

SLOVENSKI STANDARD
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Cevni sistemi iz polimernih materialov za (nizko- in visokotemperaturne) odvodne sisteme v stavbah - Akrlonitril-butadien-stiren (ABS) - 2. del: Navodilo za ugotavljanje skladnosti

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

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

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 — Acrylonitrile-butadiène-styrène (ABS) — Partie 2: Guide pour l'évaluation de la conformité

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

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English Version

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

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This draft Technical Specification is submitted to CEN members for formal vote. It has been drawn up by the Technical Committee CEN/TC 155.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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Foreword

This document (FprCEN/TS 1455-2:2011) has been prepared by Technical Committee CEN/TC 155 “Plastics piping systems and ducting systems”, the secretariat of which is held by NEN.

This document is currently submitted to the Formal Vote.

This document will supersede ENV 1455-2:2001.

EN 1455 *Plastics piping systems for soil and waste discharge (low and high temperature) within the building structure — Acrylonitrile-butadiene-styrene (ABS)* consists of the following Parts:

- Part 1: Requirements for pipes, fittings and the system
- Part 2: Guidance for the assessment of conformity (the present TS)

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Introduction

Figures 1 and 2 are intended to provide general information on the concept of testing and organisation of those tests used for the purpose of the assessment of conformity. For each type of tests, i.e. type testing (TT), batch release test (BRT), process verification test (PVT) and audit test (AT), this document details the applicable characteristics to be assessed and the frequency and sampling of testing.

A typical scheme for the assessment of conformity of materials (compounds/formulations), pipes, fittings, joints or assemblies by manufacturers is given in Figure 1.

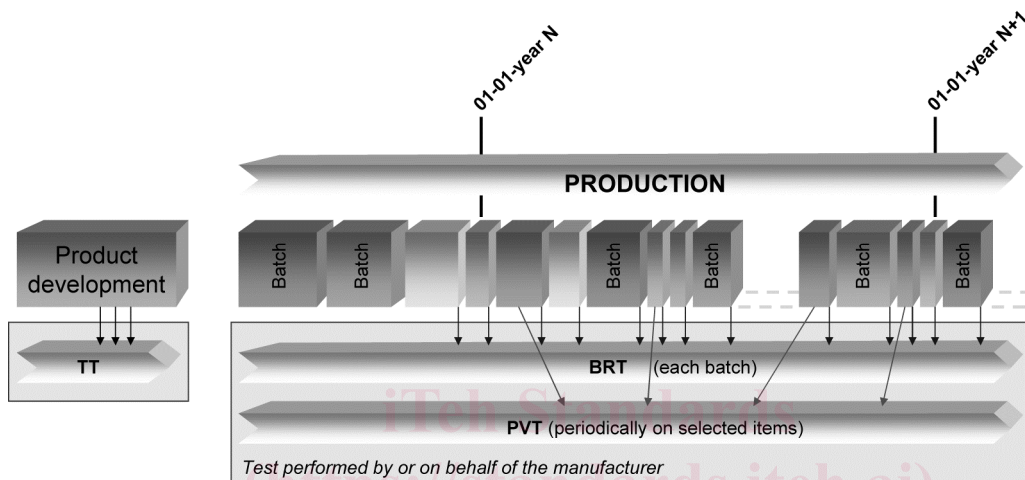


Figure 1 — Typical scheme for the assessment of conformity by a manufacturer

A typical scheme for the assessment of conformity of materials (compounds/formulations), pipes, fittings, joints or assemblies by manufacturers, including a third-party certification, is given in Figure 2.

