Quiet Barrier® Specialty Composites

Features & Benefits:

- **Triple Soundproofing Function** - The mass of Quiet Barrier® layer blocks sound while its flexible nature dampens sound energy. The thicker of the two layers of acoustic foam acts as a sound absorber decreasing ambient reflected noise. The thinner layer of acoustic foam acts as a decoupler, structurally isolating the heavy barrier layer from the construction assembly, ultimately decreasing vibration and increasing the sound blocking performance.

- **Heat Resistant** - Quiet Barrier® Specialty Composite has a fiber reinforced Polyester Film facing that not only reflects high frequencies but also reflects heat back towards the source.

- **Durable** - The Polyester Film facing provides a cleanable tear resistant surface for applications that may come in contact with oils or grease. Once punctured, the embedded fibers will prevent additional tearing or damage.

General Information:

Quiet Barrier® Specialty Composite is a four layer soundproofing composite used in construction, automotive, heavy machinery and marine industries to reduce noise transfer from structural borne and airborne sources. Quiet Barrier® Specialty Composite was engineered to be in applications where extreme noise is problematic and heat resistance is required. This is our premium barrier and acoustic foam soundproofing composite due to the intricate four layer construction. The first layer is a fiber reinforced Polyester Film facing that blocks high frequency sound, resists tearing and can be wiped clean. The second layer is a thick acoustic foam that absorbs low, mid and high frequencies. The third layer is our Quiet Barrier® LD product that blocks sound energy. The fourth layer is a thin layer of acoustic foam that suspends the barrier layer away from the mounting surface. This layer structurally isolates the barrier layer, improving the sound blocking capabilities.

How Quiet Barrier® Specialty Composites work:

In essence, Quiet Barrier® Soundproofing Composites products block the transmission of noise from one area to the next. The sound from the “noise source” hits the Polyester Film facing and high frequencies are reflected back towards the noise source. Some of the sound is then absorbed by the acoustic foam. The sound that penetrates the acoustic foam layer is then blocked by the decoupled barrier layer and reflected back into the room or space of origin. The difference between the source noise and the transmitted noise is the sound transmission loss.
Applications by Industry:

Construction Industry:
- Equipment Rooms and Enclosures
- Industrial Facilities
- Computer Rooms
- Generator Enclosures
- Compressor Rooms
- HVAC Cabinets
- Air Conditioning Unit Enclosures

Automotive Industry:
- Hood and Trunk Liners

Heavy Equipment Industry:
- Hood and Trunk Liners
- Engine Compartment Liners
- Floor Liners

Marine Industry:
- Engine Compartment Liners
- Hatch Cover Liners
- Hull Liners

Product Availability and Coverage:

1/4 inch of acoustic foam, 1 lbs per sqft barrier layer, 1 inch of acoustic foam with a reinforced Polyester Film facing:

Thickness:
- 1 1/4 in. (+/- 1/8 in.)

Size Availability and Coverage:
- 48 in. x 54 in. sheet = 18 sqft
- 48 in. x 54 in. sheet with Pressure Sensitive Adhesive (PSA) = 18 sqft
- Custom sizes and configurations available, please contact us for details.

Warnings and Limitations:

All Polyurethane Foams, including Combustion Modified Foams, will burn. Do not expose to any flame source. Once ignited, they can produce rapid flame spread, intense heat, dense smoke and toxic gases causing death. Warnings should be given to your employees and or customers. Test data does not necessarily reflect a foam's performance under actual fire conditions. Before purchasing any foam, be sure to check with your local code officials to confirm the required flammability rating of exposed materials for your area.