

# **Confidential Report**

Our Ref: 29/00603A/04/14







## Shirley Technologies Limited

Shirley Technologies Limited Wira House West Park Ring Road Leeds, LS16 6QL United Kingdom

Tel: +44 (0)113 274 3434 Fax: +44 (0)113 274 8344 Web: http://www.shirleytech.com Email: info@shirleytech.co.uk

14 May 2014 Page 1 of 3

Our Ref: 29/00603A/04/14

Your Ref: LH/lh

Client: Kvadrat A/S

Address: Lundbergsvej 10

8400 Ebeltoft Denmark

Job Title: Various Tests on One Sample of Fabric

Client's Order Ref:

Date of Receipt: 22 April 2014

Description of Sample(s): One part width sample of woven fabric, referenced by the Client:-

Divina MD 193, 100% new wool

Work Requested: abrasion resistance to EN ISO 12947

pilling resistance to EN ISO 12945-2







### Shirley Technologies Limited

Shirley Technologies Limited Wira House West Park Ring Road Leeds, LS16 6QL United Kingdom

Tel: +44 (0)113 274 3434 Fax: +44 (0)113 274 8344 Web: http://www.shirleytech.com Email: info@shirleytech.co.uk

14 May 2014 Page 2 of 3

Our Ref: 29/00603A/04/14

Your Ref: LH/lh

Client: Kvadrat A/S

<u>Testing atmosphere:</u> 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: 28.04.14. 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. Tested specimens are enclosed.

#### No. of rubs to end point

44,000

44,000

44,000

<u>52,000</u>

mean: 46,000

Observations during testing: total loss of nap (fibrous surface) visible at 7,000 rubs.

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

Specimens from the sample were tested on a modified Martindale Abrasion Machine,

using wool abradant fabricand 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

Number of rubs	Pilling grade	<u>Description</u>
500	4	pilling
1000	4	pilling
2000	4	pilling
5000	3-4	pilling







# **Shirley Technologies** Limited

Shirley Technologies Limited Wira House West Park Ring Road Leeds, LS16 6QL United Kingdom

Tel: +44 (0)113 274 3434 Fax: +44 (0)113 274 8344 Web: http://www.shirleytech.com Email: info@shirleytech.co.uk

14 May 2014 Page 3 of 3

Our Ref: 29/00603A/04/14

Your Ref: LH/lh

Kvadrat A/S Client:

# test subcontracted.

Reported by: L I Butler (Mrs) L.I. Whe

Senior Technician - Textiles

J. Bullers Countersigned by: J M Bullers (Mrs)

Operational Head - Textiles



