

Promat

PROMAGUARD® A240 Plus Fire Protection for Ship's Survivability and Safe Return to Port



www.promat-marine.com



etex industry



Introduction

Promat is the worldwide leader of passive fire protection in buildings and high performance insulation in industrial and marine applications. The performance of our products in fire and thermal insulation do not suffer competition.

Promat has now devoted their know-how and experience to provide a solution in the marine market aimed at enhancing fire protection in all compartments of the ship where the risk of fire is higher (Engine Rooms, Machinery Spaces, Galleys)

The product

The basis for such a solution is provided by PROMAGUARD®, a microporous insulation flexible board characterised by the lowest thermal conductivity (see chapter below: "Thermal characteristics") and extreme shield protection against the fire in a restricted configuration.

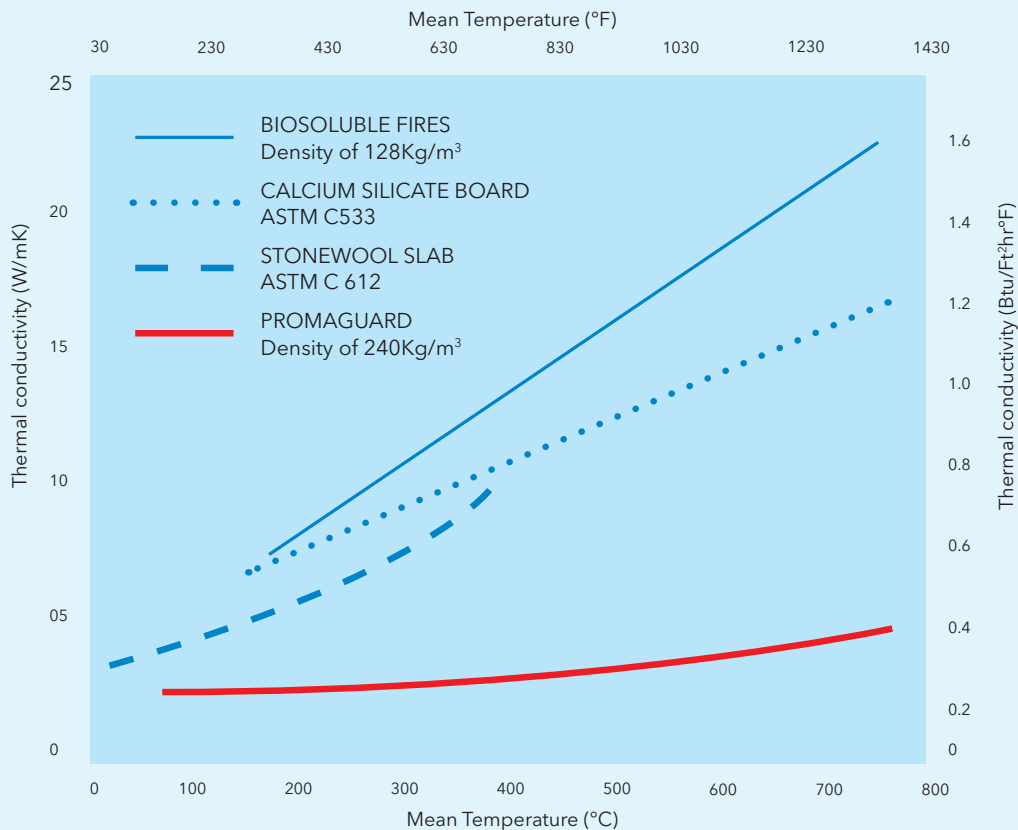
Thermal characteristics

PROMAGUARD® has the lowest thermal conductivity value compared to most traditional insulation products available on the market.

10mm PROMAGUARD® produces (in relation to density and temperature) a reduction in the irradiated heat and an insulation that would be achieved by 50mm typical fibrous material.

Hence, PROMAGUARD®, with a weight of 2.4kg/m² for 10mm thickness, can provide the best thermal performance and can achieve A60 Class fire protection.

Thermal characteristics of PROMAGUARD®



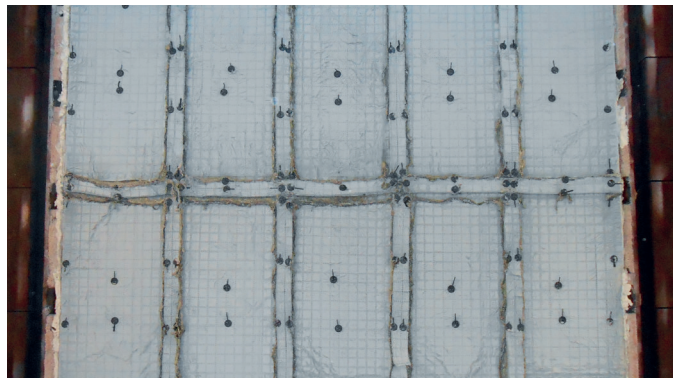
Thin & lightweight fire protective solution

PROMAGUARD® A240 Plus has performance that exceeds the SOLAS standard, providing the highest levels of Ship's Survivability to Fire Hazard

Up to now, the approach to enhanced fire protection on ships and yachts has been mainly based on developing safer active systems and increasing redundancy to reduce risk of non performance in fire hazard. However, active systems means more equipment on board, increasing complexity, weight and maintenance costs.

