

## INSTALLATION INSTRUCTIONS **ACOUSTIC PANELS**

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### IMPORTANT USER INFORMATION

Acoustic Panels are intended for indoor use in normal ambient temperature and humidity conditions and must not be exposed to open flames or hot lighting fixtures.

Acoustic Panels are designed to be permanently attached to permanent wall structures only, as described in these instructions.

Ensure that anyone installing Acoustic Panels has read and understands these instructions. Handle the panels with care; avoid rough handling.

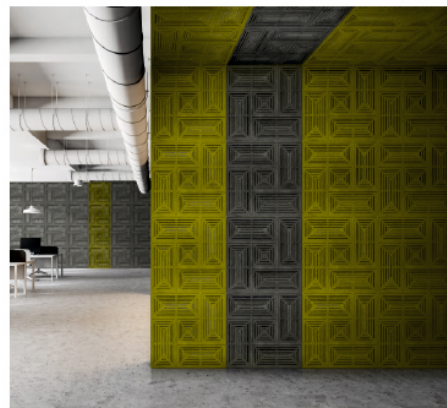
Clean Acoustic Panels only with mild soapy water. If a commercial cleaner is needed to remove a tough stain, use a pH-balanced (neutral) cleaner and test it in an inconspicuous area first to ensure no adverse effects on the surface.

Improper cleaning is not covered under warranty. For cleaning-related questions, please contact your distributor and/or supplier.

Never use excessive amounts of water or liquid cleaners on Acoustic Panels. Like any natural material, it can absorb liquids, requiring extended drying time, which could lead to mold and mildew growth.



UNDERTONE



BUZZER

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Upon receiving your MURATTO wall coverings, inspect the materials to ensure the size, design, and quality meet your order and expectations before installation. Once the material is installed, we cannot provide support if the tiles are found to be non-compliant.

### **BEFORE INSTALLATION**

#### *Storage:*

Store materials flat in a temperature-controlled, dry area, ensuring they are not crushed.

#### *Moisture Check:*

Inspect the building for moisture issues before installation, as these can lead to mold and mildew growth. Do not install if there are signs of moisture damage or infiltration. If unsure about moisture presence, consult an architect, mechanical contractor, or general contractor for proper assessment and recommendations.

#### *Responsibility:*

Muratto is not responsible for quality issues if moisture problems are not resolved before installation.

#### *Mildew Treatment:*

Remove any existing mildew and treat surfaces to prevent future growth.

### **SURFACE PREPARATION**

#### *Substrate Requirements:*

The substrate to which the Muratto Acoustic Panels are installed must be cured, painted or primed, structurally sound, flat, free of voids, dry, clean, and free of any contaminants that would affect adhesion, such as dust, adhesive, drywall compound, etc.

If any of these characteristics are not met, it is imperative to address them prior to installation.

#### *Surface Conditions:*

Ensure the substrate is level, dry, firm, crack-free, and clean of any debris or contaminants that may affect adhesion.

#### *Cleaning:*

Old chalk, adhesive, and oil paint residues should be removed with a steel brush for better absorption. Oil residues must be removed with an alkaline detergent.

#### *Leveling:*

Level uneven surfaces with an appropriate leveling compound. Prime gypsum plaster and

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highly absorbent substrates as needed, following manufacturer guidelines on dilution and drying time.

### *Temperature:*

Do not install at temperatures below +15°C. Ensure the subfloor, adhesive, wall covering, and room air are at the same temperature during installation.

## **ACCLIMATIZATION**

### *Natural Material Consideration:*

Acoustic Panels are a natural product, so the tiles move with changes in temperature and relative humidity (i.e., expand when facing high relative humidity conditions, and/or shrink in low relative humidity conditions).

### *Acclimation Process:*

To minimize inherent movement, packaged tiles should be acclimated on-site for at least 48 to 72 hours before installation.

This must be done under ongoing and operable HVAC conditions (those that will be maintained at consistent temperature and relative humidity conditions on an ongoing basis).

**Note:** as with other natural materials, do not install in a non-conditioned space (i.e., wherein the HVAC is not operable) and later turn on the HVAC system, as temperature and humidity changes can cause excessive product movement. Acclimation is achieved by opening the boxes of the Organic Blocks, removing the panels, and allowing air to flow between the individual pieces in the climatized space where the material will be installed.

## **LAYING**

Muratto tiles are natural products, and shade variations are inherent and visually appealing.

To ensure a balanced appearance, shuffle tiles before installation.

Read these instructions carefully, along with relevant national standards and the adhesive manufacturer's guidelines, before beginning installation.

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### TOOLS REQUIRED

Drill, drill bit, cordless screwdriver, cutting machine, pencil, tape rule, fizing screws, wallplugs, wood strips / fastening rails, level tool, Muratto special clips, acoustic membrane.

### MEASUREMENTS

Installing Muratto Acoustic Panels necessitates thorough planning and precise measurements to ensure a successful installation.

#### STEP 1:

Begin by measuring your wall's horizontal and vertical dimensions to determine the number of panels and wood strips required for fastening. This careful preparation will facilitate a seamless and efficient installation process.

#### STEP 2:

**Cut the Fastening Rails:** Prepare structurally sound wood or metal strips by cutting them to the required length. Each rail should measure approximately 45 mm (1-3/4") in width and 70 mm (2.75") in depth.

**Position the Rails:** Install the fastening rails vertically, ensuring they are spaced 25 cm (9-7/8") apart, measured from the center of one rail to the center of the next. Use a level to confirm that all rails are perfectly vertical, which is crucial for the proper alignment of the panels.



