



# 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 2012/32/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-8970**

This is to certify that the  
**Fire Doors**

with type designation(s)  
**MANTA A-60 Single Leaf Door**

Issued to

**Manta Sezana, Proizvodnja in trgovina d.o.o.**  
**Sežana, Slovenia**

is found to comply with the requirements in the following Regulations/Standards:  
**Annex A.1, item No. A.1/3.16 and Annex B, Module B in the Directive. SOLAS 74 as amended, Regulation II-2/and IMO FTP Code**

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

**Høvik, 2014-04-23**  
for **Det Norske Veritas AS**



This Certificate is valid until  
**2019-04-23**

Notified Body No.: **0575**

  
**Marianne Strand Valderhaug**  
Head of Department

DNV local office:  
**Rijeka**

  
**Rolf Emilsen**  
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-8970  
Item No.: A.1/3.16  
Job Id.: 344.1-004293-1

## Product description

“MANTA A-60 Single Leaf Door”

A 45 mm thick single leaf hinged door with door leaf constructed of an insulating core of 40 mm calcium silicate board Promatect L-500 of density 500 kg/m<sup>3</sup>, manufacturer by Promat GmbH, Germany, faced on both sides with 0.8 mm thick steel sheets.

The insulation is fasten to the door leaf with adhesive.

The door may be fitted with a window, an insulated glass pane of 29 mm Termoglass Lamiflame EI 60, fitted into a 1.5 mm steel frame. The window frame is fastened to the door leaf with screws. The perimeter edges of the glazing aperture were fitted with intumescent strips and the glas edge cover gaps were sealed with ceramic glazing strips and silicon sealant.

The opening between the door leaf and door frame were sealed with two profiled gaskets and one intumescent strip.

The door frame is made from 3 mm Z-profiles steel sheet and is welded to the bulkhead.

The door leaf is fixed to the door frame with three hinges..

For further details, see the drawings in the test reports listed under Type Examination documentation below.

## Application/Limitation

The door is approved for installation in steel bulkheads of class A-60. Installation of the door in bulkheads made of other materials (aluminium, FRP, etc.) are subject to case-by-case approval.

Note that this is a fire safety certificate which only covers fire technical properties (i.e. not to cover strength evaluations related to watertightness, weathertightness, etc.).

Maximum door leaf size: 1136 mm x 2115 mm (W x H).

Maximum clear door opening: 1100 mm x 2100 mm (W x H).

Maximum light opening of window: 557 mm x 457 mm (W x H).

The door has been successfully tested with extended test period in compliance with IMO MSC.1/Circ. 1319.

The insulation materials and adhesives used have to be approved according to the Marine Equipment Directive and bear the Mark of Conformity. This requirement may also be applicable for surface materials used, if required by relevant rules and regulations.

Each door is to be supplied with its manual for installation, use and maintenance.

## Type Examination documentation

Test Report Nos. P 0934/13-530-1, dated 17 February 2014 and P 0934/13-530-2, dated 18 February 2014, both from ZAG Fire laboratory and Fire Engineering, Slovenia.

Assessment No. 530/HM-DN 0934/13-6 dated 1 April 2014 from ZAG Fire laboratory and Fire Engineering, Slovenia.

## Tests carried out

Tested according to IMO 2010 FTP Code part 3.

## Marking of product

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



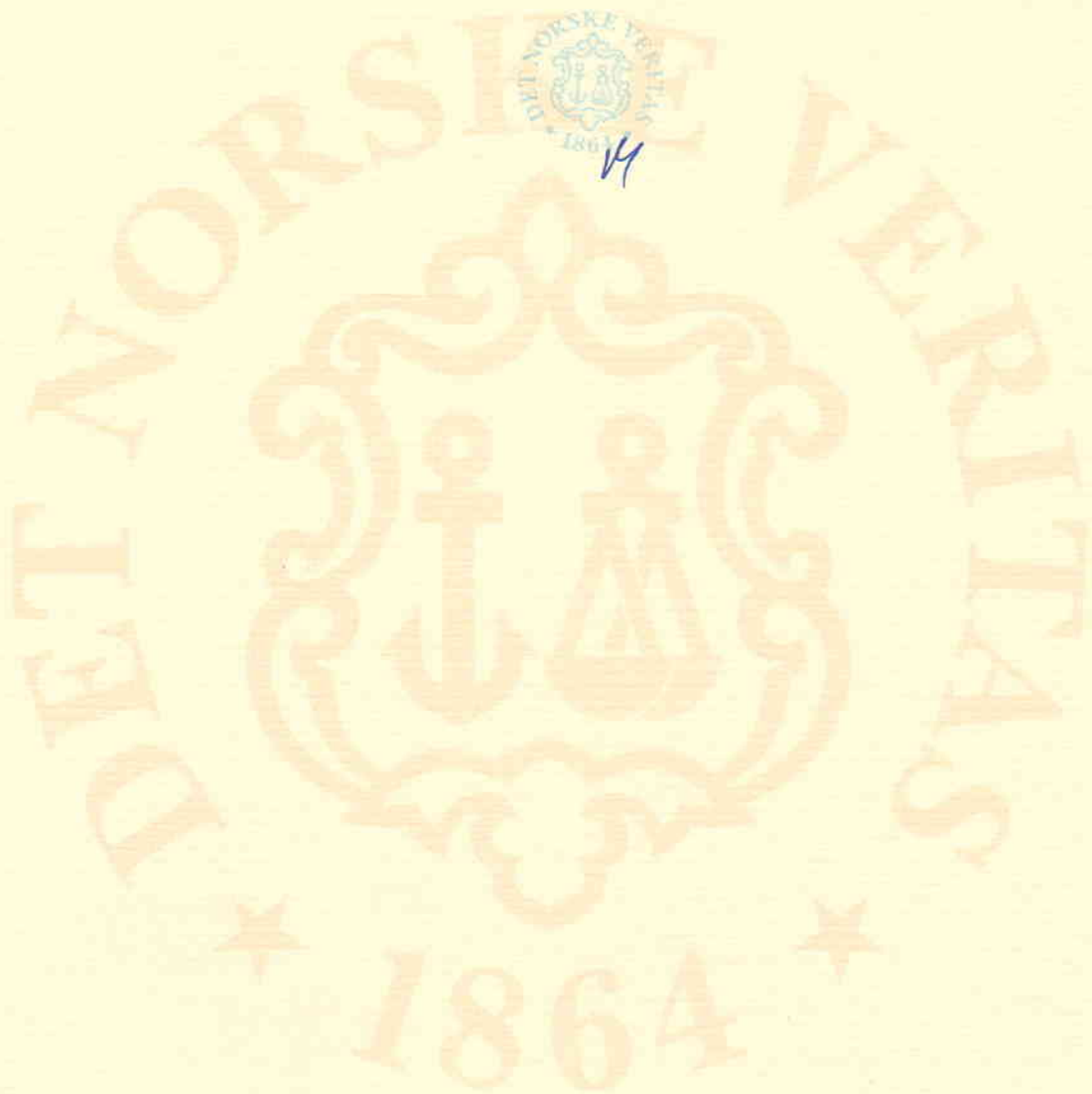
Certificate No.: MED-B-8970  
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### USCG Approval

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.

#### USCG approval limitations:

The approval is limited to fire doors without windows and doors with total window area of 645 cm<sup>2</sup>, or less, in each door leaf. For larger windows, USCG shall be contacted.



*gjema*