



EC TYPE EXAMINATION (MODULE B) CERTIFICATE

This is to certify that:

LLOYD'S REGISTER VERIFICATION LIMITED (LRV), designated as a "notified body" under the terms of the Merchant Shipping (Marine Equipment) Regulations 2016 (S.I. 2016 No.1025), did undertake the relevant type approval procedures for the equipment identified below which was found to be in compliance with the essential Fire protection equipment requirements of Marine Equipment Directive (MED) 2014/90/EU and Commission Implementing Regulation (EU) 2017/306 indicating design, construction and performance requirements and testing standards for marine equipment, subject to any conditions in the Design Appraisal Document attached hereto.

Manufacturer (Applicant)	L'Isolante K-Flex Srl
Address	Via Leonardo da Vinci, 36 20877 Roncello (Mi) Italy
Reference	Regulation 2017/306
Regulation Item (No & Item designation)	MED/3.18e SURFACE MATERIALS & FLOOR COVERINGS WITH LOW FLAME-SPREAD CHARACTERISTICS - ADHESIVES (A) & (B) & (C) CLASS DIVISIONS
Product Type	MATERIAL HAVING LOW FLAME SPREAD CHARACTERISTICS
Product Description	Fire-Resisting Material – Type "K-Flex IN-CLAD" Elastomeric Foam Insulation
Specified Standard	IMO Res. MSC.61(67) – (FTP Code) Annex 1 Part 5 IMO MSC/Circ 1120 IMO Res. MSC.307(88) – (2010 FTP Code) Part 8 IMO Res. MSC.307(88) – (2010 FTP Code) Annex 1 Part 5

The attached Design Appraisal Document (schedule) forms part of this certificate.

This certificate remains valid unless cancelled or revoked, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory in service.

Date of issue	31 July 2017	Expiry date	30 July 2022
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Certificate No.	MED 1750136
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Signed	
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Sheet No.	1 of 3
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Name	J. M. Evans
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For and on behalf of Lloyd's Register Verification
LRV EC Distinguishing No. 0038

Note:

This certificate is issued under the authority of the MCA.

This certificate is not valid for equipment; the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify the notified body named on this certificate of any modification or changes to the equipment in order to obtain a valid Certificate.

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Lloyd's
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Document number MED 1750136
Issue number 1

DESIGN APPRAISAL DOCUMENT

Date 31 July 2017	Quote this reference on all future communications SOUTSO/SFS/TA/JE/WP29305565
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ATTACHMENT TO EC TYPE EXAMINATION (MODULE B) CERTIFICATE No. MED 1750136

The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions and European Union legislation for the EC Type Examination of Marine Equipment for use on Merchant Ships Registered in the European Economic Area.

This Design Appraisal Document (schedule) forms part of the Certificate.

APPROVAL DOCUMENTATION

WarringtonFire Global Safety, Warrington, United Kingdom, Fire Test Report No. 154270 dated 7th June 2006.

CSI S.p.A., Viale Lombardia 20, 20021 Bollante (MI), Italy, Fire Test Reports No. 0643\DC\REA\12_1 dated 5th November 2012.

Exova Warringtonfire, Holmesfield Road, Warrington, WA1 2DS, United Kingdom, Fire Test Report No. 361780 dated 2nd March 2016.

CONDITIONS OF CERTIFICATION

1. Restricted Application: Restricted to steel substrates of 1.5mm thickness for chilled water pipes and air conditioning systems
2. Consisting of: one layer of outer facing 'K-Flex IN Clad Rubber Foil' hypalon rubber foil (1 mm thick, density 1.6 kg/m³) bonded with 'Adhesive Hydro K-Flex' adhesive manufactured by BASF (application rate 60 g/m²) to one layer of 'K-Flex ST' closed cell elastomeric foam insulation (25 mm thick, density 40-80 kg/m³). Insulation bonded to steel substrate with 'Locklite Super Glue' adhesive manufactured by Loctite (application rate 20 g/m²). Scrim type '213A74D' may be fitted between 'K-Flex IN-CLAD' and 'K-Flex ST'
3. Smoke and toxicity criteria as required by IMO Fire Test Procedures Code, Annex 1 Part 2, have not been tested
4. Composition of individual components, including any flame retardants, to be maintained in production in accordance with originally tested composition formula
5. 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). The wheelmark cannot be affixed to the product until a conformity assessment module is in place
6. Each item, batch or lot of the equipment is to be issued with a "Declaration of Conformity" and have the "Mark of Conformity" affixed after a conformity assessment module is in place



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PLACE OF PRODUCTION

L'Isolante K-Flex SpA
Via Leonardo da Vinci 36
20877 Roncello (MB)
Italy

K-Flex Polska Sp z.o.o
Wielenin-Kolonia 50B
99-210 Uniejow
Poland



Jessica Evans
Senior Specialist
Statutory Fire & Safety
Southampton Technical Support Office, Marine & Offshore
For and on behalf of Lloyd's Register Verification
LRV EC Distinguishing No. 0038