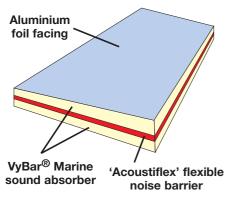


# **VyBar®** Marine

### The 'Ultimate' Acoustic Product

#### Features & Benefits

- Asbestos free
- VyBar® Marine will not contribute to metal corrosion
- VyBar® Marine will not decay, sustain mould or vermin, nor will absorb odours
- Non toxic
- Will conform to irregular surfaces
- Low cost
- · Easily cut and fabricated
- Can be supplied with self-adhesive backing



#### **Description**

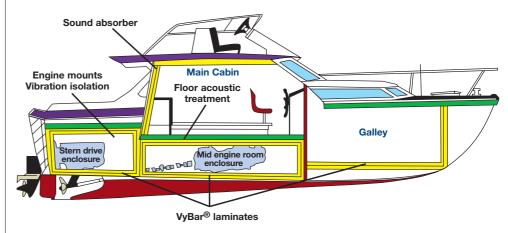
**VyBar<sup>®</sup> Marine** is a thin flexible noise barrier laminated between two layers of 'needle-punched' polyester sound absorbent/vibration decoupler.

The material is faced with a reinforced aluminium foil.

**VyBar® Marine** has a unique material construction which results in a high sound absorption, high resilience, high compression loading and high fire resistant capability.

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

This economical acoustic material effectively reduces sound radiation and sound transmission in the critical frequency region of rigid panels (e.g. steel, aluminium, fibreglass panels).



**VyBar<sup>®</sup> Marine** will not rot, will not be affected by salt water & most chemicals, will not shed fibres and is hydrolysis resistant.

Contrary to foam based products, VyBar<sup>®</sup> Marine will not disintegrate and will last a very long time (over 20 years).

**VyBar<sup>®</sup> Marine** laminates come with a plain or perforated heavy duty aluminium foil facing.

**VyBar** Marine laminates were specifically engineered to absorb and control noise in main and auxiliary engine enclosures and to line partition walls and bulkheads.

#### **Applications**

- Enclosure lining
- Engine room lining/boats
- Acoustic panels/baffles
- Under carpet sound absorber
- Floating Floors
- Firewalls of cars, trucks, buses
- Floating concrete slab
- · Vibration insulation/decoupled layer
- Stud wall construction
- Noise reverberation control/pin board
- Duct lining
- Vibrating surfaces granulators, tanks

#### **Advantages**

**VyBar® Marine**, WILL NOT, like most acoustic foams, be subject to hydrolysis and will last in salty and humid conditions.

**VyBar® Marine** WILL NOT break down, like fibreglass or rockwool, even under severe vibrations.

**VyBar® Marine** is water repellent and will not act like a sponge.



## **VyBar®** Marine

#### The 'Ultimate' Acoustic Product

#### **Properties Comparison**

Properties	VyBar <sup>®</sup> Marine	Rockwool	Fibreglass	Acoustic Foams Foams Composites	
Affected by oils	No	No	No	Yes	
Affected by water	No	Yes	Yes	Yes	
Affected by hydrolysis	No	No No No		Yes	
Affected by vibrations	No	Yes	Yes	No	
Life expectancy	Indefinite	Will disintegrate (Vibrations)	Will disintegrate (Vibrations)	6/7 years maximum	
Handling	No requirements	Require protection	Require protection	No requirements	
Flammability	Comply	Comply	Comply	Comply	
Installation	Adhesive or mechanical	Mechanical only	Mechanical only	Adhesive or mechanical	
Strength	Very strong	Fibres brake easily	Fibres brake easily	Lose strength over time disintegrates	
Recyclable	Yes	No	No	No	
Health effects	NONE	Controversial/Itchy	Controversial/Itchy	Slow release of gas	

#### Flammability\* - AS1530.3 - 1989

Material	Ignitability	Spread of Flame	Heat Evolved	Smoke Developed
VyBar <sup>®</sup> Marine <b>848F, 868F, 888F</b>	0	0	0	0 - 1
VyBar <sup>®</sup> Marine <b>48F, 68F, 88F</b>	0	0	0	0 - 1

<sup>\*</sup>Commonwealth Scientific and Industrial Research Organisation (CSIRO) test on an aluminium foil faced insulation in accordance with IMO Resolution A.635 (16) as amended by Resolution MSC 61 (67).

Vybar<sup>®</sup> Marine meets the requirements for low flame spread of a bulkhead, wall and ceiling lining as specified by the International Convention for the Safety of life at Sea, 1974.

Vybar $^{\otimes}$  Marine also meets the technical requirements according to IMO Resolution MSC 61 (67), Annex 2, Section 2.2.

#### **Miscellaneous Properties**

Material	Colour	Weight	Service Temp. Range
VyBar <sup>®</sup> Marine <b>848F</b>	Silver	9.7kg/m <sup>2</sup>	-50 to 120°C
VyBar <sup>®</sup> Marine <b>48F</b>	Silver	7.0kg/m <sup>2</sup>	-50 to 120°C

#### **Sound Transmission Loss\*\***

FREQUENCY	RANDOM INCIDENCE TRANSMISSION LOSS			
1/3 Octave Centre Frequency (Hz)	VyBar <sup>®</sup> Marine <b>848F</b>	VyBar <sup>®</sup> Marine <b>868F</b>	VyBar <sup>®</sup> Marine <b>888F</b>	
100	12	13	15	
125	14	14	16	
160	14	16	19	
200	14	16	20	
250	16	15	20	
315	19	21	21	
400	21	22	24	
500	21	25	27	
630	22	26	27	
800	24	28	29	
1000	26	30	32	
1250	27	32	32	
1600	28	34	33	
2000	31	36	37	
2500	35	39	39	
3150	36	43	43	
4000	38	45	46	
5000	43	47	48	
STC	25	27	30	

<sup>\*\*</sup>IMPORTANT NOTE:

The above Sound Transmission Loss is for the "Acoustiflex" sandwiched flexible sound barrier only. The actual Vybar® Marine composite sound barrier/absorber material will achieve a 5-6 dB increased performance than indicated in the above table.

#### **Material Safety Data**

#### **Health, Safety & Toxicology**

Health Effects: No known physical or health hazards associated with this product. Swallowed - Eye - Skin or Inhaled: The product has been tested for toxicity by skin tests on humans and by laboratory feed tests. No toxic reactions have been observed. No health effects have been reported which can be attributed to these products.

First Aid - Swallowed - eye - skin - inhaled:

Not applicable

Advice to doctor: Not applicable

**Precautions for use** 

**Exposure Limits:** Unlimited

Ventilation: No special requirements

Personal Protection: No special requirements

#### **Safe Handling Information**

Storage & Transport: No special requirements

Disposal: 100% recyclable

**Fire - Explosion Hazards:** Very low flame response. Will not explode. Use any fire fighting appliance. Like most organic materials gives off CO & CO2 during combustion.



#### energy beyond petroleum

Enquiries: Jeffrey Mann

(PO Box 205 Woollahra NSW 2025 Australia) phone: 61 2 9681 3633 fax: 61 2 9632 4622 email: mann@ebp.com.au www.ebp.com.au