



# DET NORSKE VERITAS

## EC TYPE EXAMINATION CERTIFICATE

Application of: Council Directive 96/98/EC of 20 December 1996 on Marine Equipment as amended by directive 2011/75/EU, issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Directorate. This Certificate is issued by Det Norske Veritas under the authority of the Government of the Kingdom of Norway.

CERTIFICATE NO. **MED-B-8630**

This is to certify that the  
**Penetrations through "A" class divisions: electric cable transits**

with type designation(s)  
**E.I.S. (Easy Installation System)**

Manufacturer  
**IBMO B.V.**  
**Bleiswijk, Netherlands**

is found to comply with the requirements in the following Regulations/Standards:  
**Annex A.1, item No. A.1/3.26a and Annex B, Module B in the Directive. SOLAS 74 as amended, Regulation II-2/9, IMO MSC/Circ.1276 and IMO FTP Code**

Further details of the equipment and conditions for certification are given overleaf.

**Høvik, 2013-11-18**  
for **Det Norske Veritas AS**

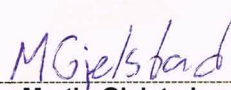


This Certificate is valid until  
**2018-11-18**

Notified Body No.: **0575**

  
**Marianne Strand Valderhaug**  
Head of Department

DNV local office:  
**Rotterdam**

  
**Martin Gjelstad**  
Surveyor



The Certificate is subject to terms and conditions overleaf. Any significant changes in design or construction of the product, or amendments to the Directive or Standards referenced above may render this Certificate invalid. The product liability rests with the manufacturer or his representative in accordance with Council Directive 96/98/EC, as amended. The Mark of Conformity may only be affixed to the product and a Declaration of Conformity may only be issued when the production/product assessment module referred to in the council directive, is fully complied with.



Certificate No.: MED-B-8630  
Item No.: A1/3.26a  
Job Id.: 344.1-004120-1

## Product description

“E.I.S. (Easy Installation System)”

consists of a steel sleeve welded to the bulkhead/deck. The sleeve is filled with IBMO E.I.S., and the sleeve may be sealed with 20 mm IBMO Pyro Putty on each side. Insulation and installation as specified in table below.

Use	Size of sleeve	Length of sleeve	Thickness of sleeve	IBMO Pyro Putty	Insulation specifications	Filling rate
Bulkhead	500 mm x 250 mm	180 mm	9.5 mm	Yes	The sleeve is partially insulated with an approved A-60 insulation. In addition the sleeve is insulated on the exposed side.	40 %
Deck	500 mm x 250 mm	180 mm	9.5 mm	Yes	The sleeve is partially insulated with an approved A-60 insulation.	40 %
Deck	Ø 60 mm	180 mm	2.25 mm	Yes	The sleeve is partially insulated with an approved A-60 insulation.	40 %
Deck	500 mm x 250 mm	150 mm	9.5 mm	No	The sleeve is partially insulated with an approved A-60 insulation	40 %
Deck	Ø 60 mm	150 mm	2.25 mm	No	The sleeve is partially insulated with an approved A-60 insulation	40 %

## Application/Limitation

Approved for use as penetration system in Class A-0 to A-60 in steel bulkheads/decks. For A-0, A-15 and A-30 the penetration is to be insulated as A-60, and in addition the division is to be insulated at least 200 mm around the penetration. Other applications are subject to case-by-case approval.

The insulation material used has to be approved according to the Marine Equipment Directive and bear the Mark of Conformity.

Each product is to be supplied with its manual for installation and maintenance.

## Type Examination documentation

Test report no. 2012-Efectis-R9421a/NKS/BKJX and no. 2012-Efectis-R9421b/NKS/BKJX both dated 14 May 2013 from Efectis Nederland BV, Rijswijk, Netherlands.

## Tests carried out

Tested according to IMO FTPC Part 3 and in compliance with IMO 2010 FTP Code Ch. 8.

