

English Version

**Plastics rainwater piping systems for above ground  
external use - Unplasticized poly(vinyl chloride) (PVC-U) -  
Part 2: Guidance for the assessment of conformity**

Systèmes de canalisations de descentes d'eaux  
pluviales en plastique à usage externe en aérien -  
Poly(chlorure de vinyle) non plastifié (PVC-U) - Partie  
2 : Guide pour l'évaluation de la conformité

Kunststoff-Rohrleitungssysteme für außenliegende  
Regenfallleitungen - Weichmacherfreies  
Polyvinylchlorid (PVC-U) - Teil 2: Empfehlungen für  
die Beurteilung der Konformität

This Technical Specification (CEN/TS) was approved by CEN on 4 December 2016 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 promptly at national level in an appropriate form. 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.

CEN members are the national standards bodies of 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 United Kingdom.



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

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

| <b>Contents</b>                              | <b>Page</b> |
|----------------------------------------------|-------------|
| European foreword.....                       | 3           |
| Introduction .....                           | 4           |
| 1 Scope.....                                 | 5           |
| 2 Normative references.....                  | 5           |
| 3 Terms and definitions, .....               | 6           |
| 4 Abbreviated terms.....                     | 9           |
| 5 General.....                               | 9           |
| 6 Testing and inspection.....                | 9           |
| 6.1 Material specification.....              | 9           |
| 6.1.1 PVC-U material .....                   | 9           |
| 6.1.2 Acrylic material .....                 | 10          |
| 6.1.3 Other material.....                    | 11          |
| 6.2 Grouping.....                            | 11          |
| 6.2.1 General.....                           | 11          |
| 6.2.2 Size groups.....                       | 11          |
| 6.2.3 Fitting groups .....                   | 11          |
| 6.3 Type testing.....                        | 11          |
| 6.4 Batch release tests .....                | 14          |
| 6.5 Process verification tests .....         | 15          |
| 6.6 Audit tests.....                         | 16          |
| 6.7 Indirect tests (IT) .....                | 18          |
| 6.8 Test records .....                       | 18          |
| Annex A (informative) Basic test matrix..... | 19          |
| Bibliography.....                            | 20          |

## European foreword

This document (CEN/TS 12200-2:2017) has been prepared by Technical Committee CEN/TC 155 “Plastics piping systems and ducting systems”, the secretariat of which is held by NEN.

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

This document supersedes CEN/TS 12200-2:2003.

Compared with CEN/TS 12200-2:2003, the following changes have been made:

- a) use of the template drafted by CEN/TC 155/WG 21 for assessment of conformity documents (change of “Terms and definitions” and addition of 1 column “Sampling procedures” in Tables);
- b) introduction of “Limits of addition of PVC reprocessed and recycled material” in a separate table (Table 2);
- c) addition of an informative Annex A: Basic test matrix.

EN 12200 consists of the following Parts, under the general title “*Plastics rainwater piping systems for above ground external use — Unplasticized poly (vinyl chloride) (PVC-U)*”.

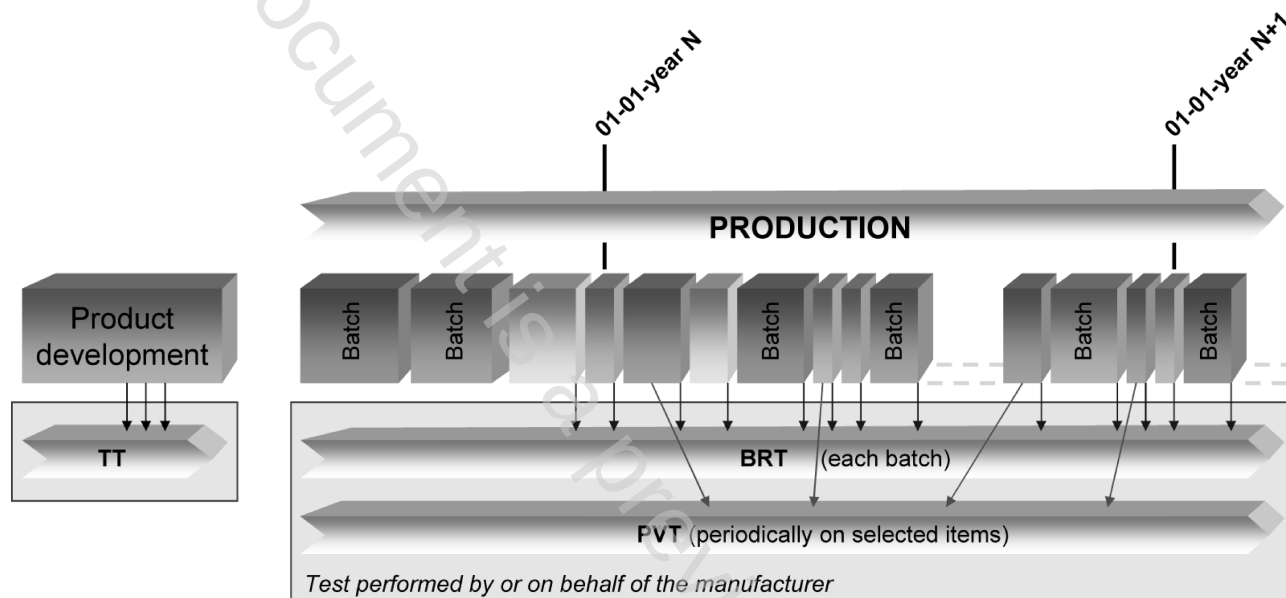
- Part 1: *Specifications for pipes, fittings and the system;*
- Part 2: *Guidance for the assessment of conformity;*

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to announce 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.

