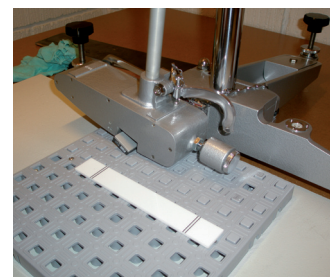
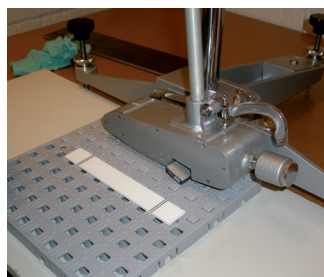


Excellent Systems A/S Testing Department



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BS 7976 (The British Pendulum test)



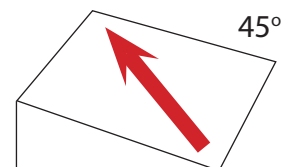
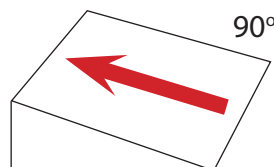
Forklaring af skridhæmnings test:

Målingerne foretages med 2 typer gummiklodser; TLR eller 4S.
Alle tal, der opgives i denne test, er et gennemsnit af 8 komplette målinger.
Overfladerne måles i tør og våd tilstand.

BS 7976 giver følgende retningsværdier for, hvor skridhæmmende en overflade er:

Skrid risiko	Målt med TRL	Målt med 4S
Høj skrid risiko	0-19	0-24
Middel skrid risiko	20-39	25-34
Lav skrid risiko	40-74	35-64
Minimal skrid risiko	>75	>65

Der måles, når man går lige på overfladen i en vinkel på 90° eller skråt på overfladen i en vinkel på 45°:



Testresultater: Excellent Systems ramper

I denne test måles Excellent Ramper i standard grå materiale og ligeledes i standard materiale med Excellent SlipStop monteret.

Testen er foretaget med TRL gummiklods.

Overflade	Tør 90°	Tør 45°	Våd 90°	Våd 45°
Standard grå	128	122	59	44
Skridrisiko	Minimal skrid risiko	Minimal skrid risiko	Lav skrid risiko	Lav skrid risiko

Standard grå med Excellent SlipStop	>150	>150	102	96
Skridrisiko	Minimal skrid risiko	Minimal skrid risiko	Minimal skrid risiko	Minimal skrid risiko

11/04/2008

Excellent Systems A/S
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Civilingeniør

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Test Report 0565-14-1-H

Part of cumulative Test Report 0565-14

English version of Test Report 0565-14-1-G

for

Excellent systems A/S

Møllevej 2, Bale
8544 Mørke
Denmark

1. Test specimen:

One sample labelled as "4. Grip tile".

2. Date of arrival:

28/05/2014

3. Test realization:

10/06/2014

4. Testing method:

Testing of floor coverings; determination of the anti-slip property - Workrooms and fields of activities with slip danger - Walking method - Ramp test according to DIN 51130:2004-6 (●).

Determination of the displacement volume of floor coverings according to DIN 51130:2004-06 (●).

5. Sampling/Sample preparation:

Sampling and delivery to the FGK was under responsibility of the customer.
The sample was tested in condition as delivered.

6. Results:

Determination of the anti-slip property according to DIN 51130:2004-06

Corrected mean acceptance angle: **27.7°** Class: **R 12**

Evaluation scheme DIN 51130:2004-06

Corrected mean acceptance angle	Class
6° to 1°	R 9
> 10° to 19°	R 10
> 19° to 27°	R 11
> 27° to 35°	R 12
> 35°	R 13

Displacement volume

According to GUV-R 181 - Rules for safety and health protection – Floorings in occupational areas with slip risk (10/2003) the determination of the displacement volume can only be applied in case of a light profile distance of at most 40 mm. **For open mesh floorings the displacement volume is in any case specified as V10.**

Therefore the sample's displacement volume has to be classified as V 10.

Evaluation scheme DIN 51130:2004-06

Area based minimal volume of the displacement volume cm ³ /dm ²	classification of the displacement volume
4	V 4
6	V 6
8	V 8
10	V 10

7. Testing uncertainties:

Determination of the anti-slip property
Details on request.

8. Epilogue:

All investigations were done in view of the latest scientific-technical trends and to the best of one's knowledge and belief. The testing results exclusively refer to the test specimen. In order to avoid misinterpretations the present report may only be copied and transmitted in its completeness. To copy extracts needs a written permission by the FGK.

27.10.2014

X

i.V. Dr. Pohlmann-Lortz
Laborleiter





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DAP-P-01.491-00-98-00
Laboratory accreditation after DIN EN 45001 by the
DAP Deutsches Akkreditierungssystem Prüfwesen
GmbH. Accreditation applies to the mentioned tests
in the accreditation certificate

Test Report 0319/03

for

Excellent Systems A/S
P.O. Box 32 DK-8544 Mørke Denmark
Tel. +45 86 37 71 33 / Fax +45 86 37 79 95

1. **Test specimen:** Comfort Flooring Elements (plastic elements 250*250*18 mm (grid structure))
2. **Date of arrival:** 28.03.2003
3. **Date of testing:** 23. – 24.04.2003
4. **Test Method:**
- Determination of the anti-slip properties of floor coverings according to DIN 51097 (wet-loaded barefoot areas; walking method – ramp test)
 - Determination of the anti-slip properties of floor coverings according to DIN 51130 (work-rooms and fields of activities with raised slip danger, walking method – ramp test)
5. **Sampling / Sample preparation:** The contractor performed sampling and delivery of the samples. The samples were delivered ready for testing.
6. **Results:**
- | | |
|--|----------------------------|
| DIN 51097: average angle of inclination: 27,4° | Classification: C |
| DIN 51130: average angle of inclination: 11,1° | Classification: R10 |
| displacement volume: without testing (grid) | Classification: V10 |

DIN 51097	Average acceptance angle of inclination	Classification
	≥ 12°	A
	≥ 18°	B
	≥ 24°	C
DIN 51130	Corrected average acceptance angle of inclination	Classification
	10° to 19°	R 10
	19° to 27°	R 11
	27° to 35°	R 12
	> 35	R 13
	Displacement volume in cm ³ /dm ²	Classification
	4	V4
	6	V6
	8	V8
	10	V10

7. **Testing Uncertainties:** DIN 51097 and DIN 51130: The acceptable measuring error of the used inclination measuring device < 0,2°. DIN 51130: The limit of comparison for the average acceptance angles amounts to 1° with a probability level of 95 %.
8. **Conclusion:** All investigations were done in view of the latest scientific-technical trends and to the best of one's knowledge and belief. The testing results exclusively refer to the test specimen. In order to avoid misinterpretations the present report may only be copied and transmitted in its completeness. For a copy of extracts of the report a written permission by the FGK is required.

ppa. Dr. Dirk Penner
(Head of Laboratory)
Höhr-Grenzhausen, den 28.04.03/i/pf-sk

For further questions please refer to: Mr. Patrick Pfeil.
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