

TFI-Report 23-001420-02

Functional and Quality Testing

Customer	Kvadrat AS Lundbergsvej 10 8400 Ebeltoft DK
Product	Textiler Bodenbelag/Textile floor covering Echo

This report includes 5 pages.



Aachen, 15.01.2024

Dr. Andreas Zoëga
Head of Testing Laboratory



The present document is provided with an advanced electronic signature.

This report only applies to the tested samples and has been established to the best of our knowledge. Only the entire report shall be reproduced. Under no circumstances, extracts shall be used. Furthermore, we apply the "General Terms and Conditions for the Execution of Contracts" of the TFI Aachen GmbH, also with regard to the order execution.

The test result does not include any addition or deduction for uncertainties due to measurement, sample preparation, sample collection and production tolerances.

1 Transaction

Order date 11.12.2023
Your reference Martina Novotná
Product designation Echo

TFI sample number 2302086

Date of sample receipt 13.12.2023

Testing period 05.01.2024 - 08.01.2024

Test order:

Change in appearance according ISO 10361 ^a

a ... Die mit a gekennzeichneten Ergebnisse basieren auf nach EN ISO/IEC 17025 akkreditierten Prüfungen./The reports marked a are based on tests accredited in accordance with EN ISO/IEC 17025.

Responsible at TFI:



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2 Product description

TFI sample number

2302086



Total thickness in mm

* 12-13

Total mass per unit area in g/m²

* 2300

Type of delivery

In Probengröße angeliefert/Supplied
in sample size

*Angabe des Auftraggebers/Customer Information



3 Results

Change in appearance (median) - shortterm	4
Change in appearance (median) - longterm	3.5

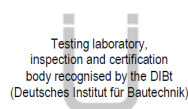
The measurement results are evaluated without consideration of the measurement uncertainty with reference to compliance with limit values, unless otherwise specified by the test standard.

4 Partial Reports

Changes in appearance according to ISO 10361



Notified Body
No. 1656



Testing laboratory,
inspection and certification
body recognised by the DIBt
(Deutsches Institut für Bautechnik)



Accredited for the methods indicated in
the partial reports to the DAkkS certificate

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Partial Report AV - Changes In Appearance

1 Transaction

TFI sample number 2302086

2 Test Method / Requirements

ISO 10361:2015 Production of changes in appearance by means of Vettermann drum and hexapod tumbler tester

Assessment standard EN ISO 9405:2017

Deviation

- No individual results of assessors given
- Vacuum cleaner used without rotating brush

Test method method B (Hexapod)

Type of underlay none

Number of assessors 3

Type of vacuum cleaner Vorwerk Kobold VT270 / EB370 with rotating brush

Assessment scale ISO loop

3 Results

Parameter	Short-term wear (4,000 cycles)		Long-term wear (12,000 cycles)	
	Mean value	Median value	Mean value	Median value
Assessment	3.8	4	3.3	3.5
Grey Scale	3.7	3-4	3	3
Dominant property	structure, colour		structure, colour	
EN 1307, table 15	class 33			
EN 14215, table 3	class 22			

Comments / special observations: none

