



Confidential Report

Our Ref: 54566-1-3



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Notified Body
for PPE Directive,
Construction Products Regulation
& Marine Equipment Directive
I.D. No. 0338 & 0339



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Date: 29 January 2018

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Client: Kvadrat A/S
Lundbergsvej 10
8400 Ebeltoft
Denmark.

Job Title: Fire Test on One Sample of Fabric

Client's Order No: -

Date of Receipt: 18 January 2018

Description of Sample(s): Twill Weave, stated to be 90% new wool, 10% nylon, worsted

Work Requested: We were asked to make the following test(s):
BS 5852 : 2006 (2011) Ignition Source 3

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



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FIRE TESTS ACCORDING TO BS 5852:2006 (2011)

Methods of test for assessment of the ignitability of upholstered seating by smouldering and flaming ignition sources

Date of Test: 26 January 2018

Pre-Treatment

The material was subjected to the water soak procedure specified in BS 5852:Annex E:2006 (2011).

Conditioning

Immediately prior to testing the sample was placed in indoor ambient conditions for 72 hours and then conditioned in a standard atmosphere of $20 \pm 5^\circ\text{C}$ temperature and $50 \pm 20\%$ relative humidity for at least 16 hours.

The sample was tested in a room of volume 25m^3 and 18°C

Procedure

The test was carried out in accordance with BS 5852:2006. The sponsor sampled the material and the specimens were cut from the sample received to the dimensions set out in the standard.

The specimen of fabric was mounted over fillings of combustion modified high resilience foam of density about 35 kg/m^3 .

The test was made using ignition source 3 in accordance with Section 11 'Methods of test for the ignitability of upholstery composites' and pass classifications were assigned for each ignition source if the performance requirements stated below were met.



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Requirements

Ignition Source	Maximum duration allowed for progressive smouldering	Maximum duration allowed for flaming
2 3	15 min after removal of burner tube	120 seconds after removal of burner tube
4 5	60 minutes after ignition of wood crib	10 minutes after ignition of wood crib
6 7	60 minutes after ignition of wood crib	13 minutes after ignition of wood crib

Failure also occurs if:

- smouldering or flaming necessitates forcible extinction due to escalating combustion behaviour so it is unsafe to continue
- flaming or smouldering essentially consumes the specimen within the test duration
- smouldering reaches the extremities of the specimen, that is to either side or to the full thickness of the filling
- flaming reaches the extremities of the specimen other than the top of the vertical part of the test specimen
- flaming passes through the full thickness of the specimen within the test duration
- any specimen that on final examination shows evidence of charring, within the filling 100 mm from the nearest part of the original position of the source
- any debris that causes an isolated floor fire that does not meet the requirements stated in the above table

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Results

The test results relate only to the ignitability of the combination of upholstery composites under the particular conditions of test. They are not intended as a means of assessing the full potential fire hazard of the materials or products in use.

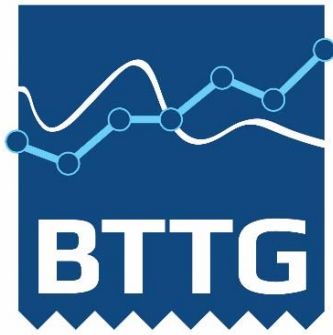
	Source 3	
	(Top)	
Time of ignition(s)	1	1
Time of Flame Extinction(s)	15	108
Time of Smoke Extinction(s)	27	132
Time of cover split(s)	52	56
Damage on seat width (mm)	20	20
Damage on seat length (mm)	55	55
Damage on seat depth (mm)	5	5
Damage on back width (mm)	40	95
Damage on back length (mm)	255	410
Damage on back depth (mm)	15	25
Melting (Yes or No)	No	No
Dripping (Yes or No)	No	No
Charring (Yes or No)	Yes	Yes
Other Phenomena		
Pass/Fail	Non ignition	Non ignition

The results indicate the sample meets the performance requirements for source 3.

Reported by: 
J Coleman
Fire Technician

Countersigned By: 
P Doherty
Operational Head

Enquiries concerning this report should be addressed to Customer Services.



TESTING • CERTIFICATION • AUDITING

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Uncertainty Budget - Annex

The overall uncertainty budget for both BS 5852:Part 1:1979 is as follows:-

±2mm

±2 seconds.



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