from a batch or lot, selected at random without regard to quality.

NOTE The number of units of product in the sample is the sample size.

[SIST ENV 1451-2:2002](https://standards.iteh.ai/catalog/standards/sist/c4ff193f-3660-4bc4-8e9d-5d99d872dfe3/sist-env-1451-2-2002)

**3.1.18
group**

a collection of similar components from which samples are selected for testing purposes.

iteh STANDARD PREVIEW
(standards.iteh.ai)

3.2 Abbreviations

NOTE For reasons of avoiding misunderstanding the following abbreviations are kept the same in each of the languages. For the same reason the terms are given in the three languages.

AT	en: audit test fr: essai d'audit de: Überwachungsprüfung
BRT	en: batch release test fr: essai de libération de campagne de fabrication de: Freigabepfung einer Charge
IT	en: indirect test fr: essai indirect de: indirekte Prüfung
ITT	en: initial type testing fr: essai de type initial de: Erst-Typprüfung
PTT	en: preliminary type testing fr: essai de type préliminaire de: vorausgehende Typprüfung

PVT	en: process verification test fr: essai de vérification du procédé de fabrication de: Prozessüberprüfung
TT	en: type test fr: essai de type de: Typprüfung
WT	en: witness testing fr: essai de témoin de: Prüfung unter Aufsicht

4 Requirements

4.1 General

4.1.1 Materials, components, joints and assemblies shall conform to the requirements given in EN 1451-1:1998.

4.1.2 Components and/or assemblies shall be produced by the manufacturer under a quality system which includes a quality plan.

4.2 Testing and inspection

4.2.1 Material specification

For the purposes of this prestandard the material specification consists of a recipe/compound comprising a polypropylene with specific trade name and additives with known dosage level.

4.2.2 Grouping

4.2.2.1 Size groups

A group of nominal sizes DN, from which an individual nominal size DN, shall be selected for testing purposes. Three size groups shall apply as designated in table 1.

<https://standards.iteh.ai/catalog/standards/sist/c4ff193f-3660-4bc4-8e9d-5d99d872d6c9/sist-en-1451-2-2002>

Table 1 - Size groups

Size group	Nominal size [DN]
1	≥ 32 to < 75
2	≥ 75 to < 200
3	≥ 200 to ≤ 315

4.2.2.2 Fitting groups

A group of fittings having a similar design. Three fitting groups shall apply as designated in table 2.

Push-fit fittings and fittings intended for butt fusion shall be considered separately.

Table 2 - Fitting groups

Fitting group	Type of fitting
1	bends
2	branches
3	other fittings