

MARRO UNLIT 4228U

PROJECT PROJÉT

SPEC TYPE

NOTES



FELT FINISH FINI FEUTRE



ADDITIONAL PREMIUM COLORS AVAILABLE – SEE ACOUSTIC MATERIAL COLOR OPTIONS PAGE

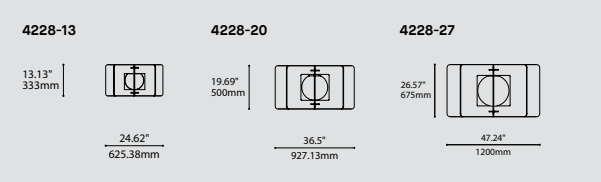
COLOR MIX MIX COULEUR



FAMILY FAMILLE



4228-20



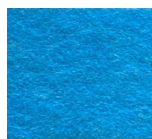
ORDERING SPECIFICATION SPÉCIFICATION DE COMMANDE						CODE
MODEL MODÈLE						
4228U-13	SMALL MARRO UNLIT					
4228U-20	MEDIUM MARRO UNLIT					
4228U-27	LARGE MARRO UNLIT					
MAIN PANELS FELT FINISH PANNEAUX PRINCIPAUX FINI FEUTRE						
ABF	AZURE BLUE FELT	BYF	BANANA YELLOW FELT	REF	RED FELT	
AWF	ARCTIC WHITE FELT	CHF	CHARCOAL FELT	SGF	SILVER GRAY FELT	
BBF	BASIC BLACK FELT	NBF	NAVY BLUE FELT	TGF	TITANIUM GRAY FELT	
BOF	BLOOD ORANGE FELT	OBF	OCEAN BLUE FELT	ZFF	ZINFANDEL FELT	
BTF	BATTLESHIP GRAY FELT	PGF	PEAR GREEN FELT			
PREMIUM*	PLEASE SPECIFY PREMIUM COLOR CODE – SEE ACOUSTIC MATERIAL COLOR OPTIONS PAGE					
	*LONGER LEAD TIME MAY APPLY, PLEASE CONTACT YOUR EUREKA REPRESENTATIVE					
BLADES FELT FINISH AILES FINI FEUTRE						
ABF	AZURE BLUE FELT	BYF	BANANA YELLOW FELT	REF	RED FELT	
AWF	ARCTIC WHITE FELT	CHF	CHARCOAL FELT	SGF	SILVER GRAY FELT	
BBF	BASIC BLACK FELT	NBF	NAVY BLUE FELT	TGF	TITANIUM GRAY FELT	
BOF	BLOOD ORANGE FELT	OBF	OCEAN BLUE FELT	ZFF	ZINFANDEL FELT	
BTF	BATTLESHIP GRAY FELT	PGF	PEAR GREEN FELT			
PREMIUM*	PLEASE SPECIFY PREMIUM COLOR CODE – SEE ACOUSTIC MATERIAL COLOR OPTIONS PAGE					
	*LONGER LEAD TIME MAY APPLY, PLEASE CONTACT YOUR EUREKA REPRESENTATIVE					
CABLE CÂBLE						AC
AC	AIRCRAFT MOUNTING, FIELD ADJUSTABLE					
CABLE LENGTH LONGUEUR DE CÂBLE						
60	60" AIRCRAFT CABLE (STD LENGTH)					
**	CUSTOM AIRCRAFT CABLE LENGTH (PLEASE SPECIFY)					
	FOR OVERALL LENGTH, PLEASE CONTACT YOUR EUREKA REPRESENTATIVE					

