

**Plastist torustiku- ja kanalisüsteemid.
Termoplasttorud. Väljastpoolt kulumisele
vastupidavuse katsemeetod, kasutades
ööpäevaringset meetodit**

Plastics piping and ducting systems -
Thermoplastics pipes - Test method for resistance to
external blows by the round-the-clock method

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 744:1999 sisaldab Euroopa standardi EN 744:1995 ingliskeelset teksti.	This Estonian standard EVS-EN 744:1999 consists of the English text of the European standard EN 744:1995.
Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 23.11.1999 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

Käsitlusala: Käesolev standard esitab meetodi ümmarguse ristlõikega termoplasttorude väliskulumisele vastupidavuse määramiseks, kasutades ööpäevaringset meetodit. Meetod on ette nähtud rakendamiseks torude eraldatud lõikudele. Tüübi testimiseks ja kontrolltestimiseks kasutatakse temperatuuri 0 °C ja/või -20 °C. Lisa A, mis on teatmeline, annab juhiseid toodangu jooksvaks testimiseks ja tulemuste hindamiseks.	Scope:
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ICS 23.040.20

Võtmesõnad: löögikindlus, löögiteimid, mehaaniliste omaduste teimid, plasttorud, termoplastvaigud

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Descriptors: Plastics, pipes, thermoplastics, impact resistance, testing.

English version

Plastics piping and ducting systems

Thermoplastics pipes

**Test method for resistance to external blows by
the round-the-clock method**

Systèmes de canalisations et de gaines en
plastiques; tubes thermoplastiques;
méthode d'essai de la résistance aux
chocs externes par la méthode du cadran

Kunststoff-Rohrleitungs- und Schutzsys-
teme; Rohre aus Thermoplasten; Prüf-
verfahren für die Widerstandsfähigkeit
gegen äußere Schlagbeanspruchung im
Umfangsverfahren

This European Standard was approved by CEN on 1995-02-06.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

This European Standard was prepared by CEN/TC 155 "Plastics piping systems and ducting systems" of which the secretariat is held by NNI.

This European Standard shall be given the status of a National Standard, either by publication of an identical text or by endorsement, at the latest by October 1995, and conflicting national standards shall be withdrawn at the latest by October 1995.

According to the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

This standard is based on ISO/DIS 3127:1992 "Unplasticized polyvinyl chloride (PVC) pipes for the transport of fluids - Determination and specification of resistance to external blows", prepared by the International Organization for Standardization (ISO). It is a modification of ISO/DIS 3127:1992 for reasons of applicability to other plastics materials and/or other test conditions and alignment with texts of other standards on test methods.

The modifications are:

- no pipe material is mentioned;
- test parameters, except those common to all plastics, are omitted;
- no material-dependent requirements are given;
- editorial changes have been introduced.

The material-dependent parameters and/or performance requirements are incorporated in the System Standard(s) concerned.

Annex A, which is informative, gives guidance on sampling.

No existing European Standard is superseded by this standard.

This standard is one of a series of standards on test methods which support System Standards for plastics piping systems and ducting systems.

1 Scope

This standard specifies a method for determining the resistance to external blows of thermoplastics pipes with circular cross sections by using the round-the-clock method.

The method is intended to be applied to isolated batches of pipe. For type testing and audit testing, 0 °C and/or -20 °C are applicable.

NOTE: Pipes made from polypropylene homopolymer (PP-H) which principally can not conform to impact requirements at 0 °C or lower temperatures are permitted to be tested at (23 ± 2) °C under the condition that PP-H pipes are intended for use for soil and waste discharge and bear an additional marking indicating that they are not to be installed below +5 °C.

2 Definition

For the purposes of this standard, the following definition applies.

True impact rate (TIR): The total number of failures divided by the total number of blows, in per cent, as if the whole batch had been tested.

NOTE: In practice, test pieces are drawn at random from the batch and the result is only an estimate of the TIR for that batch.

3 Principle

Test pieces comprising cut lengths of pipe, representative of a batch or a production run from an extruder, are subjected to blows from a falling weight dropped from a specified height on to specified positions around the circumference of the pipe. The incidence of failure is estimated as the true impact rate (TIR) of the batch, or production run, where the maximum value for TIR is 10 %.

NOTE 1: The severity of this test method can be adjusted to suit different specification needs by changing the mass of the falling weight and/or by changing the fall height. It is not technically correct to vary the severity of the test by choosing other values of TIR than that specified in this method.