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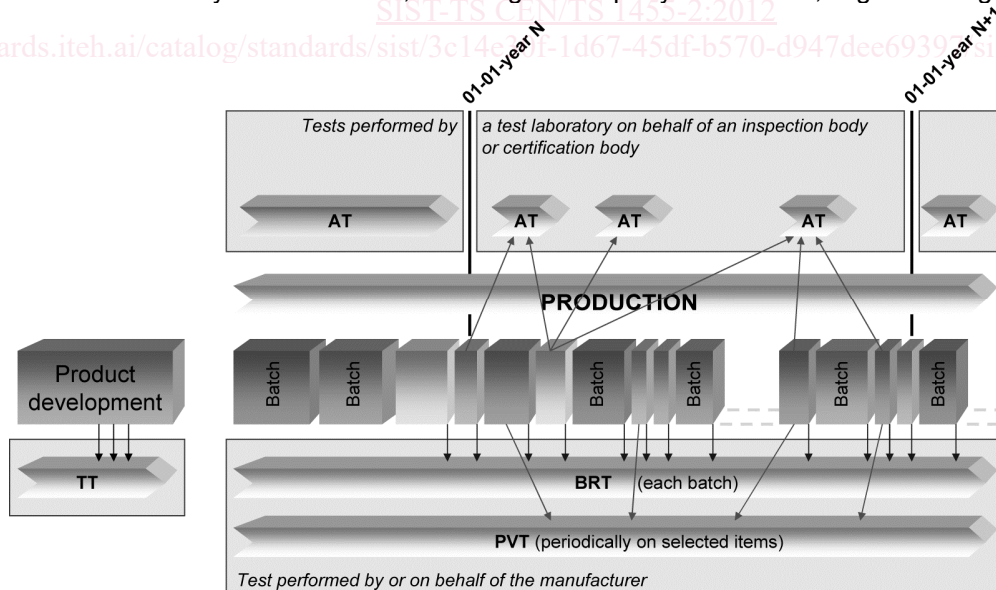


Figure 2 — Typical scheme for the assessment of conformity by a manufacturer, including a third-party certification

1 Scope

This Technical Specification gives guidance for the assessment of conformity of materials (compounds/formulations), products and assemblies in accordance with EN 1455-1 intended to be included in the manufacturer's quality plan as part of the quality management system and for the establishment of third-party certification procedures.

NOTE 1 It is recommended that the quality management system conforms to or is no less stringent than the relevant requirements to EN ISO 9001 [1].

NOTE 2 If third-party certification is involved, it is recommended that the certification body is accredited to EN 45011 [2], EN 45012 [3] or EN ISO/IEC 17021 [4], as applicable.

NOTE 3 In order to help the reader, a basic test matrix is given in Annex A.

In conjunction with EN 1455-1 (see Foreword) this document is applicable to solid-wall piping systems made of acrylonitrile-butadiene-styrene (ABS) intended to be used:

- for soil and waste discharge (low and high temperature) inside buildings (application area code "B") and
- for soil and waste discharge (low and high temperature) inside buildings and buried in ground within the building structure (application area code "BD").

This is reflected in the marking of products by "B" or "BD".

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 1455-1, *Plastics piping systems for soil and waste discharge (low and high temperature) within the building structure — Acrylonitrile-butadiene-styrene (ABS) — Part 1: Requirements for pipes, fittings and the system*

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3 Terms and definitions

For the purposes of this Technical Specification, the terms and definitions given in EN 1455-1 and the following apply.

3.1

certification body

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

NOTE A certification body is preferably accredited to EN 45011 [2].

3.2

inspection body

impartial organisation or company approved by the 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 standard

NOTE An inspection body is preferably accredited to EN ISO/IEC 17020 [5].

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3.3
testing laboratory
laboratory which measures, tests, calibrates or otherwise determines the characteristics of the performance of materials and products

NOTE 1 In the context of this part of EN 1455, the materials and products can be subjected to type testing, batch release testing, process verification testing, audit testing and/or witness testing, as applicable.

NOTE 2 A testing laboratory is preferably accredited to EN ISO/IEC 17025 [6].

3.4
quality management system
a system to direct and control an organization with regard to quality

NOTE Requirements for quality management systems are given in EN ISO 9001 [1].

