



hush[®]
acoustic tiles

Pineapple



Designed by
Sophie Concadoro

With studies linking high levels of environmental noise to a negative impact on our mental health, we have been exploring ways of reducing the harmful effects of excessive noise.

Reducing noise levels is of particular benefit to mental health spaces, where verbal communication and architectural sounds (like opening and closing secure doors) may be louder than in other environments.

In these spaces, excessive noise can be disturbing to already sensitive patients, hampering treatment and recovery plans.

When designing products for mental health environments, safety is paramount, so Hush tiles are designed with sloping edges to minimize ligature risks, and are installed with an adhesive rather than metal fixings to further reduce risks.

| |
|--|
| |
| |
| |
| |
| |
| |

DESIGNED FOR WELLBEING

Excessive noise levels in mental health environments can cause additional stress which is detrimental to treatment and recovery. These negative effects of noise can include:

- A feeling of lack of control¹
- Sleep disturbance²
- The release of stress hormones²
- Increased use of seclusion (often due to aggressive incidents)³

We designed Hush acoustic tiles to minimize the negative effects of unwanted noise, while taking care to minimize ligature risks and maximize safety for mental health spaces.

Acoustic design is fundamental to the quality of healthcare buildings. Sound affects us both physiologically and psychologically.

Department of Health Standard: -
"Specialist services" Health Technical
Memorandum 08-01: Acoustics"

1. Berglund, B., & Lindvall, T. (Eds.). Community noise. Archives of the Center for Sensory Research, 1995, 2(1), 1-195.
2. Babisch W. Cardiovascular effects of noise. Noise Health 2011;13:201-4
3. van der Schaaf, P.S., Dusseldorp, E., Keuning, F.M., Janssen, W.A., Noorthoorn, E.O., 2013. Impact of the physical environment of psychiatric wards on the use of seclusion. Br. J. Psychiatry 202 (2), 142-149

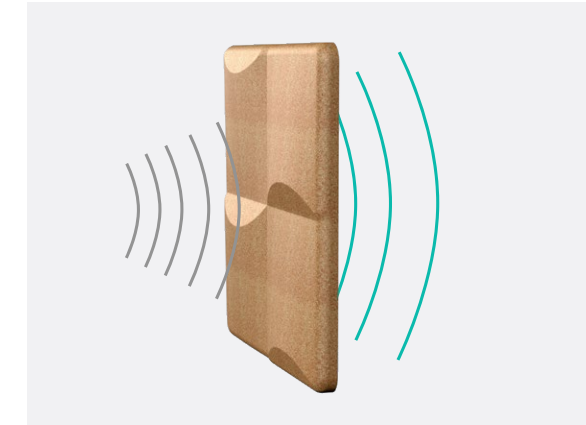
ACOUSTIC BENEFITS

Hush® tiles are carefully designed to reduce excessive noise levels, reducing reverberation time by absorbing sound waves:

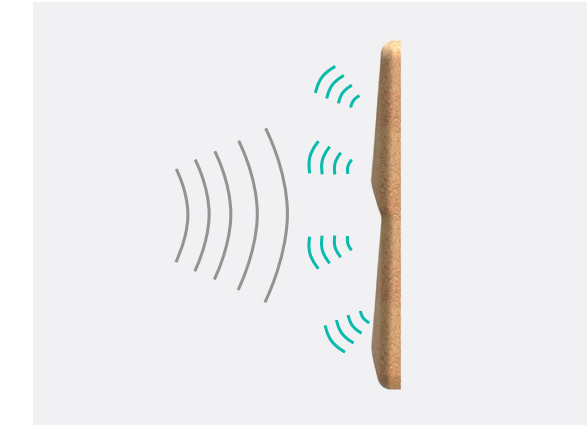
Without Hush - reverberation 5.57 seconds