PRODUCT CHARACTERISTICS CARACTÉRISTIQUES DU PRODUIT

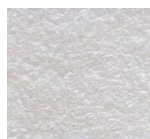


Acoustic Material Color Options for Marro

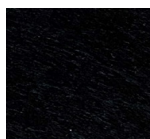
Standard colors



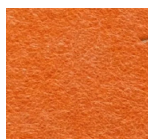
ABF
Azure Blue



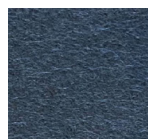
AWF
Arctic White



BBF
Basic Black



BOF
Blood Orange



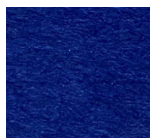
BTF
Battleship Gray



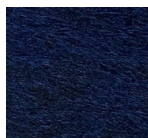
BYF
Banana Yellow



CHF
Charcoal



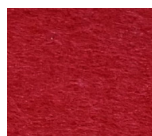
NBF
Navy Blue



OBF
Ocean Blue



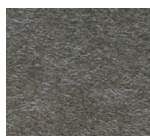
PGF
Pear Green



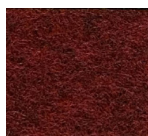
REF
Red



SGF
Silver Gray



TGF
Titanium Gray



ZFF
Zinfandel

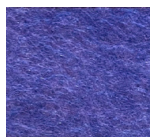
Premium colors



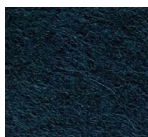
BGF
Bubble Gum



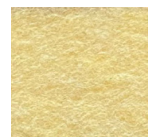
BKF
Bark Brown



DBF
Denim Blue



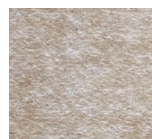
DTF
Deep Teal Green



DYF
Daisy Yellow



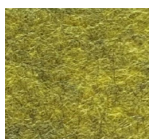
GGF
Grass Green



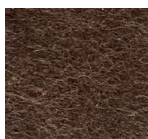
LBF
Light Beige



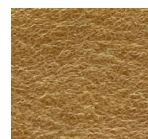
LGF
Lime Green



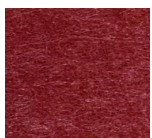
MGF
Moss Green



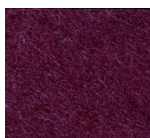
OAF
Oak Brown



PBF
Peanut Brown



PNF
Pinot Noir



PPF
Plum Purple



SBF
Sky Blue



TOF
Tangerine Orange



TPF
Tulip Purple

- Premium colors carry extended lead times. Additional fees may apply for expedited lead times. Please consult factory.
- Due to the dye process, colors may vary slightly from batch to batch.

MARRO UNLIT 4228U

SEAMLESS INSTALLATION

Marro unlit is hung on an aircraft cable without canopy.

MAIN PANELS

The main panels fullfill a strong geometric aspect

BLADES

The full blades finish the bold look and can be a different felt color from the main panels.

BRACKETS

The brackets holds the blades in place and will always be the same color as the main panels

BIG FAMILY

Marro is available in 3 sizes, allowing a lot of configurations. Also available as a lighted pendant (Marro 4228)

SOUND ABSORBING SHADE

The shade is composed of interlocked sound absorbing panels that increases acoustic comfort.

ECOLOGICAL

Custom CNC cut polyester felt panels made from recycled bottles (PET). Panels are also recyclable.

CLEANING

A proper and regular cleaning will help extend the lifespan of acoustic products. Remove dust with a vacuum cleaner and light stains with a damp cloth. For greasy and deep stains, a professional dry clean is recommended. Do no use any abrasive, soap, or chemical cleaner.

NOISE REDUCTION FIXTURES

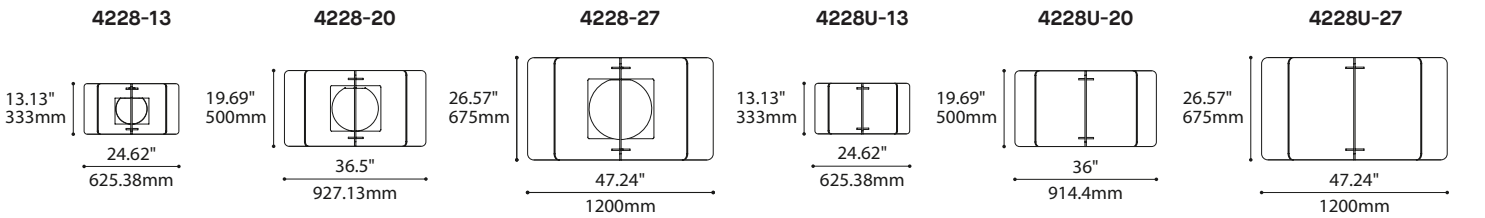
Lighted versions (Marro 4228) or the versions without light source (Marro Unlit 4228U) can be used alone or combined to create impressive layouts, while multiplying the sound absorption.

