

CERTIFICATE OF FIRE APPROVAL

This is to certify that

The product detailed below will be accepted for compliance with the applicable Lloyd's Register Rules and Regulations and with the International Convention for the Safety of Life at Sea, (SOLAS), 1974, as amended, for use on ships and offshore installations classed with Lloyd's Register, and for use on ships and offshore installations when authorised by contracting governments to issue the relevant certificates, licences, permits etc.

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|---------------------------|--|
| Manufacturer | McAllister Mills Inc. |
| Address | P.O. Box 590 173 Rainbow Circle Independence Virginia, 24348 United States of America (USA) |
| Type | A-60 DECK |
| Description | Steel deck insulated on the underside with foil encapsulated ceramic fibre insulation blanket (38mm thick, 96kg/m ³ density) type: "Alvex PF" |
| Specified Standard | IMO Res. MSC.61(67)-(FTP Code) Annex 1, Part 3 IMO MSC/Circ.1120 |

The attached Design Appraisal Document forms part of this certificate.

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

Date of issue 19 August 2011

Expiry date 18 August 2016

Certificate No. SAS F110313

Signed



Sheet No 1 of 2

Name

S. Abraham
Surveyor to Lloyd's Register EMEA
A Member of the Lloyd's Register Group

Note:

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 Lloyd's Register of any modification or changes to the equipment in order to obtain a valid Certificate.

"Lloyd's Register, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register Group'. The Lloyd's Register Group 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 Group 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."



DESIGN APPRAISAL DOCUMENT

| | |
|------------------------|---|
| Date 19 August 2011 | Quote this reference on all future communications LDSO/SFS/TA/SA |
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ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS F110313

This Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Intertek Evaluation Centre, Texas, United States of America; Fire Test Report No. 100397580SAT-001A_Rev 1, dated 30 June 2011.

CONDITIONS OF CERTIFICATION

1. Consisting of: Steel deck insulated on the underside with foil encapsulated ceramic fibre insulation blanket (38mm thick, 96kg/m³ density) type: "Alvex PF" manufactured by McAllister Inc. Ltd; retained to the deck and stiffeners with 3mm diameter welded copper/steel pins and K150 x 3mm washers, spaced at 280mm maximum centres and 12mm from all edges.
2. Production items are to be manufactured in accordance with a quality control system which shall be maintained to ensure that items are of the same standard as the approved prototype.

NOTE

The type: "Alvex PF" foil encapsulated ceramic fibre insulation blanket (38mm thick, 96kg/m³ density) may also be accepted as an A-60 insulation material for applications on steel pipes as specified in IMO MSC.1/Circular 1369-Interpretation 12 of SOLAS Reg. II-2/21.4.

PLACE OF PRODUCTION

McAllister Mills, Inc.
P.O Box 590
173 Rainbow Circle
Independence
Virginia 24348
United States of America



Saji Abraham
Surveyor
Statutory Fire & Safety
London Design Support Office
Lloyd's Register EMEA

**Supplementary Type Approval Terms and Conditions**

This certificate and Design Appraisal Document relates to type approval, it certifies that the prototype(s) of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein, it does not mean or imply approval for any other use, nor approval of any products designed or manufactured otherwise than in strict conformity with the said prototype(s).