DARCO INDUSTRIES

acoustica®
the quiet Australian

# VyBar®

A marine noise barrier to combat sound transmission and reverberation from marine engines and boat hulls.



www.darco.com.au

BARRIER

# Vybar®

marine soundproofing

**VyBar® is a rigid marine noise barrier and vibration damping sheet specifically engineered to combat the challenging combined effects of vibrations, sound transmission and reverberation from marine engines and boat hulls.**

VyBar® Marine has a unique material construction which unlike many other insulation materials results in high sound absorption coupled with resilience and compression loading capability.

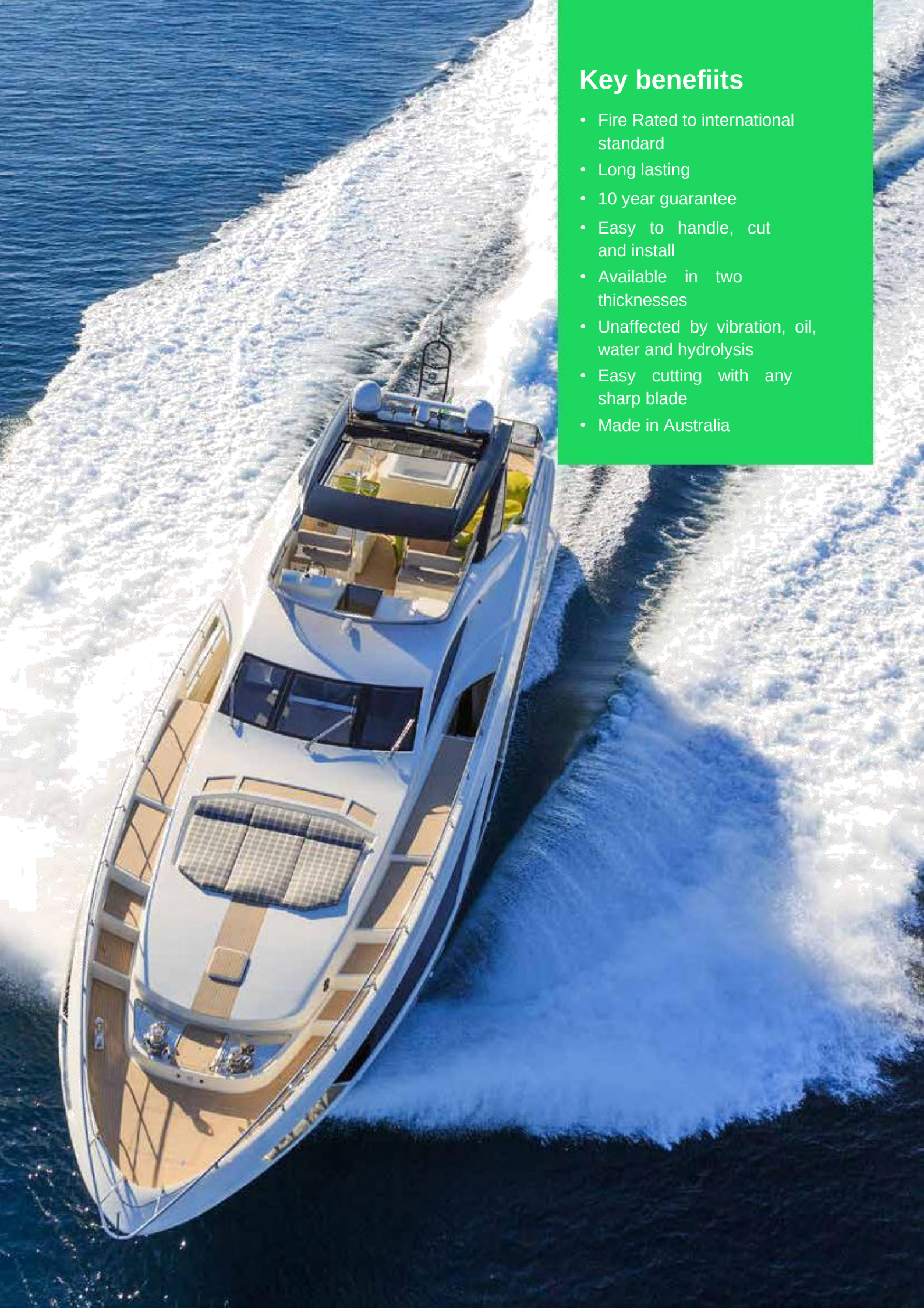
VyBar® effectively treats the often combined phenomena of vibrations, sound transmission and sound reverberation encountered with most noise problems.

