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Maritime & Coastguard Agency Approved Body authorised by the MCA Page 1 of 4 Certificate No: LR2402731UKMB Issue Date: 09/01/2024 Expiry Date: 08/01/2029

UK TYPE-EXAMINATION (MODULE B) CERTIFICATE

This is to certify that:

Lloyd's Register Marine Limited (LRM Ltd) did undertake the relevant type approval procedures for the type of equipment identified below which was found to be in compliance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended, subject to any conditions in the schedule attached hereto.

Manufacturer	Solarglide Limited
Address	Unit 8, The Stottie Shed, 5 Bakers Yard, Christon Road, NEWCASTLE UPON TYNE, NE3 1XD, United Kingdom
Reference	MSN1874 Amendment 7
Regulation Item (No. & Item Designation)	UK/3.19 - Draperies, curtains and other suspended textile materials and films
Product Type	Draperies, Curtains & Other Suspended Textile Materials and Films
Product Description	Fire Restricting Material – "Karellis 11301" PVC Free 100% Polyester Blackout Roller Blind fabric
Trade Name	Karellis 11301
Specified Standard	IMO RES MSC.307(88) - (2010 FTP CODE) Annex 1. Part 7
-r	IMO MSC.1/Circ.1456

The attached Design Appraisal Document (schedule) forms part of this certificate. This certificate remains valid unless suspended, expired or withdrawn, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory in service.

This certificate is issued under the authority of the MCA. This certificate will not be valid if the manufacturer makes any changes or modifications to the approved type of equipment, which have not been notified to, and agreed with the approved body named on this certificate.

During the period of validity of this certificate the applicable regulations (international conventions and the relevant resolutions and circulars of the IMO) and testing standards may change, therefore the product conformity may need to be re-assessed by the Approved Body.

Lloyd's Register Marine Limited (Reg. no. 13281335) is a limited company registered in England and Wales. Registered office: 71 Fenchurch Street, London, EC3M 4BS, UK. A member of Lloyd's Register group.

Bruce McDonald Global Fire & Safety Manager For and on behalf of Lloyd's Register Marine Ltd. (8512)

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

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UK TYPE-EXAMINATION (MODULE B) CERTIFICATE

The "UK Mark of Conformity" may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-control phase module (D, E or F) of Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended is fully complied with and controlled by a written inspection agreement with an Approved Body.

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ATTACHMENT TO UK TYPE EXAMINATION (MODULE B) CERTIFICATE No. LR2402731UKMB

The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions and the Merchant Shipping (Marine Equipment) Regulations 2016, as amended for the UK Type Examination of marine equipment for use on UK ships

This Design Appraisal Document forms part of the Certificate.

APPROVAL/EXAMINED DOCUMENTATION

TEST REPORTS

Shirley Technologies Limited (BTTG); Wira House, West Park Ring Road, Leeds, LS16 6QL, UK; Fire Test Report No. 23/61136/06/23, dated 29th June 2023.

CONDITIONS OF CERTIFICATION

- 1. Fire Restricting Vertically supported material consisting of PVC free coated 100% polyester fabric at a mass per unit of 290g/m² with a total thickness of 0.35mm.
- 2. Production items of the subject equipment are to be manufactured in accordance with either an approved Production Quality Assurance System (Module D), a Product-Quality Assurance System (Module E) or a Product Verification Process (Module F), as applicable. The UK Conformity Mark cannot be affixed to the product until a conformity assessment module is in place.
- 3. Each item, batch or lot of the subject equipment is to be issued with a "UK Declaration of Conformity" and have the "UK Conformity Mark" affixed after a conformity assessment module is in place.
- 4. The certificate holder is solely responsible for the products supplied under this Certificate and to ensure that their products are fully compliant with the relevant statutory regulations as applicable and are designed, manufactured and installed to the same quality and specifications as the prototype tested, including components that are designed and manufactured by third parties.
- 5. Should a change of Place of Production from that stated below be required i.e., where the stages of manufacture/assembly/testing of this product take place, the new Place of Production is to be advised to us prior to the change taking place. This Certificate will require to be updated for Approval to be maintained.
- 6. The manufacturer must keep a copy of the UK type-examination certificate, its annexes, and additions together with the technical documentation at the disposal of the national authorities for a period of at least 10 years after the UK Conformity Mark has been affixed on the last product manufactured and, in no case for a period shorter than the expected life of the marine equipment concerned.

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ATTACHMENT TO UK MODULE B CERTIFICATE - DAD Template v.0 dated 29.03.2023.



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ATTACHMENT TO UK TYPE EXAMINATION (MODULE B) CERTIFICATE No. LR2402731UKMB

PLACE OF PRODUCTION

MERMET SAS 58 chemin du Mont Maurin 38630 Les Avenieres Veyrins-Thuellin France

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Bruce McDonald Global Fire & Safety Manager Lloyd's Register Americas For and on behalf of Lloyd's Register Marine Ltd. (LRM Ltd) - UK Approved Body 8512

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ATTACHMENT TO UK MODULE B CERTIFICATE - DAD Template v.0 dated 29.03.2023.