## Introduction

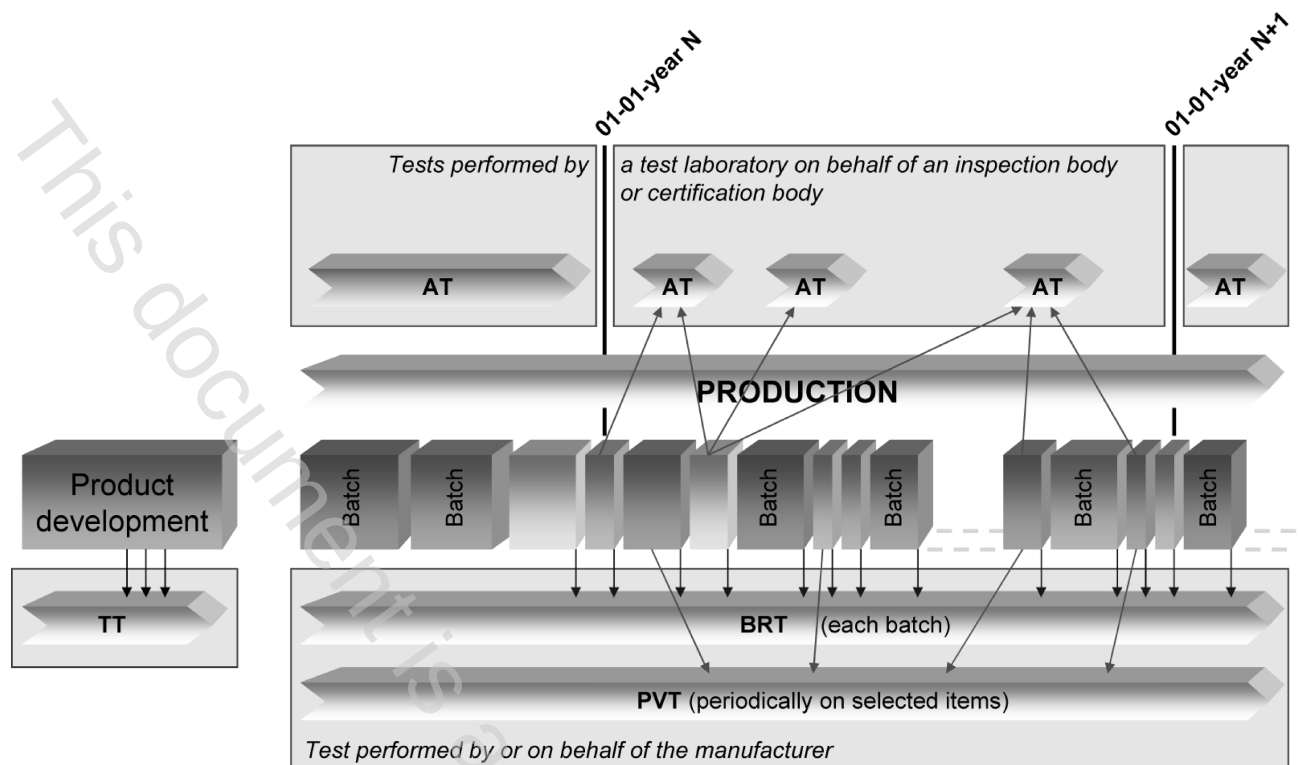
Figures 1 and 2 are intended to provide general information on the concept of testing and organization of those tests used for the purpose of the assessment of conformity. For each type of test, i.e. type test (TT), batch release test (BRT), process verification test (PVT) and audit test (AT), this part of EN 12200 details the applicable characteristics to be assessed and the frequency and sampling of testing.

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



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

## 1 Scope

This part of EN 12200 gives guidance for the assessment of conformity of formulations, products, joints and assemblies in accordance with EN 12200-1:2016 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** In order to help the reader, a basic test matrix is given in Annex A.

In conjunction with EN 12200-1:2016, this document is applicable to piping systems made of unplasticized poly(vinyl chloride) (PVC-U) intended to be used for above ground external rainwater, and to fittings and brackets made of acrylic materials which may be used in combination with the pipes.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 12200-1:2016, *Plastics rainwater piping systems for above ground external use - Unplasticized poly(vinyl chloride) (PVC-U) - Part 1: Specifications for pipes, fittings and the system*