With Hush - reverberation 3.07 seconds

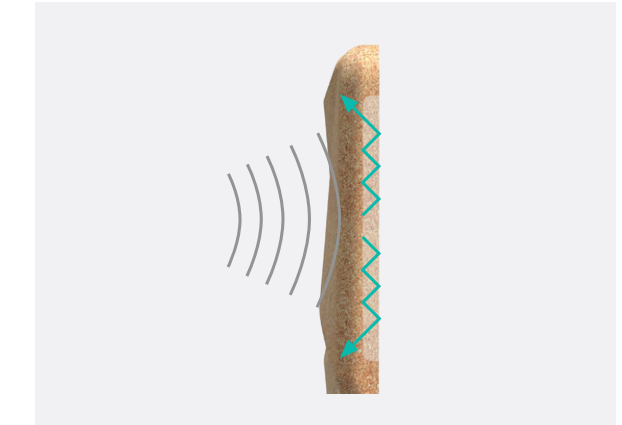
Test: 500Hz noise signal



→ Cork **absorbs sound** and noise vibrations by trapping sound waves in its honeycomb air-filled cell structure



→ The **angled faces** are designed to diffuse sound waves, distributing them throughout a space



→ **Air pockets** at the rear help to trap and further reduce sound waves reflected back through the tile

CARE AND MAINTENANCE

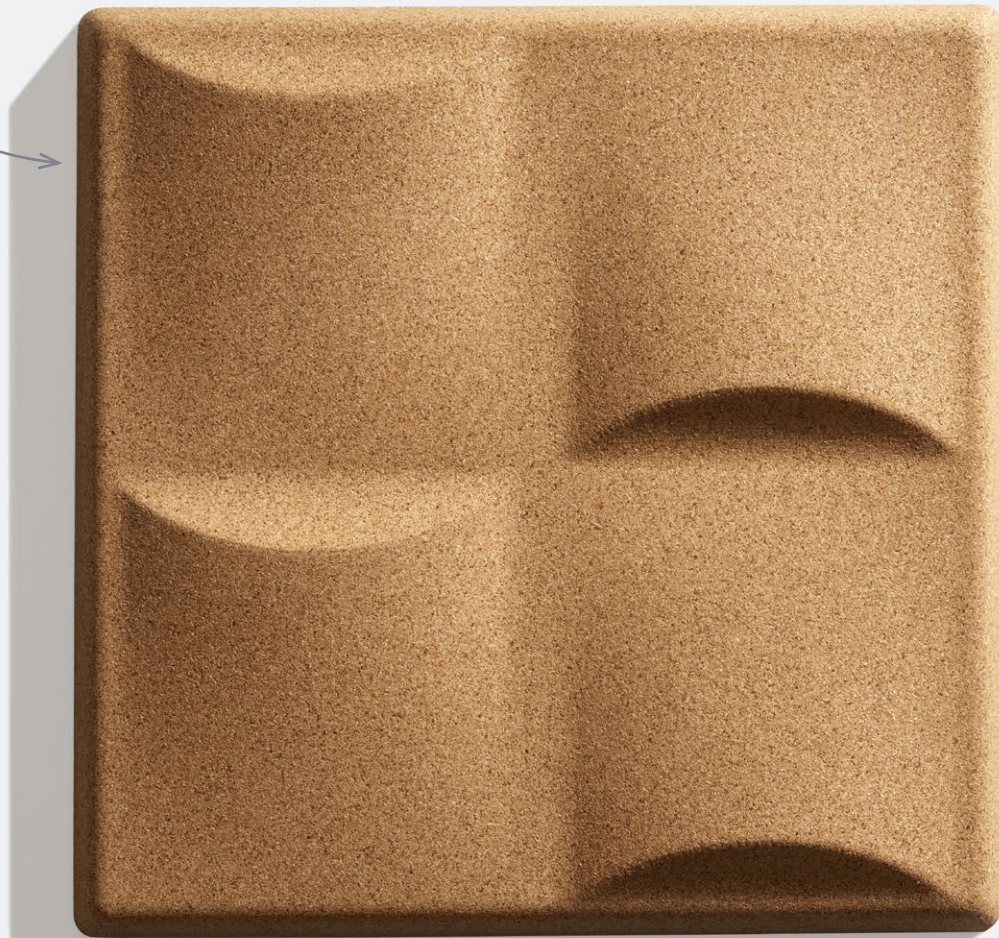
The highly compressed surface of the Hush acoustic tile, combined with the water-resistant nature of the cork material makes the tiles easy to clean and care for.

Routine and general cleaning should be carried out with a damp cloth to remove dirt or dust, and dried after cleaning.