Office: 30 Alexandra Crescent, ILKLEY, West Yorkshire, LS29 9ER, Phone or Fax 01943 603459 Reg. No. 3168606, VAT No. 659 9604 77



Reg. No. 3108000, VAI No. 659 9004 //

TEST CERTIFICATE

No. F20322/1

Testing in Accordance with Part 7 of the 2010 FTP Code Fire Test Procedures for Determining the Resistance to Flame of Vertically Supported Textiles and Films

SAMPLE INFORMATION

Client	Solarglide Limited Unit 8, The Stottie Shed, Bakers Yard, Christon Road, Gosforth, Newcastle Upon Tyne, NE3 1XD
Sample type	Fabric
Details supplied	Dart Blackout
by the client	Mass per unit area: 407 g/m ^{2,} Thickness: 0.25mm-0.33mm,
	Colour and tone: Not Given, FR treatment: None,
	Composition: 75% PVC, 25% Fibreglass
	Yarn density: Not Given, Yarn number count: Not Given
Fabric weight	Approximately 407 g/m ²
Dimensions	100cm by 148cm (Full width)
Date Received	9/9/2020
Pre-treatment	None - the fabric was stated to be inherently flame retardant
Conditioning	Not less than 24 hrs at 20 +/- 5C and 65 +/- 5% RH

TESTING

Following the pre-treatment indicated above, the material was conditioned and tested in a draft-free room, otherwise according to testing to Part 7 of the 2010 FTP Code. Testing was carried out on the face side of the fabric.

Initial testing of the material has determined that the samples were tested with a 15 second flame applied to the edge of the sample.

			WARP			WEFT					
Specimen number	1	2	3	4	5	1	2	3	4	5	
Duration of flaming (sec)	0	0	0	0	0	0	0	0	0	0	
Flaming debris separated	No	No	No	No	No	No	No	No	No	No	
Flame reached edge	No	No	No	No	No	No	No	No	No	No	
Hole reached an edge	No	No	No	No	No	No	No	No	No	No	
Surface flash	No	No	No	No	No	No	No	No	No	No	
SF propagation length	-	-	-	-	-	-	-	-	-	-	
Char length (mm)	18	14	17	19	18	17	22	19	17	19	

The test results relate only to the behaviour of the test specimens of a product under the particular condition of test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.

CONCLUSION

The sample, as received, meets the requirements of Part 7 of the 2010 FTP Code Fire Test Procedures for Determining the Resistance to Flame of Vertically Supported Textiles and Films

The fabric may be labelled "IMO FTPC Part 7".

71h

U or UU indicates a test result within our estimate of uncertainty of the specification limit - see the report appendix for more information. #=Subcontracted to a UKAS accredited Test House. The results on this test report only relate to the specimens tested above.



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Mr J Firth Technical Manager END OF REPORT

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neg. no. 5100000, mi no. 655 500 m

TEST CERTIFICATE

No. F20322/2

T1estin ti Aggoor dig1 a tswhdcsPo7sw1 20f0 FTh Cor1 Ftc1 T1eshcog1ruc1e 7ocD1s1cmtitin sw1 R1etesdig1 so Fldm1 o7V1cstgdlly Suppocs1r T1xst11e dir Ftlme

SAMHLE INFORMATION

Client	Soldcnltr1 Ltmts1r Uits8, Tw1 Ssosst1 Sw1r, Bdk1ce Ydcr, Cwctesoi Rodr, Goe7ocsw, N1agdes11 Upoi Tyi1, NE3 f XD
Sample type	Fdbdg
Details supplied	Cdci t: dl Bldgkous
by the client	Mdee p1cuitsdc1d45-0 n/m²Twtgki1ee4NosGt:1i
	Colouc dir soi 14 uikio a i, FR sc1dsm1 is 4 Noi 1
	Compoetstoi 4f00v holy1es1c
	Ydci r1ietsy4NosGt:1i,Ydci iumb1cgouis4NosGt:1i
Fabric weight	Appoxtmdslly 5-0 n/m ²
Dimensions	f 00gm by f 58gm %Full a tr sw(
Date Received) /) /2020
Pre-treatment	Noi 1 9swl 7dbctg a de esdslr so b1 tiwlc1isly 7ldm1 c1sdor dis
Conditioning	Nosl1ee swoli 25 woe ds20 +/9-C dir 6- +/9-v RH

TESTING

Following the pre-treatment indicated above, the material was conditioned and tested in a draft-free room, otherwise according to testing to Part 7 of the 2010 FTP Code. Testing was carried out on the face side of the fabric.

Initial testing of the material has determined that the samples were tested with a 15 second flame applied to the edge of the sample.

			WARh			WEFT					
Sp1gtm1iiumb1c	f	2	3	5	-	f	2	3	5	-	
Duration of flaming (sec)	0	0	0	0	0	0	0	0	0	0	
Flaming debris separated	No	No	No	No	No	No	No	No	No	No	
Flame reached edge	No	No	No	No	No	No	No	No	No	No	
Hole reached an edge	No	No	No	No	No	No	No	No	No	No	
Surface flash	No	No	No	No	No	No	No	No	No	No	
SF propagation length	-	-	-	-	-	-	-	-	-	-	
Char length (mm)	31	40	36	34	39	48	39	48	43	47	

The test results relate only to the behaviour of the test specimens of a product under the particular condition of test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.

CONCLUSION

Tw1 edmpl1, de c1g1t: 1r, m11se sw1 c1qutc1m1i se o7hdcsPo7sw1 20f0 FTh Cor1 Ftc1 T1es hcog1ruc1e 7oc D1s1cmti ti n sw1 R1etesdi g1 so Fldm1 o7 V1cstgdlly Suppocs1r T1xst1e di r Ftlme

Tw1 7dbctg mdy b1 ldb1ll1r "IMO FThC hdcsP".

71h

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Mr J Firth **T1gwi tgdl Mdi dn1c** END OF REHORT

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