

# **MUTO BINARIO**

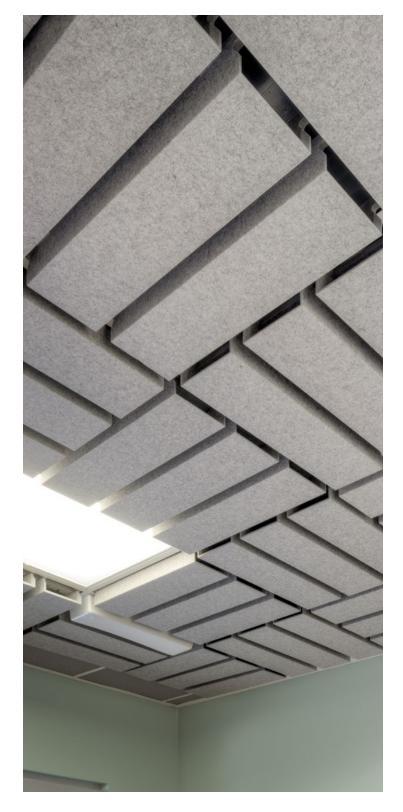
# acoustic ceiling tile solutions

Standard ceiling grid? Take it to the next level with Binario. Optimal acoustic performance and the ability to design the way you want. Available in 21 standard core colors, WOODED print or color print options. Choose from small baffles, large baffles, 2x2 and 2x4 tile sizes and even horizontal or vertical baffles. We've given you everything you need to make ceilings that matter.

Make It Cool. Make It Quiet.

### **SPECIFICATION**

| CONTENT        | 100% POLYESTER (PET) FELT   |  |  |  |  |  |
|----------------|---|--|--|--|--|--|
| CORE THICKNESS | 1/2" (12MM)   |  |  |  |  |  |
| PATTERN        | BINARIO 01 (2x2) BINARIO 02 (2x2) BINARIO 01 H (2x4) BINARIO 02 H (2x4) BINARIO 01 V (2x4) BINARIO 02 V (2x4)   |  |  |  |  |  |
| TILE SIZE      | 24" x 24" OR 24" x 48" (NOMINAL)  |  |  |  |  |  |
| COLORWAYS      | 21 STANDARD SOLID COLORS<br>8 WOODED PRINT GRAINS<br>4 PRINT COLORS   |  |  |  |  |  |
| WEIGHT         | 3 IBS EACH (2x2)   7 LBS EACH (2x4)   |  |  |  |  |  |
| ACOUSTICS      | 0.85 - 0.95 NRC   |  |  |  |  |  |
| FIRE RATING    | CLASS A   ASTM - E84  |  |  |  |  |  |
| ENVIRONMENTAL  | DELCARE, MINDFUL MATERIALS & GREENGUARD GOLD CERTIFIED. MUTO IS PRODUCED FROM 100% RECYCLABLE PET FELT WITH A MINIMUM OF 60% PRE-CONSUMER RECYCLED CONTENT. |  |  |  |  |  |
| COLORFASTNESS  | IN ACCORDANCE WITH ATCC 16.3 OPTION 3 THE COLOR CHANGE to LIGHT AT 20 AFU WAS 4.5.  |  |  |  |  |  |
| FINISH         | MATTE   |  |  |  |  |  |
| APPLICATION    | INDOOR USE ONLY   |  |  |  |  |  |
| LEAD TIME      | 2 - 4 WEEKS   |  |  |  |  |  |
| WARRANTY       | 2 YEARS   |  |  |  |  |  |



### **TOLERANCE**

PET core is a soft fibrous material. All dimensions and squareness are subject to +/- 1/16" tolerance.

### **MAINTENANCE**

Vacuum to remove dirt and dust. Remove spills or spots immediately using a clean damp cloth. Carpet and fabric cleaners can also be used to clean. (Always test an inconspicuous area first.) Compressed air may be used to dust in difficult or hard-to-reach areas.

To disinfect, bleach can be used in accordance with CDC Cleaning & Disinfection instructions. The solution ratio is 5 tablespoons of bleach to 1 gallon of water | 4 teaspoons of bleach to 1 quart of water. Apply solution by spray and wipe off immediately. (Always test in an inconspicuous area first.)



### **COLOR**

### **MATTE COLOR**

27 STANDARD COLORS CUSTOM PRINT COLORS AVAILABLE (CONTACT YOUR LOCAL SALES REP) 100% RECYCLABLE PET FELT

### **TOLERANCES**

PET felt is made from 100% recyclable polyester plastic. Variation in depth will occur. Slight and conistent variations in color, density, texture are inherent to this core material and should be expected. Color, density and texture will vary by dye lot. MUTO is made with a 'felting' process which results in a textural heathered effect where the fibers consist of multiple tones and shades.



