

# **Confidential Report**

Our Ref: 23/56769



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.

Telephone: +44 (0) 113 259 1999

Email: <u>info@bttg.co.uk</u> Website: <u>www.bttg.co.uk</u>

Date: 11 September 2019

Our Ref: 23/56769-1 Your Ref: -

Page: 1 of 7

Client: FIDIVI Tessitura Vergnano Spa

Regione Masio 19bis

10046 Poirino

Torino Italy

Job Title: Fire Test on One Sample of Fabric

Client's Order No:

Date of Receipt: 3 September 2019

Description of Sample(s): MATERA

Work Requested: We were asked to make the following test(s):

BS 7176: 2007

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





Wira House, West Park Ring Road, Leeds, LS16 6QL, UK. Telephone: +44 (0) 113 259 1999

Email: info@bttg.co.uk

Website: www.bttg.co.uk

Date: 10 September 2019

Our Ref: 23/56769-1 Your Ref: -

Page: 2 of 7

Client: FIDIVI Tessitura Vergnano Spa

Specification BS 7176: 2007 + A1:2011 Resistance to Ignition of Upholstered Furniture for non-domestic seating by testing composites using BS EN 1021:2006 Furniture – Assessment of the ignitability of upholstered furniture Parts 1 and 2 and BS 5852:Clause 11:2006

#### **Pre-Treatment**

The sample did not have a flame retardant treatment therefore it was not subjected to a water soak pre-treatment

### Conditioning

The materials for testing to Source 0 and 1 were conditioned and tested in the environments specified in Clause 7 of BS EN 1021:2006.

#### Foam Used

The sample was tested over combustion modified polyurethane foam with a density of approximately 36kg/m<sup>3</sup>.





Wira House, West Park Ring Road, Leeds, LS16 6QL, UK. Telephone: +44 (0) 113 259 1999

Email: <u>info@bttg.co.uk</u> Website: <u>www.bttg.co.uk</u>

Date: 10 September 2019

Our Ref: 23/56769-1 Your Ref: -

Page: 3 of 7

Client: FIDIVI Tessitura Vergnano Spa

## Testing to BS EN 1021-1:2006 - Source 0 - Cigarette

The sample was tested in accordance with BS EN ISO 1021-1:2006. The sample was tested over combustion modified polyurethane foam with a density of approximately 36kg/m³. A cigarette having a mass of 1±0.2g was used.

The test results relate only to the ignitability of the combustion of upholstery composites under the particular conditions of test stated, they are not intended as a means of assessing he full potential fire hazard of the materials of products in use.

#### **Results**

	Cigarette			•
	1	2	3 <sup>1</sup>	Comments
Smouldering Criteria (Yes/No)				
Unsafe escalating combustion	No	No	No	
Test assembly consumed	No	No	No	
Smoulders to extremities	No	No	No	
Smoulders through thickness	No	No	No	
Smoulders more than1 hour	No	No	No	
In final examination, presence of progressive smouldering	No	No	No	
Ignitability Performance (Yes/No)				
Occurrence of flames	No	No	No	
Ignition / Non Ignition ( I/NI )	NI	NI	NI	

Any "Yes" in smouldering or flaming criteria means Ignition

Cigarette Test Result PASS





Wira House, West Park Ring Road, Leeds, LS16 6QL, UK. Telephone: +44 (0) 113 259 1999

Email: info@bttg.co.uk

Website: www.bttg.co.uk

Date: 10 September 2019

Our Ref: 23/56769-1 Your Ref: -

Page: 4 of 7

Client: FIDIVI Tessitura Vergnano Spa

#### BS EN 1021-2: 2006 - Source 1 - Butane Flame

The sample was tested in accordance with BS EN ISO 1021-2:2006. The sample was tested over combustion modified polyurethane foam with a density of approximately 36kg/m³.

The test results relate only to the ignitability of the combustion of upholstery composites under the particular conditions of test stated, they are not intended as a means of assessing he full potential fire hazard of the materials of products in use.

