

# TYPE APPROVAL CERTIFICATE

Certificate No: **TAF000017R** Revision No:

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That the Class A and B Penetration

with type designation(s) **WR series (steel)** 

Issued to

# WallMax Srl Milano, Italy

is found to comply with

**DNV** rules for classification - Ships

**DNV** offshore standards

DNV statutory interpretations DNV-SI-0364 - SOLAS interpretations, Edition July 2021

### Application:

Approved for use as pipe penetration system for approved ship pipes in class A-0 and A-60 steel bulkheads and decks.

This certificate is recognized by Transport Canada.

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Issued at Hamburg on 2023-01-27	
This Certificate is valid until <b>2024-06-03</b> .	for <b>DNV</b>
DNV local unit: Italy/Malta CMC	
Approval Engineer: <b>Hagen Markus</b>	
	Sven Klinger
	Head of Section

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Form code: TA 251 Revision: 2022-12 www.dnv.com Page 1 of 6

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



Revision No: 1

### **Product description**

WallMax® Round frames (WR) do have two-part structure, pre-assembled with a special, single-opening round rubber module, black colour that accommodates and seals the passage of one pipe only.

Frames are available in different range of diameter openings. Adaption to pipe diameter by peel-off inner layers. Layers are off different colours; black, red, violet and yellow. Colours scheme may vary depending on the size of the modules.

Dimension of WR Modules acc. to "WR MODULE SIZES CHART - General Product Datasheet No: 7311110001"

Sleeves (SLVWR) are available as accessories in different steel qualities for bolting and welding. Dimensions acc. to "SLVWR SIZES CHART – General data sheet no.: 7311300001".

For further details refer to Product Catalogue "WallMax®"

### **Application/Limitation**

Class A-0 and A-60 Steel Bulkheads and Decks, General application.

### Size range of penetration pipes (media pipe)

Pipe material	Outer diameter
Carbon and Stainless Steel	3.6mm up to 170mm

Division type	Transit type	Pipe diameter mm
BULKHEAD A0	WR 23 to WR 150	Ø 3.6 to Ø 119
BULNIEAD AU	WR175 to WR 200	Ø 119 to Ø 170
	WR 23 to WR150	Ø 3.6 to < Ø 119
DECK A0	WR 175	Ø 119 to Ø 145
	WR 175 (Max. Dia.)	Ø 145
	WR 200	Ø 138 to Ø 170
	WR 200 (Min. Dia.)	Ø 138

Division type	Transit type	Pipe diameter mm
	WR 23 to WR 25	Ø 3.6 to Ø 12
	WR 31 to WR 50	Ø 4 to Ø 30
BULKHEAD A15 / A30 / A60	WR 68 to WR 150	Ø 24 to Ø 119
	WR 175 to WR 200	Ø 119 to Ø 170
	WR 200 (Max. Dia.)	Ø 170
	WR 23 to WR 25	Ø 3.6 to Ø 11
DECK A15 / A30 / A60	WR 31 to WR 50	Ø 4 to Ø 30
	WR 68 to WR 150	Ø 24 to Ø 119
	WR 175 to WR 200	Ø 119 to Ø 170

For application on A-15 and A-30 divisions, the penetration system and the penetrated division are to be insulated according to the drawings listed in the "Insulation plans - A15 / 30 Divisions" on page 3. Other applications are subject to case-by-case approval.

The insulation material used has to be approved.

Form code: TA 251 Revision: 2022-12 www.dnv.com Page 2 of 6



Revision No: 1

### Water - and Gas tightness

	Water Pressure		Gas Pressure (air)	
WallMax® Round frames (WR)	Test pressure	Approved pressure	Test pressure	Approved pressure
,	0.6 MPa (6.0 bar).	0.4 MPa (4.0 bar),	0.4 MPa (4.0 bar).	0.27 MPa (2.67 bar),

# Water tightness - special cases

The WallMax® Round frames (WR) is not tested with regard to the requirements given in SOLAS Ch. II-1 Reg. 13.2.3 (combined fire and water tightness test, 2014 issue). Refer to DNV GL CP-0165, Sec. 2 - Ch.5.

