— CONTRACT TEXTILES —

Q2099

FIRE RATING CERTIFICATIONS

- EN 1021 1-2 Cig & Match
- BS 7176 Medium Hazard
- BS 5852 Source 5
- IMO 8



Our Ref: SW/PN/RM 04 July 2018

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SMD Contracts Limited Unit F2 Pittman Way Fulwood Preston

PR2 9ZD Contact: Katie Hamblett

DATE RECEIVED : 20 JUNE 2018
QUALITY REFERENCE : Q2099 PRINT
REPUTED FIBRE CONTENT : NOT GIVEN
FABRIC DESCRIPTION : WOVEN
COLOUR/DESIGN : RED CHECK
END USE : UPHOLSTERY
ORDER NUMBER : CONTRACTS 48

REQUEST: BS7176:2007 + A1:2011 Specification for resistance to ignition of upholstered

furniture for non-domestic seating by testing composites - Table 1: Medium Hazard

Use

COMMENTS: Meets the flammability performance requirements of BS7176:2007 + A1:2011 Table

1 for Medium Hazard Use

S. WISEMAN LABORATORY DIRECTOR

P. NEESAM HEAD OF FLAMMABILITY

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BS 7176:2007 + A1:2011 Specification for resistance to ignition of upholstered furniture for non-domestic seating by testing composites

BS7176:2007 +A1:2011 specifies flammability performance requirements for composites comprising cover fabric and filling material(s) and includes additional requirements in clause 4.1.2 relating to the flammability behaviour of the filling materials used. The filling materials which will be used in the final article are not always known to the fabric supplier and therefore nominal filling materials are used for the purpose of testing which may not necessarily represent the final composite. All filling materials supplied by HSTTS for the purpose of testing cover fabrics comply with the relevant requirements of clause 4.1.2.

Clause 4.1.1 requires that testing is carried out in accordance with the frequency stated in clause 5. No information was provided by the client regarding the lot size or frequency of testing.

According to Table 1, composites for Medium Hazard end-use shall meet the requirements of BSEN 1021-1:2006 (cigarette ignition source), BSEN 1021-2:2006 (match-equivalent flame) and BS 5852:2006 Clause 11 (ignition source crib 5).

Pre-treatment:

In accordance with clause 4.2, all fabrics which have been chemically treated to reduce their ignitability are subjected to the water soaking and drying procedures specified in BS 5852:2006 Annex E prior to being conditioned. Such pre-treatment is not necessary for materials which are formulated to be or are inherently flame-retarded.

Pre-treatment applied: Water soaking (BS5852:2006 Annex E)

Conditioning

After any pre-treatment given but prior to testing, the test specimens of fabric, Ref: Q2099 Print were subjected to conditioning for at least 72 hours in ambient indoor conditions followed by a minimum of 24 hours at a temperature of $(23\pm 2^{\circ}\text{C})$ and relative humidity of $(50\pm 5^{\circ})$.

Test results

The following test results relate only to the ignitability of the combination of materials under the particular conditions of test; they are not intended as a means of assessing the full potential fire hazard of the materials in use. They also only relate to the materials tested. They do not guarantee to represent the performance of production materials.

Filling material used: Combustion modified high resilience foam of approximately 36 kg/m³ was used.

(i) BS EN 1021-1:2006 Furniture - Assessment of the ignitability of upholstered furniture - Part I. Ignition Source: Smouldering cigarette.

<u>Test</u>	Observations	Outcome
1	No flaming or progressive smouldering observed	Pass
2	No flaming or progressive smouldering observed	Pass



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(ii) BS EN 1021-2:2006 Furniture - Assessment of the ignitability of upholstered furniture - Part 2. Ignition Source Match flame equivalent.

Duration of flame application: 15 seconds

<u>Test</u>	<u>Observations</u>	<u>Outcome</u>
1	Duration of flaming: 1 secs	Pass
	No progressive smouldering observed	
2	Duration of flaming: 1 secs	Pass
	No progressive smouldering observed	
3	Duration of flaming: 1 secs	Pass
	No progressive smouldering observed	

(iii) BS 5852:2006. Methods of Test for the Assessment of the ignitability of upholstered seating by smouldering and flaming ignition sources.

Tests were made using ignition source 5.

The following test results relate only to the ignitability of the combination of upholstery composites (BS5852: 2006, Clause 11) under the particular conditions of test stated; they are not intended as a means of assessing the full potential fire hazard of the materials in use. They also only relate to the materials tested. They do not guarantee to represent the performance of production materials.

<u>Test</u>	<u>Observations</u>	<u>Outcome</u>
1	No progressive smouldering observed	Pass
	Duration of flaming: 4.25 mins/secs	
2	No progressive smouldering observed Duration of flaming: 5.12 mins/secs	Pass

Comments

When tested as described above the sample is assessed as meeting the flammability performance requirements of BS7176:2007 \pm A1:2011 Table 1 for Medium Hazard end-uses.



