Søuld

Installation Instructions for:

Søuld Acoustic Mats
Søuld Acoustic Mats FR
Søuld Acoustic Boards FR

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1. PLANNING INSTALLATION
2. PREPARATION ON SITE
3. MOUNTING
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1. Planning installation

1.01 NATURAL MATERIAL BEHAVIOR

Søuld products are made primarily of eelgrass, a natural material that expands and contracts in response to air humidity and temperature. The organic matter is inherently variable, leading to slight fluctuations in the products' dimensions and weight as the products adjust to changing conditions.

This natural movement is a characteristic of the material and contributes to its unique aesthetic and functionality.

Acclimatisation, proper installation, and working with tolerances are essential to achieving a good result. By following our guidelines, you will maintain the integrity and beauty of Søuld's natural materials while achieving a durable and high-quality result.

1.02 AREAS OF USAGE

Søuld products are intended for interior use only.

Do not install Søuld's products in:

- Outdoor areas
- Wet or humid rooms, bathrooms, near kitchen sinks
- Uninsulated external walls/ceilings (see 1.03)
- High-traffic or dirty environment

1.03 INSULATION AND DEW POINT

In addition to their strong acoustic performance, Søuld's products also function as highly effective insulation materials. With a lambda value comparable to conventional thermal insulation, they significantly influence the overall insulation performance of the building envelope.
Because of this, it is important to account for how Søuld's products affect the placement of the dew point within the construction.

Before installation, a moisture and dew point calculation should be carried out to ensure that the construction can manage moisture appropriately and that no condensation risk occurs behind the panels.

Søuld's products must not be installed directly on uninsulated basement walls or any cold exterior walls without insulation, as this may lead to moisture issues and potential damage to the construction. The material should always be used in a build-up where insulation and moisture conditions are correctly designed.

1.04 SURFACE FOR MOUNTING

It is important that Søuld is installed on a continuous solid and rigid surface, such as thick plasterboard or wood-based products. If Søuld is instead mounted on joists, perforated boards or similar open sub-structures, the natural material may bend, resulting in an uneven surface.

To meet Søuld's fire classification, installation surfaces/substrates must meet the following end-use conditions:

- Continuous Wood based substrates of reaction to fire class D-s2,d0 and thickness at least 12 mm. See more at **3.04**.

- Continuous A2-s1,d0 and A1 substrates with a density of at least 337 kg/m3 and thickness at least 12 mm. The substrate must be sufficiently rigid to withstand the forces exerted by the bending of Søuld products when they absorb moisture. See more at **3.04**.

1.05 WHICH PRODUCTS TO USE?

At Søuld we provide a diverse range of acoustic solutions—from our Acoustic Mats and Boards to custom Design Solutions allowing you to find the ideal fit for your project. On our website you can compare product families side by side, review their thicknesses, acoustic ratings, fire classifications, recyclability and more. Visit our **Guidelines** section to explore all options and select the version that best meets your technical and aesthetic needs.

1.06 TOLERANCES

During installation, incorporate appropriate tolerances to allow for natural movement. Leave adequate gaps or use flexible joints to accommodate potential expansion and contraction, ensuring long-term stability and visual appeal. See more at **3.03**

2. Preparation on site

2.01 PREPARATION & INSPECTION

Søuld's Installation Instructions are provided as a guide for the installer, and it is the installer's responsibility to complete all necessary preparation. For optimal results the installer must properly assess the conditions of the building and installation surfaces, select the appropriate suppliers/ contractors, and carefully follow Søuld's instructions.

Before beginning the installation, the installer must check the Søuld products they have received and notify Søuld immediately if there are any product defects or non-conformities. Søuld is not responsible for any product adjustments, repairs or replacements after installation.

2.02 TRANSPORTATION & STORAGE

For transport, Søuld recommends stacking a maximum of 10 x Søuld Acoustic Mats and 20 x Søuld Acoustic Boards per pallet. If stacking more, please pack the Mats or Boards in the original Søuld boxes first.

When loading the Mats/Boards, place and stack them with the more porous front side facing upwards.

Søuld Acoustic Mats/Boards must remain flat during transportation and storage. They must be stacked according to their dimensions and mounted on supports to ensure easy handling and lifting and to avoid damaging the material. The edges must be protected whenever the material is handled, especially when unpacking it.

Søuld's products waiting to be installed should be stored in original packaging in a climate-controlled environment without high temperature and relative humidity levels, always avoiding sudden changes in these conditions.

2.03 ACCLIMATISATION

Before beginning installation, Søuld's products must be unpacked and left to acclimatise to the final temperature and humidity conditions of the room/ building for a minimum of 2-3 weeks (see definitions below).

During acclimatisation, the products will adapt to the temperature and humidity conditions that are expected to be present in the use phase of the room/building.

Lack of acclimatisation could result in changes to the products dimensions, weight and performance.

Do not place Mats/Boards directly on a floor with heating or similar.

