



Received: 12/15/2017	Completed: 01/02/2018	Letter: Y3	TM	P.O.#:	Test Report #: 3-23711-3-
Client's Identification	Style: Flex. Composition: 100% Polyester. Weight: 680 g/lm. Product End Use: Upholstery. Color #: 60011/Grey.				
Tested For: Bente Ellingsoe, Quality Department	Key Test: ASTM D 4157/ACT 100K				484
Gabriel A/S Hjulmagervej 55 DK-9000 Aalborg, Denmark	Tel: 011-45-9630-3100		Ext:		
	Fax: 011-45-9811-6125				

Test Category: Wyz Abrasion Specifier: ACT LE 2015; VE 08/15 CODE: 100,000 RQ
 PC: 8H NTR 5/16 dl/SM

TEST PERFORMED: ASTM D 4157 Standard Test Method for Abrasion Resistance of Textile Fabrics
 (Oscillatory Cylinder Method - Wyzenbeek) --

As cited and modified by the ACT Voluntary Performance Guidelines (January 2015)

BRIEF DESCRIPTION OF TEST: The abrading material (abradant) is placed on the rotating (oscillating) cylinder of the tester. The submitted material which is to be evaluated is held in position by four testing arms. Typically, two of the arms support length specimens, and two of the arms support width specimens. The abradant rubs against the submitted material. A back and forth movement is considered a double rub. At specified intervals, the support arms are raised, and the submitted material is visually examined. The result of this visual examination is recorded. The total number of double rubs is dependent upon the client's request. The test is concluded at the number of double rubs requested by the client or when the rating falls below a value of 3.

PRODUCT CATEGORY: Upholstery - Woven Fabric

TEST PARTICULARS (check one from each of items 1 - 3, as applicable):

- 1. Abradant: #10 cotton duck - Specified for all materials except 100% olefin
 Wire (steel) screen -Specified for 100% olefin
- 2. Material with elasticity: Backed with tape to prevent elongation
- 3. Surface Category: Regular surface
 Special surface effect (napped, chenille, embossed, textured, etc.)

TEST CONDITIONS: Specimen Tension: 4 lbs.; Head Pressure (Compression Force): 3 lbs.

RATING SYSTEM FOR REGULAR SURFACE:

- 5 - None or negligible wear
- 4 - Slight wear
- 3 - Moderate wear
- 2 - Noticeable wear (broken yarns, floating yarns, etc.)
- 1 - Severe wear (complete fabric break)

RATING SYSTEM FOR SPECIAL SURFACE EFFECT:

- 5 - None or negligible wear/change of special surface effect
- 4 - Slight wear/change of special surface effect
- 3 - Moderate wear/change of special surface effect
- 2 - Noticeable wear/change of special surface effect (base yarns exposed)
- 1 - Severe wear/change of special surface effect (base yarns exposed and broken)



Received: 12/15/2017 Completed: 01/02/2018 Letter: Y3 TM P.O.#: Test Report #: 3-23711-3-

Client's Identification Style: Flex. Composition: 100% Polyester. Weight: 680 g/lm. Product End Use: Upholstery. Color #: 60011/Grey.

Tested For: **Bente Ellingsoe, Quality Department** Key Test: ASTM D 4157/ACT 100K 484
 Gabriel A/S
 Hjulmagervej 55 Tel: 011-45-9630-3100 Ext:
 DK-9000 Aalborg, Denmark Fax: 011-45-9811-6125

RESULTS: Visual Observations (see page 1 for Rating System)

# of Double Rubs	Length Specimens	Width Specimens
3,000	5	5
9,000	4.5	4.5
15,000	4.5	4.5
22,500	4.5	4.5
30,000	4.5	4.5
40,000	4	4.5
50,000	3.5	4
60,000	3.5	4
70,000	3.5	4
80,000	3.5	4
90,000	3.5	4
100,000	3	4
	Moderate thinning of surface texture	Slight thinning of surface texture

NOTE: For tests exceeding 100,000 double rubs, the cotton duck abradant is changed after every 100,000 double rubs.

REMARKS: None.

ACCEPTANCE CRITERIA:

Low Traffic/Private Spaces: No yarn breaks or noticeable wear after 15,000 double rubs (Minimum rating of 3)

High Traffic/Public Spaces: No yarn breaks or noticeable wear after 30,000 double rubs (Minimum rating of 3)

CONCLUSION: Based on the above Results and Acceptance Criteria, the item tested is rated for:

Low Traffic/Private Spaces; High Traffic/Public Spaces; Unrated

CERTIFICATION: I certify that the above results were obtained after testing specimens in accordance with the procedures and equipment specified above.

[Signature]
 AUTHORIZED SIGNATURE
 GOVMARK
 MA-2/ac

Douglas W. Lipp

JAN 16 2018