MIXED FELT COLOR POSSIBILITY

It is possible to create a combination of 2 felt colors from our selection of Standard and Premium felt colors

COLORS

Available in 14 standard colors and 16 Premium colors, For all color options, refer to the Acoustic Material Color Options page.



PRODUCT SPECIFICATION	4228-13	4228-20	4228-27	4228U-13	4228U-20	4228U-27
PERFORMANCE						
SYSTEM WATTAGE	9.8 W	9.8 W	14.1 W	N/A	N/A	N/A
DELIVERED LUMENS (4000K)	657 LM	724 LM	1100 LM			
EFFICACY	69.8 LM/W	73.8 LM/W	72.3 LM/W			
OTHER INFORMATION						
WEIGHT	4.78 LBS / 2.2 KG	7.60 LBS / 3.4 KG	12.93 LBS / 5.9 KG	3.59 LBS / 1.6 KG	5.73 LBS / 2.6 KG	10.14 LBS / 4.6 KG
L70 (LUMEN MAINTENANCE)	> 55 000 HRS	> 55 000 HRS	> 55 000 HRS	N/A	N/A	N/A
FELT	HIGH DENSITY 9MM POLYESTER FELT					
ACOUSTIC	ACOUSTIC MATERIAL RATED AT 0.75 N					
FIRE RATING	ASTM E84-13 (FELT MATERIAL ONLY)					
MAX. LUMINANCE 45°-90° OF NADIR	344 CD/M2	165 CD/M2	132 CD/M2	N/A	N/A	N/A

5 years warranty

Visit our website for warranty terms and conditions.

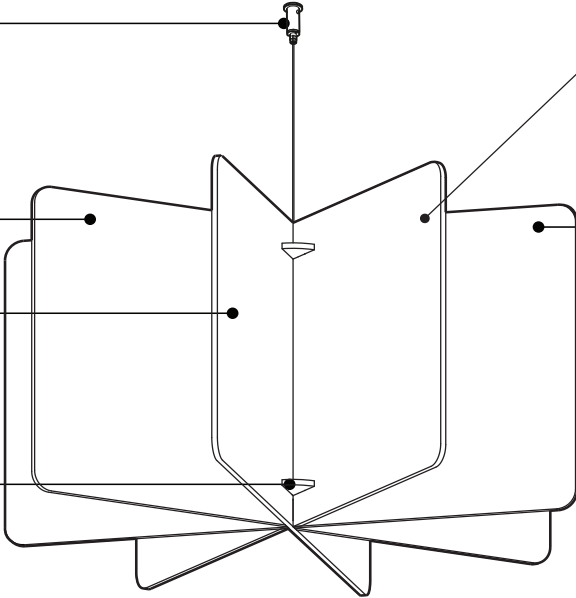
MARRO UNLIT 4228U

INSTALLATION SANS QUINCAILLERIE VISIBLE
Marro Unlit est suspendu par câble d'acier sans pavillon.

PANNEAUX PRINCIPAUX
Les panneaux principaux renforcent la géométrie.

AILETTES
Les ailes pleines viennent compléter le look imposant et peuvent être d'une couleur différente des panneaux principaux.

BRACKETS
Les brackets tiennent les ailettes en place et sont de la couleur des panneaux principaux



FAMILLE DE PRODUIT
Marro est disponible en 3 formats, permettant un lot de configurations. Également disponible en suspension éclairé (Marro 4228)

ABAT-JOUR INSONORISANT
L'abat-jour du luminaire est composé de deux panneaux insonorisant entrecroisés qui augmentent le confort acoustique.