Method for Søuld Acoustic Mats/Mats FR

- To achieve optimal product acclimatisation, distribute the Mats/Boards separately (not stacked) throughout the site of installation.

Method for Søuld Acoustic Boards FR

- Søuld Acoustic Boards FR might "cup" if they are left out in the open as seperated boards, without being mounted on a stiff backer. Søuld Acoustic Boards needs to be placed in a stack for acclimatisation to prevent cupping. This however needs at least 3-4 weeks, as the acclimasation is extended as the material will adapt to the sorroundings more slow.

2.04 SAFETY

It is necessary to use a mechanical ventilation system an wear a protective face mask and safety glasses when cutting and installing Søuld Acoustic Mats/Boards. This is to protect from the dust and particles that may be emitted and to protect from particles entering the eyes.

2.05 CUTTING

Before cutting, please make sure that the material acclimatisation has been properly done. Søuld Acoustic Mats/Boards are easy to cut using a table saw, circular saw or equal. It is recommended to use a sharp blade to minimize frayed edges.

Only cut one mat/board at a time.

CNC-cutting is also possible with a drag-knife or a oscilating knife. Remember to make a small test before starting on the material for mounting.

2.06 SURFACE CONDITIONS

Clean the installation surfaces before mounting Søuld products. Remove dust, loose particles, dirt and grease. Smooth any rough areas and fill any holes so that the surfaces have a uniform, even level with a maximum surface variation of +/- 2 mm. Be extra careful with painted surfaces to ensure there are no flakes or chipping paint.

Surfaces must be completely dry before installation. Never install Søuld products on a freshly painted surface.

3. Mounting

3.01 TYPES OF MOUNTING METHODS

Søuld acoustic products can be mounted with glue to achieve a seamless and secure installation. This method is suitable for substrates that are stable and meet the necessary conditions for adhesive bonding. Follow these steps to ensure a successful glue-based installation described in section **3.04**.

Using both glue and screws for mounting Søuld products combines the strengths of each method, creating a more secure and versatile installation. This approach is particularly advantageous in scenarios where the substrate's stability is uncertain or when additional support is desired. Here's why you might choose to combine glue and screws. See more in section **3.05**.

3.02 IMPORTANT NOTE ON ALTERNATIVE FIXTURES

Søuld acoustic products are designed to deliver optimal performance and safety when installed according to the methods outlined in this guide. Using alternative fixtures or mounting methods not specified in this guide may result in significant issues, including:

- Acoustic Properties: The acoustic performance of Søuld products relies on proper positioning, alignment, and attachment as described. Alternative fixtures may compromise sound absorption or diffusion, preventing the material from meeting its intended specifications.
- Dimensional Stability: Fixtures that do not provide uniform support (e.g., mounting on open frames or joists without continuous backing) may cause bending or deformation of the panels, affecting both appearance and functionality.
- Fire Safety: Søuld products are fire-rated under specific conditions, including installation on approved substrates. Deviating from the specified methods or using incompatible materials can invalidate the fire safety classification.
- Warranty Void: Any use of alternative fixtures or deviations from the guide may void product warranties or guarantees provided by Søuld.
- To ensure optimal performance, safety, and compliance, always adhere strictly to the installation methods detailed in this guide. If specific project conditions require alternative mounting solutions, consult Søuld for guidance and approval before proceeding.

3.03 Mounting patterns

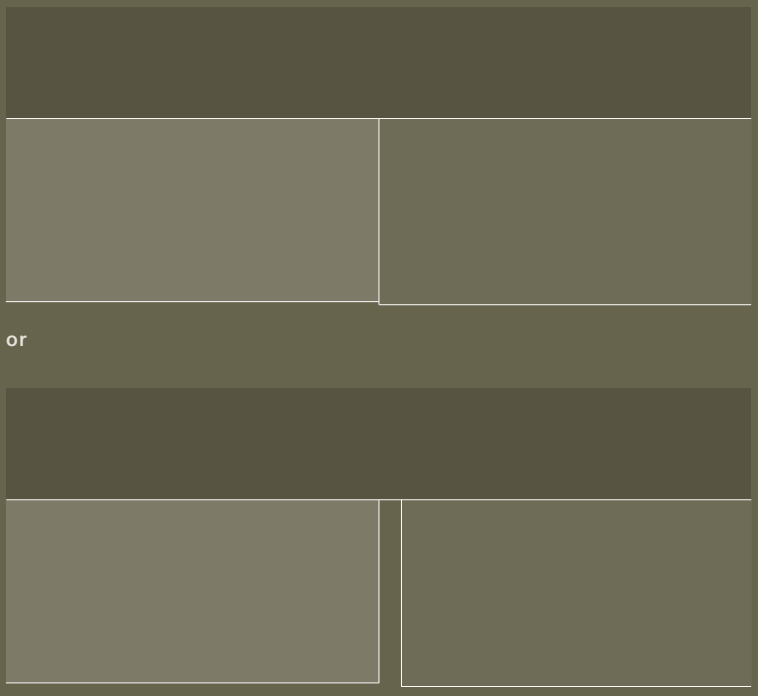
Søuld Acoustic Mats and Boards are made from natural eelgrass, a material shaped by seasonal and environmental factors, as well as the specific locations where it is collected. These factors can lead to subtle variations in color, tone, brightness, and even thickness. Eelgrass collected during different times of the year or from different regions may display unique characteristics, such as lighter or darker shades, and slight differences in material thickness due to its organic nature.