### **WOODED COLOR**

### **MATTE FINISH**

12 PRINTED WOODED GRAINS 1/2" CORE THICKNESS 100% RECYCLABLE PET FELT

### **TOLERANCES**

PET felt is made from 100% recyclable polyester plastic. Slight and consistent variations in color, density, texture are inherent to this core material and should be expected. Color, density and texture will vary by dye lot. MUTO is made with a 'felting' process which results in a textural heathered effect where the fibers consist of multiple tones and shades.

Please request physical samples as colors are represented differently with different computer monitors.



WHITE WASHED OAK BLONDE MAPLE





NATURAL ASH



AGED ASH



SMOKED ASH



AMBER ASH



WARM WALNUT



NATURAL WALNUT



**BLACK WALNUT** 



WEATHERED PINE



CARBON WALNUT



CHARRED OAK

### **PRINT COLOR**

### **MATTE FINISH**

4 PRINTED STANDARD COLORS 1/2" CORE THICKNESS 100% RECYCLABLE PET FELT CUSTOM PRINT COLORS AVAILABLE (CONTACT YOUR LOCAL SALES REP)

### **TOLERANCES**

PET felt is made from 100% recyclable polyester plastic. Slight and consistent variations in color, density, texture are inherent to this core material and should be expected. Color, density and texture will vary by dye lot. MUTO is made with a 'felting' process which results in a textural heathered effect where the fibers consist of multiple tones and shades.

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**DESERT ROSE** 



DARK CLAY



RIVER

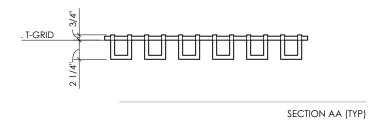


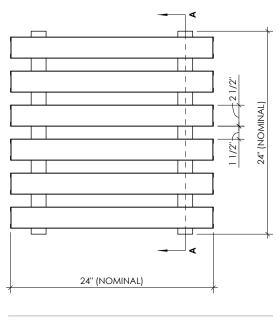
SAP GREEN

# SIZE | BINARIO 01

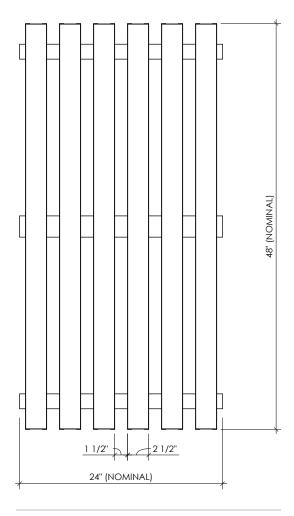
### **TILE DIMENSIONS**

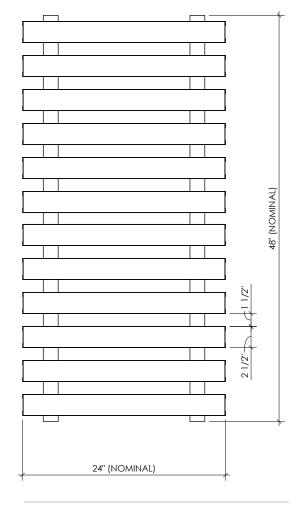
BINARIO 01 (2x2) - 24" x 24" NOMINAL BINARIO 01 H & V (2x4) - 24" x 48" NOMINAL





BINARIO 01 (2x2)





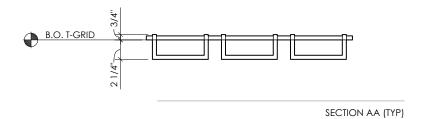
BINARIO 01 V (2x4)

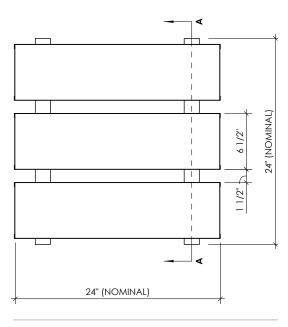
BINARIO 01 H (2x4)