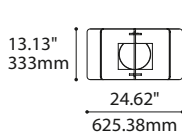
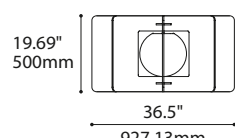
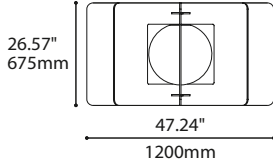
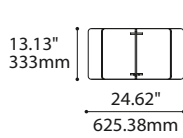
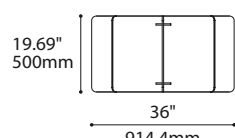
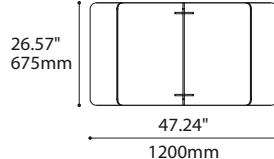
ÉCOLOGIQUE
Panneaux de polyester faits de bouteilles de plastique recyclées (PET) et coupés sur mesure. Les panneaux sont recyclables.

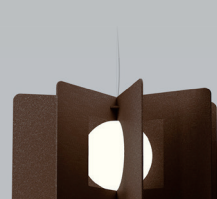
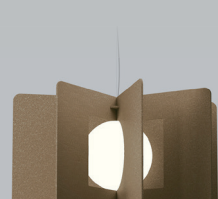
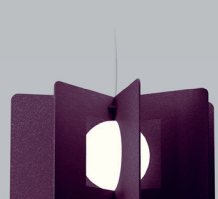
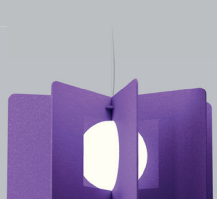
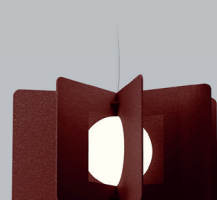
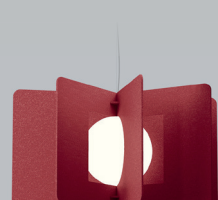
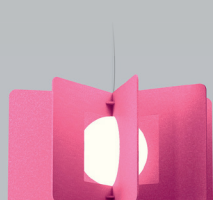
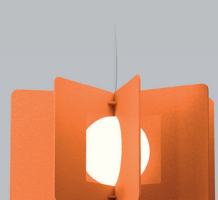
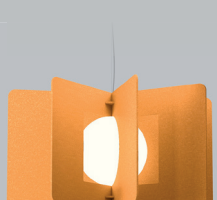
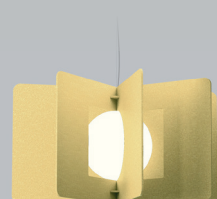
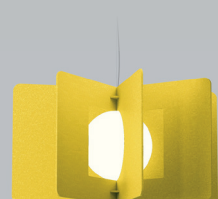
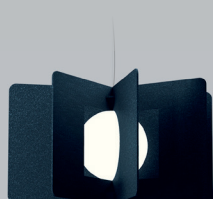
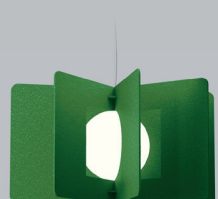
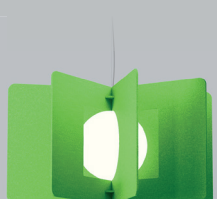
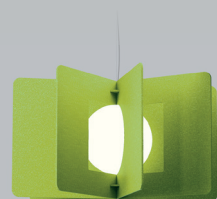
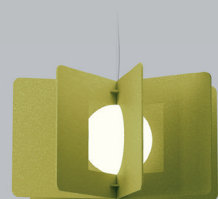
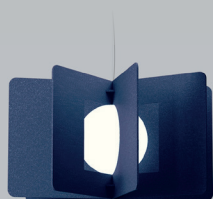
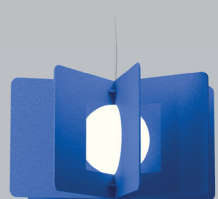
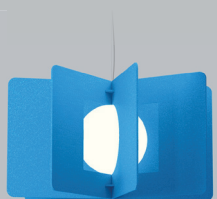
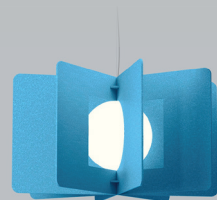
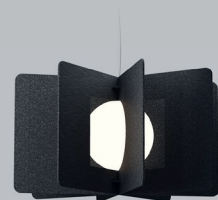
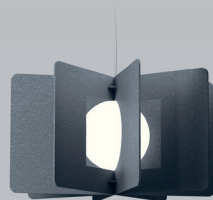
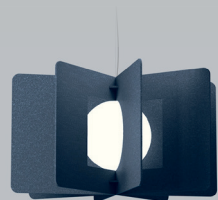
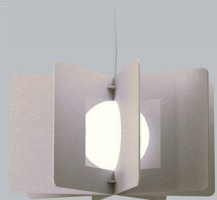
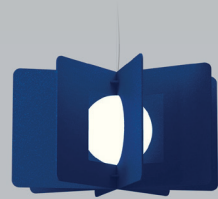
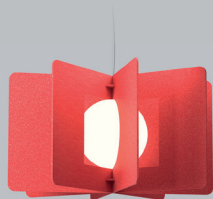
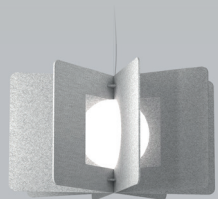
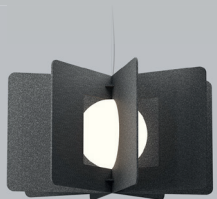
MIX DE COULEURS POSSIBLES
Il est possible de créer des combinaisons de 2 couleurs à travers notre sélection de feutres couleurs Standard ainsi que nos couleurs Premium

