



Materials & Solutions

Cruise, Yacht, and Marine
Interior Project





At APM workshop, materials meet engineers, designers, fabricators, and installers. Our engineers and designers transform materials and associated components into ultra-performing structural panels, parts, and components for marine projects. We select the finest materials and components to produce products and solutions for cruise, yacht, and vessel super-structural and structural noise and acoustic insulation projects. As experienced professionals in the field, we understand each marine project is unique and requires, and because of that, we select materials based on project specifications and technical requirements. No matter the project's complexity, we have the necessary materials and expertise to complete a marine project successfully.



At APM, we offer our clients a complete turnkey solution from materials selection to design, fabrication, testing, certification, and installation.

We offer various products and solutions for various marine projects- structural, thermal and sound insulation. The materials and associated components used in our products and solutions are sustainable, lightweight, fire retardant, DNV GL certified, EPD certified, and 100% recyclable. Most of the structural core materials we use in products and solutions are manufactured in-house, and the necessary supporting materials

are sourced domestically, depending on the project specification and scope of work. Because of that, we can meet the highest quality and safety standards for any marine project. Our offered products and solutions meet local and federal safety and standard requirements. All our raw materials meet industry standards and requirements.

PRODUCTS & SOLUTIONS:

Structural thermal insulation project

- ✓ Mass fabrication of ready-to-install Aluminum laminated PU and PIR foam core-based interior structural thermal insulation panels, body parts, and components for cruise, yacht, and vessel interiors.
- ✓ Project-specific custom cutting and fabrication of marine structural thermal insulation parts, components, and larger structures from PU and PIR foam core sheets and boards.
- ✓ Fabrication and custom production of Thermoplastic (PET and PP) laminated PU and IR foam core-based structural insulation panels and large components for cruise and yacht interiors.
- ✓ Custom fabrication and production of PLA and Biopolymer laminated PIR and PU foam core-based insulation panels and large structures of any dimensions.
- ✓ Custom production of HPL phenolic laminated PIR and PU-based thermal insulation panels and large structures.
- ✓ Fabrication and mass manufacturing of PU-based structural insulation laminated, sandwich panels, and composite components of any dimension.
- ✓ Carbon fiber, fiberglass laminated PU, PIR foam-based super-thermal insulation panels, and large structural components.
- ✓ Thermoforming and mass production of structural insulation body parts and components.
- ✓ Structural insulation materials testing, standardization, and certification according to local standards.





Material Specification:

- ✓ Available thermal insulation value (R-value): 4-60
- ✓ Available density: 1- 60 lbs./cf. (pcf)
- ✓ Customized thickness: 3/4 - 40"
- ✓ Length and width: completely customized
- ✓ Material finish: unfaced, foil faced, fsk facing, custom laminated, customized panels
- ✓ OEM Fabrication: Drawing and design specific OEM component fabrication and production
- ✓ Mold and anti-bacterial resistance
- ✓ Fire performance: Class A fire rated and non-combustible
- ✓ Chemical and weather resistant
- ✓ Moisture and humidity resistant
- ✓ Material appearance: Rigid, semi-flexible, and flexible
- ✓ Compressive strength: 5- 50 psi
- ✓ Recycled content: up to 70% recycled content depending on the needs
- ✓ Ready to install products and solution
- ✓ Fully custom produced composite and laminated insulation panels
- ✓ 100% Made in USA



Thermal insulation material
PU/PIR foam sheet



Thermal insulation panel
Aluminum laminated PIR



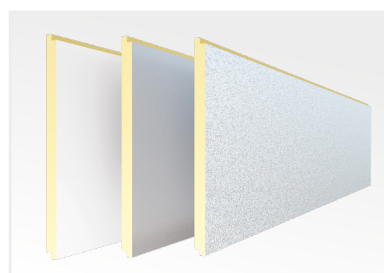
**High temperature
fiberglass blanket**



Fiberglass board



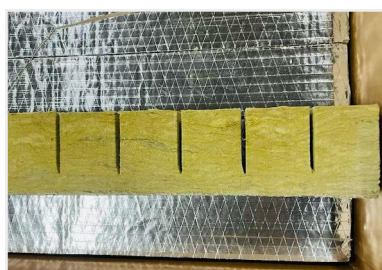
Thermal insulation panel
HPL Phenolic-foam
composite



