Betongkonstruktioner – Provning av produkter och system för skydd och reparation –
Del 1: Bestämning av linjär krympning för polymerer och ytskyddsprodukter (SPS)

Products and systems for the protection and repair of concrete structures – Test methods –
Part 1: Determination of linear shrinkage for polymers and surface protection systems (SPS)

The European Standard EN 12617-1:2003 has the status of a Swedish Standard. This document contains the official English version of EN 12617-1:2003.
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English version

Products and systems for the protection and repair of concrete structures - Test methods - Part 1: Determination of linear shrinkage for polymers and surface protection systems (SPS)

Produits et systèmes pour la protection et la réparation des structures en béton - Méthodes d'essai - Partie 1: Détermination du retrait linéaire des polymères et des systèmes de protection de surface

Produkte und Systeme für den Schutz und die Instandsetzung von Betontragwerken - Prüfverfahren - Teil 1: Bestimmung des linearen Schrumpfes von Polymeren und Oberflächenschutzsystemen (OS)

This European Standard was approved by CEN on 3 March 2003.

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 Management Centre 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 Management Centre has the same status as the official versions.

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

This document (EN 12617-1:2003) has been prepared by Technical Committee CEN/TC 104 "Concrete and related products", the secretariat of which is held by DIN.

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 2003, and conflicting national standards shall be withdrawn at the latest by October 2003.

The European Standard is one of a series dealing with products and systems for the protection and repair of concrete structures:

EN 12617-1, Products and systems for the protection and repair of concrete structures - Test methods - Part 1: Determination of linear shrinkage for polymers and surface protection systems (SPS).


EN 12617-4, Products and systems for the protection and repair of concrete structures - Test methods - Part 4: Determination of shrinkage and expansion.

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

This European Standard specifies a method for determining the linear shrinkage of solvent free multicomponent cold curing reactive resins for the protection and repair of concrete structures.

NOTE The method is not suitable for rubber, elastic and very fast curing products. Rubber and elastic products show relaxation effects and can dissipate stress to the ground. For testing very fast curing products the pot life should be long enough for mixing and preparing the test specimens.

2 Normative references

This European Standard incorporates by dated or undated references, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).


3 Terms and definitions

For the purposes of this European Standard, the terms and definitions contained in EN 1504-1 and the following apply.

3.1 shrinkage
contraction in length or volume during curing of the material

3.2 shrinkage value
ratio of the gap width in mm after curing to the original length of 1 m

4 Apparatus

4.1 Two trough sections, of length 1 000 mm ± 1 mm, made of 30 mm x 4 mm steel angle with ends fitted with flat ground flanges closed with matching bolted metal plates which also serve as supports, all shown in Figures 1 and 2.

4.2 Instrument to measure length to an accuracy of 0,05 mm (e.g. slide gauge).

4.3 Drying cabinet maintained at (70 ± 2) °C.