COULEURS
Disponible en 14 couleurs standards et 16 couleurs Premium. Pour toute les options, consultez la Fiche de Spécification

ATTÉNUATION DU BRUIT
Les versions éclairées (Marro 4228) ou sans source lumineuse (Marro Unlit 4228U) peuvent s'utiliser seules ou être disposés de façon à créer d'impressionnant agencement, multipliant ainsi l'absorption du bruit ambiant.

NETTOYAGE
Un nettoyage approprié et régulier contribuera à prolonger la durée de vie des produits acoustiques. Enlever la poussière avec un aspirateur et les taches légères avec un linge humide. Pour les tâches importantes ou graisseuses, un nettoyage à sec est recommandé. Ne pas utiliser de produits abrasifs, de savon ou de produits nettoyants chimiques.

	4228-13	4228-20	4228-27	4228U-13	4228U-20	4228U-27
						
SPÉCIFICATION PRODUIT	4228-13	4228-20	4228-27	4228U-13	4228U-20	4228U-27
PERFORMANCE						
PUISSANCE TOTALE	9.8 W	9.8 W	14.1 W	N/A	N/A	N/A
LUMENS RÉELS (4000K)	657 LM	724 LM	1100 LM			
EFFICACITÉ	69.8 LM/W	73.8 LM/W	72.3 LM/W			
AUTRES INFORMATIONS						
POIDS	4.78 LBS / 2.2 KG	7.60 LBS / 3.4 KG	12.93 LBS / 5.9 KG	3.59 LBS / 1.6 KG	5.73 LBS / 2.6 KG	10.14 LBS / 4.6 KG
L70 (MAINTENANCE DE LA LUMIÈRE)	> 55 000 H	> 55 000 H	> 55 000 H	N/A	N/A	N/A
FEUTRE	FEUTRE DE POLYESTER HAUTE DENSITÉ 9MM					
ACOUSTIQUE	MATÉRIEL ACOUSTIQUE GRADÉ À 0.75 N					
RÉSISTANCE AU FEU	ASTM E84-13 (MATÉRIEL FEUTRE SEULEMENT)					
MAX. LUMINANCE 45°-90° OF NADIR	344 CD/M2	165 CD/M2	132 CD/M2	N/A	N/A	N/A



Acoustic test results

The acoustic testing of our fixtures enables us to get data such as the average Sabins per object and the sound absorbing coefficient (Sabins/ft²). One Sabins is the equivalent of 1ft² of perfect sound absorption.

For the Marro, Elke and Joli, we tested two size of the fixture; the Marro 27" and the 13".