Thermal insulation panel
Thermoplastic laminated PIR



Fabricated mineral wool



Kerfed mineral wool



Thermal insulation panel
PIR-Plywood-HPL composite

PRODUCTS & SOLUTIONS:

Structural noise and acoustic insulation project

- ✓ Fabrication and mass manufacturing of ready-to-install Wood fiber, Balsa, and Cellulose foam core-based cruise and yacht noise, as well as acoustic structural insulation panels, parts, and components.
- ✓ Project-specific custom cutting and fabrication of Polyester film laminated fiberglass composite sheets, structural noise

and acoustic insulation panels, and cruise and yacht interior components.

- ✓ Custom fabrication and manufacturing of Polyester and Fiberglass laminated Wood fiber, Balsa, and Cellulose foam core-based structural noise and acoustic insulation panels and large structures for marine interiors.

- ✓ Project-specific custom fabrication of Polyester film laminated PET, Cellulose, and PU foam core-based noise insulation panels and components for cruise and ferry interiors.

- ✓ Custom fabrication and mass production of HPL Phenolic laminated Cellulose, Wood fiber, and PET foam core-based sandwich composite acoustic insulation panels and components.

- ✓ Fabrication and mass manufacturing of PLA and biopolymer laminated Wood fiber, PU, and Cellulose foam core-based noise insulation panels and large structures for marine interiors.

- ✓ Custom fabrication and mass production of EVA-Cotton fabric laminated Wood fiber, Cellulose, and PET foam core-based sound insulation-absorption sandwich composite panels, parts, and components.

- ✓ Custom fabrication and mass production of Wood and Plywood laminated Wood fiber, Cellulose, and PET foam core-based sound insulation-absorption sandwich composite panels, parts, and components.



- ✓ Thermoforming and mass production of structural noise and acoustic insulation body parts and components.
- ✓ Structural noise and acoustic insulation materials testing, standardization, and certification according to local and industry standards.



Material Specification:

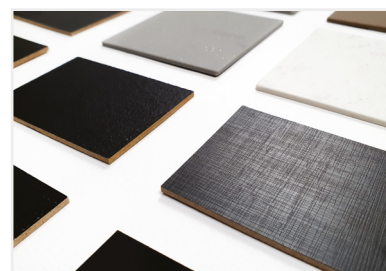
- ✓ Ultimate sound blocking and maximum acoustic insulation.
- ✓ Close to ideal sound and noise absorption.
- ✓ Ultimate sound and noise reduction.
- ✓ Sound Absorption (NRC): Up to 0.95.
- ✓ Sound Attenuation: Up to 40 CAC.
- ✓ Custom manufacturing and ready-to-install solutions.
- ✓ 100% recyclable, made from recycled materials.
- ✓ Super lightweight and excellent strength-to-weight ratio.
- ✓ No water and moisture absorption.
- ✓ Standard fire-retardancy. Class A fire performance.
- ✓ Fully weather-resistant, added antimicrobial properties.
- ✓ Mold and sag-resistant.
- ✓ EPD, LCA, IMO/MED, and DNV-GL certified.
- ✓ Meet US, Canada, and EU regulatory standards.
- ✓ Durability: Impact Resistance, Scratch Resistance
- ✓ Fully customized products and solutions.
- ✓ Fully customized light reflection performance.
- ✓ Made in USA



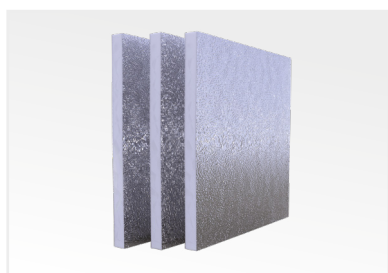
Noise blocking
Wood fiber sheet



Sound blocking
PET foam core



Sound insulation/blocking panel
Polyester film laminated
wood fiber



Acoustic insulation/blocking
Polyester film laminated
PET foam



Noise blocking/insulation
Custom fabricated PET felt



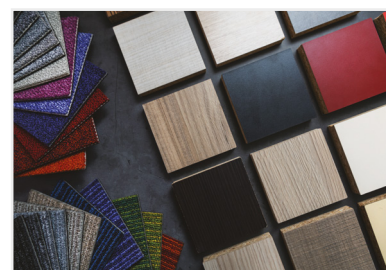
Sound insulation
PLA laminated wood fiber