An additional coating provides stain and scratch-resistant properties.

- Clorox wipes, detergent wipes, and all-purpose wipes are effective at removing tough stains but should be used sparingly, avoid repeated use to prolong the life of the product
- If ink is applied to the panel this can be removed with the application of a small amount of isopropyl alcohol
- If a panel became damaged a cork glue could be used to reattach a removed section leaving almost no visible mark

Shaped to minimize ligature risks and prevent climbing

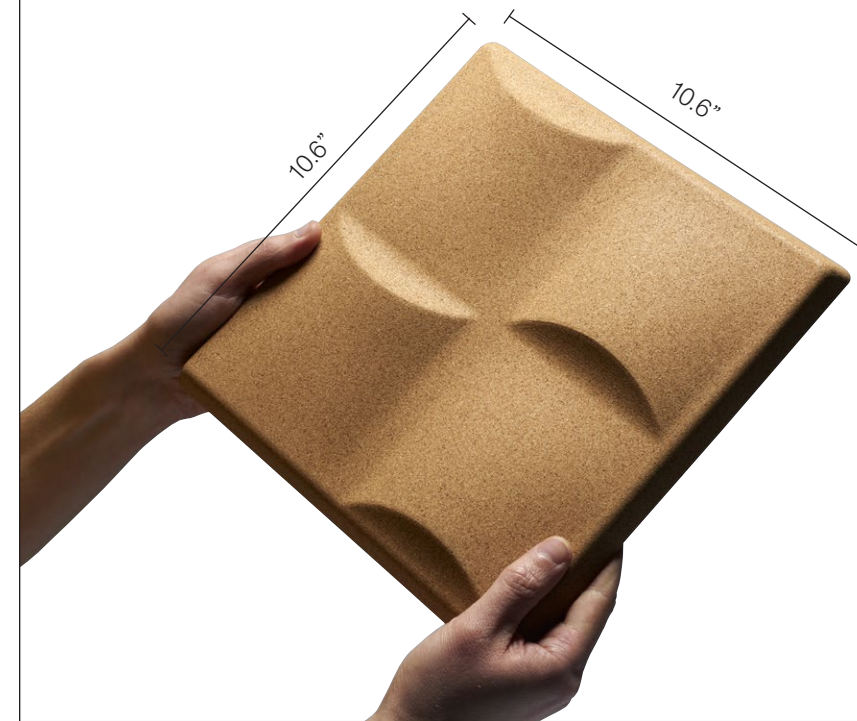


Secured without fixings for safety

MATERIALS

Hush® tiles are made from Cork granules held together with a polyurethane binder and water-based color pigment. We chose Cork because it:

- Is a sustainable natural product which is harvested from the Quercus Suber tree without cutting down or otherwise harming the tree
- Has excellent sound absorption properties and provides effective thermal insulation
- Is water-resistant and easy to keep clean
- Has naturally occurring anti-microbial properties



INSTALLATION

Hush tiles are provided with a fast-setting grab adhesive which is used to secure them to the wall.

