Solutions:
Isolated Soles - Sylomer

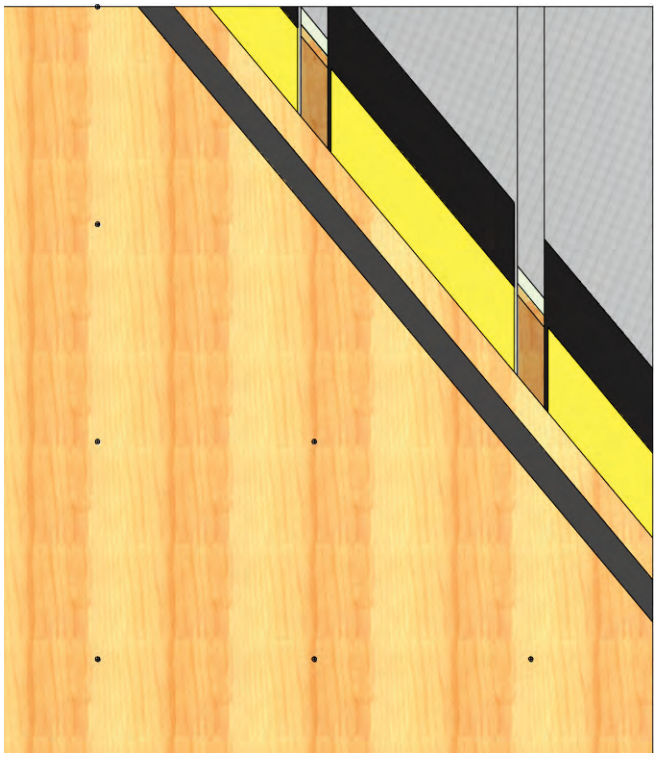
Soundown's Sylomer floated sole system is a comprehensive system for floating (isolating) soles in FRP, Steel and Aluminum vessels. Soles utilizing Soundown's Sylomer system are highly effective at increasing comfort level through reduction of mechanical and living noises.

Energy from mechanical sources is transmitted into the hull from engines, propellers, generators, air conditioning equipment and a host of other types of equipment required to provide the creature comforts enjoyed aboard today's yachts. Hydrodynamic energy is also transmitted to the hull either as the vessel moves through the water or from wave and wake action at rest. Floated soles will break the transmission path of this energy and prevent it from entering the accommodation areas where it can cause a range of unwanted noises.

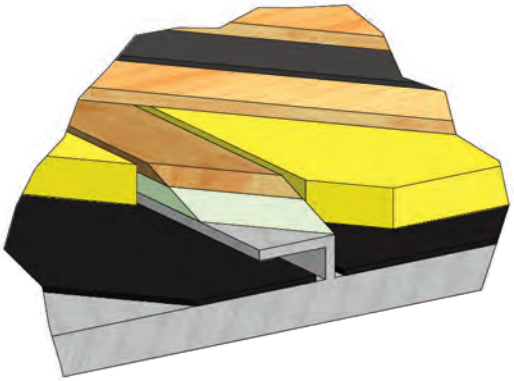
Soundown's Sylomer floated sole system combines the two key elements, isolation and damping, for reducing structure borne noise. Sylomer isolation strips create an elastic separation between the ship structure and the sole panel that reduces noise by preventing the energy from traveling from structure to the panels.

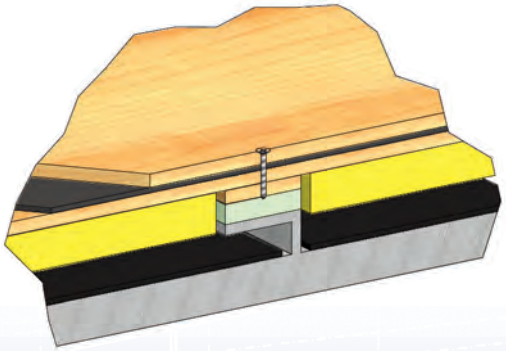
Soundown QuietCore composite plywood is a damped panel that is used for the subfloor in this system. Damped panels are used to lower the response of the panel to any vibration that may carry through the Sylomer.

