

SOUND ABSORBER FOR CHALLENGING ENVIRONMENTS

REAPOR[®]



SOUNDPROOFING SOLUTIONS FOR ALL INDUSTRIES
pyroteknc.com

Pyrotek.

- Exceptionally high Noise Reduction Coefficient (NRC)
- Unique, non-combustible glass-based material
- No smoke emissions
- Weather, water and UV resistant

SOUND ABSORBER FOR CHALLENGING ENVIRONMENTS

Reapor® panels are made from recycled glass granules, using a patented German process. The granules are fused together to form stone-look panels that can be used both indoors and outdoors. Reapor panels are hard, lightweight and fibre-free. The unique material absorbs noise both between and within the glass granules, resulting in exceptionally high noise reduction.

Reapor has the pleasant appearance of cut stone. Made from recycled glass, the panels are lightweight and durable. Reapor is easily installed and maintained, has no VOC emissions and is durable in both indoor and outdoor applications.

Reapor has a wide range of applications where effective noise reduction is required in outdoor and indoor areas – especially those areas with high humidity or fire concerns. Unlike traditional porous or open-cell materials, Reapor will not disintegrate with contact of water or moisture. Reapor panels are non-combustible and binder free.

FEATURES

- High sound absorption
- Non-combustible
- Fibre-free
- Rigid and durable
- Made from recycled materials
- Easily worked
- Lightweight
- Non-toxic, volatile organic compound free
- Quick and simple to install
- Easily maintained and cleaned
- Simple to repair
- Safe to use
- Endorsed and tested by leading acoustic consultants and engineers



FIRE SAFETY (SMOKE AND VOLATILE FREE)

Around the world, building codes are changing to reflect the increasing understanding of fire hazards. Materials that utilise fire retardants may slow the spread of fire but not reduce smoke production. The demand for virtually non-combustible materials is on the rise. Reapor has achieved a non-combustible rating, with no smoke emissions. When exposed to fire or flames, Reapor will not emit any toxic fumes or volatiles, making its installation a fire-safe way of controlling unwanted noise.

INSTALLATION

Reapor panels can be cut, drilled and routed using standard woodworking tools. This enables easy installation around obstacles, and the production of decorative shadowing effects. Various install methods are available and can be found in Installation Guide located on our website.



Reapor can be easily routed, cut and shaped

Reapor is suitable for both indoor and outdoor applications where exceptional noise reduction is required

PRODUCT CONSTRUCTION

Reapor panels are made using a unique process. Expanded glass granulate is mixed and formed. The glass granules are then sintered at temperatures of 750 °C - 900 °C this then cures the green panel. This process ensures that there are no Volatile Organic Compounds (VOCs) that can later be released, and that the panels can not break down over time through binder failure.

WEATHER, MOISTURE AND CONTAMINATION

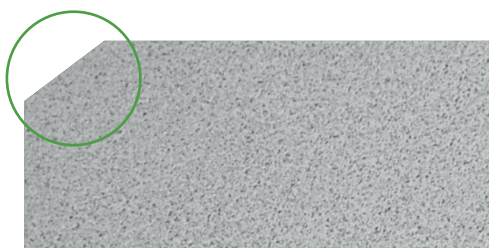
With its fused glass granule construction, Reapor is naturally resistant to both moisture and sunlight. In these conditions, other acoustic materials need elaborate protection, often adversely affecting acoustic performance. But Reapor requires no such protection, and if installed correctly and with adequate flashing, will last indefinitely. If exposed to damp conditions, a sodium residue known as efflorescence may appear on the surface. However, this does not affect the product's performance and can be easily washed off.

ACOUSTIC TESTING

Reapor has exceptional acoustic performance for its thickness. This is due to the numerous glass granules which act as individual, tiny sound absorbers. When tested independently to ISO standard, Reapor has an NRC of 0.95 at 50 mm thickness.

EDGE DETAIL

Reapor is available with chamfered or square edge finishes. This flexibility allows Reapor panels to seamlessly enhance your desired architectural appearance.