Contrary to foam based acoustic marine products that become powdery and breakdown over time, Vybar is not effected by hydrolysis and will not degrade.

VyBar® is designed to line partition walls and bulkheads in marine vessels.



**Darco Industries**



## Key benefiits

- Fire Rated to international standard
- Long lasting
- 10 year guarantee
- Easy to handle, cut and install
- Available in two thicknesses
- Unaffected by vibration, oil, water and hydrolysis
- Easy cutting with any sharp blade
- Made in Australia

## Construction

VyBar® Marine is manufactured from a double needle punched 100% polyester fibres layer faced on one side with a visco-elastic acoustic barrier and an aluminium foil on the opposite face.

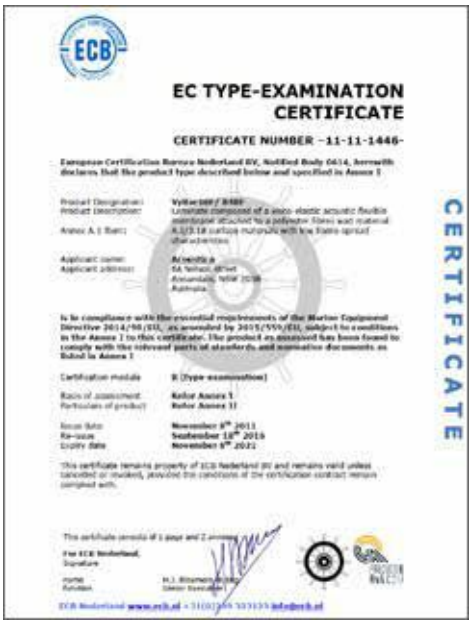
**Standard Sheet dimensions:**

VyBar® 48F = 1200x1200x10mm
VyBar® 848F = 1200x1200x20mm

**Please contact Acoustica to discuss your specific requirements.**

## Certifiication

VyBar® Marine has been tested by the CSIRO and certified that it meets the requirements for low flame spread of a bulkhead, wall and ceiling lining in accordance with IMO Resolution A.653 (16) as amended by resolution MSC 61 (67) as specified by the International Convention for the Safety of Life at Sea, 1974.


EC TYPE-EXAMINATION
CERTIFICATE
CERTIFICATE NUMBER -11-11-1446-
CERTIFICATE

EC TYPE-EXAMINATION CERTIFICATE & Wheel Logo

VyBar® is in compliance with the essential requirements of the Marine Equipment Directive 2014/90/EU, as amended by 2015/559/EU.

## Applications

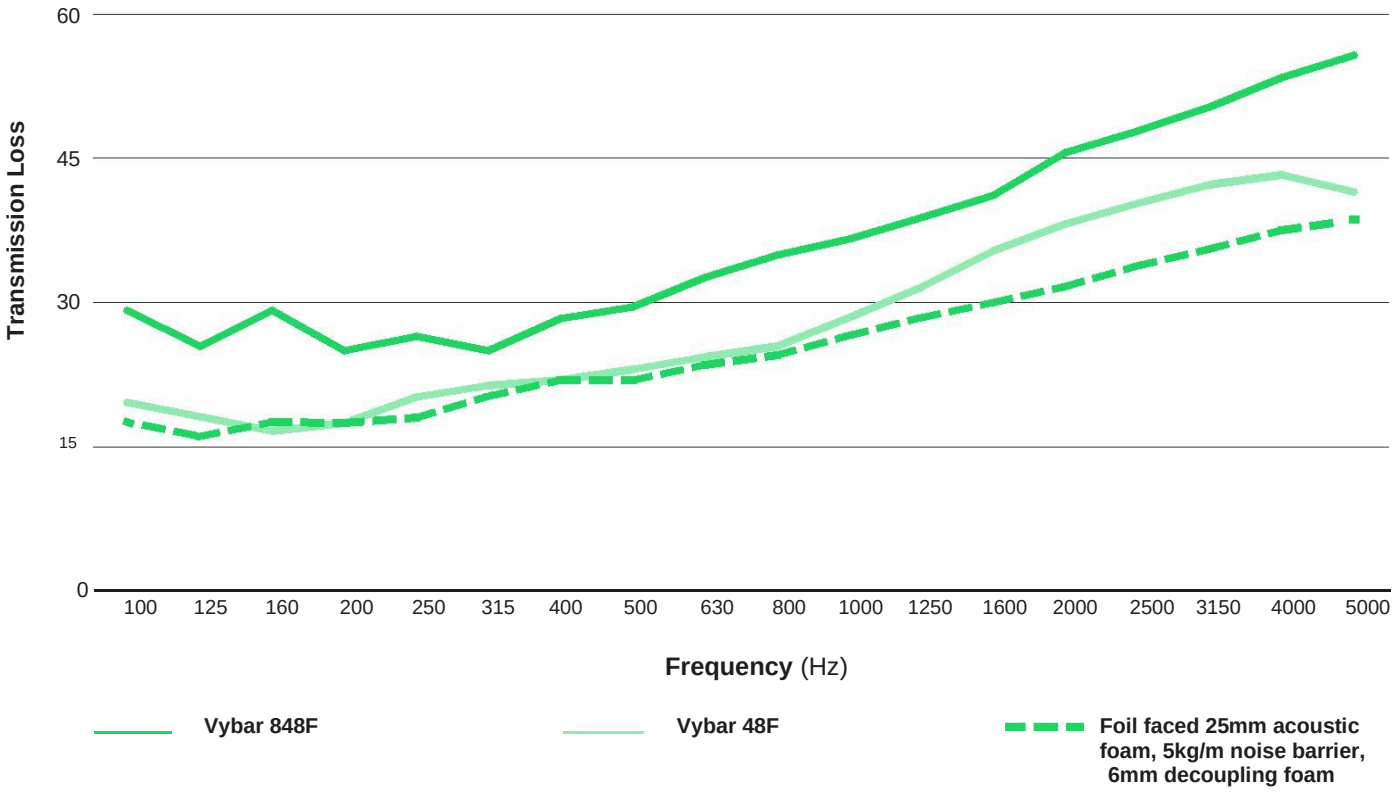
- Auxiliary engine enclosures
- Line partition walls and bulkheads