The newly developed passive solution PROMAGUARD® A240 Plus, provides guaranteed performance with a relatively low weight, comparable to standard mineral wool A60 insulation. The test conducted at RINA Fire Laboratory achieved more than 4 hours of insulation by combining PROMAGUARD® with high quality Isover ULTIMATE®, with a total thickness of 75mm and only 7.5 kg/m².

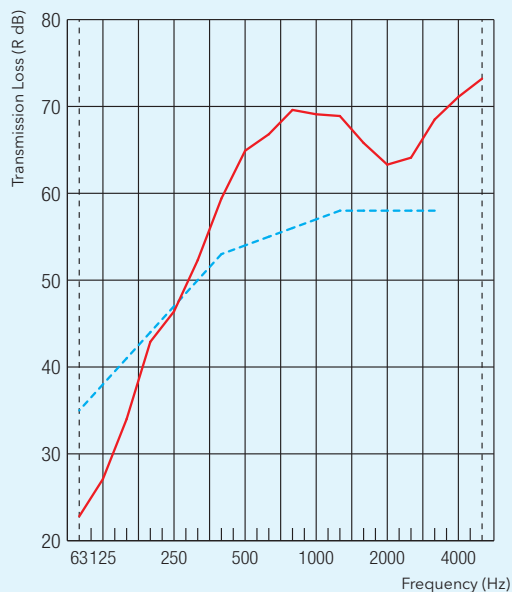
Application to achieve enhanced fire protection class notation and safe return to port for cruise, ferries and yacht is then envisaged.



Steel Bulkhead A60 Class (MED194014CS)
15mm PROMAGUARD® + 60mm ULTIMATE® 66kg/m³

15mm PROMAGUARD® + 2x30mm ISOVER ULTIMATE® 66kg/m³
Area sample (m²): 2.0 - Weight (kg/m²): 7.5 - Thickness (mm): 75

Frequency (Hz)	R (dB)
100	22.8
125	27.1
160	34.0
200	42.9
250	46.4
315	52.3
400	59.4
500	64.9
630	66.8
800	69.6
1000	69.1
1250	68.9
1600	65.8
2000	63.3
2500	64.1
3150	68.5
4000	71.1
5000	73.2



$$R_w = 54\text{dB}$$

Evaluation according to ISO curve 717-1

The PROMAGUARD® A240 Plus solution on steel is also capable of providing noise reduction of up to 54dB (ISO 10140/2). This can be additionally improved by applying PROMASOUND® TL, the acoustic mass barrier developed by Promat, to achieve up to 58dB.

Belgium / Luxemburg

Microtherm NV

Industriepark-Noord 1
9100 Sint-Niklaas
Tel: +32 3 760 1980
Fax: +32 3 760 1999
info@promat-industry.com
www.promat-industry.com

Asia Pacific Headquarters, Malaysia

Promat International (Asia Pacific) Ltd.

Unit 19-02-01 -Level 2 PNB
Damansara
No.19 Lorong Dungun - Damansara
Heights
50490 Kuala Lumpur
Tel: +60 3 2095 5111
Fax: +60 3 2095 6111
info@promat-ap.com
www.promat-ap.com

Australia

Promat Australia Pty. Ltd.

1 Scotland Road
Mile End South
Adelaide, SA 5031
Tel: 1800 Promat (776 628)
Fax: +61 8 8352 1014
mail@promat.com.au
www.promat-ap.com

Austria

Promat GmbH

St.-Peter-Straße 25
4021 Linz
Tel: +43 732 - 6912 - 0
Fax: +43 732 - 6912 - 3740
office@promat.at
www.promat.at

China

Promat China Ltd.

Room 1507, Building 5
SOHO Xiandaicheng
No.88 Jianguo Road
Chaoyang District
100022 Beijing
Tel: +86 (10) 8589 1254
Fax: +86 (10) 8589 2904
info@promat.com.cn
www.promat.com.cn

Czech Republic

Promat s.r.o.

Čkalova 22/784
16000 Praha 6 - Bubeneč
Tel: +420 2 2439 0811
Fax: +420 2 3333 3576
promat@promatpraha.cz
www.promatpraha.cz

Denmark

Ivarsson

Kometvej 36
6230 Røddekro
Tel: +45 7020 0482
Fax: +45 7466 1020
info@promat.nu
www.promat.nu

France

Promat S.A.S.

