

# **MUTO BORDO**

## acoustic ceiling solutions

With large open-concept floor plans and fast paced office culture comes noise. MUTO Quadro ceiling baffles are your solution for ceilings that speak softly. Manufactured with a 1/2" wrapped stiffener for increased rigidity and structure and optimal sound absorption, sound control just got a whole lot easier with MUTO.

Make It Cool. Make It Quiet.

#### **SPECIFICATION**

CONTENT	100% POLYESTER (PET) FELT
CORE THICKNESS	1/2" (12MM)
BAFFLE THICKNESS	1 1/2" (38MM) WITH STIFFENER
COLORWAYS	27 COLORWAYS
SIZE	MIN LENGTH: 24" (NOMINAL) MAX LENGTH: 108" (NOMINAL) DEPTH: 11.5" OR 15.5"
WEIGHT	0.8 LB   SQUARE FOOT
HARDWARE	1/4 - 20 CONNECT OR STRUTCLIP
ACOUSTICS	0.65 - 1.05 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



#### **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.)



## **HOW TO SPECIFY**

It is easy to specify Bordo with four simple steps.

#### **CHOOSE YOUR COLOR**

Select from 27 beautiful solid colors or a combination of colors to make Bordo baffles uniquely yours

#### **DECIDE ON BAFFLE DEPTH**

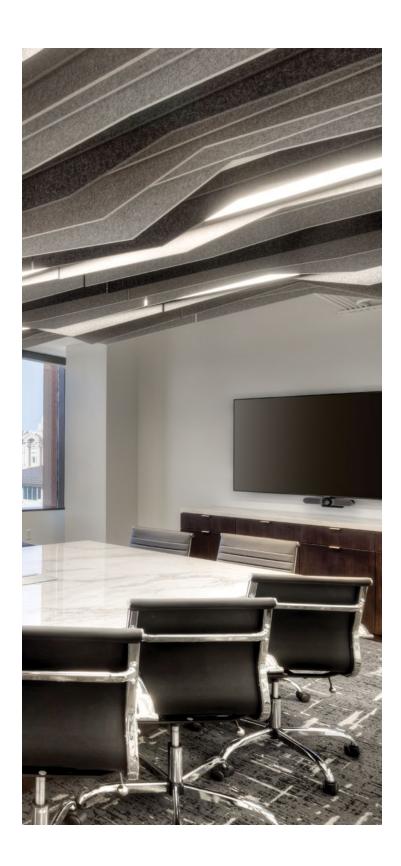
With 11.5" or 15.5" depth options, select the baffle height that fits your ceiling conditions.

#### PROVIDE RCP OR BAFFLE LENGTHS

Baffle lengths range from 24" to 108". Provide your RCP and we'll lay out your baffles or indicate your desired baffle length and quantity.

#### **SELECT HARDWARE**

With 1/4 - 20 Connect or StrutClip hardware options, we make your installation simple and easy.



#### **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.



## SIZE

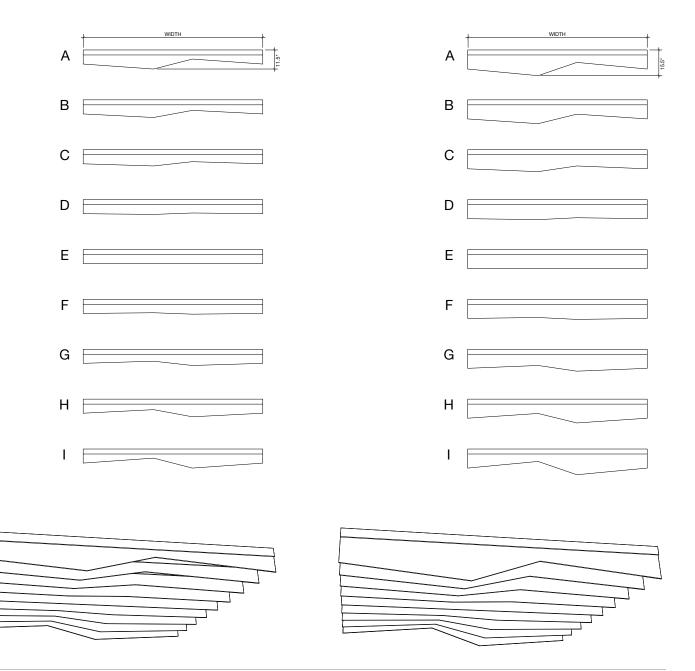
#### **BAFFLE DIMENSIONS**

LENGTH: 24" - 108" (NOMINAL) MAX DEPTH: 11.5" OR 15.5"

#### HARDWARE SPACING

48" OC SPACING FOR 5' LENGTH OR LONGER

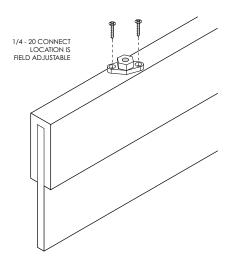




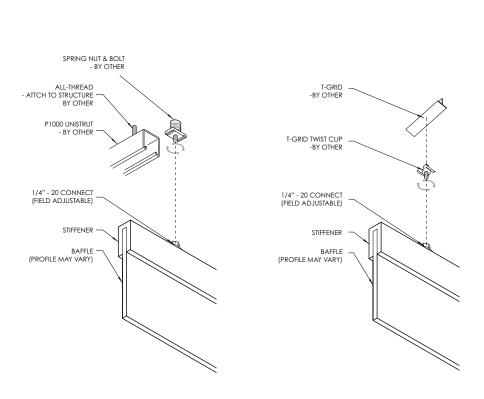
#### **HARDWARE**

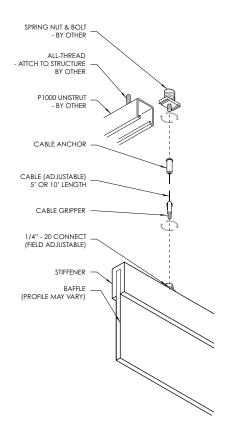
## 1/4 - 20 CONNECT CONNECTION

1/4" - 20 THREADED CONNECT 2 COUPLERS PER BAFFLE FACTORY INSTALLED CONNECT CAN DETACH AND BE RELOCATED IN FIELD CONNECT CAN ATTACH TO ANY 1/4" - 20 SYSTEM







