



Confidential Report

Our Ref: 29/03708A/11/25



Date: 21 November 2025

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Client: **Kvadrat A/S**Lundbergsvej 10
8400 Ebeltoft
Denmark**Job Title:** Various Tests on One Sample of Fabric**Clients Order Ref:** ---**Date of Receipt:** 11 November 2025**Description of Sample:** One sample of fabric, referenced; Vidar Duo 0698.**Work Requested:** We were asked to make the following test(s):Martindale Abrasion - BS EN ISO 12947-2
Pilling - BS EN ISO 12945-2
Seam Slippage - BS EN ISO 13936-2

- * subcontracted test, UKAS accredited
- ** subcontracted test, EN ISO/IEC 17025 accredited
- *** not UKAS accredited

This report relates only to the items tested.

All tests were carried out in the laboratories in Leeds, unless otherwise indicated.



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Client: **Kvadrat A/S**

Abrasion Resistance Test: BS EN ISO 12947-2: 2016 12kPa pressure

Conditioning

Unless otherwise specified the sample has been conditioned and tested, where appropriate, in the standard atmosphere for conditioning and testing textiles (BS EN ISO 139:2005 + A1:2011) of 65±4% r.h. and 20±2°C.

Colour Change

Colour change grade at the number of rubs shown. Colour change grades range from 5 (no change) to 1 (severe change).

No. rubs	Specimen 1	Specimen 2	Specimen 3	Specimen 4	Overall Result
3000	4-5	4-5	4-5	4-5	4-5

Specimen breakdown

Rubs to specimen breakdown (end point) observed using a magnification of approximately 10x. The overall result is the lowest individual result obtained during testing.

	Specimen 1	Specimen 2	Specimen 3	Specimen 4	Overall Result
No. rubs	>100,000	>100,000	>100,000	>100,000	>100,000
End point type	End point not reached	End point not reached	End point not reached	End point not reached	



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Determination of Fabric Propensity to Surface Pilling, Fuzzing or Matting – Modified Martindale Method

Date of test: 17/11/2025

Three specimens from the sample were tested on a modified Martindale Abrasion Machine using wool abradant fabric and a loading weight of $415 \pm 2g$, as stated in Annex A, Table A.1, following the Category 1 procedure for upholstery fabrics described in BS EN ISO 12945-2:2020.

Pre-treatment: none
 Deviations/ unusual features: none

The tested specimens were visually assessed by two observers and rated according to BS EN ISO 12945-4:2020.

No. of pilling rubs	Pilling				Fuzzing				Matting			
	Result 1	Result 2	Result 3	Mean	Result 1	Result 2	Result 3	Mean	Result 1	Result 2	Result 3	Mean
125	4-5	4-5	4-5	4-5	4	4	4-5	4	5	5	5	5
500	4-5	4-5	4-5	4-5	4	4	4-5	4	5	5	5	5
1000	4	4-5	4-5	4-5	4	4	4	4	5	5	5	5
2000	4	4	4-5	4	4	4	4-5	4	5	5	5	5
5000	4-5	5	4-5	4-5	4	4	4	4	5	5	5	5
7000	4-5	4-5	4-5	4-5	4	4	4	4	5	5	5	5

Expanded uncertainty of measurement where $k=2$ (approximately 95% confidence level) = ± 0.5 grading units



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Determination of the Slippage Resistance of Yarns at a Seam in Woven Fabric – BS EN ISO 13936-2: 2004 (2017) – 180N maximum force applied to specimens

Date of test: 21/11/2025

Conditioning

Unless otherwise specified the sample has been conditioned and tested, where appropriate, in the standard atmosphere for conditioning and testing textiles (BS EN ISO 139:2005 + A1:2011) of 65±4% r.h. and 20±2°C.

Results

180N maximum force applied to specimens, fabric breakdown (FB) or seam breakdown (SB) is recorded as a failure.

Direction	Spec No.	Seam Opening (mm)	Fabric / Seam Breakdown (N)	Direction	Spec No.	Seam Opening (mm)	Fabric / Seam Breakdown (N)
Warp way seam (Warp slippage)	1	4.0	No	Weft way seam (Weft slippage)	1	5.0	No
	2	4.0	No		2	4.0	No
	3	4.0	No		3	6.0	No
	4	4.0	No		4	6.0	No
	5	3.0	No		5	6.0	No
	Mean	4.0			Mean	5.0	



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Where required to make a judgement to any pass/fail criteria an estimation of uncertainty of measurement has been taken into account. Under our Policy we have used a non-binary decision rule.

See our decision rules Policy (<https://www.bttg.co.uk/about-us/decision-rules-policy/>) for further information.

Reported by:.......... K Marshall, Section LeaderCountersigned by:.......... J Brewster, Section Leader

Enquiries concerning this report should be addressed to Customer Services.



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Uncertainty Budget

The overall uncertainty budget for BS EN ISO 12947-2 is as follows:-

Specimen breakdown

± 20 %

Shade change

± 0.5 Grade

The overall uncertainty budget for BS EN ISO 12945-2 is as follows:-

± 0.5 Grade

The overall uncertainty budget for BS EN ISO 13936-2 is as follows:-

Overall uncertainty ± 4.7 %



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