Chamfered edge



Square edge



APPLICATIONS

- Rail tunnels and rail noise barriers
- Tunnels, vents and exits
- Road side noise barriers
- High fire safety areas
- Plant rooms
- Substations and enclosures
- Indoor swimming pool and spa areas
- Exit ways, stairwells and smoking areas
- Cooling towers
- Restaurants and cafés
- Parking exits



Rail tunnels



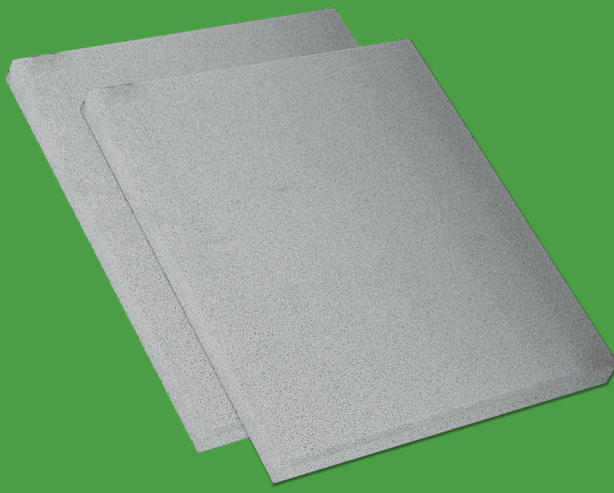
Cooling towers and HVAC



Restaurants, cafés



Outdoor areas - including Power generators, air conditioning enclosures



FREQUENTLY ASKED QUESTIONS

(Please refer to the installation guide and TDS on our website for more information).

DOES IT HAVE BINDERS?

Reapor does not use binders in its manufacture. Therefore, there are no VOCs to be released and there is no binder that could break down over time. The additional benefit is no smoke or volatiles released when exposed to fire or flames.

DOES IT HAVE POTENTIAL FOR MOULD GROWTH?

With no organic substances for bacteria to live on, Reapor does not support mould growth. However, if mould growth were to occur through a build-up of contaminants, Reapor can be washed or treated with an anti-fungicide.

HAS IT BEEN INDEPENDENTLY TESTED FOR SOUND ABSORPTION?

Reapor has been independently tested by Fraunhofer Institut Stuttgart, Germany (25 and 50 mm thickness) and CSIRO Melbourne, Australia (50 mm thickness), achieving a noise reduction coefficient (NRC) of 0.95 for 50 mm.

WHAT SIZE PANELS ARE AVAILABLE?

Three standard panel sizes are available:

- 625 x 625 mm (25 or 50 mm thickness)
- 1200 x 625 mm (25 mm thickness)
- 1250 x 625 mm (50 mm thickness)

Notes:

- Lead times may apply for the above sizes
- 625 mm is the maximum and optimum production width. Smaller panels are made by milling-down the width (involves waste).
- A custom thickness up to 65 mm is available
- 25 mm thick Reapor does not have chamfered edges



IS IT EASY TO INSTALL?

Reapor panels can be cut with standard woodworking equipment, using woodworking dust protection.

HOW IS IT PACKAGED?

Reapor is packaged in cardboard boxes on pallets. The minimum order quantity for our stock standard size (625 x 625 x 50 mm) is five panels or one pack (five panels per pack). Bulk orders are shipped in 20 ft or 40 ft containers.

IS IT EASILY REPAIRED?

Marks in Reapor panels can be removed using a small piece of Reapor as a sanding block. For holes and punctures, use a clear acrylic binder with some crumbled granules.

IS IT SUITABLE FOR OUTSIDE?

Yes! Reapor resists weather, water and UV exposure over an extended period of time. It is also resistant to chlorides and potassium, and so will survive without further protection in coastal areas. (The product may effloresce, leaving a white colour on the face of the panel – however, this will not affect the performance of the panel.)

WHY DOES REAPOR HAVE BETTER ACOUSTIC QUALITIES THAN SIMILAR GLASS BEAD PANELS?

There are no binders used to enhance absorption performance.

IS IT FIRE-RATED? IF SO TO WHAT STANDARD?

Reapor is non-combustible according to EN 13501-1, DIN 4102, AS 1530.1 / ISO 1182.

CAN IT BE USED ON ROADWAY/TRAFFIC BARRIERS?

Yes – in conjunction with concrete structures, Reapor is ideal for use in road barriers, train tunnels and similar applications.



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PYROTEK WORLDWIDE LOCATIONS

AUSTRALIA

CANADA

CHINA

CZECH REPUBLIC

HONG KONG

INDIA

INDONESIA

JAPAN

KOREA

MALAYSIA

SINGAPORE

NEW ZEALAND

TAIWAN

THAILAND

TURKEY

UNITED ARAB EMIRATES

UNITED KINGDOM

UNITED STATES OF AMERICA

VIETNAM

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CONTACT DETAILS

For further information please visit our website:
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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 or mechanical engineer on data presented by the manufacturer. Due to the wide variety of individual projects, Pyrotek NC 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 Information Page refers will not infringe any third party's patents or rights. DISCLAIMER: This document is covered by Pyrotek standard Disclaimer, Warranty and © Copyright clauses. See pyroteknc.com/disclaimer.