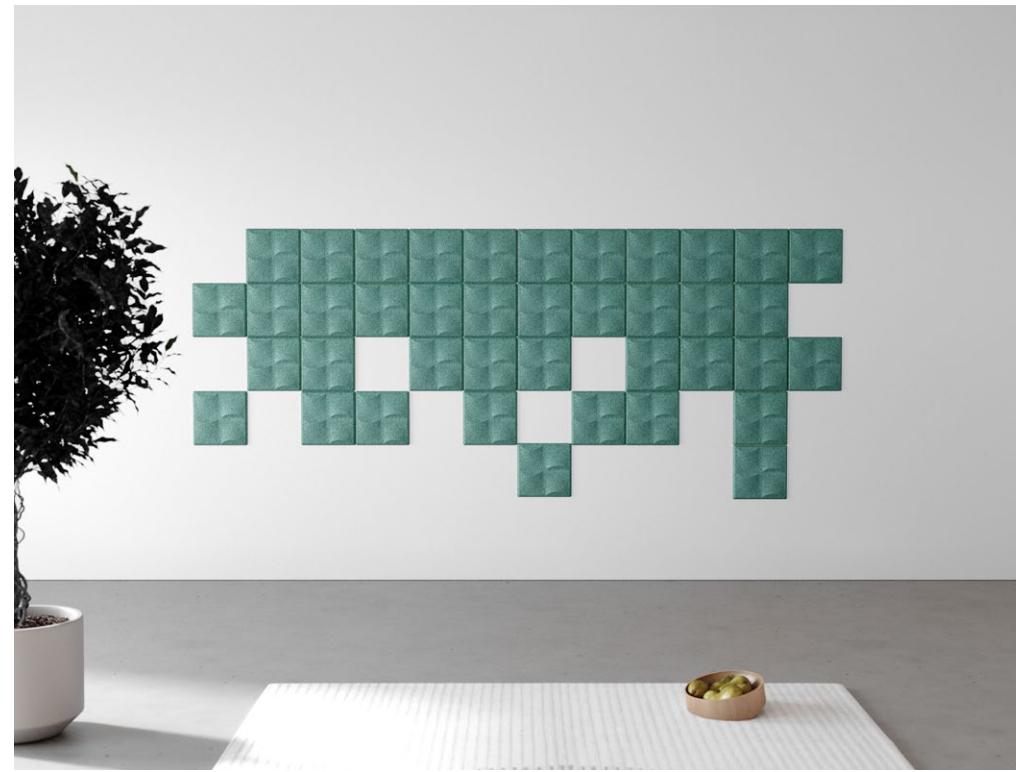
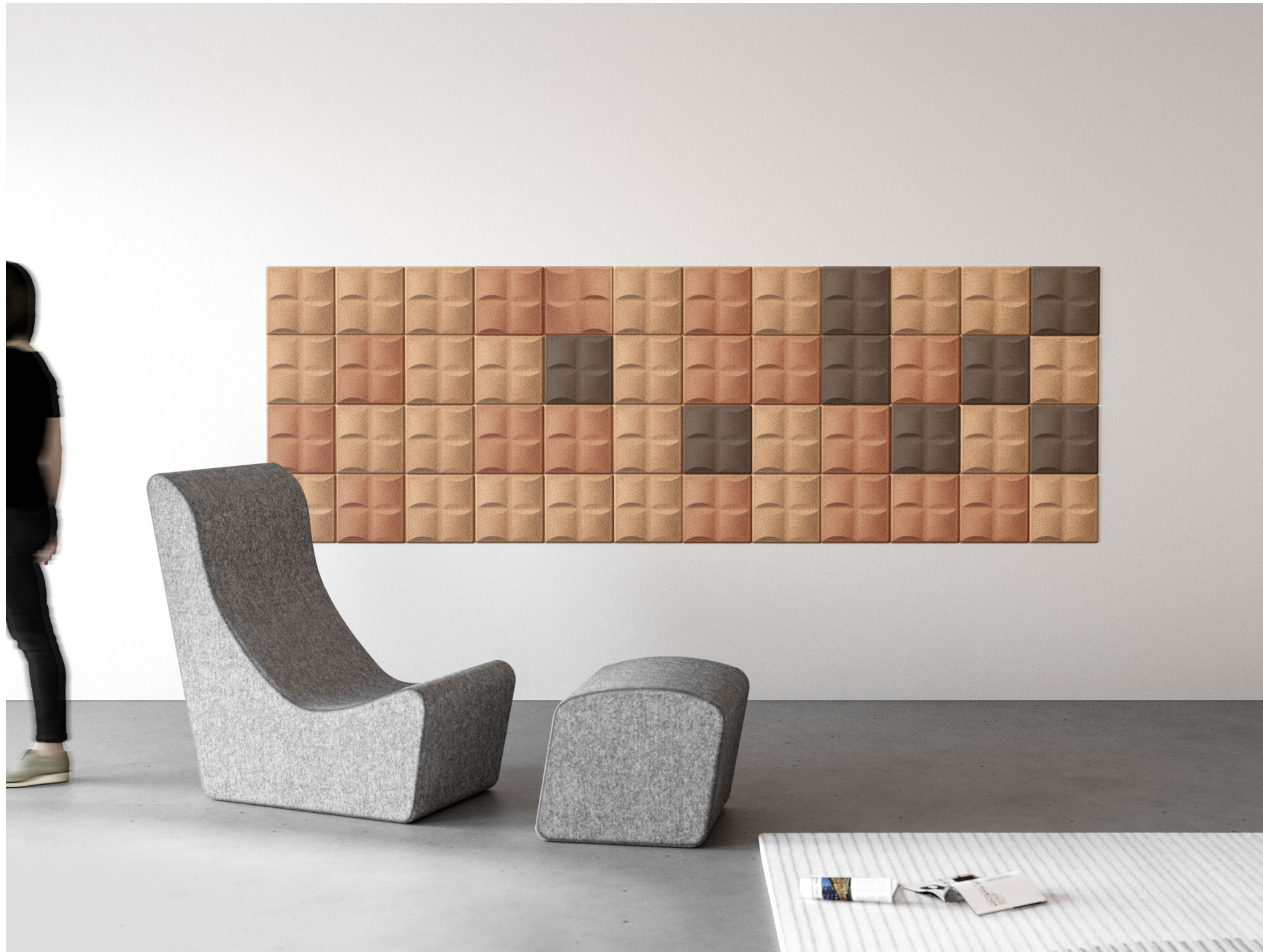
Unlike metal fixings, which could present ligature and self-harm risks, this adhesive method is designed to maximize safety.