## Marking of product

The product or packing is to be marked with name of manufacturer, type designation, fire-technical rating, MED Mark of Conformity and USCG approval number if applicable (see below and page 3).

## Mark of Conformity

The manufacturer is allowed to affix the Mark of Conformity according to Article 11 in the Council Directive 96/98/EC on Marine Equipment and shall issue a Declaration of Conformity, only when the module D or E or F of Annex B in the same directive is fully complied with.

Module D: The quality system for production and testing shall be approved by the Notified Body.

Module E: The quality system for inspection and testing shall be approved by the Notified Body.

Module F: Compliance of the products to type as described in this EC Type-Examination Certificate must be verified by the Notified Body who also shall issue a Certificate of Conformity.



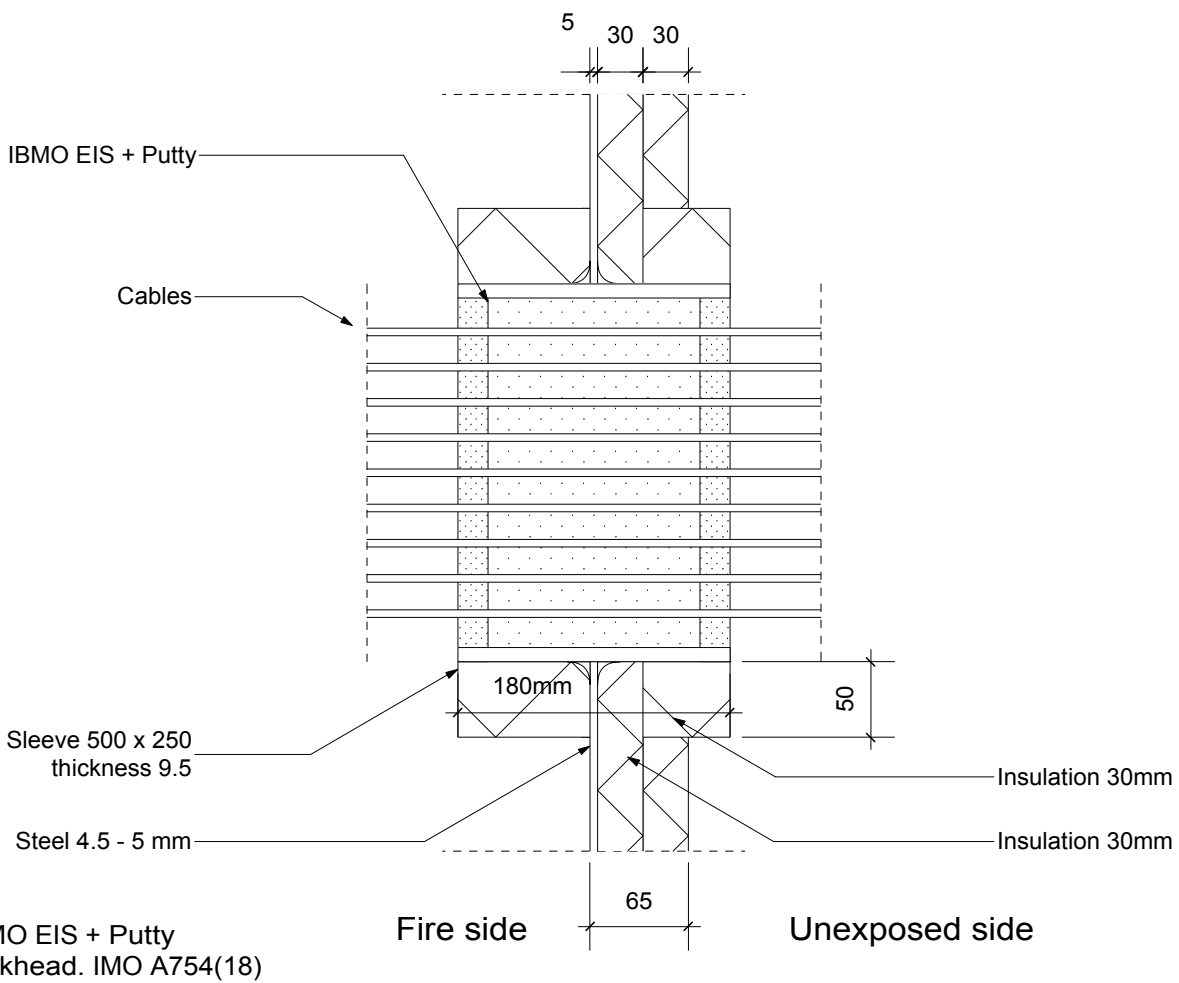






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### USCG Approval

An U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the United States of America and the EEA EFTA states on the mutual recognition of certificates of conformity for marine equipment" signed 17 October 2005.