To achieve a harmonious and visually consistent surface, it is important to evenly distribute the products during installation.

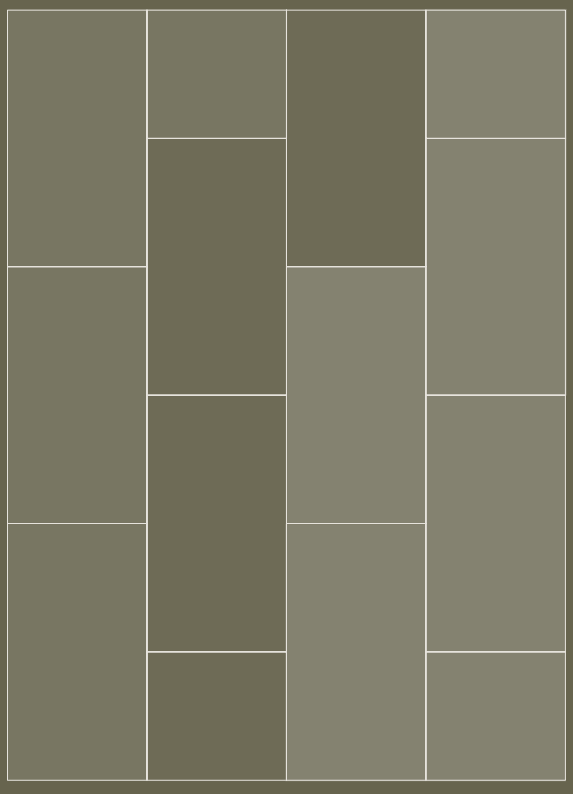
We recommend mixing Søuld Acoustic Mats/Boards from different boxes and pallets to balance these natural variations, creating a cohesive appearance that celebrates the authentic beauty and uniqueness of Søuld's natural materials.

During installation, incorporate appropriate tolerances to allow for natural movement. Leave adequate gaps or use flexible joints to accommodate potential expansion and contraction, ensuring long-term stability and visual appeal.

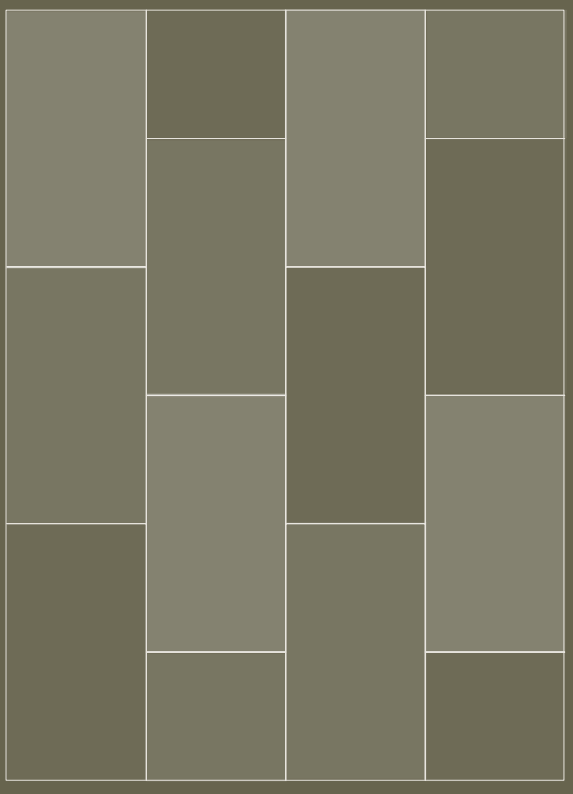
MOUNTING DETAILS - SECTION



UNSUITABLE PATTERNS - PLAN



RECOMMENDED PATTERNS - PLAN



3.04 Mounting with glue

FRONT & BACK

Due to the production process, the front and back sides of Søuld's Acoustic Mats/Boards have a slightly different texture. The front side is the most porous. The back side is harder and more compressed and light. Søuld always recommends installing the mats/boards with the front side facing outwards, into the space. It is important to note that if Søuld Acoustic Mats/Boards are installed with the back side facing outwards, the material's performance specifications will not be fulfilled.

RECOMMENDED GLUES

Danalim - Turbo Tack / Marine Bond & Seal or similar. NOTE: Be very careful not to get glue on the front of Søuld's Acoustic Mats/Boards, as this cannot be removed with a satisfactory result.