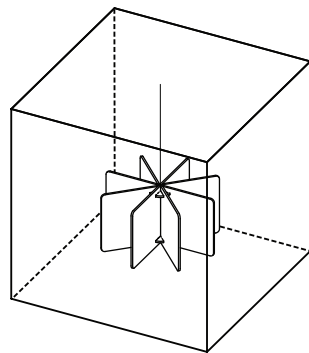
These were tested 36" from the test surface (ceiling).

2x Marro 27" in a single row, objects spaced 70" on center.

6x Marro 13" in two rows of three objects each, rows spaced 50" on center, objects in each row spaced 45" on center.

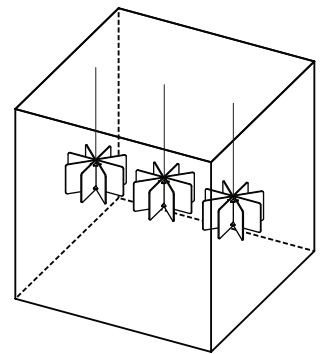
Marro unlit 27" test

250Hz - 13.29 Sabins
500Hz - 16.75 Sabins
1000Hz - 21.63 Sabins
2000Hz - 27.34 Sabins
Average per fixture:
19.75 Sabins

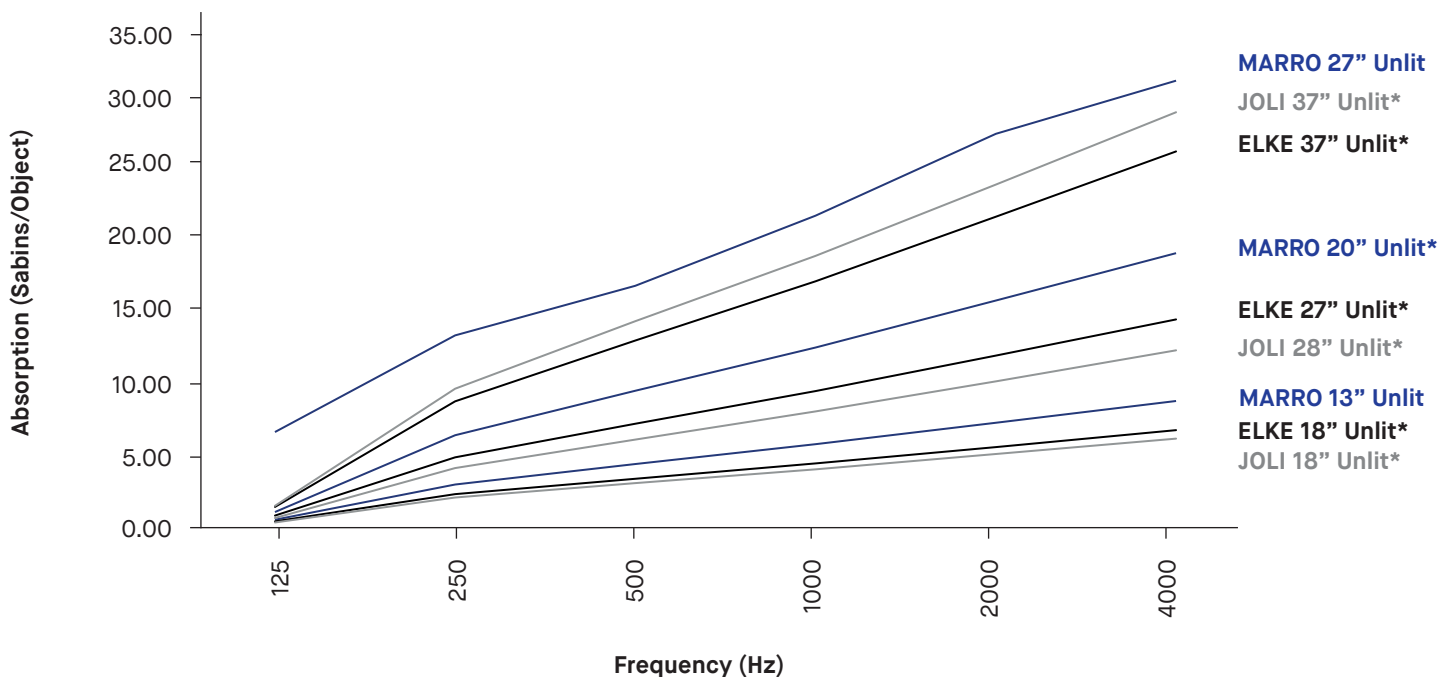


Marro unlit 13" test

250Hz - 2.91 Sabins
500Hz - 4.33 Sabins
1000Hz - 5.71 Sabins
2000Hz - 7.21 Sabins
Average per fixture:
5.04 Sabins