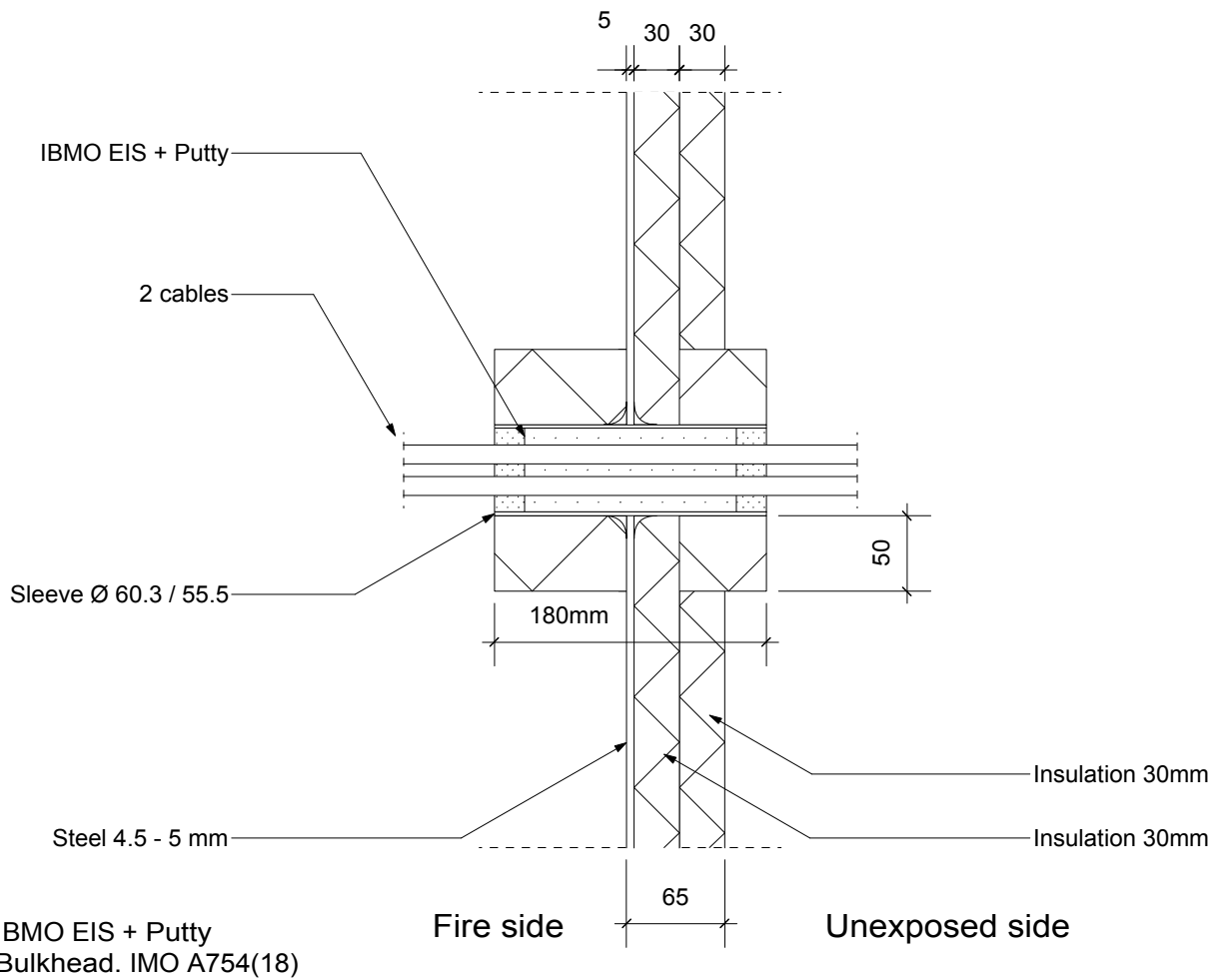




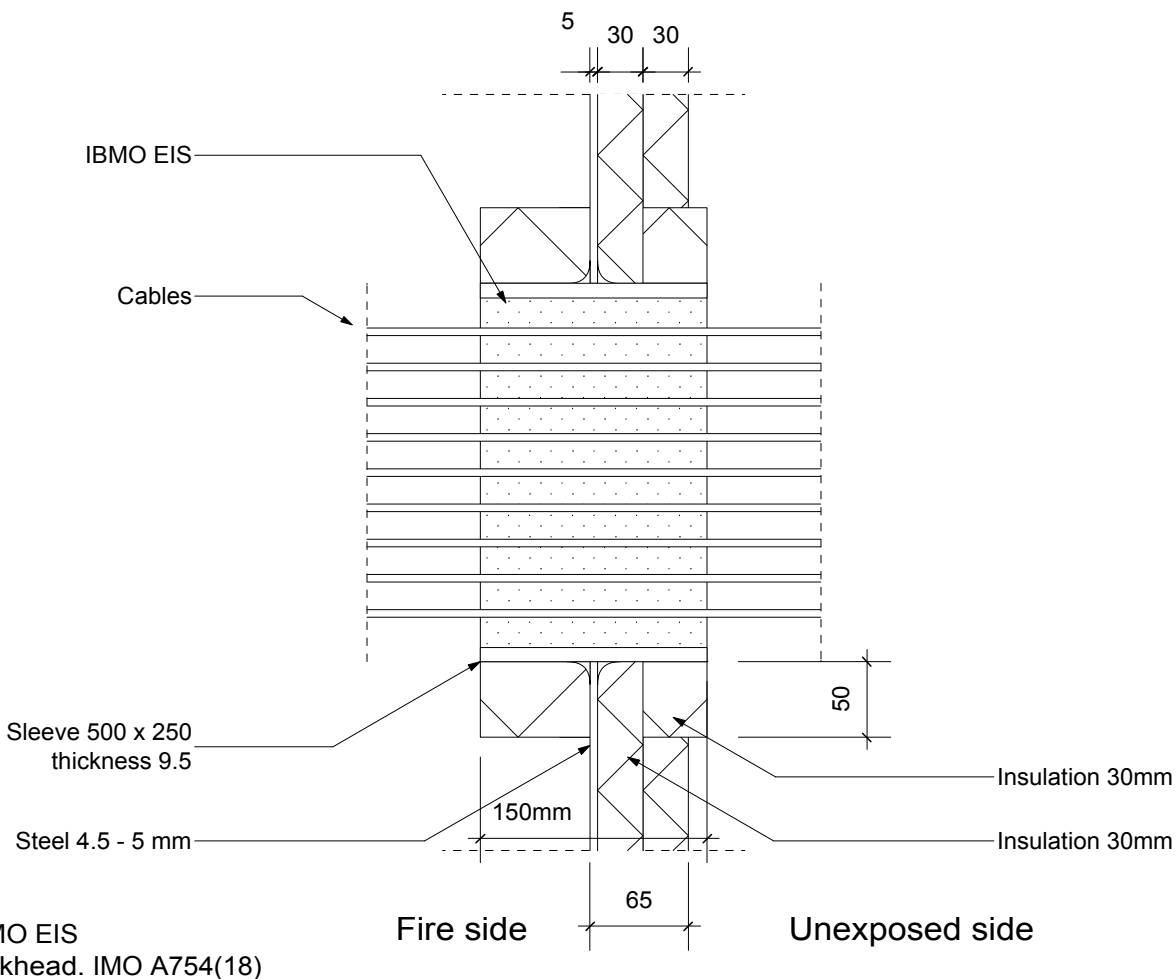
legend
 putty pad
 EIS
 MPS
 HPS

remarks
<ul style="list-style-type: none"> <li>- All measurements in millimeters</li> <li>- Sleeves placed symmetrical</li> <li>- Filling rate 40%</li> </ul>





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	Subject:	Bulkhead, 4.5-5mm.		
	Scale:	1:5		
	Date:	03-03-2013		
	Initials.:	RV		
Lorentzstraat 13 2665 JG Bleiswijk The Netherlands		Tel.: +31(0)10 - 522 75 05 Fax: +31(0)10 - 476 31 45 Web: www.ibmo.eu		