REUSE OR RECYCLING

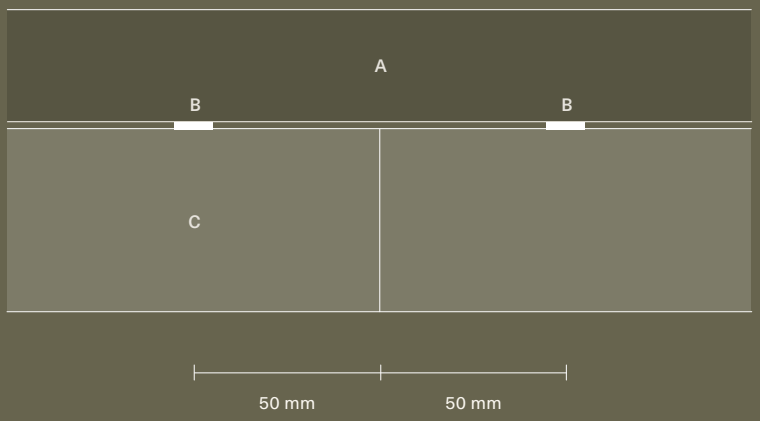
After installation it is possible to carefully dismantle the products from the wall or ceiling and gently pull off the adhesive string. The product can thus be reused 1:1 or sent back to Søuld's factory to be recycled. See more at **chapter 5.**

INSTRUCTIONS

1. Read and follow all the previous steps before proceeding with the Mounting Instructions. Pay careful attention to acclimatisation, surface preparation and safety.
2. Select the necessary equipment for mounting with glue.
3. Place the products in the desired positions, then mark the wall or ceiling with a pencil to form a mounting guide.
4. Before mounting all the mats/boards, mount one Mat/Board to ensure the desired outcome.
5. Apply the glue as strips on the backside of the Mats/Boards. The strips of glue should be approx. 8 mm in diameter and should be placed approx. 100 mm apart.
6. After applying the glue, carefully place the Mats in their desired positions on the walls or ceilings, and carefully press the Mats into place.
7. Mount the mats/boards to the walls or ceilings one-by-one and row-by-row, starting from the lower levels. Ensure the first row is perfectly aligned before moving on to the next row.
8. Leave the Mats/Boards to dry for 48 hours and do not touch or move the mats during drying time.

MOUNTING DETAILS

Technical Drawing



A	Ceiling/wall board or surface *
B	Glue string
C	Søuld

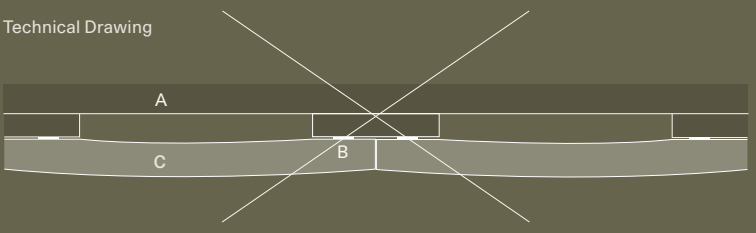
* Wood-based substrates with a reaction to fire class of D-s2,d0, or all A2-s1,d0 and A1 substrates with a minimum density of 337 kg/m^3 and a thickness of at least 12 mm, are suitable. The substrate must be sufficiently rigid to withstand the forces exerted by the bending of Søuld products when they absorb moisture**.