Acoustic blocking
Fabricated PET felt Panel



Sound blocking
Cotton laminated PET foam



Acoustic blocking
HPL- wood fiber composite

PRODUCTS & SOLUTIONS:

Interior and exterior structural projects

- ✓ Fabrication and mass manufacturing of ready-to-install PVC, PET, PU, and Cellulose foam core-based structural panels, large parts, and components for cruise, yacht, and ferry interiors and exteriors.
- ✓ Project-specific custom cutting and fabrication of PET and PP laminated Cellulose, PVC, PET, and PU structural superstructures and large components for marine interiors.
- ✓ Project-specific custom cutting, fabrication, and mass manufacturing of PLA and biopolymer laminated PU, Cellulose, PVC, and PET foam core-based super-structural structural panels.
- ✓ Custom fabrication and production of glass fiber and Carbon fiber laminated Cellulose, PU, PVC, and PET foam core-based super-structural sandwich composite panels and large structures for cruise and ferry.
- ✓ Custom manufacturing HPL Phenolic laminated PU, PVC, and PET foam core-based structural sandwich composite panels and large structures for cruise and yacht interiors.
- ✓ Fabrication and production of Synthetic wood and Plywood laminated PU, PET, and PVC foam core-based structural panels and large structures for cruise and yacht interiors.
- ✓ Fabrication and mass production of Aluminum laminated PVC, PET, and PU structural composite panels and large parts of any dimensions.



- ✓ Thermoforming and mass production of super-strength structural body parts and components.
- ✓ Structural materials testing, standardization, and certification according to local standards.



Material Specification:

- ✓ Recyclable and sustainable.
- ✓ Lightweight, excellent strength-to-weight ratio
- ✓ Minimum carbon footprint, sustainable materials processing.
- ✓ Remarkable tensile and compression strength.
- ✓ Exceptional mechanical and physical strength.
- ✓ No water and moisture absorption.
- ✓ Excellent thermal and heat stability.
- ✓ Extreme weather resistant.
- ✓ Corrosion resistance.
- ✓ Standard fire retardancy.
- ✓ Excellent service life.
- ✓ EPD, LCA, and DNV-GL certified.
- ✓ Meet US, Canada, and EU regulatory requirements and standards.
- ✓ Easy installation and minimum maintenance.
- ✓ Excellent cold and hot weather resistance.
- ✓ Manufactured in USA.



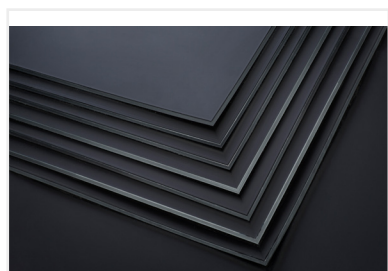
Structural material
High-density PVC foam board



Structural material
Composite panel



Structural material
Phenolic panel



Structural material
Carbon composite panel



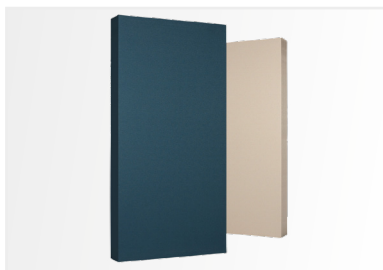
Structural panel
PP laminated PVC foam core



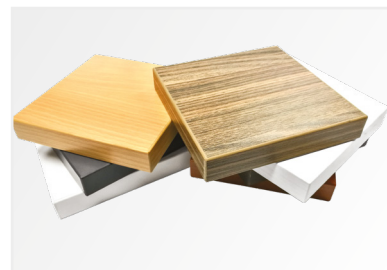
Structural panel
HPL laminated wood panel



Decorative panel



Structural material
PLA laminated PVC foam core



Structural material
HPL laminated PVC foam core




Structural panel
Aluminum-PET composite



Contact:

Advanced Performance Materials (APM)

66 West Flagler Street, Miami, FL 33130, USA.

 +1 786-776-4022

 contact@advancedmaterialsus.com

www.advancedmaterialsus.com