Additionally, the sloped edges of the tiles have been carefully designed to prevent climbing and minimize ligature risks.



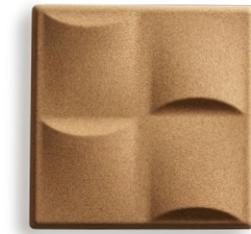
TEST CERTIFICATES

- Fire retardant to BS 5852:2006 Clause 12 (Source 0 and 1)
- Acoustic testing BS EN ISO 354:2003

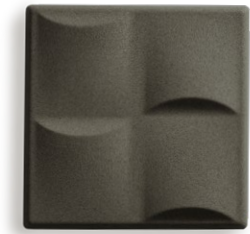




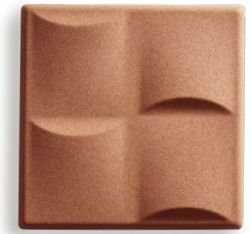
HUSH®



Raw
1HUS1-BOX8-RAW



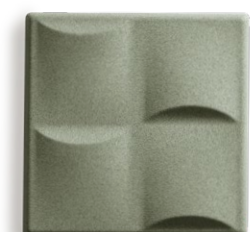
Light Grey
1HUS1-BOX8-LGREY



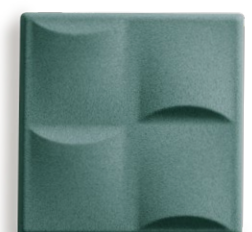
Copper
1HUS1-BOX8-COPPER



Gold
1HUS1-BOX8-GOLD



Moss
1HUS1-BOX8-MOSS



Deep Sea
1HUS1-BOX8-DEESEA



Blush
1HUS1-BOX8-BLUSH

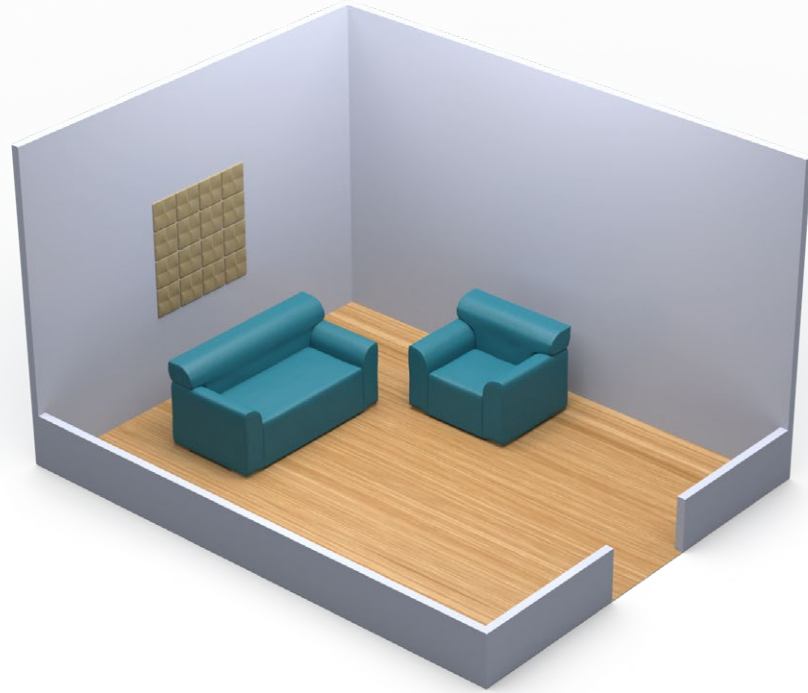
*Designed to minimize
ligature risks and
prevent climbing*

