

**Pyrotek<sup>®</sup>**

# MARINE

ACOUSTIC AND THERMAL SOLUTIONS





Pyrotek is a global leader in providing engineered solutions to the marine industry. We develop and manufacture materials to provide advanced noise and vibration mitigation and fire protection for various vessel types. Our products comply with maritime regulations and ensure vessel and passenger safety for years to come.



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# GLOBAL COMPLIANCE

Pyrotek is committed to safety and compliance to meet international codes in the marine industry. We work with approved laboratories to independently certify our solutions, which are time tested and supported by proven results.



WE **SUPPORT** YOU ACROSS 35 + COUNTRIES 80+ LOCATIONS

## WHO WE ARE

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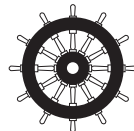


- Global manufacturer of acoustic and thermal insulation materials since 1972
- Unmatched technical service, support and solutions
- Distributors of globally recognised products
- Over 50 years experience

## WHY CHOOSE US

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- Exceptional R&D team of engineers and scientists that develop and refine innovative products
- Extensive data analysis and noise predictions
- Design capabilities utilising CAD and 3D modelling to support installation
- Independently tested and certified to International Maritime Regulations
- Local support, global footprint
- Advanced end-to-end solutions
- Quality Management Systems Certification: AS/NZSISO 9001:2015



**TESTED AND ENDORSED**  
FORMULATED MATERIAL PROPERTIES FOR HIGHLY  
VERSATILE, SIMPLE APPLICATION SOLUTIONS





## LUXURY

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Luxury yachts aim to create a retreat for owners to establish memorable experiences. Our advanced solutions provide passenger comfort by effectively addressing noise and vibrations, ensuring our client's vision of building handcrafted yachts admired for quality. We offer bespoke solutions for super and mega yachts, meeting exclusive performance expectations.



## COMMERCIAL

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Our team delivers class-leading insulation designs encompassing noise, vibration, thermal and fire protection for commercial passenger ferries, charter vessels and large-scale liners, ensuring comfort for all on-board. We have provided solutions for these vessels that have stood the test of time and continue to deliver exceptional results decades later.



## MILITARY & DEFENCE

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We develop advanced materials for vessels while meeting unique military specifications across all missions and environments. Our range of products has been leading the industry in reducing personnel fatigue caused by noise, vibration and heat with advanced soundproofing, thermal comfort, and fire protection to optimise crew performance when and where it matters.



## WORKBOAT

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Internationally recognised for workboats, our specialised line of products addresses and protects vessels from structural fatigue, ensuring longevity. Controlling noise from machinery, pumps, HVAC systems and more, provides the crew with excellent working and living conditions while offshore.





## VIBRATION DAMPING

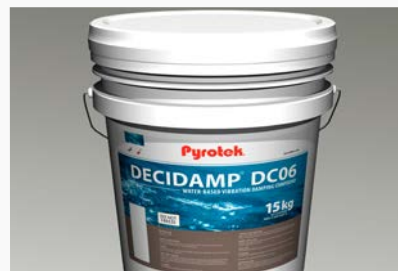
Specialised vibration damping solutions, designed to withstand challenging environments whilst achieving effective structure-borne noise control. Solutions based on extensional, viscoelastic and constrained layer technologies, suitable for the cold of the polar regions, the warmth of the tropics or both, effective across a broad frequency range and meeting strict fire safety and smoke toxicity protocol, common in the maritime industry.



### DECIDAMP® SP150

**Single component, water-based vibration damping coating**

Ready to use, non-toxic and fast dry coating applicable for use on most structures, such as steel, aluminium, composites, and wood for advanced vibration damping. Easily sprayed, brushed or trowelled, it is unique for the thickness achieved in a single coat and the total thickness at which it is marine certified, delivering exceptional extensional damping properties at broad frequency and temperature ranges. Previously known as "Soundpaint", a widely used and trusted product.



### DECIDAMP® DC06

**Water-based, two component viscoelastic compound**

An isocyanate free, two-part, thixotropic solution providing excellent viscoelastic properties resulting in substantial reductions in structure-borne noise over a broad temperature and frequency range. Applied to perforated metal to reduce the total weight of the system and bonded to the structure in a constrained layer configuration (sandwich system). Installation requires minimal PPE reducing impact on trades working in the same areas during construction.



