Reapor[™]





The First Sintered Glass Absorber From The Acoustical Industry's Leading Innovator

Indoor air quality (IAQ), life safety issues, and LEED requirements call for non-fibrous, recycled, non-toxic, and non-combustible materials. Reapor is a new, highly absorbent panel formed from recycled glass, which has been fired and expanded into glass granules. The granulate is formed into panels by mechanical and chemical processes, then sintered to give its final porous structure. The panels can be cut with standard tools and left natural, painted with a non-bridging paint, or upholstered with fabric. Reapor can be used indoors or outdoors. This new material sets new standards for an environmentally friendly, rugged surface, offering moisture resistance, high sound absorption, and ease of maintenance.



Problem and Solution

Problem

Traditional absorptive cores like fiberglass and mineral wool are fibrous. This may prohibit their use in indoor applications where fiber-free materials are mandated. The required fabric coverings are common and typically no longer visually intriguing. Also outdoor applications are not possible.

Solution

A new porous sintered glass panel called Reapor was developed from recycled glass that offers high sound absorption and is fiber-free, rugged, non-combustible, moisture resistant, and can be used indoors or outdoors.

Performance Specifications



Installation

Reapor can be machined with standard saws, routers and drills. The panels can be attached by gluing or pre-drilling and bolting in place. Edges can be chamfered or butted together, as shown to the far right. Reapor can also be mounted to one or two sides of a concrete wall and used in traditional post and panel highway barrier construction. Colors can also be applied forming interesting patterns (shown on front).



FEATURES

- High sound absorption
- Non-combustible
- Fiber-free
- Rigid and rugged
- Moisture resistant
- 100% recyclable
- Easily machined
- Lightweight

BENEFITS

- Sintered glass offers high sound absorption over a broad frequency range, thus providing excellent control of reflection and excess reverberation
- Inorganic sintered glass is non-combustible, offering a fire-safe absorptive treatment
- The sintering process produces a fiber-free panel, which can be used whereever codes call for fiber-free products
- The panels are rigid and rugged, offering a highly absorptive impact resistant surface
- Moisture resistance makes the panel ideal for humid indoor applications, such as swimming pools and spas, and also outdoor applications
- The glass used to form the panels is all 100% recycled, satisfying LEED requirements and is environmentally friendly
- The panels can be machined and installed with standard tools and commercial installation systems
- The light weight reduces loading issues

APPLICATIONS

Gymnasiums, Subways and other transportation facilities, Convention Centers, Swimming pools, Schools, Firing Ranges, Power Stations, Offices, Highway barriers, etc.

SPECIFICATIONS

- Three sizes are available: (length x width x thickness in mm): 609 x 1219 x 25 or 50 (24" x 48" x 1" or 2") 730 x 630 x 25 (28.8" X 24.8" X 1") 1480 x 625 x 50 (58.3" X 24.6" X 2")
- Weight: 25 mm is 1.36 lb/sf
- Edge condition: square edge standard





Chamfered

Butt

Absorption

The graph illustrates the absorption coefficient for a 2" Reapor panel directly mounted to the substrate and mounted with a 2" air cavity.