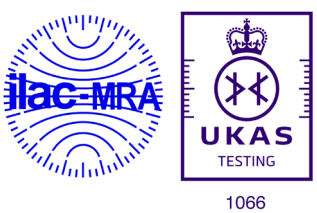
Confidential Report

Our Ref: 23/61805B/02/24



Wira House, West Park Ring Road, Leeds, LS16 6QL, UK.
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Email: onestopshop@bttg.co.uk
Website: www.bttg.co.uk

Date: 19 February 2024

Our Ref: 23/61805B/02/24
Your Ref: --

Client: **Zimmer + Rohde GmbH**

Zimmersmuhlenweg 14-18
61440 Oberursel
Frankfurt
Germany

Job Title: Fire Test on One Fabric Sample

Clients Order Ref: --

Date of Receipt: 14 February 2024

Date Test Started: 19 February 2024

Description of Sample: One sample of fabric, which was referenced by the client as;

1502, stated to be: 95% PES, 5% PA, Backing 70% PES, 30% CV

Work Requested: We were asked to test the received sample to the following standard:

BS EN 1021:Parts 1 & 2:2014 – Ignitability of Upholstered Furniture

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

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Note: This report relates only to the items tested.

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Client: **Zimmer + Rohde GmbH**

FIRE TEST ACCORDING TO BS EN 1021-1:2014
Assessment of the ignitability of upholstered furniture. Part I. Ignition Source 0: Smouldering cigarette

Pre-Treatment

The material received no pre-treatment as the fabric is stated to not have an FR treatment.

Conditioning

The materials for testing to Source 0 and 1 were conditioned for a minimum of 24 hours and tested in the environments specified in Clause 7 of BS EN 1021-1 & 2:2014.

The sample was tested in a room of volume 25m^3 and 18ºC.

Procedure

The test was carried out in accordance with BS EN 1021-1:2014. The sponsor sampled the material and the specimens were cut from the sample received to the dimensions set out in the standard.

The sample was tested over non-fire retardant polyurethane foam with a density of approximately 20-22 kg/m^3.

Tests were made using ignition source 0.

Requirements

The specimens shall not:-

Smouldering Criteria

a) display escalating combustion requiring active extinction.
b) smoulder or burn until it is essentially consumed within the test duration.
c) smoulder or burn to the extremities of the specimen, or through the full thickness, within the duration of the test.
d) smoulder for more than one hour.
e) on final examination, show evidence of progressive smouldering.

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Requirements (continued)

Flaming Criteria

a) show evidence of flaming initiated by a smouldering source.

Results

	Specimen No.		
Smouldering criteria	**1**	**2**	**3[1]**
Unsafe escalating combustion	No	No	---
Testing assembly consumed	No	No	---
Smoulders to extremities/full thickness	No	No	---
Smoulders more than 1 hour	No	No	---
In final examination, presence of progressive smouldering	No	No	---

Flaming criteria	**1**	**2**	**3[1]**
Occurrence of flames	No	No	---
Specimen Result Ignition (I) / Non Ignition (NI)	**NI**	**NI**	**---**

Any “Yes” in smouldering or flaming criteria means Ignition

Note

The 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.

Comments

An NI designation indicates that the sample meets the performance requirements of BS EN 1021-1.

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FIRE TESTS ACCORDING TO BS EN 1021-2:2014
Assessment of the ignitability of upholstered furniture. Part 2. Ignition Source 1: Match flame equivalent.

Pre-Treatment

The material was subjected to the water soak according to BS 5651:1978, as modified by the above regulations.

Conditioning

The sample was conditioned for at least 24 hours at a temperature of 23±2°C and relative humidity of 50±5%.

The sample was tested in a room of volume 25m^3 and 18ºC.

Procedure

The test was carried out in accordance with BS EN 1021-2:2014. The sponsor sampled the material and the specimens were cut from the sample received to the dimensions set out in the standard.

The sample was tested over non-fire retardant polyurethane foam with a density of approximately 20-22 kg/m^3.

Tests were made using ignition source 1.

Requirements

The specimens shall not:-

Smouldering Criteria

a) display escalating combustion requiring active extinction.
b) smoulders until it is essentially consumed within the test duration.
c) smoulder to the extremities of the specimen, or through the full thickness, within the duration of the test.
d) smoulder for more than one hour.
e) show evidence of charring, other than discolouration, for more than 100mm in any direction apart from the nearest part of the original position of the source.

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Requirements (Continued)

Flaming Criteria

a) display escalating combustion requiring active extinction.
b) burns until it is essentially consumed within the test duration.
c) burns to the extremities of the specimen, or through the full thickness, within the duration of the test.
d) exhibit any flaming for more than 120 seconds after removal of the burner tube.

Results

	Specimen No.		
Smouldering criteria	**1**	**2**	**3[1]**
Unsafe escalating combustion	No	No	---
Testing assembly consumed	No	No	---
Smoulders to extremities/full thickness	No	No	---
Smoulders more than 1 hour	No	No	---
In final examination, presence of progressive smouldering	No	No	---

Flaming criteria	**1**	**2**	**3[1]**
Unsafe escalating combustion	No	No	---
Testing assembly consumed	No	No	---
Flames to extremities/full thickness	No	No	---
Flames longer than 120 seconds	No	No	---
Specimen Result Ignition (I) / Non Ignition (NI)	**NI**	**NI**	**---**

Note

The 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.

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Comments

An NI designation indicates that the sample meets the performance requirements of BS EN 1021-2.

Where required to make a judgement to any pass/fail criteria an estimation of uncertainty of measurement has been taken into account. Under our Policy we have used a non-binary decision rule.

See our decision rules Policy (https://www.bttg.co.uk/about-us/decision-rules-policy/) for further information.

Uncertainty Budget

The overall uncertainty budget for both BS EN 1021: Part 1 and 2:2014 is as follows:-

Timings: ±2 seconds.
Measurements: ±2mm.

Reported by:..... R Walls, Laboratory Technician

Countersigned by:..... B Bland, Technical Customer Service Officer

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