### DECIDAMP® DC30

**Two component polyurethane viscoelastic compound**

Working best in a constrained layer configuration, the product is applied using a notched trowel to metal, fiberglass or plastic counter-plates and bonded to the structure requiring treatment. Corrosion resistant and highly thixotropic, the product can be utilized on vertical as well as overhead substrates, curing to form a flexible inter-layer for the lifetime of the vessel.



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Unique solutions designed as either standalone or within a system to deliver industry leading performance. Tested to various international marine standards including defense standards for military applications.



## DECIDAMP® SLC

### Viscoelastic self-levelling compound

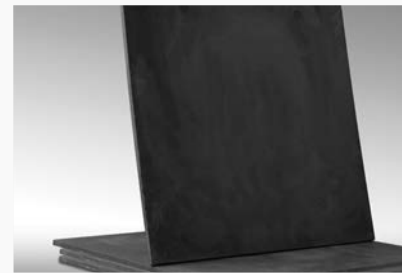
Specially formulated with lower viscosity to allow for easy levelling of uneven horizontal surfaces, this economical, two component polyurethane compound works best as the primary layer between substrate and self-levelling cement. The built-in properties will effectively level flooring, eliminating 'cresting', leaving a floor with excellent vibration damping properties, and a surface that can be easily finished with various commercial or luxury floor coverings.



## SOUNDMETAL™ MPM

### "Sandwiched" constrained layer metal composite panel

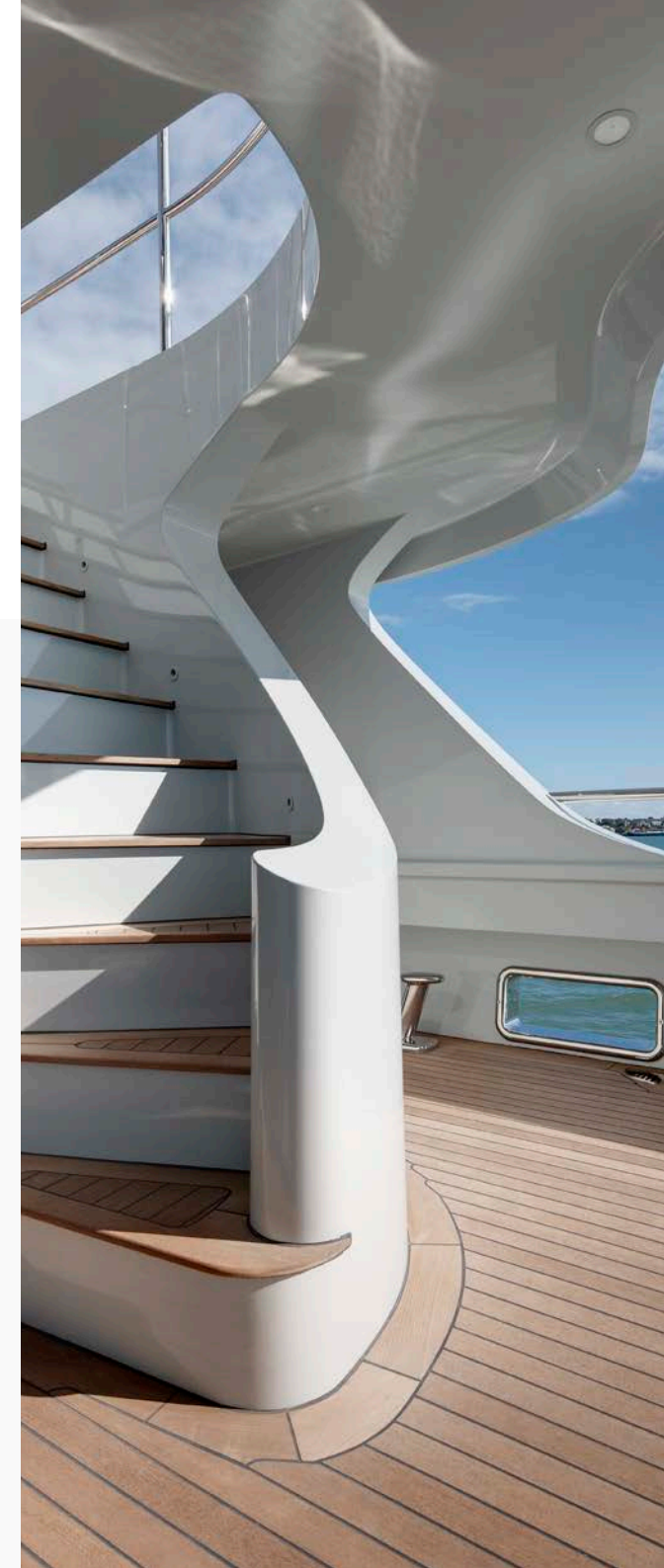
Manufactured from either marine grade aluminium, stainless or electro-galvanised steel, the damped metal composite comprises of two layers of metal laminated together utilising a viscoelastic polymer. Using the 'constrained layer' principle, the function of the viscoelastic interlayer is to damp structure borne sound and to reduce vibration acceptance and radiation. Used as a functional and robust sheathing layer in commercial and luxury yachts, providing an extra layer preventing noise transfer. These panels can be powder-coated to suit colour preference.