In addition to being affective against mechanical and hydrodynamic noises floated soles are a key element for increasing privacy between decks. Galleys located above lower deck, guest cabins above or below crew and vertically adjacent guest cabins all present distinct privacy challenges. Foot fall, voice and AV noises are common compliant that can be prevented using Soundown's Sylomer and QuietCore products.



QuietCore M (9/6/9) sole floated on Sylomer L-12



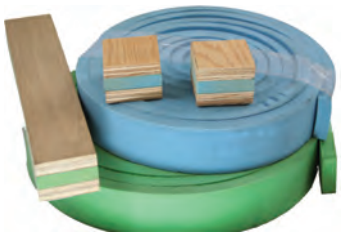


SOUNDOWN
FOR PEACE AND QUIET

2010.1.A

SOUNDOWN CORPORATION
ACOUSTIC INSULATION DETAIL

Sylomer



Sylomer are an a urethane isolation foam having a wide range of elatsic stiffness optimized for different loads and frequency ranges. This versatile foam is the isolation strip material used to float panels in sole and bulkhead constructions. The correct stiffness of material is chosen based on type of noise or vibration source, expected live and dead loads and the percentage of surface area being covered.

Sylomer can be easily installed as a roll good that bonded in place using PUR adhesives such as Sika Flex 252. Also available are Soundown IsoStrips that are premade sandwiches of Sylomer and plywood that can be screw fastened without compromising performance through short circuits.

ADVANTAGES

- Reduce noise 5-10dBA (as much as a 50% reduction in audible noise).
- Extremely durable with project over 25 years old showing no degradation of performance.
- Capable of handling loads from 0.72psi (0.005n/mm^2) to 116 PSI (0.8n/mm^2)
- Adaptable to work with flat plate or stiffened bulkheads.
- Color coded for staightforwad handling at job site.

QuietCore

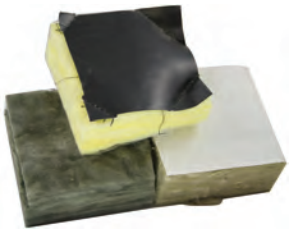
Soundown QuietCore Panels are damped plywood panels that create the subfloor in many floated sole arrangements. These composite panels are made up of two symmetrical plywood skins and an acoustic core, creating a highly damped panel which is effective in reducing structure borne and airborne noise. Core materials include Barium Loaded Vinyl and cork/ vinyl composite in varying densities to meet acoustic and weight requirements.

QuietCore panels are available as oversized panels (48.5" x 96.5") trimmed to a true 4' x 8' panel with clean flush edges where many competing products are trimmed to less than 4' x 8' or have uneven edges.

ADVANTAGES

- Highly damped panels have better transmission loss than non-damped panels of same weight.
- Available with a range of cores and wood species to match yard or build material requirements.
- Certified acoustic data by River Bank Laboratories available upon request.
- Cutting capabilities provide allow for delivery of kitted parts for repeat parts.
- Green options available using FSC plywood and 100% recycled acoustic cores.

Acoustic Absorption Materials



Soundown acoustic fill is used in the cavity below floated soles to increase the effectiveness of the assmebly. 2" of Soudown acoustic fill materials increase the acoustic transmission loss of a floated wall system by up to 4dBA. Acoustic fill is available in a range of materials including foam, fiberglass, non wovens and mineral wool. With densities ranging from 04lbs/ft^3 (6.4 kg/m^3) to 8lbs/ft^3 (130kg/m^3) a range of fire resistance from unrated to A-60, a product can be specified that will meet your acoustic requirements without adversly affecting weight or SFP programs.

ADVANTAGES

- Increase transmission loss of sole assemblies by as much as 4dbA
- Easily installed light weight options available
- Increase thermal insulation value of soles to increase efficiency of HVAC systems.

16 Broadway
Salem, MA 01970
1-978-745-7000
www.SOUNDOWN.com

SOUNDOWN
FOR PEACE AND QUIET

3005 S.W. 2nd Ave. #102
Fort Lauderdale, FL 33315
1-954-761-9188
sales@soundown.com