Smouldering criteria	1	2
Unsafe escalating combustion	No	No
Testing assembly consumed	No	No
Smoulders to extremities	No	No
Smoulders through thickness	No	No
Smoulders more than 1 hour	No	No
Char >100mm from source	No	No
Flaming criteria	1	2
Unsafe escalating combustion	No	No
Testing assembly consumed	No	No
Flames to extremities	No	No
Flames through thickness	No	No
Flames longer than 120 seconds	No	No
Specimen Result (Ignition or Non-ignition)	Non-Ignition	Non-Ignition

Any "Yes" in smouldering or flaming criteria means Ignition

Match Test Result PASS





Wira House, West Park Ring Road, Leeds, LS16 6QL, UK. Telephone: +44 (0) 113 259 1999

Email: info@bttg.co.uk Website: www.bttg.co.uk

Date: 10 September 2019

23/56769-1 Our Ref: Your Ref:

> Page: 5 of 7

Client: FIDIVI Tessitura Vergnano Spa

#### BS 5852: 2006 Source 5 - Crib 5

The sample was tested in accordance with BS 5852:2006.

The sample was tested over combustion modified polyurethane foam with a density of approximately 36kg/m<sup>3</sup>.

The test results relate only to the ignitability of the combustion of upholstery composites under the particular conditions of test stated, they are not intended as a means of assessing he full potential fire hazard of the materials of products in use.

#### **Results**

The test results are shown in the tables below:-

	Specimen 1	Specimen 2
Time of Ignition (s)	24	15
Time of Flame Extinction (s)	205	239
Time of Smoke Extinction (s)	336	353
Time of cover split	28	20
Extent of damage (mm) - Seat		
Width	126	134
Length	96	109
Depth	53	56
Extent of damage (mm) - Back		
Width	91	93
Length	358	374
Depth	55	63
Melting	Yes	Yes
Dripping	Yes	Yes
Charring	Yes	Yes
Comments and Observations		
Specimen Result (Ignition or Non-ignition)	Non-Ignition	Non-Ignition

#### Acronyms

ME - Manually extinguished DNS - Material did not split

BTT - Burnt through thickness of foam





EC - Escalating combustion DNO – Did not observe time of event DNI - Did not ignite

 $Shirley ^{\texttt{0}}\ Technologies\ Limited.\ Registered\ Office: Wira\ House,\ West\ Park\ Ring\ Road,\ Leeds,\ LS16\ 6QL.$ A company registered in England & Wales with company number 04669651. VAT Number GB 816764800.  $\mathsf{BTTG^{TM}}$  and  $\mathsf{Shirley}^{\circledast}$  are trade names of Shirley Technologies Limited The supply of all goods and services is subject to our standard terms of business, copies of which are available on request.Our laboratories are accredited to EN ISO/IEC 17025.



Wira House, West Park Ring Road, Leeds, LS16 6QL, UK.

Telephone: +44 (0) 113 259 1999 Email: info@bttg.co.uk

Website: www.bttg.co.uk

Date: 10 September 2019

Our Ref: 23/56769-1 Your Ref:

> Page: 6 of 7

Client: FIDIVI Tessitura Vergnano Spa

#### Comment

The results indicate "Non-ignition" combustion of the materials is designated NI/5 (ie. Pass)

#### Conclusion

The combination of materials meets BS 7176: 2007 for Medium Hazard.

This report relates only to the samples submitted and as described in the report.

Uncertainty of measurement has not been taken into account when presenting the test result. The relevant uncertainty value is included as an annex which forms an integral part of the report.

See BS 7176: 2007 + A1: 2011 Clause 6 for labelling and identification requirements. The test results relate only to the ignitability of the combination of upholstery composites under the particular conditions of test stated (BS EN 1021-1: 2006, BS EN 1021-2: 2006 and BS 5852: 2006 respectively); they are not intended as a means of assessing the full potential fire hazard of the materials or products in use.

Reported by:.....

B Bland

Laboratory Technician

Countersigned By:.....

P Doherty

Manager





Wira House, West Park Ring Road, Leeds, LS16 6QL, UK.

Telephone: +44 (0) 113 259 1999 Email: <u>info@bttg.co.uk</u>

Website: www.bttg.co.uk

Date: 10 September 2019

Our Ref: 23/56769-1

Your Ref: -

Page: 7 of 7

**Client: FIDIVI Tessitura Vergnano Spa** 

# **Uncertainty Budget - Annex**

The overall uncertainty budget for both BS 7176: 2007 +A1: 2011 is as follows:-

Measurements:  $\pm 2$ mm Timings:  $\pm 2$  seconds.