KEY FEATURES

- Helps to reduce excessive noise through diffusion and absorption of sound waves
- Designed to minimize ligature risks and prevent climbing
- Adhesive installation method (fixing components) help to maximize safety
- Fire retardant to BS 5852:2006 Clause 12 (Source 0 and 1)
- Reduces reverberation time from 5.57s to 3.07s at 500Hz

OPTIONS

- Choose from 7 versatile colors
- Customizable design allows for endless configurations

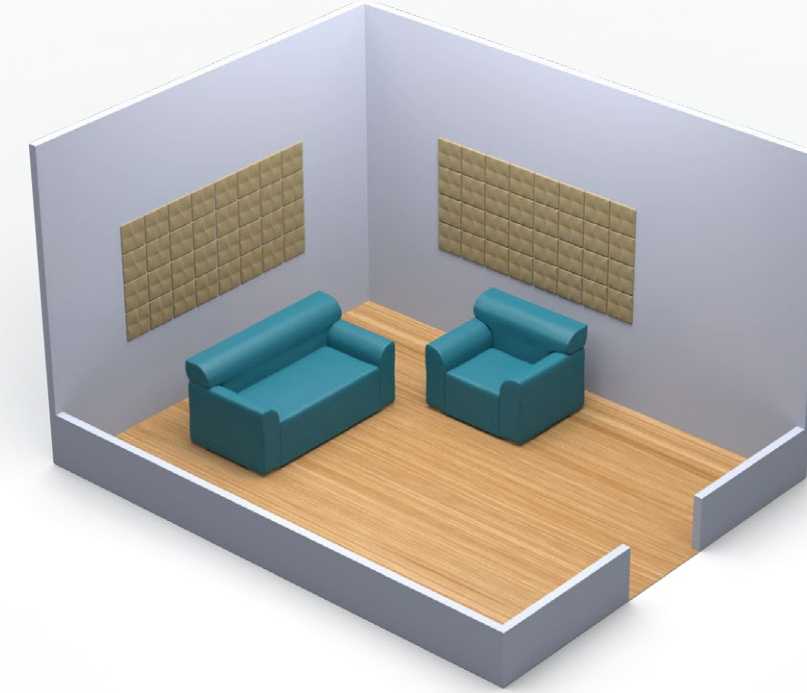


16 HUSH® TILES

6% REDUCTION
in sound
reverberation time

Calculations are illustrative only, based on the following assumptions:

- Frequency range 125Hz - 4000Hz
- Room size
16.4' long x 13.1' wide x 9.8' high
- Flat ceiling, one door (heavy), one window (118.1" glass), lino on concrete flooring, plaster wall