MOUNTING CONDITIONS

Technical Drawing

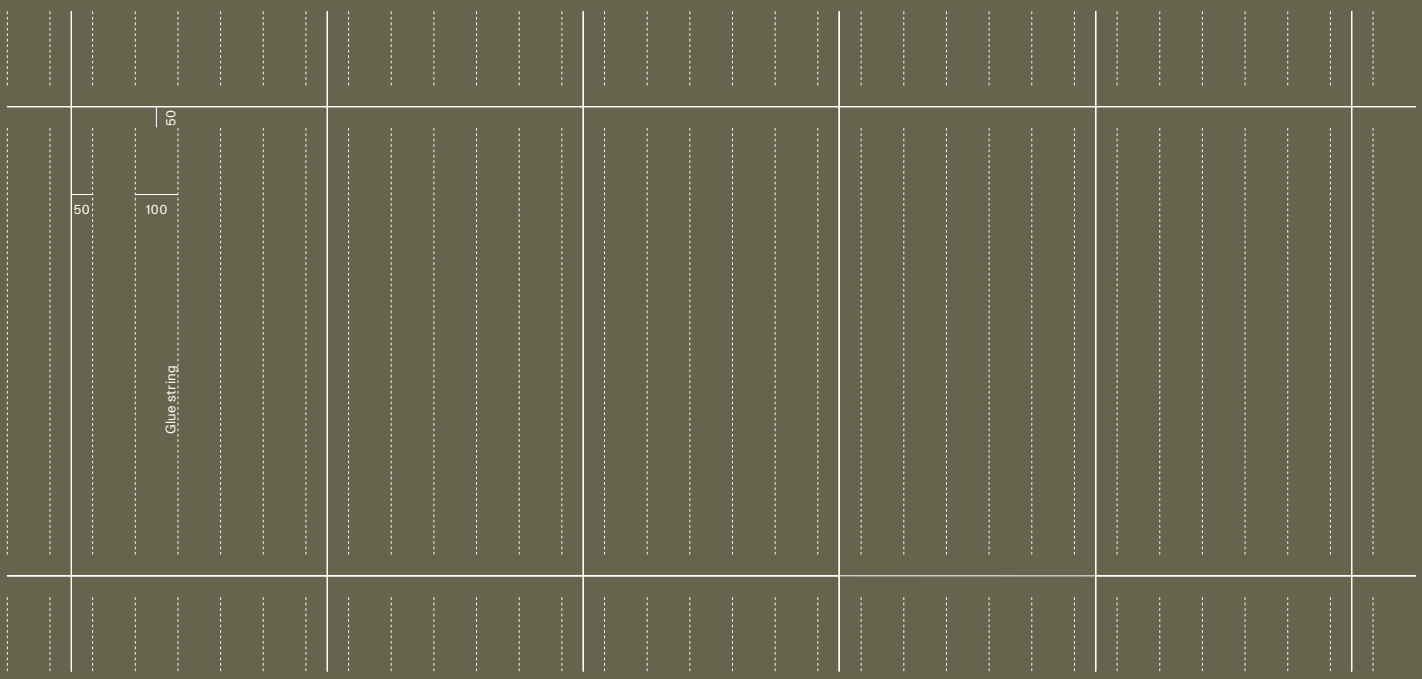
UNSUITABLE MOUNTING CONDITIONS

Technical Drawing

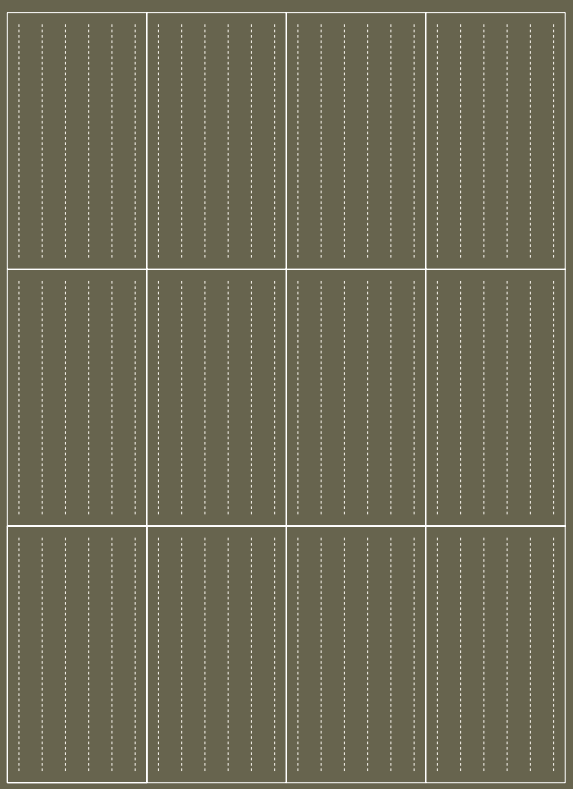


**It is important that Søuld is installed on a continuous solid and rigid surface, such as thick plasterboard or wood-based product*. If Søuld is instead mounted on joists, perforated boards or similar open sub-structures, the natural material may bend, resulting in an uneven surface. To avoid this, Søuld must be continuously mounted on a surface using adhesive.

POSITIONS OF GLUESTRINGS



PATTERNS FOR INSTALLATION



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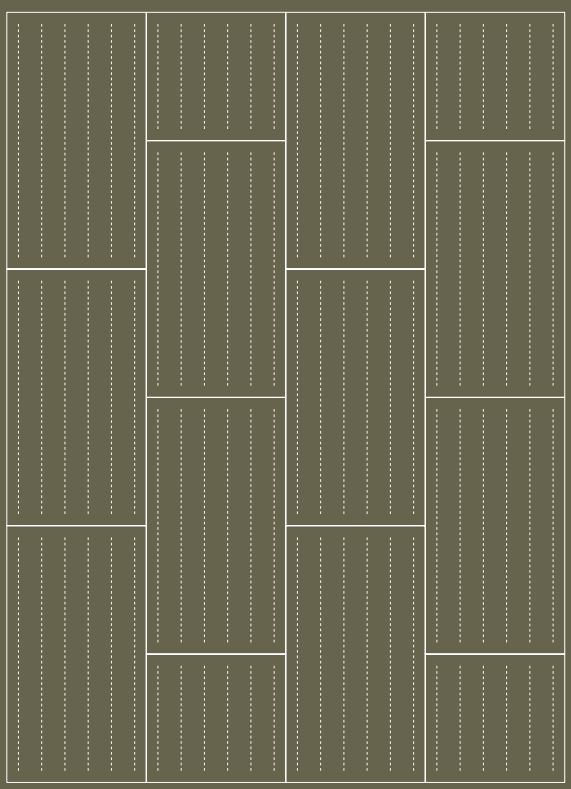


3.05 Mounting with glue + screws

Using both glue and screws for mounting Søuld products combines the strengths of each method, creating a more secure and versatile installation. This approach is particularly advantageous in scenarios where the substrate's stability is uncertain or when additional support is desired.

