

Our Ref: SW/PN/BR

19 May 2014

**Report 236789/2**

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Camira  
Hopton Mills  
Mirfield  
West Yorkshire  
WF14 8HE

Contact: David Brook

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DATE RECEIVED	:	12 MAY 2014
FABRIC SUPPLIER	:	CAMIRA
QUALITY/REFERENCE	:	MAIN LINE FLAX
REPUTED FIBRE CONTENT	:	70% WOOL, 30% FLAX
FABRIC DESCRIPTION	:	WOVEN
COLOUR/DESIGN	:	MULTI
ORDER NUMBER	:	48710
END USE	:	SEATING
PERFORMANCE STANDARD	:	GENERAL

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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

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COMMENTS: Meets the flammability performance requirements of BS7176:2007 + A1:2011 Table 1 for Medium Hazard Use

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**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: "Main Line Flax" 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± 2°C) and relative humidity of (50±5%).

**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/m<sup>3</sup> 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>	<u>Observations</u>	<u>Outcome</u>
1	No flaming or progressive smouldering observed	NI (Non-ignition)
2	No flaming or progressive smouldering observed	NI (Non-ignition)

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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 No progressive smouldering observed	NI (Non-ignition)
2	Duration of flaming: 2 secs No progressive smouldering observed	NI (Non-ignition)
3	Duration of flaming: 2 secs No progressive smouldering observed	NI (Non-ignition)

- (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 Flaming ceased within 10 minutes of ignition Duration of flaming: 4.15 mins/secs	NI (Non-ignition)
2	No progressive smouldering observed Flaming ceased within 10 minutes of ignition Duration of flaming: 4.51 mins/secs	NI (Non-ignition)

**Comments**

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