<p><b>legend</b></p>	<p><b>remarks</b></p>			<p><b>IBMO Group B.V.</b></p>																							
<p> putty pad</p> <p> EIS</p> <p> MPS</p> <p> HPS</p>	<p>- All measurements in millimeters          - Sleeves placed symmetrical          - Filling rate 40%</p>			<table border="1"> <tr> <td data-bbox="798 1803 1133 1848">Project:</td> <td colspan="2" data-bbox="1133 1803 1560 1848">Fire test 2013 IMO A754(18)</td> </tr> <tr> <td data-bbox="798 1848 1133 1892">Drawing No.:</td> <td data-bbox="1133 1848 1340 1892">C.FTBH.15.01.13</td> <td data-bbox="1340 1848 1560 1892">page 1 of 1 paper size A4</td> </tr> <tr> <td data-bbox="798 1892 1133 1937">Subject:</td> <td colspan="2" data-bbox="1133 1892 1560 1937">Bulkhead, 4.5-5mm.</td> </tr> <tr> <td data-bbox="798 1937 1133 1982">Scale:</td> <td colspan="2" data-bbox="1133 1937 1560 1982">1:5</td> </tr> <tr> <td data-bbox="798 1982 1133 2027">Date:</td> <td colspan="2" data-bbox="1133 1982 1560 2027">03-03-2013</td> </tr> <tr> <td