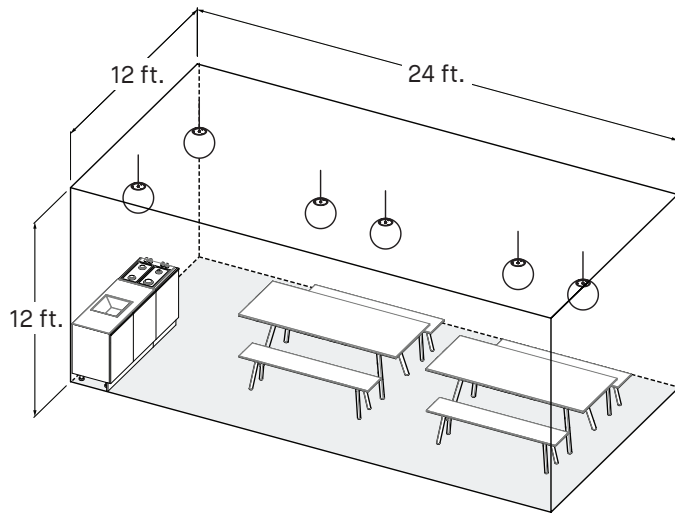


Sound Absorption



Reverberation time

Based on the test data, we are able to calculate the reverberation time of fixture layouts in a closed room and determine the extra amount (ft²) of sound absorbing material that would be required for a comfortable level. Reverberation time is the calculation of the time it takes for sound to fade by 60 dB in a closed space in seconds. As a reference, the WELL standard recommends a reverberation time of 0.5 seconds for a open space applications and 0.6 seconds for a conference room. Here are two acoustic scenarios using the Marro acoustic pendant in a lunch & breakroom

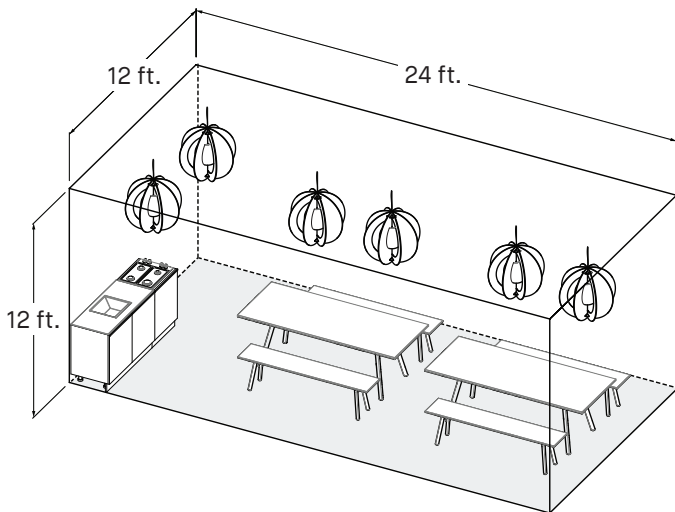


Scenario 1

6x MIKA 16"
hanging 12" from the ceiling.

Average workplane illuminance
for a lunch & breakroom
14 fc

Reverberation time
1.191 seconds



Scenario 2

6x JOLI 37"
hanging 12" from the ceiling.

Average workplane illuminance
for a lunch & breakroom
14 fc

Reverberation time
0.804 seconds
+48% better acoustics

 Carpet on
concrete floor

 1/2" sheetrock
walls and ceiling

SEE THE ACOUSTIC DATA DOCUMENTS
ON OUR WEBSITE FOR MORE
INFORMATION.