BP 66 Rue de L'Ammandier
78540 Vernouillet
Tel: +33 1 3979 6160
Fax: +33 1 3971 1660
info@promat.fr
www.promat.fr

Germany

Promat GmbH

Scheifenkamp 16
40878 Ratingen
Tel: +49 2102 493 0
Fax: +49 2102 493 111
mail@promat.de
www.promat.de

Hong Kong

Promat International (Asia Pacific) Ltd.

Room 1010, C.C. Wu Building
302-308 Hennessy Road, Wanchai
Tel: +852 2836 3692
Fax: +852 2834 4313
apromath@promat.com.hk
www.promat.com.hk

India

Promat Fire & Insulation Private Limited

Unit No. 605, 6th Floor, Tower B
Global Business Park
Mehrauli Gurgaon Road
Sector 26, Gurgaon
122 002 Haryana
Tel: +91 (0) 124 4346865
info@promat-india.com
www.promat-india.com

Italy

Promat S.p.A.

Via Perlasca 14
27010 Vellezzo Bellini (PV)
Tel: +39 0382 45 75 1
Fax: +39 0382 92 69 00
industria@promat.it
www.promat-marine.com

Japan

Promat Japan Corporation

Mitsuseimei Shinohashi Bldg. 7F,
1-8-11
Shinohashi, Koto-ku
Tokyo 135-0007
Tel: +81 333 772 821
Fax: +81 333 782 821
sales@promat.jp
www.promat.jp

Malaysia

Promat (Malaysia) Sdn. Bhd.

Unit 19-02-01 - Level 2 PNB
Damansara
No.19 Lorong Dungun
Damansara Heights
50490 Kuala Lumpur
Tel: +60 3 2095 8555
Fax: +60 3 2095 2111
info@promat-ap.com
www.promat-ap.com

The Netherlands

Promat B.V.

Vleugelboot 22
3991 CL Houten
PO Box 475
3990 GG Houten
Tel: +31 30 241 0770
Fax: +31 30 241 0771
info@promat.nl
www.promat.nl

Poland

Promat TOP Sp. z o. o.

ul. Przeclawska 8
03 879 Warszawa
Tel: +48 22 212 2280
Fax: +48 22 212 2290
top@promatop.pl
www.promatop.pl

Russia

Promat

Pr. Vernadskogo 84/2
119606 Moscow
Tel: +7 (495) 246 01 01
Fax: +7(495) 246 01 92
sales@promat.ru
www.promat.ru

Singapore

Promat Building System Pte. Ltd.

10 Science Park Road
#03-14 The Alpha - Singapore
Science Park II
117684 Singapore
Tel: +65 6776 7635
Fax: +65 6776 7624
info@promat.com.sg
www.promat-ap.com

Slovenia

Promat d.o.o.

Trata 50
4220 Škofja Loka
Tel: +386 4 51 51 451
Fax: +386 4 51 51 450
info@promat-see.com
www.promat-see.com

South Africa

Marley SA (Pty) Ltd.

44 Industry Road, Clayville Ext. 444
Olifantsfontein, 1666 Gauteng
Tel: +27 (0)11 316 2121
promat@marley.co.za
www.promat-industry.co.za

South Korea

Promat International (Asia Pacific) Ltd.

(Korea Branch Office)
Room 406, 811-2 - Yeoksam-dong
Gangnam-gu
135080 Seoul
Tel: +82 70 7794 8216
apromath@promat.com.hk
www.promat-ap.com

Spain

Promat Ibérica S.A.

C/Velazquez, 47 - 6° izda
28001 Madrid
Tel: +34 91 781 1550
Fax: +34 91 575 1597
info@promat.es
www.promat.es

Switzerland

Promat AG

Stationsstrasse 1
8545 Rickenbach-Sulz
Tel: +41 52 320 9400
Fax: +41 52 320 9402
office@promat.ch
www.promat.ch

United Arab Emirates

Promat Fire Protection LLC

Plot no. 597-921,
Dubai Investment Park 2
PO Box 123945
Dubai
Tel: +971 4 885 3070
Fax: +971 4 885 3588
www.promatfp.ae

United Kingdom

Promat UK Limited

Unit B1, Broadlands
Heywood Distribution Park
Pilsworth Road
Heywood OL10 2TS
Tel: +44 (0) 800 588 4444
Fax: +44 (0) 161 763 0569
sales@promat.co.uk
www.promat-marine.com

USA

Promat Inc.

1731 Fred Lawson Drive
37801 Maryville
Tennessee
Tel: +1 865 681 0155
Fax: +1 865 681 0016
sales@promat.us
www.promat.us