



DET NORSKE VERITAS TYPE APPROVAL CERTIFICATE

441.22 262.1-009628-1

Det Norske Veritas TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. **S-6246**

This is to certify that the

Watertight Door

with type designation(s)

Quick acting Watertight door

Manufactured by

**Pacific Coast Marine
EVERETT WA, United States**

is found to comply with

Det Norske Veritas' Rules for Classification of Ships

Application

see page 2

Høvik, 2010-09-22

for **Det Norske Veritas AS**
Martin Fowlie

DNV local office:

This Certificate is valid until

2014-12-31
Igor Antonijevic

Please note that all regular text on this page should be in Arial size 9.

Product description

Quick acting hinged watertight door.

Maximum clear opening 81x47 inches

Maximum spacing between stiffeners is 20 inches.

Maximum spacing between dogs is 20 inches.

Stiffeners:

Aluminium construction: Perimeter channel AL-AC-3x1.75 Aluminium Associated Channel

Horizontal stiffener AL-ASC-4x1.75 American Standard Channel

Steel construction: ASTM A36 Channel 3x1.66 ST-CH-3-4.1#

Alternative material options:

- for door frame ASTM A-36 mild steel and 304 stainless steel may be used
- for door panel ASTM A-36 mild steel and 304 or 316 stainless steel may be used.

Design options:

- Portlight with or without deadlight cover may be placed in watertight door.
- Concealed or pantograph hinge option may be used.
- Spoke-style and lock-in T-wrench handwheel option may be used.

Application/Limitation

Maximum designed pressure is 3.5m.

These doors may be used in positions where the watertightness is required and hinged doors are acceptable and where the pressure is less or equal to maximum design pressure. Tighteners shall be mounted also on the hinged side.

Watertight doors with portlight options shall not be used below freeboard deck

The Type approval does not cover support of these doors into the hull structure. That is subject for approval of the specific vessel that the doors are intended for.

Each door shall be tested for tightness to the design pressure with a presence of DNV surveyor.

Type Approval documentation

Tests carried out

Prototype test carried out at Pacific Coast Marine Industries, Everett, Washington USA, dated 2005-11-03, and 2006-02-16, with DNV surveyor P.M. Read present. Test carried out with satisfactory results.

Marking of product

- Manufacturer's name or brand.
- DNV Type approval certificate number (S-6246)
- Product certificate number
- Maximum allowable pressure (3.5m)

Certificate Retention Survey

Det Norske Veritas's surveyor is to be given permission to perform Certification Retention Survey at any time during the validity period of this certificate. The arrangement is to be in accordance with procedure described in item 4.3, Certification Note No. 1,2.

END OF CERTIFICATE

Notice: This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.