#### Installation

The installation and insulation of the WallMax® sealing System is to be carried out according to the following manufacturer's instructions, actual versions apply.

# **Insulation plans**

A-0 Divisions	Document No.	Issue date	Transit type	Pipe diameter mm
BULKHEAD A0	7170400092,	11/11/2022	WR 23 to WR 150	Ø 3.6 to Ø 119.0
BULKHEAD AU	Rev.02	11/11/2022	WR175 to WR 200	Ø 119.0 to Ø 170.0
	7170400094, Rev.02	11/11/2022	WR 23 to WR150	Ø 3.6 to Ø 119
		11/11/2022	WR 175	Ø 119 to Ø 145
DECK A0	1.07.02	11/11/2022	WR 200	Ø 138 to Ø 170
	7170400097, Rev.02	11/11/2022	WR 175 (Max. Dia.) WR 200 (Min. Dia.)	Ø 145 Ø 138

A-60 Divisions	Document No.	Issue date	Transit type	Pipe diameter mm
		11/11/2022	WR 23 to WR 25	Ø 3.6 to Ø 12
	7170400093, Rev.02		WR 31 to WR 50	Ø 4 to Ø 30
BULKHEAD A60			WR 68 to WR 150	Ø 24 to Ø 119
			WR 175 to WR 200	Ø 119 to Ø 170
	7170400097, Rev.02	11/11/2022	WR 200 (Max. Dia.)	Ø 170
	7170400095, Rev.02	11/11/2022	WR 23	Ø 3.6 to Ø 11
DECK A60			WR 31 to WR 50	Ø 4 to Ø 30
			WR 68 to WR 150	Ø 24 to Ø 119
			WR 175 to WR 200	Ø 119 to Ø 170

A15/A30 Divisions	ons Document No. Issue date		Transit type	Pipe diameter mm
	7170400093.01, Rev.02 7170400097, Rev.2	11/11/2022	WR 23 to WR 25	Ø 3.6 to Ø 12
			WR 31 to WR 50	Ø 4 to Ø 30
BULKHEAD			WR 68 to WR 150	Ø 24 to Ø 119
			WR 175 to WR 200	Ø 119 to Ø 170
		11/11/2022	WR 200 (Max. Dia.)	Ø 170

	7170400095.01, Rev.02	11/11/2022	WR 23	Ø 3.6 to Ø 11
DECK			WR 31 to WR 50	Ø 4 to Ø 30
DECK			WR 68 to WR 150	Ø 24 to Ø 119
			WR 175 to WR 200	Ø 119 to Ø 170

Form code: TA 251 Revision: 2022-12 www.dnv.com Page 3 of 6



Revision No:

Each pipe penetration system is to be supplied with its actual manual for installation and use.

# **Tests carried out**

- Fire tests according to IMO Res.MSC.307(88)-(2010 FTP Code). IMO MSC.1/Circ.1488

# **Type Examination documentation**

Page 4 of 6 Form code: TA 251 Revision: 2022-12 www.dnv.com



Revision No: 1

Form code: TA 251 Revision: 2022-12 www.dnv.com Page 5 of 6



Revision No: 1

# **Transport Canada Approval**

Based on the procedures laid down in the Transport Canada Publication entitled "Approval Procedures for, Life Saving Equipment and Structural Fire Protection Products (TP 14612)", DNV GL confirms that the products listed in this certificate are in accordance with Transport Canada's requirements.

# **Marking of product**

Scope	Packaging unit – Modules	Sleeves with stickers
	Example	Example
Manufacturer name	WALLMAX®	WALLMAX®
Part name	WR43 AISI316	SLVWR 150 AISI 316
Part No	7111110043	7111310150
Fire Rating	A60	A60

### Periodical assessment

For retention of the Type Approval, a DNV Surveyor shall perform periodical assessment to verify that the conditions for the Type Approval are complied with. Refer to the Class Programme DNV-CP-0338, Sec.4.

To check the validity of this certificate, please look it up in <a href="https://approvalfinder.dnv.com">https://approvalfinder.dnv.com</a>

### **End of certificate**

Form code: TA 251 Revision: 2022-12 www.dnv.com Page 6 of 6