

# Translation of the slip resistancy report, Permovable, made by Vloerveilig

Product: Permovable

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The measurements were made between 11:00 and 11:30 at a temperature of +/- 20 degrees Celsius, dry weather and indoor.

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Measurement procedure and clarification of test method:

In a many European countries there are no legal regulations yet regarding the slip resistance of floors. Since 2003 there is an industrial agreement in the Netherlands regarding this subject: NTA 7909:2003

This agreement describes a measuring method based on the Floor Slide Control device (FSC2000). This method makes it possible to perform measurement on site in a real situation.

This device takes a measurement with three materials: rubber, plastic and leather under wet and dry conditions.

The outcome of these measurements can be used for classification according to the German DIN 51130 standard.

## NTA standard:

	Friction coefficient	Deviation between wet and dry condition	
Leather in dry and wet condition	> 0.30	< 0.90	< 50%
Rubber and plastic in dry and wet condition	> 0.44	< 0.90	< 50%

## DIN 51130 standard:

Class	Friction coefficient
< R10 (R9)	0.00 - 0.18
R10	0.18 - 0.34
R11	0.34 - 0.51
R12	0.51 - 0.71
R13	> 0.71

Measurement was made with the material on a solid smooth surface in printed and non-printed condition.

Measurements	Printed film
Leather in dry condition:	$\mu = 0.46$
Rubber in dry condition:	$\mu = 1.00$
Plastic in dry condition:	$\mu = 1.00$
Leather in wet condition:	$\mu = 0.53$
Rubber in wet condition:	$\mu = 0.46$
Plastic in wet condition:	$\mu = 0.20$

## Conclusion:

This film complies with **R10** with plastic under wet conditions.  
This film complies with **R11** with rubber under wet conditions.  
This film complies with **R11** with leather under dry conditions.  
This film complies with **R12** with leather under wet conditions.  
This film complies with **R13** with rubber and plastic under dry conditions.