

## Test Certificate 103791

### Report Details

**Report Number** 103791 - 1      **Service Requested** BS 7176: 2008+A1:2011 - Medium Hazard + Watersoak  
**Date Received** 15-Dec-22    **Date Tested** 19-Dec-22    **Date Issued** 19-Dec-22

### Customer Details

**Company Name** FLAMEN TEK LIMITED  
**Customer Contact** JANE GIRLING      **Company Address** COMPASS HOUSE  
**Customer Ref/PO** 21977      BUNWELL ROAD BESTHORPE  
NORFOLK  
NR17 2NZ

### Customer Details - As Supplied by the Customer

**Sample Description** BALDER 3 - WOVEN FABRIC. TREATED WITH A DURAF LAM® FLAME RETARDANT FORMULATION BY FABRIC FLARE SOLUTIONS LTD.

**Fibre Composition** 68% NEW WOOL, 6% NYLON, 26% COTTON

**Quality/Batch Ref** BALDER 3

**Colour** VARIOUS

**Sample End Use** UPHOLSTERY

**Model Ref**

**Manufacturer**

**Supplier / Buyer** KVADRAT A/S

### Specification:

BS 7176:2007+A1:2011 – Specification for the resistance to ignition of upholstered furniture for non-domestic seating by testing composites. (Medium Hazard)

### Test Methods:

BS EN 1021-1:2006 – Furniture – Assessment of the ignitability of upholstered furniture. Part 1: Ignition source smouldering cigarette.

BS EN 1021-2:2006 – Furniture – Assessment of the ignitability of upholstered furniture. Part 2: Ignition source match flame equivalent.

BS 5852:2006 Clause 11 Source 5 – Methods of test for the assessment of the ignitability of upholstered seating by smouldering and flaming ignition sources

### Pre-Treatment:

The sample has been subjected to the water soaking procedure in accordance with Annex D of EN 1021:20065 and Annex E of BS 5852:2006 then line dried in ambient conditions.

### Conditioning:

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

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### 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	1021-1	Test 1	Test 2
Filling Material Used:		GM33-35	GM33-35

*Cigarette ceased smouldering within [mins]:		FTS	FTS
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#### Progressive Smouldering Criteria

3.1A: Unsafe escalating combustion:	<input type="checkbox"/>	<input type="checkbox"/>
3.1B: Smoulders to extremities:	<input type="checkbox"/>	<input type="checkbox"/>
3.1C: Smoulders through thickness:	<input type="checkbox"/>	<input type="checkbox"/>
*3.1D: Smoulders for more than 1 hour:	<input type="checkbox"/>	<input type="checkbox"/>
Evidence of melting / charring / dripping:	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
3.1E: Presence of active smouldering on final examination:	<input type="checkbox"/>	<input type="checkbox"/>

#### Flaming Criteria

Cover Split	<input type="checkbox"/>	<input type="checkbox"/>
Occurrence of flames:	<input type="checkbox"/>	<input type="checkbox"/>

Test Result	PASS	PASS
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Test Type	1021-2	Test 1	Test 2	Test 3
Filling Material Used:		GM33-35	GM33-35	GM33-35
*Flaming Ceased: [Seconds]:		0.00	0.00	0.00
<b>Progressive Smouldering Criteria</b>				
3.1A: Unsafe escalating combustion:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.1B: Smoulders to extremities:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.1C: Smoulders through thickness:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
*3.1D: Smoulders for more than 1 hour:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Evidence of melting / charring / dripping:		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
<b>Flaming Criteria</b>				
Cover Split		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.2A: Unsafe escalating combustion:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.2B: Test assembly consumed:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.2C: Flaming to extremities:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.2D: Flaming through thickness:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
*Flaming continued for more than 120 seconds:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Test Result		PASS	PASS	PASS

## 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 Criteria - BS 5852:2006 Source 5

### Initial Test

### Repeat Test

\*Smouldering Ceased Within: [mins]

#### Progressive Smouldering Criteria

Filling Material Used:

GM33-35

GM33-35

4.1.1A: Displays unsafe escalating smouldering combustion, requires to be forcibly extinguished?



4.1.1C: Any test specimen that smoulders until it is essentially consumed



\*4.1.1E: Detectable amounts of smoke, heat or glowing 60 mins after crib ignition?



4.1.1F: On final inspection, any evidence of charring more than 100 mm in any direction (apart from upwards) from the original nearest position?



#### Flaming Criteria

\*Flaming Ceased: [mm:ss]

2:32

2:38

4.2.1A: Displays unsafe escalating flaming combustion, requires to be forcibly extinguished?



4.2.1B: Any test specimen that burns until it is essentially consumed within the test duration and requires forcibly extinguishing



4.2.1C: Flame front reaches the lower margin, either side or passes through the full thickness?



\*4.2.1E: Flaming continued for more than 10 minutes after the ignition of the crib?



\*4.2.1G: Any test specimen from which flaming debris causes an isolated floor fire that continues to flame for longer than 10 mins?



Test Result

PASS

PASS

**Overall Result: PASS**

The sample supplied meets the test criteria of BS 7176:2007 + A1:2011 (Medium Hazard)

Authorised Signature:



**Zeb Alam**

Operations Director

The uncertainty of measurement is taken into account when stating conformance to the specification. The test results are compared with the acceptance limits which are determined by reducing the specification limit by the expanded test uncertainty  $U_{k=2}$  (approximately 95% confidence interval) and providing all measured values are within the tolerance limits then such results are declared as "Pass". The Uncertainty budgets are stated for each test method and should be considered when results are on or close to the acceptance limits, and in such cases it should be noted that the risk of false acceptance or false rejection is  $\leq 2.5\%$ . All test results issued on this report refer only to the item under test as supplied by the customer.

**END OF REPORT**