SELECTING SCREWS

Mounting screws should be selected according to the conditions of each specific installation site, including the type of walls or ceilings. Søuld generally recommends corrosion-treated steel or brass screws with a wide and flat head, plus a washer.

Due to the high salt content of Søuld's eelgrass materials, the steel screws should be protected with a C5 (or Danish A4) class. Søuld recommends selecting screws that are black or a similar colour to the Acoustic Mats/ Boards, or for a subtle colour contrast, select corrosion-protected burnished brass screws.

DISCLAIMER

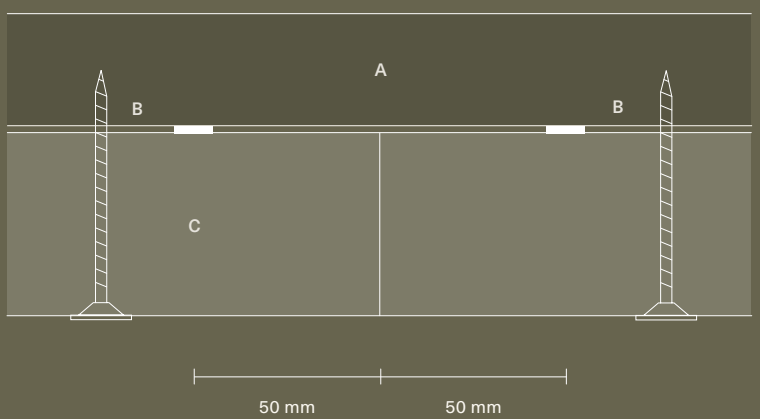
This method of installation with both glue and screw has is not integrated with the Fire-classification report. To obtain the fire-class described in the data-sheets, please use section 3.04.

INSTRUCTIONS

1. Follow the steps in 3.04
2. Select the necessary equipment for mounting with screws.
3. When inserting the screws, do not force or push the screws in too deep as this will deform the material. The screws should be gently tightened, just enough to hold the mats to the walls or ceilings.
4. Mount the material to the walls or ceiling one-by-one and row-by-row, starting from the lower levels. Ensure the first row is perfectly aligned before moving on to the next row.
5. Once all the Mats/Boards are mounted, check if all the screws are evenly placed and adjust if needed. Loosen any screws that are too tight.

MOUNTING DETAILS

Technical Drawing



A	Ceiling/wall board or surface *
B	Glue string & screw
C	Søuld

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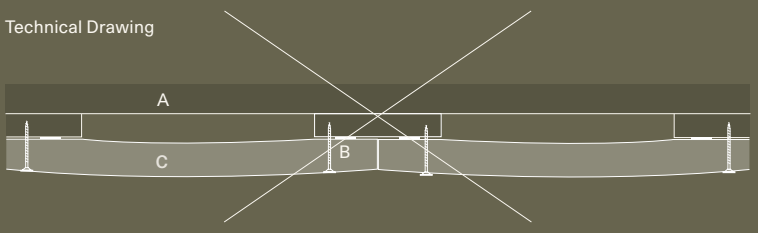
MOUNTING CONDITIONS