## DECIDAMP® TILE

### Vibration damping tile

Designed for use on heavy gauge metal substrates exhibiting both extensional and constrained layer damping technologies. This new generation polymer-based tile was first conceived for Military/Navy applications in mind – and is now also a preferred solution particularly in the bow thruster compartments in commercial and workboat craft.





## SOUND ABSORBERS

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Sound absorption materials facilitate control of reverberation or reflected sound within a space. When installed within a partition cavity, they will improve the transmission loss performance. Pyrotek sound absorption materials are your ideal solution to minimise noise.



**SORBERPOLY™ 2D**  
Fine fibre, non-woven polyester

Excellent sound absorbing and thermal insulation properties, useful in high humidity applications. Fuel, oil and grease resistant, under normal applications, material will last a lifetime. Traditional horizontal layer (2D) with high resiliency to maintain loft.



**SORBERMEL®**   
Flexible, light-weight, open-cell melamine foam

Highly fire retardant, with excellent sound absorption and thermal insulation properties. The material is dimensionally stable and very easy to cut, shape and install.



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Pyrotek sound absorption solutions improve noise levels and comfort. We deliver the ideal conditions for owners, guests, and crew.



### SORBERFOAM™

**Combustion modified acoustic foam**

Combustion modified, flexible acoustic foam, with high noise absorption properties. Sorberfoam outperforms traditional acoustic foams, engineered to resist degradation or foam rot (hydrolysis). It is offered with a range of facings and thicknesses dependent on application.



### SORBERSCREEN® / MICRO

**Perforated metal sheet sound absorber**

The perforated metal sound absorber provides inherent fire safety with a robust, durable finish and aesthetic appeal. It is the ideal machinery or interior space sheathing solution.

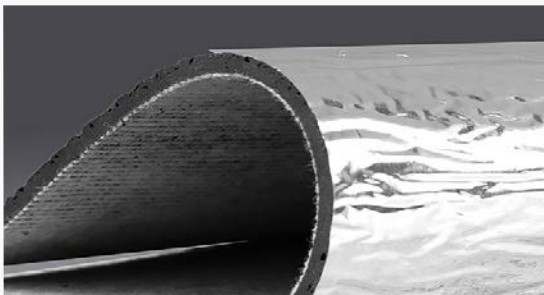




PRODUCTS DESIGNED TO PROVIDE HIGH-LEVEL ACOUSTIC PERFORMANCE FOR EXTREME CONDITIONS WITH CONSIDERATION TO AESTHETICS & ENVIRONMENT

## FLEXIBLE NOISE BARRIERS

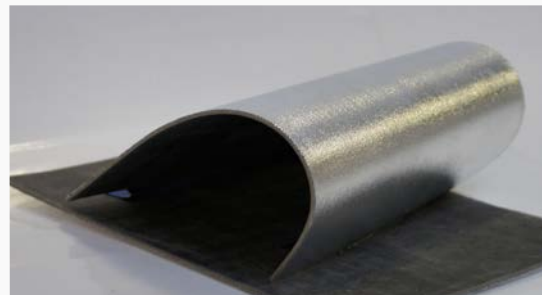
Mass loaded vinyl barriers protect by controlling the noise transfer. The specialised noise barriers are dense, durable, thin, tear-resistant and flexible to reduce the effects of "coincidence dips" and provide superior acoustic transmission loss. They can be used as standalone solutions or incorporated into composite materials to enhance performance.