Test Certificate 88453 - 1

Report Details

Report Number 88453 - 1 Date Tested 23-Mar-21 Date Issued 23-Mar-21

Service Requested BS 5852 Part 1: 1979 - Schedule 4 Part 1 & Schedule 5 Part 1 + Water Soak

Customer Details

Company Name SMD CONTRACTS

Customer Contact EMMA LOCKWOOD Company Address UNIT F2; PITTMAN WAY

Customer Ref/PO FULWOOD

LANCASHIRE

PR2 9ZD

Customer Details - As Supplied by the Customer

Sample Description LANGHOLM CHARCOAL

Fibre Composition MICROPOROUS COATED POLYESTER

Quality/Batch Ref

Colour CHARCOAL

Sample End Use DOMESTIC CARAVANS (SWIFT)

Model Ref Manufacturer

Supplier / Buyer SMD

Specification:

Schedule 4 Part 1 (The Cigarette test) and Schedule 5 Part 1 (The Match test) of The Furniture Furnishings (Fire) (Safety) Regulations 1988 (as amended). S.I. 1324.

Test Methods:

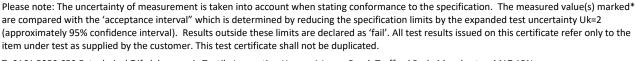
BS 5852 Part 1: 1979 - Methods of test for the ignitibility by smokers' materials of upholstered composites for seating.

Conditioning:

The sample was conditioned for 72 hrs in ambient conditions then for at least 24 hrs in a specified atmosphere at $20 \pm 5^{\circ}$ C and $50 \pm 20\%$ relative humidity.

Pre-Treatment:

Water soak procedure in accordance with BS 5651: 1978 - Clause 4 (as amended by The Furniture and Furnishings (Fire) (Safety) Regulations 1988







Test Certificate 88453 - 1

Test Results

The Following test results relate only to the ignitibility of the combination of the materials under the particular conditions of test; they are not intended as a means of assessing the full potential fire hazard of the materials in use.

Test Type Filling Material Used:	Schedule 4 Part 1	Initial Test VP45 20-22Kg/m³	Repeat Test VP45 20-22Kg/m³
Smouldering Duration [mm:ss]:		<60.0	<60.0
Progressive smouldering and/or placement of the cigarette:	flaming observed within one hour of the		
Evidence of melting:		✓	•
Evidence of charring:		✓	•
Evidence of dripping:			
Cover Split			
Forcibly Extinguished			
Test Result		PASS	PASS
Test Type	Schedule 5 Part 1	Initial Test	Repeat Test
Test Type Filling Material Used:	Schedule 5 Part 1	Initial Test VP45 20-22Kg/m³	Repeat Test VP45 20-22Kg/m³
Filling Material Used: Smouldering / Flaming / Glowing		VP45 20-22Kg/m³	VP45 20-22Kg/m³
Filling Material Used: Smouldering / Flaming / Glowing Progressive smouldering observe	g Duration [mm:ss]:	VP45 20-22Kg/m³	VP45 20-22Kg/m³ 0.02
Filling Material Used: Smouldering / Flaming / Glowing Progressive smouldering observe the flame:	g Duration [mm:ss]:	VP45 20-22Kg/m³ 0.01	VP45 20-22Kg/m³ 0.02
Filling Material Used: Smouldering / Flaming / Glowing Progressive smouldering observe the flame: Evidence of melting:	g Duration [mm:ss]:	VP45 20-22Kg/m³ 0.01 ✓	VP45 20-22Kg/m³ 0.02 ✓
Filling Material Used: Smouldering / Flaming / Glowing Progressive smouldering observe the flame: Evidence of melting: Evidence of charring: Evidence of dripping:	g Duration [mm:ss]:	VP45 20-22Kg/m³ 0.01 ✓	VP45 20-22Kg/m³ 0.02 ✓
Filling Material Used: Smouldering / Flaming / Glowing Progressive smouldering observe the flame: Evidence of melting: Evidence of charring: Evidence of dripping: Flaming continued for more there	g Duration [mm:ss]: ed within one hour after the removal of	VP45 20-22Kg/m³ 0.01 ✓	VP45 20-22Kg/m³ 0.02 ✓

Please note: The uncertainty of measurement is taken into account when stating conformance to the specification. The measured value(s) marked* are compared with the 'acceptance interval" which is determined by reducing the specification limits by the expanded test uncertainty Uk=2 (approximately 95% confidence interval). Results outside these limits are declared as 'fail'. All test results issued on this certificate refer only to the item under test as supplied by the customer. This test certificate shall not be duplicated.





