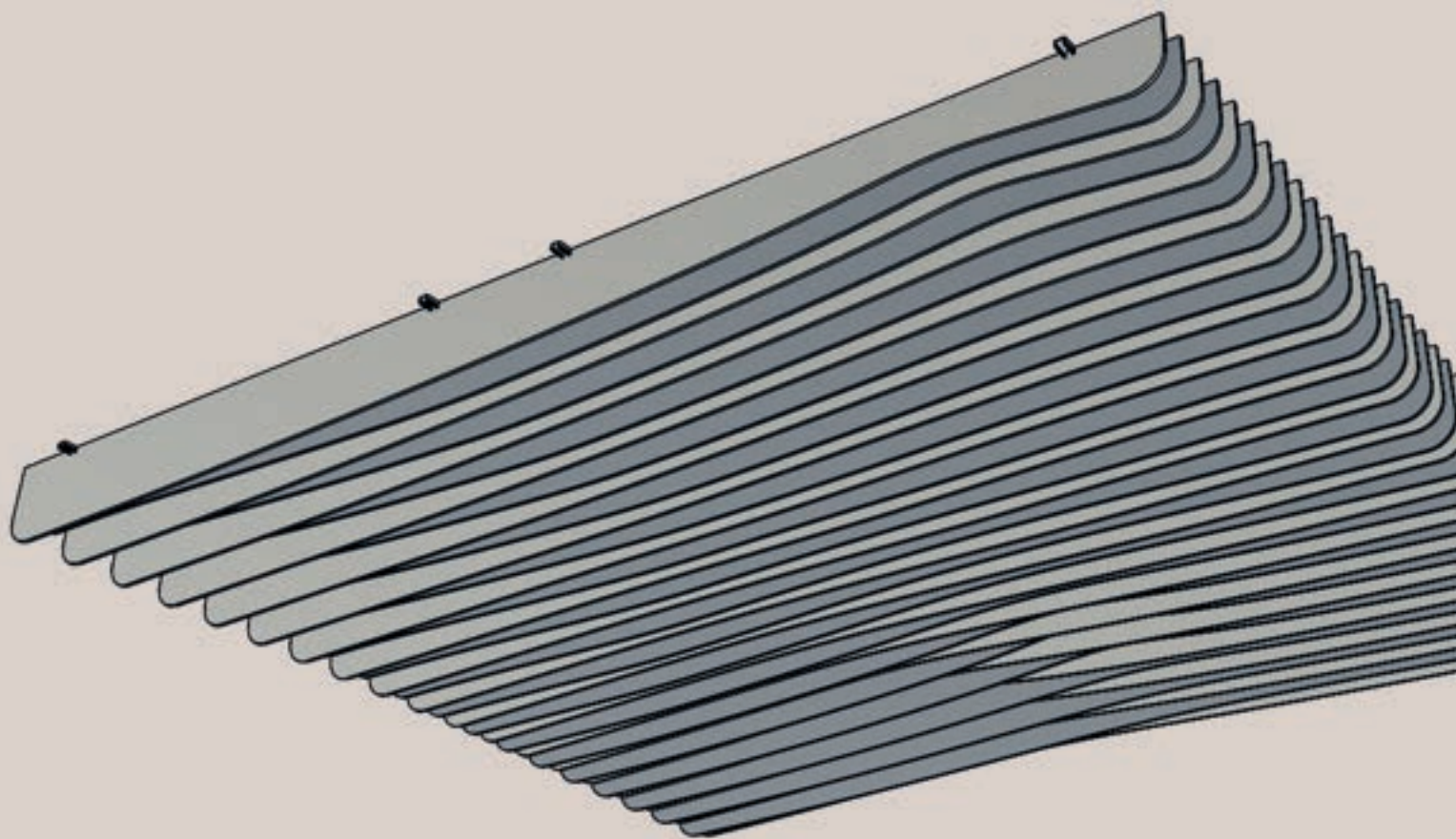


IMPACT ACOUSTIC®



Fusion

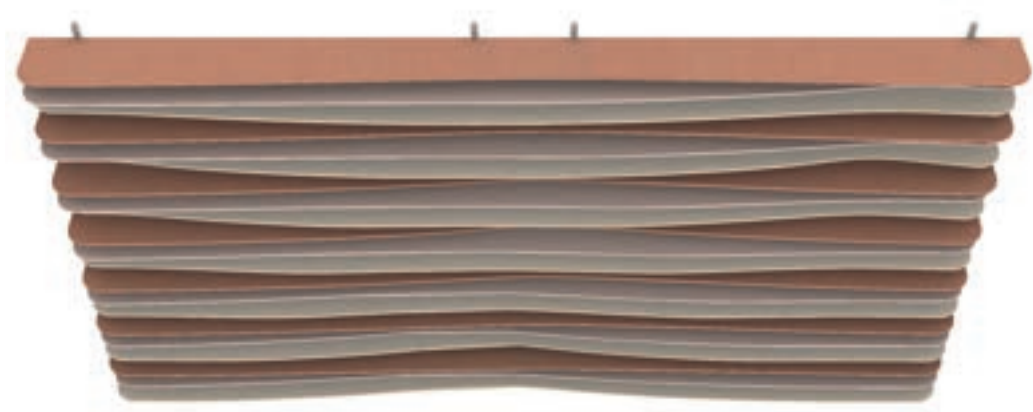
Baffle System

713.12.46.000.00
713.12.47.000.00
713.12.48.000.00
713.12.49.000.00

TECHNICAL DATA SHEET

Fusion Baffle

General Information



Data

Applicable article numbers

713.12.46.000.00	713.12.47.000.00
713.12.48.000.00	713.12.49.000.00

Dimensions¹

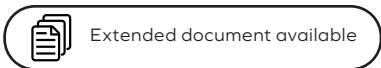
Height range	125-295mm	5"-11.5"
Spacing options	100 or 200mm	4" or 8"
Material thickness	12mm	0.47"
Length	on demand	on demand



Custom solutions available

Material

Baffles	100% PET (60% post-consumer) in 36 colors.
Strut profiles	Steel (galvanized or powder coated black)



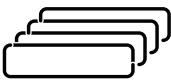
Extended document available

Weight²

Baffles	2.4kg/m ² (±10%)	0.49 lbs/ft ² (±10%)
Strut profile	0.62kg/m	0.99 lbs/ft

Included

Custom baffles



Suspension system



Installation guide



Design revision



Warranty 10 years³



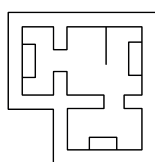
