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Plastics piping systems for non-pressure drainage and sewerage - Polyester resin concrete (PRC) - Part 2: Manholes and inspection chambers

I.S. EN 14636-2:2009

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English Version

**Plastics piping systems for non-pressure drainage and
sewerage - Polyester resin concrete (PRC) - Part 2: Manholes
and inspection chambers**

Systèmes de canalisations en plastique pour les
branchements et les collecteurs d'assainissement sans
pression - Béton de résine polyester (PRC) - Partie 2:
Regards et boîtes d'inspection et de branchement

Kunststoff-Rohrleitungssysteme für drucklos betriebene
Abwasserkanäle und -leitungen - Polymerbeton (PRC) -
Teil 2: Einsteigschächte und Kontrollschächte

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Foreword

This document (EN 14636-2:2009) 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 Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2010, and conflicting national standards shall be withdrawn at the latest by June 2010.

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

EN 14636, *Plastics piping systems for non-pressure drainage and sewerage — Polyester resin concrete (PRC)*, consists of the following parts:

- *Part 1: Pipes and fittings with flexible joints*
- *Part 2: Manholes and inspection chambers*

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard specifies units made from polyester resin concrete (PRC, see 3.1.18), and their joints, for the construction of inspection chambers with inverts not exceeding 2 m deep and for manholes, intended to be used within a drain or sewer system operating without pressure. It applies to products for use outside buildings in buried installations to be installed by open-trench techniques.

This document applies to nominal sizes from DN 600 to DN 3000 for chamber rings and shaft rings having a circular shape.

The intended use of these products is to provide access to buried drain or sewer systems for the conveyance of wastewater, i.e. sewage and surface water, at temperatures up to 50 °C, without pressure or occasionally at a head of pressure up to 0,5 bar¹⁾, and installed in areas subjected to vehicle and/or pedestrian traffic and outside buildings.

NOTE 1 The attention of readers is drawn to applicable requirements contained in EN 476.

This standard specifies definitions, requirements and characteristics of units and their joints for the construction of manholes and inspection chambers, of materials, test methods, marking and evaluation of conformity.

The units are classified on the basis of its type and the type of structure they are intended to be used.

NOTE 2 It is the responsibility of the purchaser or specifier to make the appropriate selections, taking into account their particular requirements and any relevant national regulations and installation practices or codes.

2 Normative references

The following referenced documents are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 637, *Plastics piping systems — Glass-reinforced plastics components — Determination of the amounts of constituents using the gravimetric method*

EN 681-1, *Elastomeric seals — Materials requirements for pipe joint seals used in water and drainage applications — Part 1: Vulcanized rubber*

EN 705:1994, *Plastics piping systems — Glass-reinforced thermosetting plastics (GRP) pipes and fittings — Methods for regression analysis and their use*

EN 13101, *Steps for underground man entry chambers — Requirements, marking, testing and evaluation of conformity*

EN 13121-1, *GRP tanks and vessels for use above ground — Part 1: Raw materials — Specification conditions and acceptance conditions*

EN 14636-1, *Plastics piping systems for non-pressure drainage and sewerage — Polyester resin concrete (PRC) — Part 1: Pipes and fittings with flexible joints*

EN ISO 75-2:2004, *Plastics — Determination of temperature of deflection under load — Part 2: Plastics, ebonite and long-fibre-reinforced composites (ISO 75-2:2004)*

1) 1 bar = 10⁵ N/m² = 0,1 MPa.

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