

# **Confidential Report**

Our Ref: 23/58122-10-2



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: www.bttg.co.uk

Date: 20 January 2021

Our Ref: 23/58122-10-2 Your Ref: 0011512406

Page: 1 of 7

Client: Gabriel A/S

Hjulmagervej 55 DK-9000 Aalborg

Denmark

Job Title: Fire Test on One Sample of Fabric

Client's Order No: 0011512406

Date of Receipt: 4 January 2021

Description of Sample(s): One sample identified as follows was received for testing:

Go Check 61138 / Beige

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: <u>info@bttg.co.uk</u>

Website: www.bttg.co.uk

Date: 20 January 2021

Our Ref: 23/58122-10-2 Your Ref: 0011512406

Page: 2 of 7

Client: Gabriel A/S

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 samples received no pretreatment as the fabric is stated to be inherently flame retardant.

### 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 35kg/m<sup>3</sup>.





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: 20 January 2021

Our Ref: 23/58122-10-2 Your Ref: 0011512406

Page: 3 of 7

Client: Gabriel A/S

## 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 35kg/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**

	Cigarette		)	_	
	1	2	3 <sup>1</sup>	Comments	
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 than1 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			

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: 20 January 2021

Our Ref: 23/58122-10-2 Your Ref: 0011512406

> Page: 4 of 7

Client: Gabriel A/S

#### 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 35kg/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.

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	
Flouring oritorio	1	2	
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

Date:

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

20 January 2021

Our Ref: 23/58122-10-2 Your Ref: 0011512406

> Page: 5 of 7

Client: Gabriel A/S

#### 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 35kg/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)	5	5
Time of Flame Extinction (s)	189	180
Time of Smoke Extinction (s)	262	265
Time of cover split	8	9
Extent of damage (mm) - Seat		
Width	112	110
Length	136	159
Depth	48	50
Extent of damage (mm) - Back		
Width	420	420
Length	110	134
Depth	38	58
Melting	Yes	Yes
Dripping	No	No
Charring	Yes	Yes
Comments and Observations	-	-
Specimen Result (Ignition or Non-ignition) Acronyms	Non-Ignition	Non-Ignition

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® 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  $\mathsf{Shirley^{@}}$  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: 20 January 2021

Our Ref: 23/58122-10-2 Your Ref: 0011512406

Page: 6 of 7

Client: Gabriel A/S

#### Comment

The results indicate "Non-ignition" of the materials and the test is designated NI/5 i.e. 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.

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: 20 January 2021

Our Ref: 23/58122-10-2 Your Ref: 0011512406

Page: 7 of 7

Client: Gabriel A/S

# **Uncertainty Budget - Annex**

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

Measurements: ±2mm
Timings: ±2 seconds.