Technical Drawing

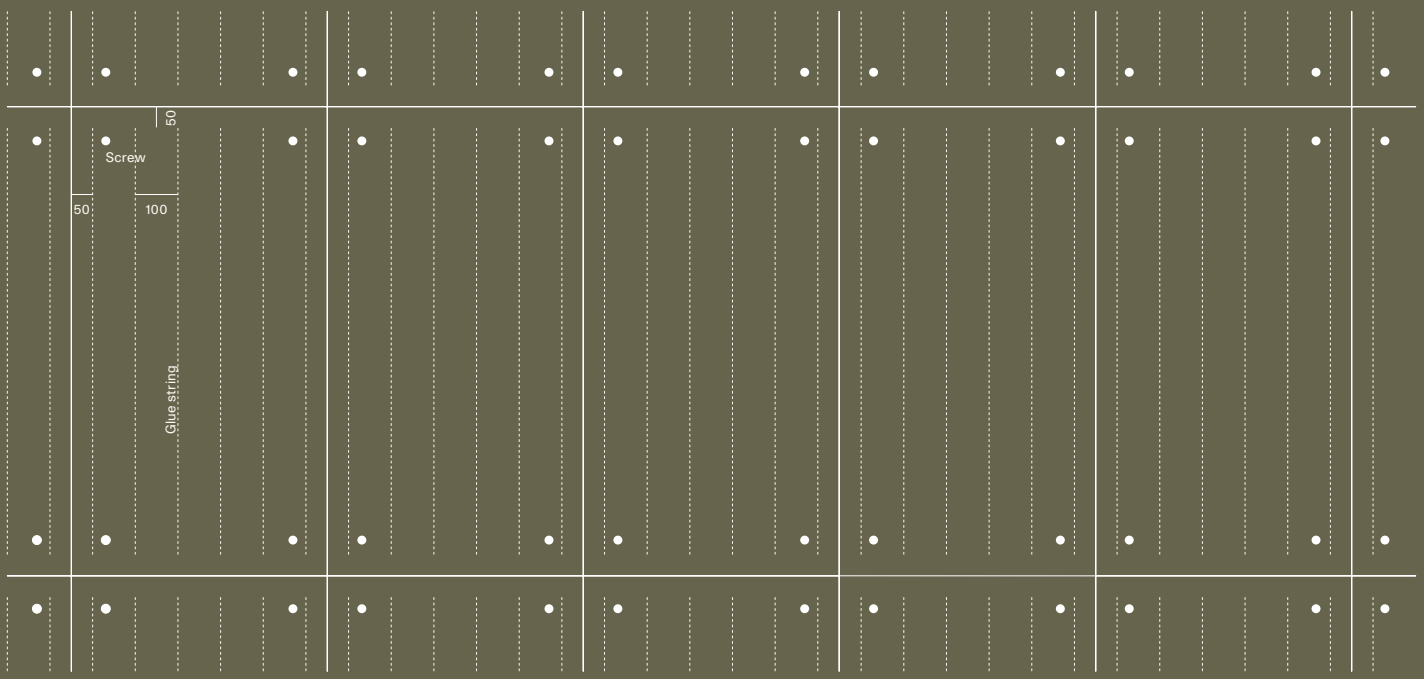
UNSUITABLE MOUNTING CONDITIONS

Technical Drawing

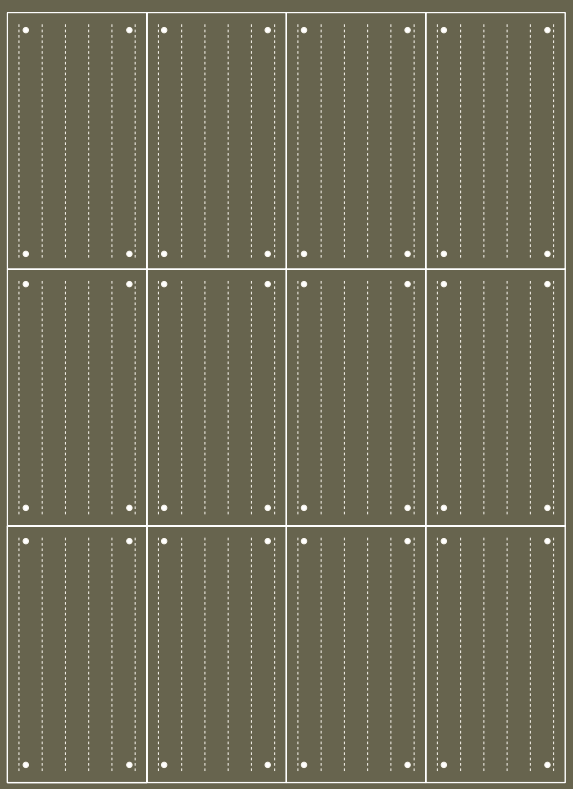


**It is important that Søuld is installed on a continuous solid and rigid surface, such as thick plasterboard or wood-based product*. If Søuld is instead mounted on joists, perforated boards or similar open sub-structures, the natural material may bend, resulting in an uneven surface. To avoid this, Søuld must be continuously mounted on a surface using adhesive.

