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Test Report No. 2.1/24602/0684.1.1-2015e

General

Issued: 01 September 2016

Order by: **Proline Systems GmbH**
Kratzenburger Landstraße 3
56154 Boppard
Germany

Material: Decapling mat made of a glass nonwoven (white) bottomside and a fiberglass fabric topside (black)
PROSECUREfibretec
(declaration by customer)

cementitious adhesive
Sopro`s No. 1
(declaration by customer)

Order date: 20 May 2015

Samples : 09 June 2015

Tests:	**Standard**	**Issue**
1. Determination of tensile adhesion strength for cementitious adhesives	according to DIN EN 1348	11.2007

The results apply exclusively to the specimens submitted
The date of testing is reported on the enclosed enclosure/-es.
Results are reported to the accuracy given in the standards. In statistical evaluation, the measured accuracy is taken.

This test report contains 3 pages
It may not be published in parts.

1. General

The test samples were made by the customer in the laboratory of KIWA GmbH TBU in Greven.

1.1. Test conditions

The setup of the samples is shown in table 1.

Tab.1: Sample setup

setup (from bottom to top)	material	mix ratio	additional information
underground	concrete slab DIN EN 1323 (40 cm x 40 cm x 4 cm)	-	-
bottom bonding (Underground - membrane)	Sopro No. 1	25 kg / 10,25 l water	floating-Buttering-procedure 4 mm toothing
sealing membrane	PROSECUREfibretec	-	-
topside bonding (membrane - tile)	Sopro No. 1	25 kg / 10,25 l water	floating-Buttering-procedure 6 mm toothing
tiles	unglazed tiles Typ V1 (5 cm x 5 cm)	according to DIN EN 14411, group Bla	loaded with 2 kg for 30 seconds

1.2 Storage conditions

The storage conditions are shown in table 2.

Tab. 2: storage conditions

Storage	Duration
Dry storage	28 d in normal climate 23/50

1.3 Determination of tensile adhesion strength for cementitious adhesives

The test area was not cutted to the underground. Instead a steel template (51 mm x 51 mm) was applied around the tile to prevent a detach of the decapling mat with the underground.
Test was performed with a device from the company Freundl Series Easy MLC.

1.4. Results

The summary of the results is shown in table 2.

Tab. 2: results of the tensile adhesion strength

sample Nr.	dry storage	
	tensile adhesion strength in N/mm²	fracture
1	1,3	E/oF
2	1,3	E/oF
3	1,3	E/oF
4	1,0	E/oF
5	1,1	E/oF
6	1,3	E/oF
7	1,1	E/oF
8	1,2	E/oF
9	1,2	E/oF
average*	**1,2**	**-**

E/oF = crack between decapling mat and cementitious adhesive topside

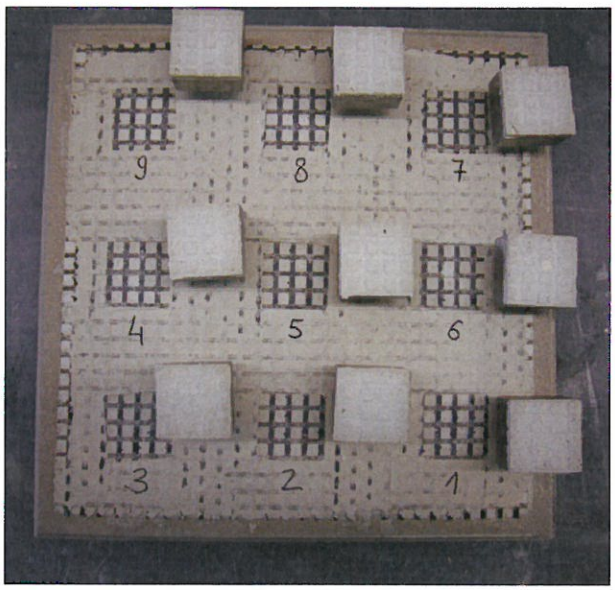

Image 1: fracture surface

*Averaging based on DIN EN 1348 part 9 and DIN EN 1346 part 9; individual values were deleted which deviate more than ± 20 % from the average. If 5 or more values left, a new average was made.

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