# SIZE | BINARIO 02

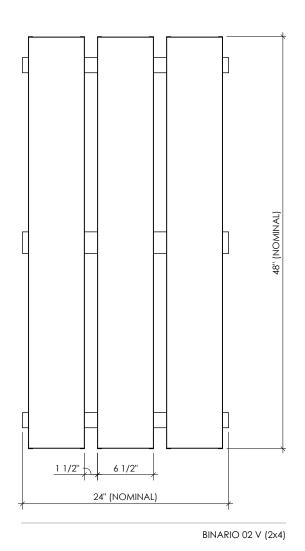
### **TILE DIMENSIONS**

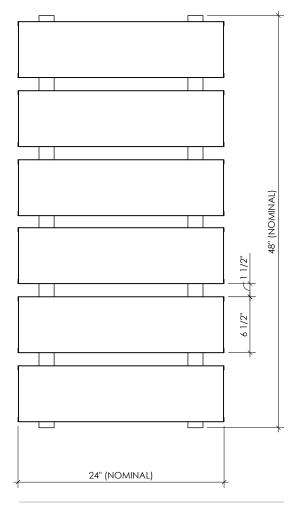
BINARIO 02 (2x2) - 24" x 24" NOMINAL BINARIO 02 H & V (2x4) - 24" x 48" NOMINAL





BINARIO 02 (2x2)





# **ASSEMBLY & INSTALLATION** STEP ONE STEP TWO STEP THREE STEP FOUR

STEP FIVE

### FIELD CUTTING INSTRUCTIONS

### **CUTTING**

BINARIO TILES CAN BE CUT AND MODIFIED FOR VARIOUS SITE CONDITIONS. PLEASE NOTE: YOU CANNOT CUT BAFFLES AS THEY WILL LOSE THEIR STRUCTURE. ONLY TILE STRUT MAY BE CUT.

WHEN CUTTING, BE SURE TO USE SHARPENED TOOLS TO AVOID ANY OVERHEATING OF THE PET MATERIAL. A UTILITY KNIFE WITH A NEW BLADE MAY ALSO BE USED. THE FOLLOWING TOOLS ARE RECOMMENDED:

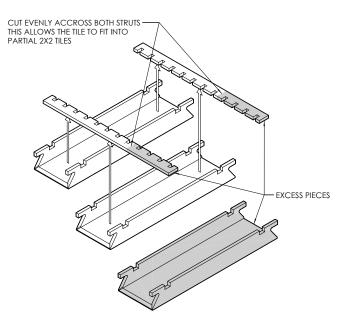
HAND SAW - USE A FINE TOOTHED BLADE. HOLD THE BLADE AT A LOW ANGLE AND CUT SLOWLY WITH **REGULAR STROKES** 

TABLE SAW OR CIRCULAR SAW - USE A FINE TOOTHED BLADE WITH 80 TEETH OR MORE. CARBIDE TIPPED BLADES ARE RECOMMENDED FOR EXTENSIVE CUTTING OR LARGE QUANTITY OF PANELS. ALLOW THE PANEL TO PASS THROUGH THE SAW WITH EVEN PRESSURE AVOIDING UN-NECESSARY FORCE. TAKE CAUTION TO AVOID OVERHEAT-ING THE MATERIAL WITH THE BLADE.

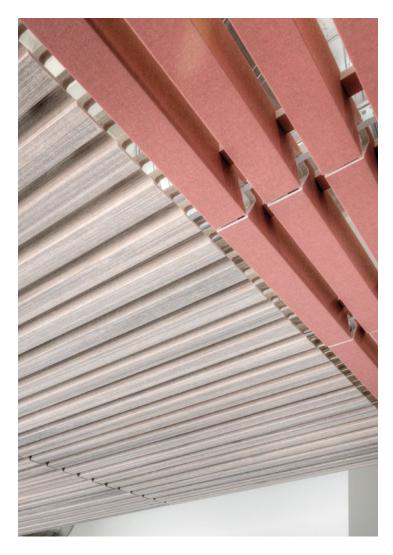
JIG SAW - USE A FINE TOOTHED BLADE SUITED FOR FINISH WOODS AND PLASTICS. IF ADJUSTABLE, USE SLOWER SPEEDS AND STEADY MOVEMENT AND PRESSURE. CAREFULLY CLAMP ALL PANELS TO AVOID VIBRATION OR MOVEMENT WHEN CUTTING AND SUPPORT THE PANEL AT ALL TIMES.

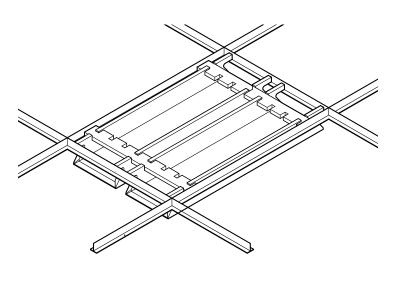
CAREFULLY CONFIRM ALL CEILING CONDITIONS TO ENSURE PROPER DIMENSIONS BEFORE CUTTING. USE BLUE TAPE BEFORE MARKING THE FACE OF A TILE WITH PENCIL. MARKS WILL NOT ERASE FROM THE SURFACE.