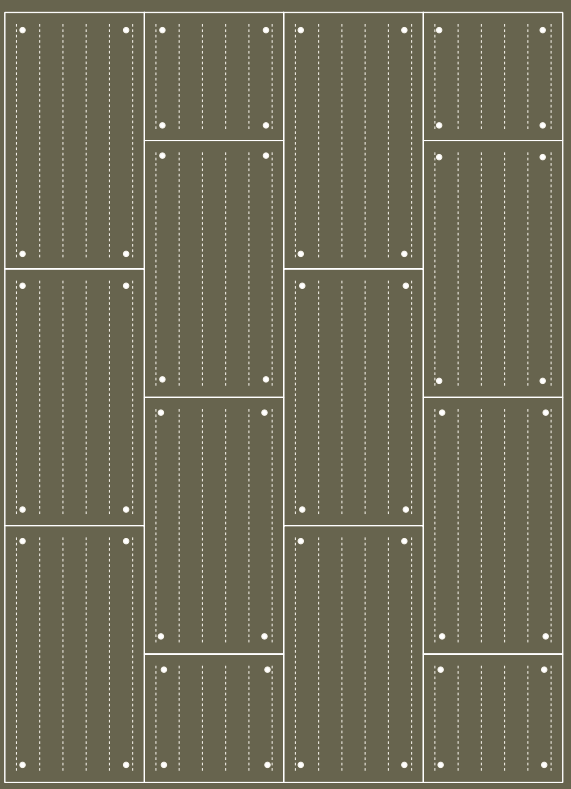
POSITIONS OF GLUESTRINGS & SCREWS



PATTERNS FOR INSTALLATION



PATTERNS FOR INSTALLATION



4. Maintenance & Repairs

4.01 MAINTENANCE

After installation and during everyday use, gently clean Søuld products with a soft duster to remove dust and particles.

To perform a deeper clean, use a vacuum cleaner with a brush attachment, sweeping lightly across the product surfaces. To avoid loosening the product fibres, do not apply too much pressure or drag cleaning equipment across the surfaces.

Do not use scouring pads or any sharp/rough cleaning equipment that could fray the surfaces. Avoid banging or dragging objects across the surfaces.
Do not use commercial cleaning products. Do not use alcohol, stain removers, thinners, acetone, trichloroethylene, ammonia, bleach, vinegar, anti-limescale cleaners, powder cleaners or detergents, or any other products that contain these substances.

4.02 PATINA

Søuld's acoustic products are made from natural eelgrass fibres, which will gradually develop a beautiful patina over time. As part of the material's organic nature, slight variations in colour and texture may occur.

With exposure to natural light and air, the surface will slowly become lighter in tone — similar to solid wood.. This gentle brightening process enhances the authentic and timeless character of Søuld's natural materials, giving each installation a unique and evolving appearance.

4.03 REPAIRS

Søuld's eelgrass products have a consistent fibrous structure throughout the interior and surface. Hence, minor damages to the surface typically will not impact the appearance of the products. Products with significant damage will need to be replaced, as it is not possible to repair damaged mats.

Minor surface damages, where fibers have come loose, can be repaired using an iron set to a maximum of 150°C and a piece of baking paper. Gently glide the iron over the damaged area with the baking paper placed on top. The binder in the material will reactivate, helping to secure the fibers back into place. Leave the baking paper in place until the binder has fully cured. Be cautious not to apply heat for too long at a time, as this may cause dark spots to appear on the surface.

Always test the process on a sample board or mat before applying it to the final product.

4.04 LIFESPAN

Søuld's acoustic materials are designed to have a long life span when installed and maintained correctly. The eelgrass fibres are naturally durable and do not degrade under normal indoor conditions.

When used in dry, stable interior environments and cleaned gently as recommended, the expected service life of Søuld Acoustic Boards and Mats can exceed 50 years — comparable to traditional solid wood and other high-quality natural building materials.

5. Demounting & Take-back

5.01 DEMOUNTING

When your products are no longer in use and need to be dismantled, it is important that the original installation guidelines have been followed. This makes the dismantling process easier. Since relatively thick glue string are used during installation, it is possible to remove them again - see steps in 18.

Steps for demounting:

- Use a strong stiff high-quality spatula and carefully insert it behind the Mats or Boards.
- Work the spatula slowly back and forth until the adhesive starts to release.
- Remove one glue string at a time. Aim to keep the glue string as intact as possible—if it was applied thickly during installation, you may be able to pull it off in one continuous strip.
- If the products are mounted on plasterboard or other porous materials, the surface will likely require some repairs after dismantling.
- The Mats or Boards can be removed in whole pieces and reused in a new setting.
- If any edges on the Søuld products are frayed, they can be trimmed clean with a scissor—or follow the repair steps described in section 4.

5.02 REUSE, RECYCLING & DISPOSITION

Søuld's Acoustic Mats/Boards are designed to be fully circular.
By agreement with the customer, Søuld can take back used Søuld products, shred them down and recycle the fibres. The recycled fibres can be blended into standard Søuld products or used as a base for second-generation Søuld materials.

We reuse our pallets whenever possible. If you have empty pallets from a delivery, they can be returned to us so they can be reused. If you would like us to collect pallets, please request pickup via the link below.

Used Søuld products that are not returned to Søuld can be disposed of via combustion at heating plants.

5.03 TAKE-BACK HOMEPAGE

Simply fill out the form below with the necessary details, and we will get in touch to schedule a pick-up. Once collected, the materials are returned to our production, where they are processed and transformed into new Søuld Acoustic Products or reuse the pallets.

The cost of transporting the material to Søuld's facility shall be covered by the customer.

By returning your materials, you help us minimize waste, reduce the use of virgin resources, and extend the life of our natural, eelgrass-based products.

Click here to enter the platform