

Kiwa GmbH TBU

Gutenbergstraße 29 48268 Greven

Tel. +49 (0)2571 9872 0 Fax +49 (0)2571 9872 99 infokiwagreven@kiwa.de www.kiwa.de

Test Report No. 2.1/24602/0957.0.2-2015e

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)

Order date:

06 October 2015

Samples:

06 October 2015

Tests:

Standard

Issue

1. Punching test

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. It may not be published in parts.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	concrete slab (30 cm x 30 cm)	-	-
primer	Sopro GD 749	undiluted Dispersion	applied by brush drying time: atleast 30 min
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 (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	Time	
Dry storage	42 d in normal climate 23/50 06. October 2015 – 17. November 2015	



1.3 Punching test according to FDF-code of practice (08.2004)

After the storage a point load was caused with an steelstamp of 4 cm² (Ø 2,25 cm) at 3 different position (shown in image 1) with 15N/s.

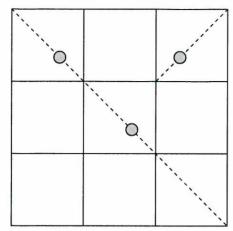


image 1: description of the system

Position of the stamp. Diagonal with a gap of 10 mm, measured from the edge of the tile.

1.4. Results

The summary of the results is shown in table 3.

Tab. 3: results

sample (position)	maximum load in N	distance at maximum load in mm	failure
1 (centered tile)	13090	2,04	no damage at the ceramic full crack in the concrete slab (underground)
2 (edge tile)	9080	1,79	no damage at the ceramic full crack in the concrete slab (underground)

In order to the cracking of the concrete slabs (Underground) the test had to be canceled. The defining of the maximum power for the first damage at the ceramic was not possible. The maximum power which is shown in table 3 refers to the collapse of the Underground.

i.V Matthias Käsekamp, B. Eng. (Deputy head of test laboratory)

i.A. Alexander Kriz, B. Sc. (Staff of test laboratory)