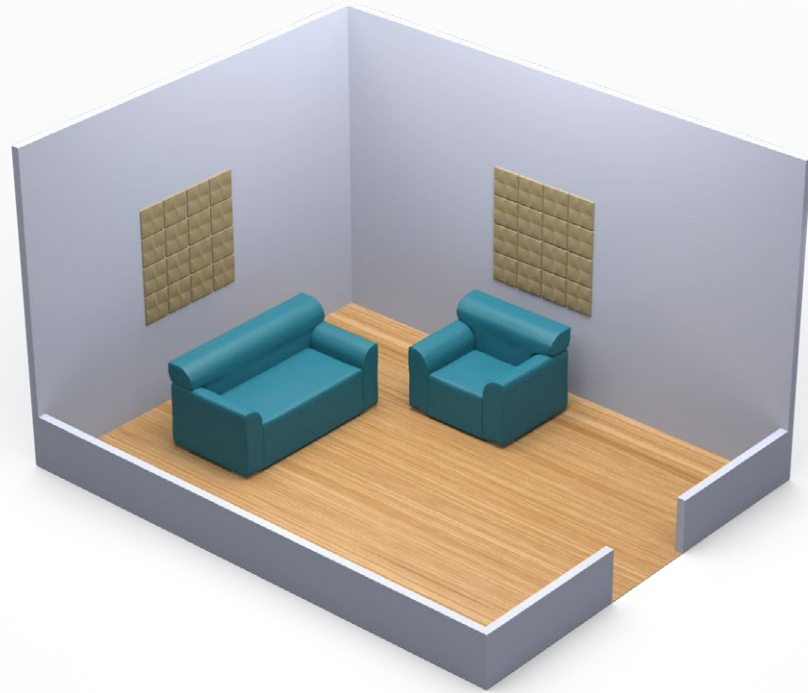


64 HUSH® TILES

15% REDUCTION
in sound
reverberation time

Calculations are illustrative only, based on the following assumptions:

- Frequency range 125Hz - 4000Hz
- Room size
16.4' long x 13.1' wide x 9.8' high
- Flat ceiling, one door (heavy), one window (118.1" glass), lino on concrete flooring, plaster wall

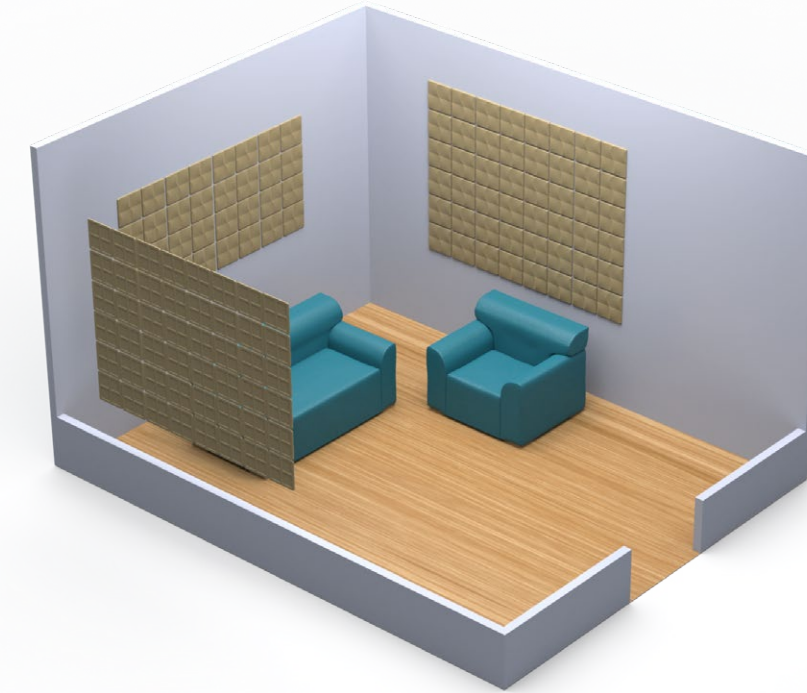


32 HUSH® TILES

8% REDUCTION
in sound
reverberation time

Calculations are illustrative only, based on the following assumptions:

- Frequency range 125Hz - 4000Hz
- Room size
16.4' long x 13.1' wide x 9.8' high
- Flat ceiling, one door (heavy), one window (118.1" glass), lino on concrete flooring, plaster wall



128 HUSH® TILES

24% REDUCTION
in sound
reverberation time

Calculations are illustrative only, based on the following assumptions:

- Frequency range 125Hz - 4000Hz
- Room size
16.4' long x 13.1' wide x 9.8' high
- Flat ceiling, one door (heavy), one window (118.1" glass), lino on concrete flooring, plaster wall

Hear for yourself...

To arrange a demonstration or book a visit to our showroom, please call 800.496.9324

Pineapple Contracts, 2149 Avon Industrial Dr., Rochester Hills, MI 48309

T

800.496.9324

E

inquiries@pineapplecontracts.com

W

us.pineapplecontracts.com

Pineapple