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Standards

Irish Standard  
I.S. EN 14636-1:2009

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

## I.S. EN 14636-1:2009

*Incorporating amendments/corrigenda issued since publication:*

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English Version

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

Systèmes de canalisations en plastique pour les  
branchements et les collecteurs d'assainissement sans  
pression - Béton de résine polyester (PRC) - Partie 1:  
Tubes et raccords avec assemblages flexibles

Kunststoff-Rohrleitungssysteme für drucklos betriebene  
Abwasserkanäle und -leitungen - Gefüllte  
Polyesterharzformstoffe (PRC) - Teil 1: Rohre und  
Formstücke mit flexiblen Verbindungen

This European Standard was approved by CEN on 5 October 2009.

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## **Foreword**

This document (EN 14636-1:2009) 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of an identical text or by endorsement, at the latest by May 2010, and conflicting national standards shall be withdrawn at the latest by August 2011.

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.

This European Standard consists of the following Parts:

*Plastics piping systems for non-pressure drainage and sewerage — Polyester resin concrete (PRC):*

- *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 United Kingdom.

## **1 Scope**

This European Standard applies to pipes and fittings made from polyester resin concrete (PRC, see 3.1.23), intended to be used within a drain or sewer system operating without pressure. It applies to products for use in buried installations to be installed by open-trench techniques or pipe jacking.

It applies to pipes, fittings and their joints of nominal sizes from DN 150 to DN 3000 for circular cross-sections, from WN/HN 300/450 to WN/HN 1400/2100 for egg-shaped cross-sections and from DN 800 to DN 1800 for kite-shaped cross-sections.

The intended use of these products is for the conveyance of sewage, rainwater and surface water at temperatures up to 50 °C, without pressure or occasionally at a head of pressure up to 0,5 bar<sup>1)</sup>, and installed in areas subjected to vehicle and/or pedestrian traffic.

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

It specifies definitions, requirements and characteristics of pipes, fittings, joints, materials, test methods and marking.

The pipes are classified on the basis of the intended method of installation and cross-sectional shape.

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 document. 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 — Material requirements for pipe joint seals used in water and drainage applications — Part 1: Vulcanized rubber*

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

EN 1119, *Plastics piping systems — Joints for glass-reinforced thermosetting plastics (GRP) pipes and fittings — Test methods for leaktightness and resistance to damage of non-thrust resistant flexible joints with elastomeric sealing elements*

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

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

EN ISO 3126, *Plastics piping systems — Plastics components — Determination of dimensions (ISO 3126:2005)*

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<sup>1)</sup> 1 bar = 10<sup>5</sup> N/m<sup>2</sup> = 0,1 MPa



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