### QUADZERO™ NL

**Fire-resistant, foil faced noise barrier**

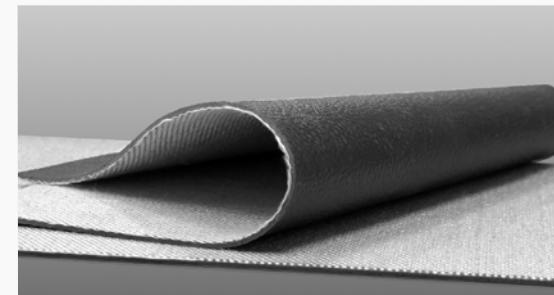
Foil faced mass-loaded vinyl noise barrier, offering superior acoustic transmission loss and upgraded fire-resistance, developed to meet stringent fire safety requirements in the marine industry. Achieving the highest fire ratings, Quadzero NL can be used as the final layer on top of certified fire protection solutions.



### QUADZERO™ dBX

**Mass-loaded barrier with aluminium glass-cloth facing**

Developed to meet market requirements in Marine, Quadzero dBX is a thin, strong mass barrier made from recycled polymers that are halogen-free and offered in a wide range of weights that provide effective acoustic transmission loss performance. The aluminium glass cloth (AGC) face offers a durable flame-retardant surface complying to IMO FTP Code.



### WAVEBAR® MIL

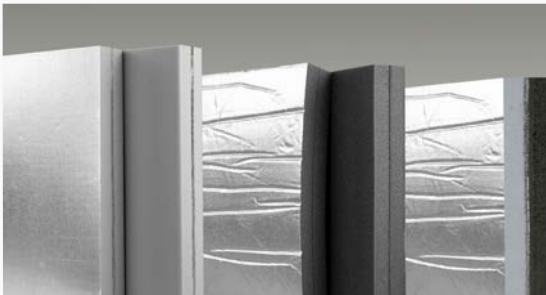
**MIL-SPEC and fire-resistant noise barrier**

Designed for the military and navy industry, conforming to MIL-PRF-24699A (SH), Wavebar MIL added 'flame shield' has been approved for use in military vehicles and navy ships. The dense, thin, highly-flexible and tear-resistant noise barrier has excellent fire-resistance and thermal insulation.



## UNIQUE COMPOSITES

Composite materials simplify acoustic treatment and save space by introducing the combined effects of absorbers, barriers and dampers. The unique single installation efficiently addresses noise transfer across a vast frequency range.



### SORBERBARRIER™

**High performance barrier-absorber composite**

The high performance is achieved by its unique composite that offers both excellent noise transmission loss and high noise absorption. A flexible mass noise barrier, based on Wavebar® technology, laminated between two layers of flexible acoustic foam. Available in various thicknesses and weight, with an array of facings to suit the application. This range has a new addition designed to meet IMO FTP Code specification for Low flame spread.



### SILENTSTEP®

**Soundproofing underlay**

Exceptional acoustic carpet underlay, comprising of a flexible noise barrier fused onto a high-density premium foam underlay. The combination of these two products allows Silentstep to reduce the transmission of footfall and impact-generated noise, as well as reduce the transmission of airborne noise.



### SUBDUE®

**Lightweight multi-layered acoustic panels**

A combination of viscoelastic cores, lamination technology and outer layer materials to produce high-performing composite panels that are both strong and rigid. Subdue offers exceptional acoustic properties and reduces the critical frequencies by reflecting, absorbing and damping the vibration and transmission of sound through walls and floors.



## ANTI-CONDENSATION

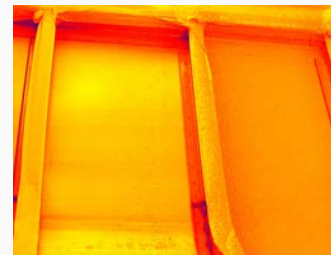
The lightweight coating will protect against condensation and thermal bridging, which can result in corrosion under insulation (CUI). Decicoat T35 reduces the temperature differentials between substrate and environment to minimise the potential of condensation forming. The coating can be used within a system or in its own right.



