

Translation of the slip resistancy report made by Vloerveilig, dated 11-07-2018

Product: FloorAppeal Floortex 250g LT

Date: 11-07-2018

The measurements were made between 14:00 and 15:00 at a temperature of 23 degrees Celsius, dry weather and indoor.

Company: Vloerveilig B.V.
Engineer: Marcel van Zoelen

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	Non-printed film
Leather in dry condition:	$\mu = 0.49$	$\mu = 0.48$
Rubber in dry condition:	$\mu = 0.92$	$\mu = 0.91$
Plastic in dry condition:	$\mu = 0.83$	$\mu = 0.93$
Leather in wet condition:	$\mu = 0.48$	$\mu = 0.41$
Rubber in wet condition:	$\mu = 0.84$	$\mu = 0.85$
Plastic in wet condition:	$\mu = 0.69$	$\mu = 0.69$

Conclusion:

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