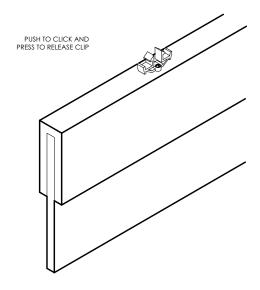


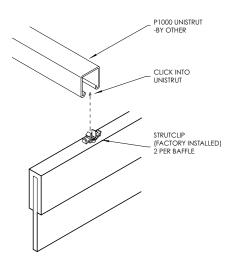
1/4 - 20 CONNECT INSTALLATION OPTIONS

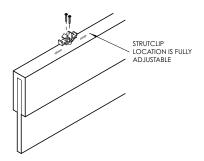
## **HARDWARE CONTINUED**

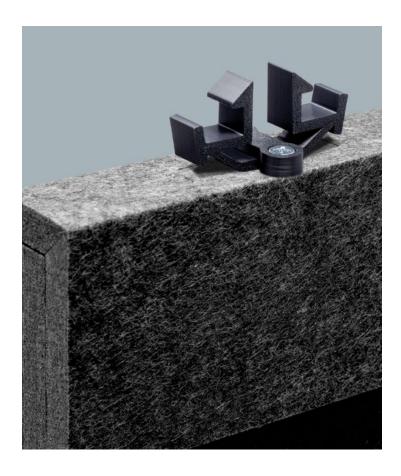
#### STRUTCLIP CONNECTION

FOR UNISTRUT INSTALLATION ONLY UNISTRUT PROVIDED BY OTHERS 2 STRUTCLIP HARDWARE PER BAFFLE FACTORY INSTALLED STRUTSNAP CAN DETACH AND BE RELOCATED IN FIELD



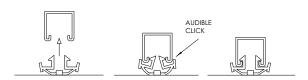






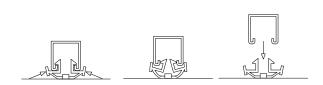
#### **INSTALLATION**

**ENGAGE STRUTCLIP** P1000 UNISTRUT BY OTHER



INSERT STRUTCLIP INTO UNISTRUT. YOU WILL HEAR AN AUDIBLE CLICK.

DISENGAGE STRUTCLIP P1000 UNISTRUT BY OTHER



TO REMOVE, SQUEEZE TABS ON BOTH SIDES AND BAFFLE WILL DROP FROM UNISTRUT. FOR BAFFLES LONGER THAN 48", TWO INDIVIDUALS ARE REQUIRED FOR BAFFLE REMOVAL.



#### **ACOUSTICS**

NRC values in the United States use the ASTM C423 for an industry wide standard for testing acoustic baffles.

The previous test: ASTM C423-17: "Standard Test Method for Sound **Absorption and Sound Absorption** Coefficients by the Reverberation Room Method." has been replaced in 2023 with ASTM C423-23.

This latest version removes ambiguity regarding the surface area used to calculate the NRC values.

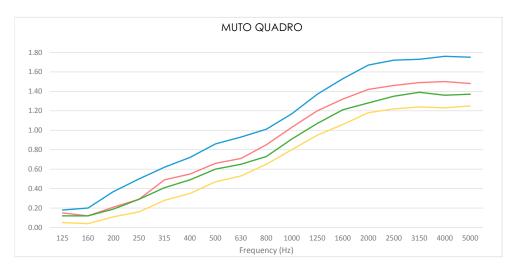
Previous Soelberg NRC values for hanging baffles have used ASTM C423-17 with the total sound absorption divided by the total surface area of the test surface covered by the hanging baffles, including intermediate spaces. This is more conservative than other calculation methods, but is most representative of the intended use of our baffles.

As of July 2023, Soelberg has adapted all of our NRC tests to the latest method: ASTM C423-23.

The new standard is more precise, avoiding the ambiguity inherent in C423-17. The new C423-23 also includes an additional 12" of space in the baffle array for all tests. This was not included in the previous test standard, and may cause the final NRC value to decrease sliahtly.

Soelberg strives to have the most precise acoustic data possible, and is the first manufacturer to adopt the new standard to our knowledge.

Please confirm that the ASTM C423-23 method was used when comparing competing products.



PRODUCT	MOUNTING	AMI	PLE FREQUENCY	(Hz)				
	@ 12" O.C.		250	500	1000	2000	NRC	SAA
7.5"	$J_1$	α	0.50	0.86	1.17	1.67	0.65	0.65
9.5"	$J_1$		0.29	0.66	1.03	1.42	0.75	0.77
11.5"	$J_1$		0.29	0.60	0.91	1.28	0.85	0.85
15.5"	$J_1$		0.16	0.47	0.80	1.18	1.05	1.04

\*\*\*NRC values are from Quadro baffles spaced at 12" on center. Profiled baffles (Bordo, Gesto & Custom) have slightly lower values due to the removed material. For the best approximate NRC value, use the next size down (e.g. for a 15.5" Gesto, see NRC values for the 11.5" on the table above)

#### 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

#### 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.

#### **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 formaldehyde.







