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11 July 2012

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Our Ref: 31886-2
Your Ref: LH/lh

Client: Kvadrat A/S

Address: Lundbergsvej 10
8400 Ebeltøft
Denmark

Job Title: Various Tests on One Sample of Fabric

Client's Order Ref:

Date of Receipt: 28 June 2012

Description of Sample(s): One full width sample of woven fabric, described by the Client as upholstery fabric, reference:-

Canvas 974, 90% new wool, 10% nylon

Work Requested: abrasion resistance to EN ISO 12947
pilling resistance to EN ISO 12945-2

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Testing atmosphere: Unless otherwise specified the sample(s) 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.

Determination of the Abrasion Resistance of Fabrics by the Martindale Method – Determination of Specimen Breakdown

Date of test start: 02.07.12. Four specimens from the sample were tested, under a nominal pressure of 12 kPa(795±7g) in accordance with BS EN ISO 12947-2:1998, using a Martindale abrasion tester as described in BS EN ISO 12947-1:1998.

The reference abradant was mounted over woven backing felt and specimen breakdown (end point) was reached when two separate threads had completely broken. The change of shade of the test specimens was not assessed. The tested specimens are enclosed.

No. of rubs to end point
≥ 100,000

Note: the test was discontinued at 100,000 rubs, as agreed with the Client; end point had not been reached.

Observations during testing: pills formed at approximately 45,000 rubs and continued throughout the test; these were cut off at intervals.

Determination of Fabric Propensity to Surface Fuzzing and Pilling–Modified Martindale Method #

Date of test: 03.07.12. Specimens from the sample were tested on a modified Martindale Abrasion Machine, using wool abradant fabric and a loading weight of 415 ±2g as stated in Annex A, Table A.1, following the Category 1 procedure for upholstery fabrics described in BS EN ISO 12945-2:2000.

The specimens were tested to a total of 5000 rubs, visually assessed at intervals and rated according to Table 1 of the Standard, summarised as follows:-

- 5 - no change
- 4 - slight surface fuzzing and/or partially formed pills
- 3 - moderate surface fuzzing and/or moderate pilling
- 2 - distinct surface fuzzing and/or distinct pilling
- 1 - dense surface fuzzing and/or severe pilling

<u>Number of rubs</u>	<u>Pilling grade</u>	<u>Description</u>
500	4-5	slight surface fuzzing
1000	4-5	slight surface fuzzing
2000	4-5	slight surface fuzzing
5000	4	slight surface fuzzing

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test subcontracted.

Reported by: *L.I. Butler*

L I Butler (Mrs)
Senior Technician – Textiles

Countersigned by: *J. Bullers*

J M Bullers (Mrs)
Operational Head – Textiles

Enquiries concerning this report should be addressed to Customer Services.

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