## Sound Transmission Loss

| Frequency (Hz) | Sound Transmission Loss (dB) | |
|---|---|---|
| **1/3 Octave** | **VyBar® 48F** | **VyBar® 848F** |
| 100 | 19.2 | 28.4 |
| 125 | 17.6 | 25 |
| 160 | 17.6 | 28.8 |
| 200 | 17.6 | 24.7 |
| 250 | 17.6 | 26.1 |
| 315 | 17.6 | 24.6 |
| 400 | 17.6 | 28.3 |
| 500 | 17.6 | 29.5 |
| 630 | 24.2 | 32.5 |
| 800 | 25.4 | 34.7 |
| 1000 | 28.2 | 36.2 |
| 1250 | 31.2 | 38.6 |
| 1600 | 35.3 | 41 |
| 2000 | 38.1 | 45.3 |
| 2500 | 40.2 | 47.7 |
| 3150 | 41.9 | 50.2 |
| 4000 | 43.3 | 53.3 |
| 5000 | 41.5 | 55.8 |
| Rw | 28 | 35 |
| Ctr | -3 | -3 |
| Rw + Ctr | 25 | 32 |



*Image by Allan Tongs Boatbuilders, New Zealand



## Recommended Installation

For optimum beneft VyBar® Marine must be properly & carefully installed.

Where airfow is required expert advice should be sought from our engineer, as acoustic baffles may be required.



## Cutting

VyBar® Marine are easy to cut to size and install.

Measure the area to be treated carefully & apply the measurements to the VyBar® Marine with a black felt tip marker.

It is advisable to increase the measured area by 1-2 mm all around for a tight ft, even when cutting from a pattern.



## Pinning, Glueing & Taping

If the vessel is being insulated against both sound & fre, welded metal or bimetal pins are recommended.

If the vessel is only being insulated against sound, adhesive PVC pins are acceptable.

Pins should be installed starting 200mm max from material edges in a 300x300 grid pattern.

If there is a space between the VyBar® Marine and the surface it is being adhered to, a backing washer should be installed on the pin prior to installing the material. This will ensure a secure fxing.

All edges & joints should be taped with a reinforced aluminium foil tape.

If the product is being laminated with other materials a fre resistant glue is recommended.

# DARCO INDUSTRIES

**TRUST THE INDUSTRIAL INSULATION MATERIALS EXPERTS**

**Built on Trust, Focused on Quality**

## CORE CAPABILITIES & SOLUTIONS

- Thermal Insulation & Lagging Systems
- Acoustic & Noise Control Materials
- High-Temperature Textiles, Ropes & Seals
- Fire Protection Blankets, Curtains & Sleeves

ISO Quality Standards

Defense & Marine Grade

Industrial & Mining Rated

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