

MARINE DIVISION

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Certificate number: 16356/A1 BV

File number : ACI 4010/033/001

Product code : 5301H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

TYPE APPROVAL CERTIFICATE

as per Bureau Veritas Classification Rules

This certificate is issued to

SLEEV-IT FIRE SYSTEMS LTD.

Sittingbourne - UNITED KINGDOM

for the type of product

PIPE PENETRATIONS IN FIRE DIVISIONS

Sleev-It Pipe Collars System for plastic pipes penetrations through A0, A15, A30 and A60 divisions.

Regulations and standards :

BV Rules Part C Chapter 4 - SOLAS 74, as amended, SOLAS 2000 Regulations II-2/9.3.1 - IMO Resolution A.754(18) - IMO Resolution MSC.61(67) Annex 1 Part 3.

This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements of the Regulations and standards mentioned above.


This certificate is valid until : 19 Jul 2011

At Paris la Défense, on : 25 Oct 2006

For BUREAU VERITAS,
By order of the Secretary

Approval office

Local office : BV LONDON
Surveyor : S. Yule



J. BENOIT



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine Division. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

"Sleeve-It Pipe Collars System for plastic pipes"

Each sealing system comprises a 60mm-long tubular steel casing 0.7 mm thick, welded or bolted to the bulkhead or to the deck. A break is incorporated in the casing so that the collar can be sprung open to permit installation around a pipe. Several layers of Sleeve-it graphite intumescent material are inserted between the casing and the pipe, nominally 2.5mm thick. The appropriate number of layers depending on the pipe diameter is given in §4.3.

Pipe material	Pipe diameter	Installation	Fire ratings of Sleeve-it collars
PB, PPr, PE and uPVC	16 to 125 mm	bulkhead (1 collar fixed to the insulated side) or deck (1 collar fixed to the underside)	A0, A15, A30 and A60
PB, PPr, PE and uPVC	160mm	bulkhead (1 collar fixed to the uninsulated side) or deck (1 collar fixed to the underside)	A0, A15, A30 and A60 NOTA: for deck installations, an extra square of rockwool insulation 280x280x30 mm is required around the pipe, over the deck insulation on the underside of the deck.
PB	16 to 50mm	bulkhead (1 collar fixed to either side of the bulkhead)	A0, A15, A30 and A60

PB= Polybutylene ; PPr= Polypropylene ; PE= Polyethylene ; uPVC= Unplasticized polyvinylchloride

When the collar is fixed to the insulated side of the bulkhead or deck, the whole length of the collar has to be insulated.

Materials and/or components :

- Collar stainless steel casing manufactured by All Metal Pressings Ltd.
- Sleeve-it graphite intumescent material layers manufactured by Sleeve-it Fire systems Ltd.
- Non-combustible Rockwool, density 110 kg/m³, to be BV type approved.

2. DOCUMENTS AND DRAWINGS :

As per the Manufacturer's drawings included in tests reports listed in § 3 .

3. TEST REPORTS :

3.1- Test reports N° 208971 dated 12 February 2003, 208972 dated 20 March 2003, 223968 dated 5 September 2005 & 223969 dated 1 September 2005 as per IMO Resolution A754(18) from BRE Testing, UK.

3.2- Assesment CC 228739 dated 11 May 2006 from BRE Testing, UK.

4. APPLICATION / LIMITATION :

4.1- Approval valid for ships having to comply with SOLAS 74 Convention, as amended, and for units having to comply with IMO Resolution A649 (The "MODU Code").

4.2- The fitting aboard to be the same as used for the test.

4.3- Penetration seal specification:

Pipe diameter (mm)	Minimal number of layers of intumescent material	Minimal number of fixing tabs
16	2	2
50	3	3
110	5	4
125	5	4
160	8	6

5. PRODUCTION SURVEY REQUIREMENTS :

As per HBV products.

6. MARKING OF PRODUCT :

The product or packing is to be marked with name of manufacturer, type designation and fire technical rating.

7. OTHERS :

7.1- This approval is given on the understanding that the Manufacturer will accept full responsibility for informing shipbuilders or their sub-contractors of the proper methods of fitting and general maintenance of the approved equipment and the conditions of this approval.

7.2- This certificate supersedes BV Type Approval certificate N°16356/A0 BV issued on 19/07/2006 by Bureau Veritas.

***** END OF CERTIFICATE *****