\*\*\*PLEASE NOTE: IF YOUR CEILING CONDITIONS DO NOT ALLOW FOR TRIMMING BINARIO AS SHOWN BELOW, PLEASE ORDER SLAB CEILING TILES FOR OTHER CONDITIONS TO ACCOMMODATE MEP (MECHANICAL, ELECTRICAL & PLUMBING) COMPONENTS.





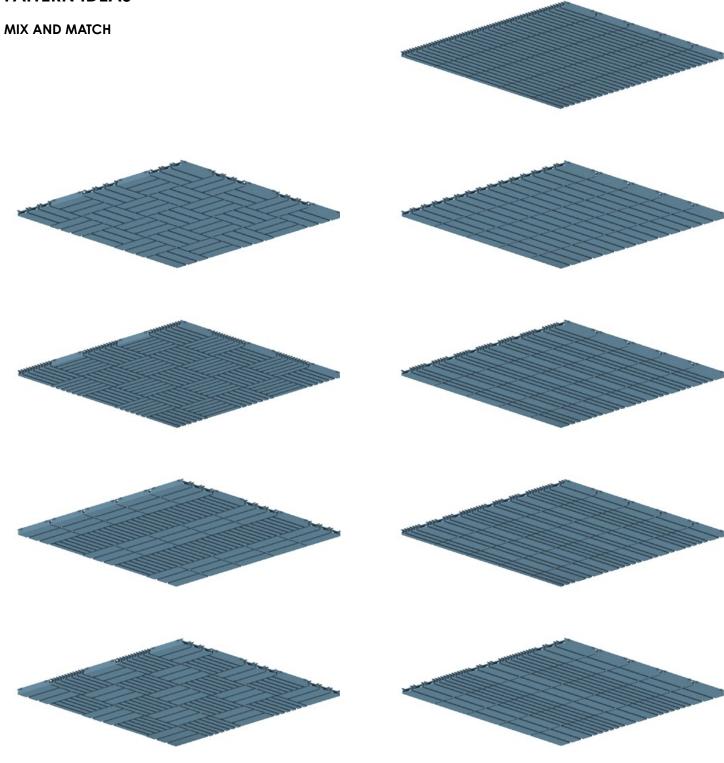




TRIMMED TILE IN T-GRID



# **PATTERN IDEAS**



### **ACOUSTICS**

### **APPARENT NRC RATINGS**

NRC values are typically used for flat surfaces of a given surface area, e.g. carpet or wall coverings. When rating hanging objects that are

spread out, the 'Apparent NRC' is used.

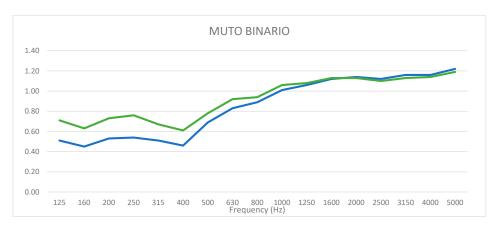
### WHAT IS NRC?

NRC is an acronym for Noise Reduction Coefficient. This is a convenient single rating for assessing the absorbency of a material.

This can be used to predict its efficacy for reducing reverberation within a room. NRC the absorption coefficients at 125 Hz, 250 Hz, 500 Hz and 1,000 Hz, rounded to the nearest 0.05.

### WHY NOT STC?

STC (Sound Transmission Class) is a value used to describe the amount of sound that passes through a barrier. This can be given to a material or an entire wall assembly. If you need to assess how well a barrier can block sound between rooms you'll need to know the STC rating. Acoustic baffles are not used to physically divide rooms, but rather to absorb noise within a room. Problematic noise in a room is called reverberation. This can manifest as droning or ringing sound when people are speaking, or in the worst case: an echo. For this reason, NRC or SAA are the appropriate rating systems for treating reverberation issues.



| PRODUCT    | MOUNTING |   | SAMPLE FREQUENCY (Hz) |      |      |      |     |        |  |  |  |
|------------|----------|---|-----------------------|------|------|------|-----|--------|--|--|--|
|            |          |   | 250                   | 500  | 1000 | 2000 | NR  | C SAA  |  |  |  |
| 01 (SMALL) | E400     | α | 0.54                  | 0.69 | 1.01 | 1.14 | 0.8 | 5 0.83 |  |  |  |
| 02 (WIDE)  | E400     |   | 0.76                  | 0.78 | 1.06 | 1.13 | 0.9 | 5 0.91 |  |  |  |

### **ENVIRONMENTAL**

### **DECLARE, MINDFUL MATERIALS** & GREENGUARD GOLD CERTIFIED

We care about the environment and it matters that our materials support healthy and productive interior spaces. We use innovative materials but ensure that they meet the highest level of standards and expectations.

MUTO PET felt core material is 100% recyclable with no added urea formaldehvde.





