



TESTING • CERTIFICATION • AUDITING

Confidential Report

Our Ref: 53755-1-3



1066

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



Wira House, West Park Ring Road, Leeds, LS16 6QL, UK.
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Date: 21 July 2017

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Your Ref: -

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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: 6 July 2017

Description of Sample(s): San, stated to be 92% new wool, 8% nylon, worsted

Work Requested: We were asked to make the following test(s):
BS EN 1021-1:2014 and BS EN 1021-2 2014

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



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FIRE TESTS ACCORDING TO BS EN 1021-1:2014

Assessment of the ignitability of upholstered furniture. Part I. Ignition Source 0: Smouldering cigarette

Date of Test: 17 July 2017

Pre-Treatment

The sample was water-soaked and dried in accordance with BS EN 1021 Part 1:Annex D.

Conditioning

After drying the sample was conditioned for at least 16 hours at a temperature of $23\pm 2^{\circ}\text{C}$ and relative humidity of $50\pm 5\%$.

The sample was tested in a room of volume 25m^3 and 22°C .

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 $20\text{-}22\text{ kg/m}^3$.

Tests were made using ignition source 0.



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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.

Flaming Criteria

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

Results

| | Cigarette | | | Comments |
|---|-----------|----|----------------|----------|
| | 1 | 2 | 3 ¹ | |
| Smouldering Criteria (Yes/No) | | | | |
| Unsafe escalating combustion | No | No | -- | |
| Test assembly consumed | No | No | -- | |
| Smoulders to extremities | No | No | -- | |
| Smoulders through thickness | No | No | -- | |
| Smoulders more than 1 hour | No | No | -- | |
| In final examination, presence of progressive smouldering | No | No | -- | |
| Ignitability Performance (Yes/No) | | | | |
| Occurrence of flames | No | No | -- | |
| Ignition / Non Ignition (I/NI) | NI | NI | -- | |

¹ Results for cigarette 3, only if applicable.



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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

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

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 sample was water-soaked and dried in accordance with BS EN 1021 Part 2:Annex D.

Conditioning

The sample was water-soaked and dried in accordance with Annex D of this standard. After drying the sample was conditioned for at least 16 hours at a temperature of $23\pm 2^{\circ}\text{C}$ and relative humidity of $50\pm 5\%$.

The sample was tested in a room of volume 25m^3 and 22°C .

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 $20\text{-}22\text{ kg/m}^3$.



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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.

Flaming Criteria

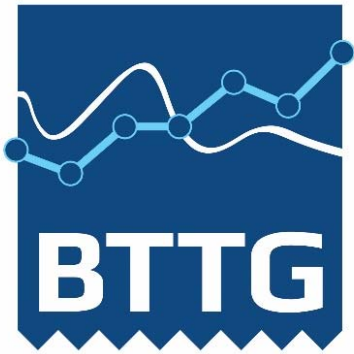
- a) display escalating combustion requiring active extinction.
- b) burns until it is essentially consumed within the test duration.
- c) burns to the extremities of the specimen, or through the full thickness, within the duration of the test.
- d) exhibit any flaming for more than 120 seconds after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



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Results

| | Match Flame Equivalent | | Comments |
|---|------------------------|----|----------|
| | 1 | 2 | |
| Smouldering Criteria (Yes/No) | | | |
| Unsafe escalating combustion | No | No | |
| Test assembly consumed | No | No | |
| Smoulders to extremities | No | No | |
| Smoulders through thickness | No | No | |
| Smoulders more than 1 hour | No | No | |
| In final examination, presence of progressive smouldering | No | No | |
| Ignitability Performance (Yes/No) | | | |
| Unsafe escalating combustion | No | No | |
| Test assembly consumed | No | No | |
| Flames to extremities | No | No | |
| Flames through thickness | No | No | |
| Flames longer than 120 seconds | No | No | |
| Ignition / Non Ignition (I/NI) | NI | NI | |

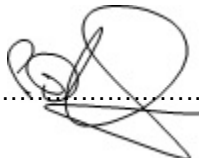
Note

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.

Comments

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

Reported by: 
 J Coleman
 Fire Technician

Countersigned By: 
 P Doherty
 Operational Head

Enquiries concerning this report should be addressed to Customer Services.



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Uncertainty Budget - Annex

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

Measurements: ± 2 mm
Timings: ± 2 seconds



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