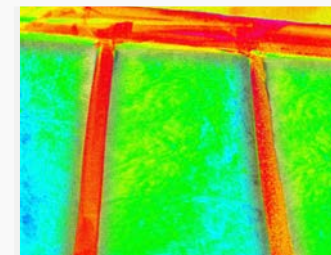
### DECICOAT™ T35

**Lightweight anti-condensation and corrosion protection**

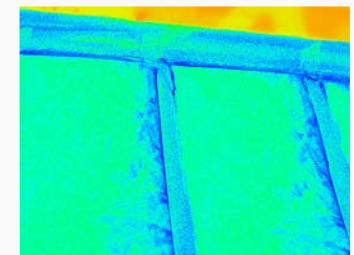
Improve the efficiency of thermal insulation without the compromise of thermal bridging. Together with excellent vibration damping properties, it is ideal to use where thickness restrictions, weight reduction, thermal insulation and acoustic performance are priority in walls and ceilings in marine applications.



NO INSULATION



FIBRE OR FOAM INSULATION



DECICOAT T35 WITH FIBRE OR FOAM INSULATION



## SPECIALTY MARINE PRODUCTS

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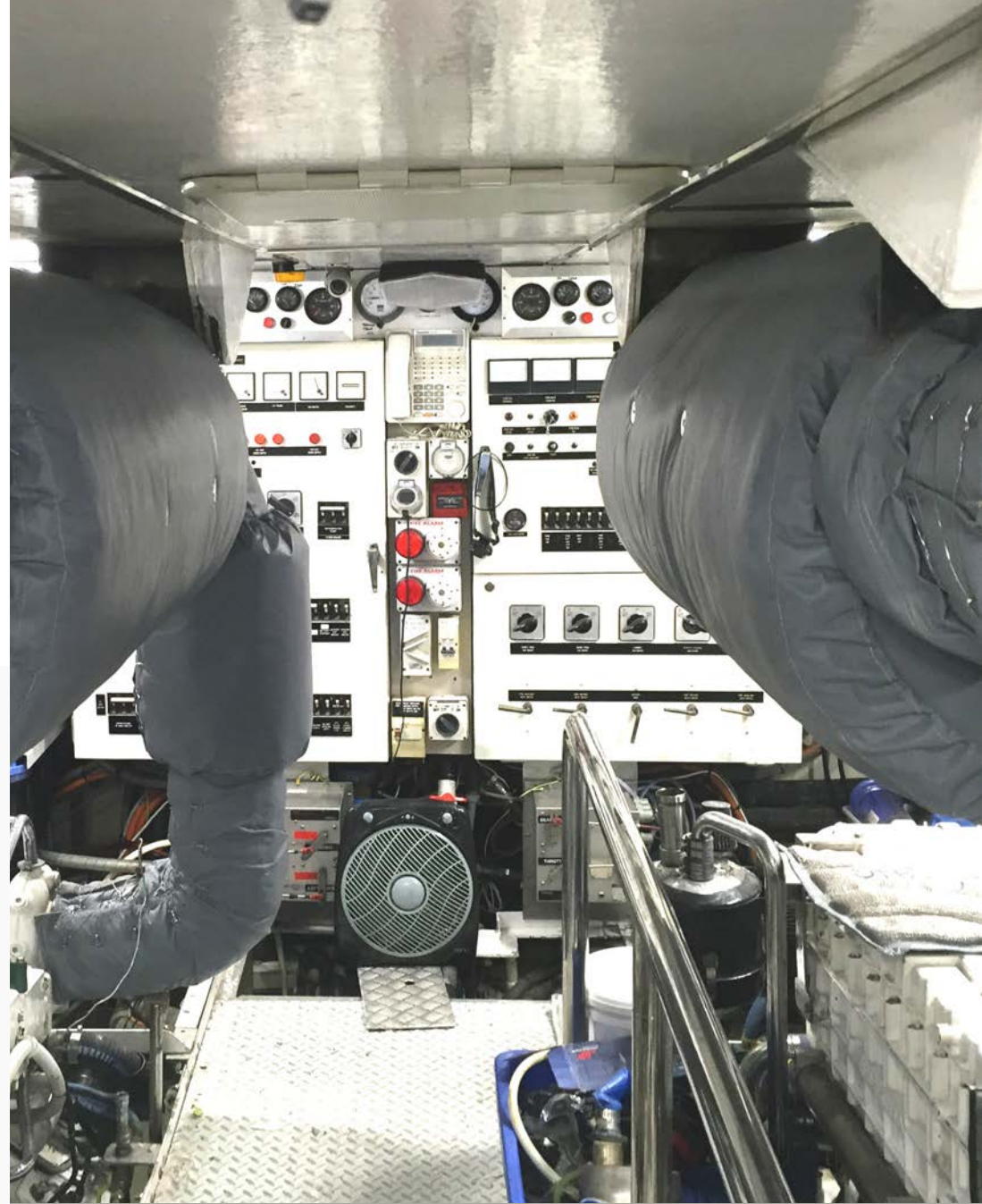
Our unique specialty marine range offers complete customisation. Suitable across various conditions, these products present a low-cost solution to effectively reduce heat, decreasing energy bills in cryogenic and high temperature environments.



