



Institut luxembourgeois de la normalisation
de l'accréditation, de la sécurité et qualité
des produits et services

ILNAS-EN 12618-3:2004

**Products and systems for the
protection and repair of concrete
structures - Test methods - Part 3:
Determination of the adhesion of**

Produits et systèmes pour la protection
et la réparation des structures en béton -
Méthodes d'essais - Partie 3:
Détermination de l'adhérence des

Produkte und Systeme für den Schutz
und die Instandsetzung von
Betontragwerken - Prüfverfahren - Teil 3:
Bestimmung der Haftzugfestigkeit von

08/2004



National Foreword

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English version

**Products and systems for the protection and repair of concrete
structures - Test methods - Part 3: Determination of the
adhesion of injection products, with or without thermal cycling -
Slant shear method**

Produits et systèmes pour la protection et la réparation des
structures en béton - Méthodes d'essai - Partie 3:
Détermination de l'adhérence des produits d'injection,
après cycles thermiques ou non - Méthode par cisaillement
oblique

Produkte und Systeme für den Schutz und die
Instandsetzung von Betontragwerken - Prüfverfahren - Teil
3: Bestimmung der Haftzugfestigkeit von Rissfüllstoffen mit
oder ohne thermische Behandlung - Schrägscherfestigkeit

This European Standard was approved by CEN on 27 February 2004.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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Foreword

This document (EN 12618-3:2004) has been prepared by Technical Committee CEN /TC 104, "Concrete and related products", the secretariat of which is held by DIN.

It has been drafted by Sub-Committee 8 "Products and systems for the protection and repair of concrete structures" (Secretariat AFNOR).

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 February 2005, and conflicting national standards shall be withdrawn at the latest by February 2005.

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

1 Scope

This document describes the method for determining the slant shear bond strength of all injection products intended to restore the integrity of cracked concrete and covered by prEN 1504-5.

The test may be performed upon cracks injected in the dry, damp, wet or with water flowing through them. It should always be carried out after the appropriate period of curing under the standard conditions of test detailed below, but may additionally be performed upon a further set of specimens after a period of artificial ageing by thermal cycling.

Whilst the testing of the repaired crack is normally by short term static load, it may also be performed as a creep test by long term static load, or as a dynamic test by the application of a cyclic load.

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 196-1, *Method of testing cements - Part 1: Determination of strength*.

EN 1504-1:1998, *Products and systems for the protection and repair of concrete structures – Definitions, requirements, quality control and evaluation of conformity – Part 1: Definitions*.

prEN 1504-5:2001, *Products and systems for the protection and repair of concrete structures - Definitions, requirements, quality control and evaluation of conformity - Part 5 : Concrete injection*.

EN 1766, *Products and systems for the protection and repair of concrete structures - Tests methods - Reference concretes for testing*.

EN 12390-1, *Testing hardened concrete – Part 1: Shape, dimensions and other requirements for test specimens and moulds*.

EN 12390-2, *Testing hardened concrete – Part 2: Making and curing specimens for strength tests*.

EN 12390-4, *Testing hardened concrete – Part 4: Compressive strength - Specification for testing machines*.

EN 13687-4, *Products and systems for the protection and repair of concrete structures - Tests methods - Determination of thermal compatibility - Part 4: Dry thermal cycling*.

3 Terms and definitions

For the purpose of this document, the terms and definitions given in EN 1504-1:1998 and prEN 1504-5:2001 apply.