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Test Report No. 2.1/24602/0957.0.1-2015e

General

Issued: 01 September 2016

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

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

Decapling mat made of a nonwoven bottomside (white), a glass grid texture in the middle (blue)
and HDPE-grid rods (blue) topside
Blanke • PERMAT
(declaration by customer)

Order date: 06 October 2015

Samples : 06 October 2015

Tests:

	Standard	Issue
1. Test of crack bypassing	FDF - code of practice	08.2004

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 and 1 annex
It may not be published in parts.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. Description of the system

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	2 concrete slabs blunt (40 cm x 20 cm x 4 cm)	-	-
primer	Sopro GD 749	undiluted Dispersion	applied by brush drying time: at least 30 min
bottom bonding (Underground - membrane)	Sopro No. 1	25 kg / 10,25 l water	floating - buttering- procedure 4 mm toothing
sealing membrane	PROSECUREfibretec or Blanke • PERMAT	-	-
topside bonding (membrane - tile)	Sopro No. 1	25 kg / 10,25 l water	floating - buttering- procedure 6 mm toothing
tiles	unglazed tiles (10 cm x 10 cm x 8 mm)	according to DIN EN 14411, group Bla	loaded with 2 kg for 30 seconds
jointing	Sopro Brillant PerlFuge 1-10 mm	5 kg / 1,1 l water	drying time approx. 24 h joint width 5 mm

1.2 Storage conditions

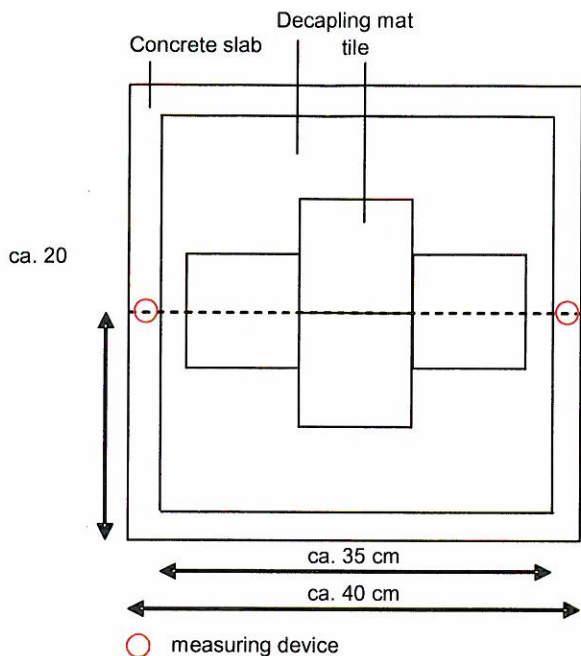
The storage conditions are shown in table 2.

Tab. 2: storage conditions

Storage	Duration
Dry storage	42 d in normal climate 23/50 06. October 2015 – 17. November 2015 (test date in the results)



1.3 Test of crack bypassing according to FDF- code of practice (08.2004)



After a storage of 42 days at 50% rel. humidity, a crack was generated without applied load. The length of the generated crack was measured with 2 measuring devices (HBM WA 20) which were placed between the concrete slabs (shown in the picture 1). While the test is running, the tiles and the joints are monitored. Distance and force were recorded.

Image 1: plan of the system setup

1.4. Results

The summary of the results is shown in table 3.

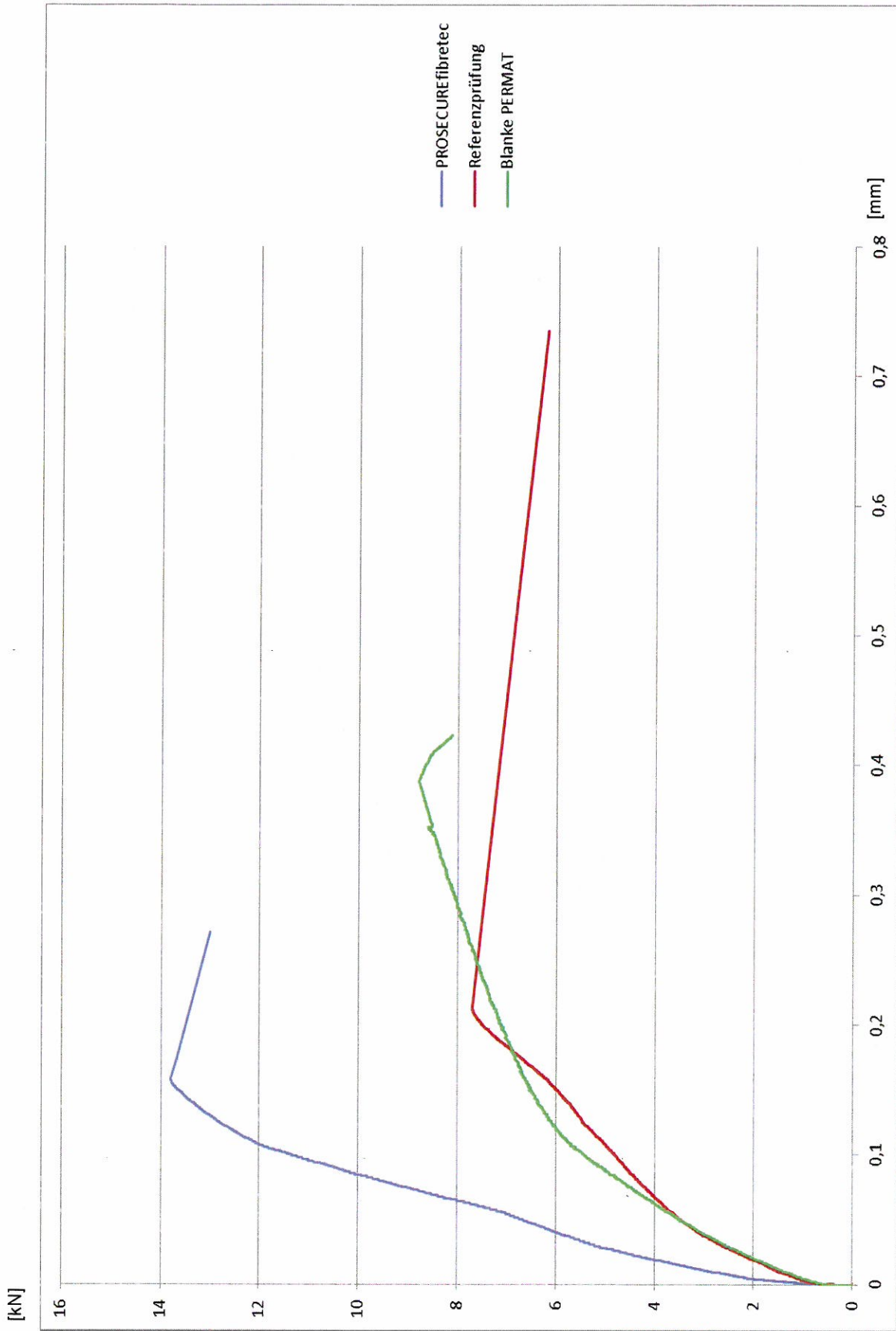
table 3: results

test No.	test system	crack widening in mm	measured power in kN	failure
1	reference without decapling mat (test date: 23.11.2015)	0,17	7,7	split of the test sample
		0,25		
2	PROSECUREfibretec (test date: 25.11.2015)	0,16	13,8	sidewall crack at the joint
		0,15		
3	Blanke • PERMAT (test date: 19.11.2015)	0,27	8,8	sidewall crack at the joint
		0,50		

In annex 1 the force-path curve is shown.

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Force-path curve for the test of crack bypassing