### THERMAL BLANKETS & EXHAUST COVERS

**Customised, soft, removable high temperature blankets and covers**

Designed and manufactured fully customised, utilising our range of fabrics, felts and blankets to suit a variety of conditions in marine applications. Thermal covers are suited to conditions from cryogenic to high temperature. Providing excellent personal protection from heat, thermal covers are easy to remove and replace during routine maintenance.



### QUICK AND EASY INSTALLATION

Less down time and more effective,  
longer lasting insulation



## THERMAL AND FIRE PROTECTION

Our exceptional line of specialty marine and offshore products offers fire protection for walls, ceilings and floor systems to provide our customers with tailored solutions for designing internal fire and acoustic furnishings. Our fire protection products meet A, B, C and H class fire ratings with high sound reduction capabilities.



U SEA PROTECT 

U SEA Protect combines peak performance in fire protection and thermal insulation with an extremely lightweight, flexible product. It provides additional acoustic insulation while being faster and more efficient to install than traditional methods. It is marine certified (type approval) for use on steel, aluminium and composite/glass constructions.



ISOVER E-SAVER 

Isover E-Saver is manufactured from glass wool bonded with a thermosetting resin to deliver excellent thermal and acoustic properties. The product can be used in a multitude of applications due to its superior compression strength and stiffness.



FYREWAP® 

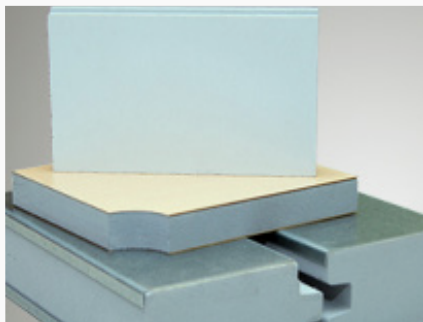
Fyrewrap marine blanket is a totally inorganic, biosoluble, flexible, high temperature insulation blanket specifically designed to provide structural fire protection for marine applications at a reduced thickness. Fyrewrap marine blanket is chemically stable, and its thermal properties are unaffected after exposure to water or high humidity.



PROMAT 

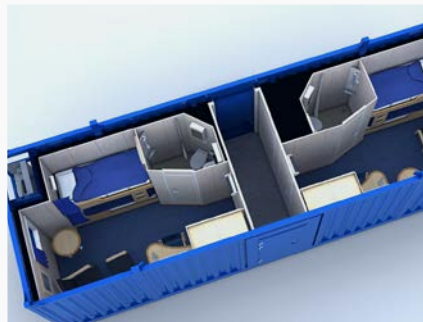
Promat provides outstanding solutions for any marine requirement, including fire protection and thermal insulation for varying styles of marine craft.





### LITECORE MARINE ⚙️

The unique Litecore Marine panels are non-combustible and ultra-lightweight. Available to suit specific customer requirements, marine panels can be supplied raw or with decorative features such as HPL laminate, paper, glass tissue, veneers, plywood, steel sheets or aluminium sheets.



### TNF MARINE FITOUT ⚙️

Quality systems for the shipbuilding and offshore industry including fire certified doors, panels, ceilings, wet units, and floating floors - providing a complete accommodation package which can be supplied standard, semi-modular or modular form, for just-in-time installation anywhere in the world.



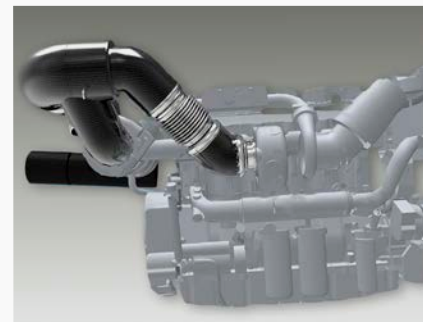
### SYLOMER®

PUR elastomer material developed by Getzner is one of the leading products on the international market for vibration isolation and mitigation. The elastic polyurethane material deforms under tension and compression loads, but always returns to its original form.