3.5
quality plan
document setting out the specific quality practices, resources and sequence of activities relevant to a particular product or range of products

3.6
type testing
TT
testing performed to verify that the material (compound/formulation), product, joint or assembly is capable of conforming to the requirements given in the relevant standard

NOTE The type test results remain valid until there is a change in the material (compound/formulation) or product or assembly provided that the process verification tests are done regularly.

3.7
batch release test
BRT
test performed by or on behalf of the manufacturer on a batch of material, products, which has to be satisfactorily completed before the batch can be released

3.8
process verification test
PVT
test performed by or on behalf of the manufacturer on material, products, joints or assemblies at specific intervals to confirm that the process continues to be capable of producing products which conform to the requirements given in the relevant standard

NOTE Such tests are not required to release batches of material (compound/formulation) or products and are carried out as a measure of process control.

3.9
audit test
AT
test performed by a test laboratory on behalf of an inspection body or certification body to confirm that the material (compound/formulation), product, 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 management system

3.10
indirect test
IT
test performed by or on behalf of the manufacturer, different from that specified test for that particular characteristic, having previously verified its correlation with the test specified

**3.11
witness test
WT**

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

**3.12
material**

generic term for compound/formulation grouped by families, expressed by generic names, e.g. polypropylene, stainless steel, brass or EPDM

NOTE Definition from European Commission, Directorate-General for Enterprise and Industry, Sub-group on Product Testing Procedures (EC, DG ENT and IND, SG PTP).

**3.13
compound/formulation**

clearly defined homogenous mixture of base polymer with additives, i.e. anti-oxidants, pigments, stabilizers and others, at a dosage level necessary for the processing and the intended use of the final product

**3.14
material batch**

clearly identified quantity of a given homogeneous compound/formulation manufactured under uniform conditions and defined and identified by the formulation manufacturer

**3.15
product**

pipe or fitting of a clearly identified type intended to be a part of a piping system which the manufacturer puts on the market

**3.16
product batch**

clearly identified collection of products, manufactured consecutively or continuously under the same conditions, using the same compound/formulation conforming to the same specification

NOTE The production batch is defined and identified by the product manufacturer.

**3.17
lot**

clearly identifiable sub-division of a batch for inspection purposes

**3.18
sample**

one or more products drawn from the same production batch or lot, selected at random without regard to their quality

NOTE The number of products in the sample is the sample size.

**3.19
group**

collection of similar products from which samples are selected for testing purposes

**3.20
component**

product manufactured out of a specific compound/formulation, brought to the market as part of a product or as a spare part

FprCEN/TS 1455-2:2011 (E)**3.21****joint**

connection between two products

3.22**assembled product**

assembled final product using two or more single parts

3.23**thermoplastics fabricated fitting**

fitting produced from pipe and/or from injection-moulded fittings by thermoforming, solvent-cementing or welding

3.24**assembly**

product that can be dismantled into a set of components

EXAMPLE A test piece consisting of various products.

3.25**sampling plan**

specification of the type of sampling to be used combined with the operational specification of the entities or increments to be taken, the samples to be constituted and the measurements or tests to be made

EXAMPLE A specific plan which indicates the number of units of products or assemblies to be inspected.

3.26**product type**

generic description of a product

EXAMPLE A pipe or fitting or their main parts, of the same design, from a particular compound.

3.27**cavity**

(moulding) space within a mould to be filled to form the moulded product

EXAMPLE That part of the injection mould which gives the form to the injection moulded product

4 Abbreviated terms

To avoid misunderstanding, the abbreviations in this Clause are defined as being the same in each language. For the same reason, the terms are given in the three languages, English, French and German.

	EN	FR	DE
AT	audit test	essai d'audit	Überwachungsprüfung
BRT	batch release test	essai de libération de campagne de fabrication	Freigabepfung einer Charge
IT	indirect test	essai indirect	indirekte Prüfung
PVT	process verification test	essai de vérification du procédé de fabrication	Prozessüberprüfung
TT	type test	essai de type	Typprüfung
WT	witness testing	essai témoin	Prüfung unter Aufsicht