Test Certificate 88453 - 1

Overall Result: PASS

The sample supplied meets the UK Furniture and Furnishing (Fire)(Safety) Regulations 1988 (amended 1989, 1993, 2010) S.I.1324

Authorised Signature:

Zeb Alam

Operations Director

END OF REPORT

Please note: The uncertainty of measurement is taken into account when stating conformance to the specification. The measured value(s) marked* are compared with the 'acceptance interval" which is determined by reducing the specification limits by the expanded test uncertainty Uk=2 (approximately 95% confidence interval). Results outside these limits are declared as 'fail'. All test results issued on this certificate refer only to the item under test as supplied by the customer. This test certificate shall not be duplicated.





FLAMMABILITY TEST CERTIFICATE - 87482

COMPANY DETAILS: SMD CONTRACTS

SMD GROUP LTD, UNIT F2, PITTMAN WAY, FULWOOD,

PRESTON, PR2 9ZD

CONTACT NAME(S): EMMA LOCKWOOD TEL: 01772 651199

EMAIL: <u>emma_lockwood@smdtextiles.co.uk</u>,

Sarah_west@smd-textiles.co.uk

 DATE RECEIVED:
 05/02/2021

 DATE TESTED:
 12/02/2021

 DATE ISSUED:
 12/02/2021

 PO NUMBER:
 NOT STATED

SAMPLE DESCRIPTION: Q2099

COLOUR: NOT STATED

MODEL REF: NOT STATED

QUALITY/BATCH REF: NOT STATED

COMPOSITION: MICROPOROUS COATED POLYESTER

WEAVE TYPE: NOT STATED

FURNITURE TYPE: CONTRACT UPHOLSTERY

YARN COUNT: NOT STATED

THREADS PER INCH: WARP: NOT STATED WEFT: NOT STATED

FABRIC THICKNESS: NOT STATED **MASS PER UNIT AREA:** NOT STATED

FR TREATMENT: FABRIC: NOT STATED

MANUFACTURER: FABRIC: NOT STATED

SUPPLIER: FABRIC: SMD CONTRACTS

FILLING DENSITY KG/M³: 20-22KG/M³

SPECIFICATION/REQUIRMENT:

IMO FTP Part 8 – Fire test procedures for the ignitability by smokers' materials of upholstered composites for seating.

CONDITIONING:

The sample was conditioned for 72 hrs in ambient conditions then for at least 24 hrs in a specified atmosphere at $23 \pm 2^{\circ}$ C and $50 \pm 5\%$ r h.

Authorised By:

Zeb AlamMark JonesKaren BrooksOperations DirectorQuality ManagerManaging Director

Please note: this test results issued on this certificate refer only to the item tested and therefore doesn't relate to the lot or batch of the product / sample. This test certificate shall not be duplicated. Textile Innovation House, 1 Lyons Road, Trafford Park, Manchester, M17 1RN. T: 0161 50 50 650 E: technical@ifs-labs.com





FLAMMABILITY TEST CERTIFICATE - 87482

CIGARI	ETTE	SPE	CIFIC	CATI	ON:
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Diameter: 8mm Ø	Length: 70mm	Mass: 1.0g	Smouldering Rate: 12 min/50mm	

TEST RESULTS:

"The Following test results relate only to the behaviour of the test specimens of a product under particular conditions of test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use"

TEST CRITERIA – (CIGARETTE TEST) FILLING MATERIAL USED:	INITIAL TEST VP45	REPEAT TEST VP45
Smouldering Ceased	<60.00	<60.00
PROGRESSIVE SMOULDERING CRITERIA		
Progressive smouldering and/or flaming observed within one hour of the placement of the cigarette?	NO	NO
Evidence of melting, charring, dripping?	Melting: 🛛 💢	Charring: 🛛 Dripping: 🗌
FLAMING CRITERIA (9.3)		
Cover Split?	NO	NO
Extent of Damage from source of ignition (mm)	70 X 5	65 x 5
TEST RESULT	PASS	PASS

TEST CRITERIA – (MATCH TEST)	INITIAL TEST	REPEAT TEST
FILLING MATERIAL USED:	VP45	VP45
Flaming duration:	0.01	0.01
PROGRESSIVE SMOULDERING CRITERIA		
Progressive smouldering and/or flaming observed within one hour of the removal of the flame?	NO	NO
Evidence of melting, charring, dripping?	Melting: 🛚	Charring: Dripping:
FLAMING CRITERIA		
Flaming continued for more than 120 seconds after the removal of the burner?	NO	NO
Extent of damage from source of ignition (mm)	100 x 20	90 x 15
TEST RESULT	PASS	PASS

CONCLUSION:

The sample supplied **meets** the performance criteria as stated in paragraph 3 of IMO FTP Part 8: 2010

END OF REPORT