### CENTEK MUFFLERS

Specialised FRP water-cooled marine mufflers use the highest quality resin. Designed for high temperatures and fire-resistance. Complete range available, with in-line, lift, water/ gas separator with complete custom sizing and measurements available. Lloyds Register Certified and carries an ABS Type approval and meet or exceed ABYC-P1 standards and military specifications.



### DEANGELO

Precision exhaust engineering with industry leading DeAngelo exhaust systems for vessels 29' to 400'. DeAngelo understands the delicate balance between maximum allowable exhaust back pressure, exhaust temperature, noise attenuation, raw water intake and engine room serviceability.





## DEDICATED MANUFACTURING

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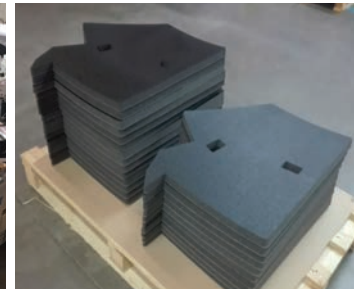
Large marine projects depend on reliable suppliers, dedicated manufacturing and stringent delivery schedules. Pyrotek can scale and adapt to suit any project supply requirements with local manufacturing across global locations. From design, production, and logistics, your project success is only a few steps away.

## CUSTOM KITS AND PARTS

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For easy installation, all materials are available to be supplied as pre-cut and labeled parts for your designs. Pre-routed, finished flooring cut to your templates means simpler processing for our customers.

*'Peel and Stick' self adhesive backing available for quick and simple installation.*



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Pyrotek endorse forest sustainability and the preservation of natural environment. We procure the highest quality materials from suppliers who hold FSC (Forest Stewardship Council) Certification and PEFC (Programme for the Endorsement of Forestry Certification) amongst other certification programmes.

Caveats: Specifications are subject to change without notice. The data in this document are typical of average values based on tests by independent laboratories or by the manufacturer and are indicative only. Materials must be tested under intended service conditions to determine their suitability for purpose. The conclusions drawn from acoustic test results are as interpreted by qualified independent testing authorities. Nothing here releases the purchaser/user from responsibility to determine the suitability of the product for their project needs. Always seek the opinion of your acoustic, mechanical and fire engineer on data presented by the manufacturer. Due to the wide variety of individual projects, Pyrotek Acoustic and Thermal is not responsible for differing outcomes from using their products. Pyrotek disclaims any liability for damages or consequential loss as a result of reliance solely on the information presented. No warranty is made that the use of this information or of the products, processes or equipment to which this brochure refers will not infringe any third party's patents or rights.

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# MARINE PROJECTS

Decades of experience have allowed us develop high-performance materials suitable to the regulatory demands of our customers and extreme marine conditions. Our portfolio demonstrates our significant global involvement across the marine industry.

For more stories of success, visit [pyroteknc.com/case-studies](http://pyroteknc.com/case-studies)

COUNTRY	BUILDER	VESSEL TYPE
Australia	Thales	Navy Patrol / Coast Guard
Australia	Echo / Evolution Yachts	Trimaran and Catamaran
Australia	Riviera	Monohull
Australia	Lurrssen / Cimec Forgacs	Navy Patrol / Coast Guard
China	CIMC Raffles / Pride Mega Yachts	Monohull
China	IAG Yachts	Luxury
China	Yuexin	Work
China	DSIC	Offshore
Malaysia	Grandbanks	Monohull
New Zealand	McMullen and Wing	Motorhull - Luxury
New Zealand	Circa Marine	Work
New Zealand	Q-West Boatbuilders	Work
New Zealand	Profab Central Engineering	Commercial Luxury
Poland	Sunreef	Catamaran
Poland	Galeon	Monohull
Singapore	Sembawang Shipyard - Sembcorp Marine	Work
Taiwan	Lungteh	Navy Patrol / Coast Guard
UAE	Gulfcraft	Monohull
USA	Metal Shark	Catamaran
USA	Eastern Shipbuilding	Staten Island Ferry





- Six research and development centres
- Five engineering centres
- Global manufacturing headquarters in Sydney, Australia

