



Confidential Report

Our Ref: 29/03695A/10/25



Date: 05 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: 17 October 2025

Description of Sample: One sample of fabric, referenced; Safire 0380.

Work Requested: We were asked to make the following test(s):

BS EN ISO 12947-2 - Martindale Abrasion
BS EN ISO 12945-2 - Pilling
BS EN ISO 13936 - Seam Slippage

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



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Note: This report relates only to the items tested.

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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	4	4	4	4

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.

No. rubs	Specimen 1	Specimen 2	Specimen 3	Specimen 4	Overall Result
50,000	50,000	50,000	50,000	50,000	50,000
End point type	Fibre layer fully worn off	Fibre layer fully worn off	Fibre layer fully worn off	Fibre layer fully worn off	



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Client: **Kvadrat A/S**

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

Date of test: 30/10/2025

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	5	5	4-5	4	4	4	4	5	5	5	5
500	4-5	5	4-5	4-5	4	4	4	4	5	5	5	5
1000	4-5	4-5	4-5	4-5	4	4	4	4	5	5	5	5
2000	4-5	4-5	4-5	4-5	3-4	3-4	3-4	3-4	5	5	5	5
5000	4-5	4-5	4-5	4-5	3-4	3-4	3-4	3-4	5	5	5	5
7000	4-5	4-5	4-5	4-5	3-4	3-4	3-4	3-4	5	5	5	5



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Client: **Kvadrat A/S****Determination of the Slippage Resistance of Yarns at a Seam in Woven Fabrics**


Date of test: 29/10/2025

Five specimens from each direction of the sample were tested in accordance with BS EN ISO 13936-1: 2004 (2007). The force required to give a seam opening of 6mm was calculated by computer software.

<u>Direction</u>	<u>Mean 6mm seam opening force (N)</u>
(warp seam) warp slippage	3.0
(weft seam) weft slippage	4.0

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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