data-bbox="798 2027 1133 2072">Initials.:</td> <td colspan="2" data-bbox="1133 2027 1560 2072">RV</td> </tr> <tr> <td colspan="2" data-bbox="798 2072 1133 2150">                 Lorentzstraat 13                  2665 JG Bleiswijk                  The Netherlands             </td> <td colspan="2" data-bbox="1133 2072 1560 2150">                 Tel.: +31(0)10 - 522 75 05                  Fax: +31(0)10 - 476 31 45                  Web: www.ibmo.eu             </td> </tr> </table>		Project:	Fire test 2013 IMO A754(18)		Drawing No.:	C.FTBH.15.01.13	page 1 of 1 paper size A4	Subject:	Bulkhead, 4.5-5mm.		Scale:	1:5		Date:	03-03-2013		Initials.:	RV		Lorentzstraat 13 2665 JG Bleiswijk The Netherlands		Tel.: +31(0)10 - 522 75 05 Fax: +31(0)10 - 476 31 45 Web: www.ibmo.eu	
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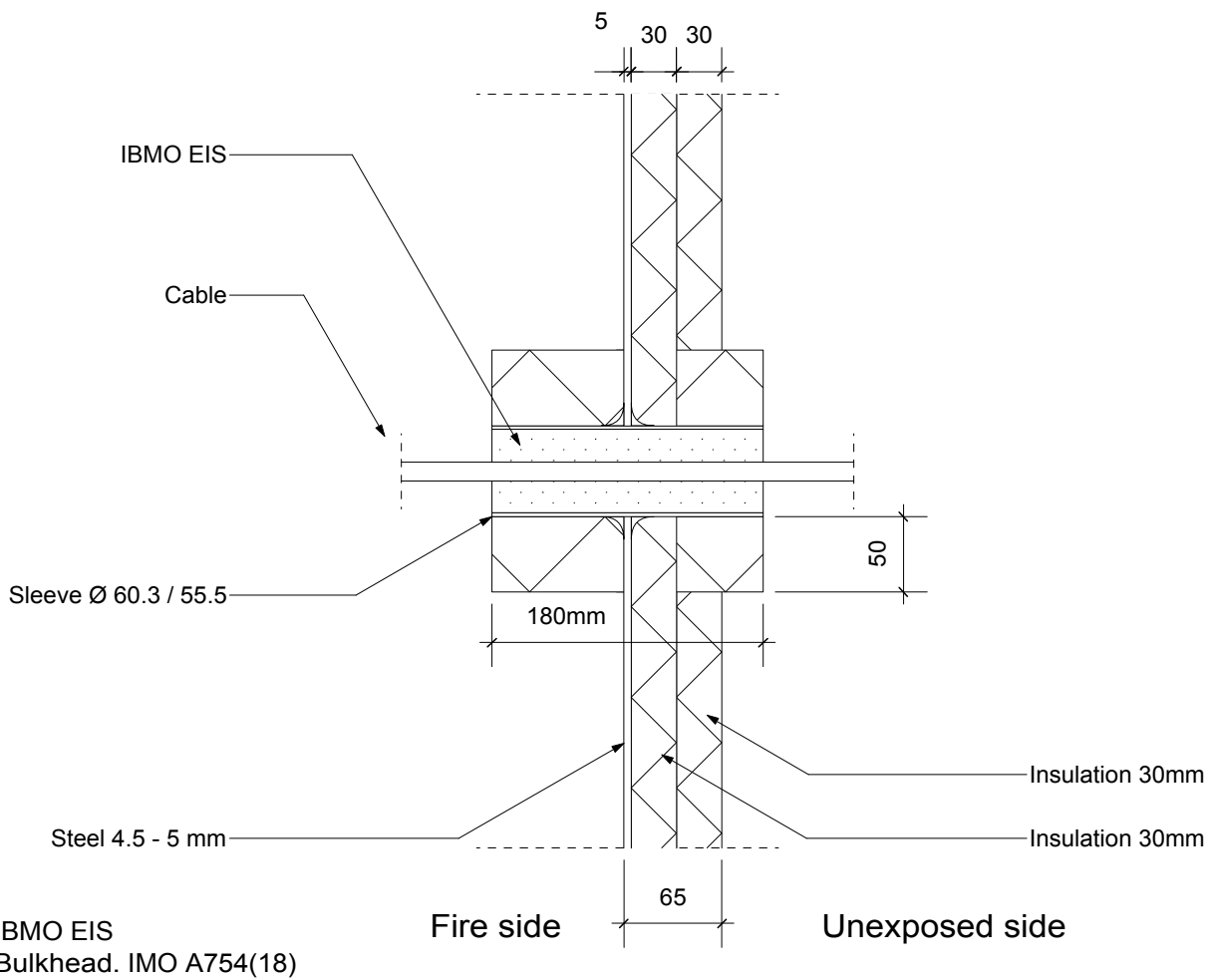






IBMO EIS  
Bulkhead. IMO A754(18)

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