

Anchoring products of reinforcement bars SILKO test programme 2016

Introduction

This is an unofficial translation of the Finnish report. In case of interpretation disputes the Finnish report.

These test instructions are used in examining the suitability of anchoring products of reinforcement bars for both repair and new building of concrete engineering structures of the orderer (developer)

The product is mixed and applied on concrete substrate by the representative of the product agent under the surveillance of the representative of the test laboratory. Any exception to this procedure is noted in the test report.

Test programme

The anchoring product of reinforcement bars must have CE marking according to EN 1504-6, it must fill all the functional requirements given in the standard and its AVCP class must be 2+.

In addition the bleeding and frost salt durability must fill the requirements given below.

Bleeding

Bleeding is tested according to EN 480-4, EN 445 chapter 4.4, EN 445 chapter 4.5 or according to the test method described below.

The test is carried out at 21 ± 2 °C.

A litre of anchoring material is poured in the measuring vessel. The vessel is sealed tightly to prevent water from evaporating, The vessel is placed in calm place free of vibration. After 2 hours the height of the anchoring material and the height of layer of the bleeding water are measured.

The anchoring material must not bleed. The bleeding must be 0.00 %.

Frost salt durability

The frost salt durability is tested according to EN 13687-1. The number of freeze thaw cycles is 50. The test results must be:

- Average crack width ≤ 0.05 mm
- The width of all cracks < 0.1 mm
- No lamination
- Scaling ≤ 0.5mm, < 20 % of surface
- Adhesion after 50 cycles ≥ 2 MPa

Reference

EN 1504-6 (2006) Products and systems for the protection and repair of concrete structures - Definitions, requirements, quality control and evaluation of conformity - Part 6: Anchoring of reinforcing steel bar. 21 p.

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