**Drill the Fastening Rails:** Vertically drill holes through the 70 mm (2.75") depth of each rail at intervals of 60 cm (23-5/8") to 70 cm (27-9/16").

**Prepare the Wall:** Ensure the wall is level and flat before installation. While minor irregularities can be adjusted using spacers or shims, it's best to start with a properly prepared surface.

**Install Anchors:** If the fastening rails are not being attached directly to a structural substrate (such as wood, steel, or concrete), install appropriate anchors (e.g., drywall or concrete anchors) into the wall.

**Attach the Fastening Rails:** Apply a suitable adhesive along the length of each rail to reinforce the bond. Then, affix the rails to the wall using appropriate screws, ensuring they are securely fastened.

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**Position Starting and Finishing Strips:** Place a starting and finishing wood strip close to each wall corner, independent of the other rails, to ensure a clean and professional finish.

### STEP 3:

To install the acoustic substrate between the fastening rails for Muratto Acoustic Panels, follow these steps:

**Select Acoustic Material:** Use 40 mm (approximately 1.5 inches) thick cotton insulation (rolled) or rigid mineral wool. While our testing is based on mineral wool, cotton provides similar results.



**Cut to Fit:** Measure and cut the acoustic material to fit snugly between the installed fastening rails.

**Adhere to Wall:** Secure the acoustic material to the back wall cavity between the rails using a suitable construction adhesive or by fastening it to the sidewalls of the rails.

**Maintain Air Gap:** Ensure there is an air gap between the acoustic substrate material and the Acoustic Panels to achieve optimal Noise Reduction Coefficient (NRC) values.

### IMPORTANT NOTES

When installing Muratto Acoustic Panels, it's important to note that alternative installation methods can affect the panels' sound absorption and Noise Reduction Coefficient (NRC) values:

- **Without Acoustic Material Substrate:** Installing the panels directly onto fastening rails without an acoustic substrate will decrease the NRC by approximately 0.1 (e.g., to 0.6 for Undertone and 0.7 for Buzzer). In this case, it's recommended to reduce the thickness of the fastening strips to 40 mm (approximately 1.5 inches).

- **Direct Glue Method:** Applying the panels directly to the substrate using adhesive, similar to the installation method for the Organic Blocks Design Blocks series, will result in NRC values roughly half of those achieved with the standard method involving rigid insulation and an air gap between fastening rails.

These alternative methods may be suitable for applications where reduced sound absorption is acceptable.

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### STEP 4:

Start the installation at the left-end corner. Ensure the groove sides are facing upwards and to the right.

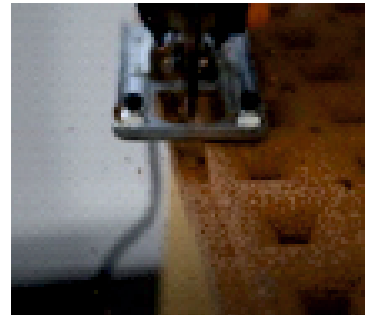
Place the first panel directly into the corner of the wall.



Cut off both tongue sides of the first plank in the first row.

Then, remove the bottom tongue from the remaining planks in the first row.

Ensure the panels are perfectly level using a spirit level.



Cutting Panels – Use a circular or reciprocating saw with the appropriate blade.

If the saw cannot cut through the entire panel thickness, complete the cut using a knife, handsaw, or another suitable tool.



Install the panel with the groove side facing upwards and to the right, as shown in the picture.





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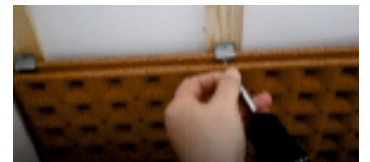
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### STEP 5:

Secure the first panel by attaching Muratto clips and fixing screws to the horizontal groove side, as shown in the picture.



Fix each panel using two Muratto clips - one on the leftmost fastening rail and one on the center fastening rail.



### STEP 6:

Interlock the next panel on the right side of the current row and secure it using Muratto clips.

Continue installing the remaining panels until you reach the end of the row.



If you do not end on a full piece, cut off the last panel of carefully measure to ensure all panels line up and the edge the row as it is shown in the picture, making sure to detail is as planned.



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### **IMPORTANT NOTES**

Panels can also be installed directly onto the wall without fastening rails. In this case, ensure the wall is completely flat and use the appropriate adhesive.

However, this installation method will result in lower acoustic performance compared to the standard application.

### **FINAL INSPECTION AND CLEANING**

Check the entire installation for any misaligned tiles or gaps and make necessary adjustments.

Use a clean, damp cloth to wipe away any dust or residue.

### **POST-INSTALLATION CARE**

Avoid moisture exposure for at least 48 hours after installation.

Regularly clean with a dry or slightly damp cloth to maintain the appearance of the Acoustic Panels.

If needed, consult the supplier for recommended maintenance practices.

### **GENERAL**

The information in these installation instructions is meant to provide guidance to the installer on installing the Acoustic Panels, and under no circumstance will Muratto be liable for installation issues and/or costs (whether direct, indirect, special, incidental, or consequential damages resulting from the use or guidance provided herein).

These guidelines are not intended to cover all possible conditions and situations that might occur. The end user must exercise caution and common sense when assembling or installing Muratto products.

Should you have any questions, please contact Muratto and/or the partner for help and/or additional information.

Thank you.