1 - all dimentions are nominal 2 - all weight values are nominal 3 - Impact Acoustic warranty terms apply

Fusion Baffle

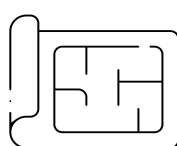
Specification Guide

Ensure you make the perfect choice by choosing our solutions for your next project. To get started, simply define some basic information and constraints about your space. Then explore our range of standard solutions or contact us directly for a more in-depth discussion of personalised customized options.

1 Prepare this information:



Project Area
(Ceiling, Wall or Both)

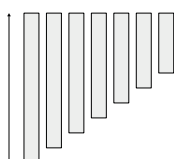


Ceiling Plans (RCP)
and/or Elevations
page 8

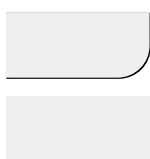


Other Considerations
page 8

2 Specify your Baffles:



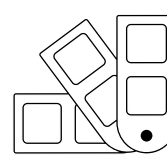
Height
page 4



Corner Shape
page 4

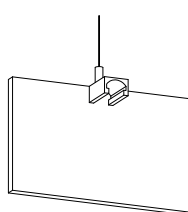


Spacing
page 4-6

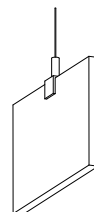


Colors
(2 or 3)
page 9

3 Select installation method:

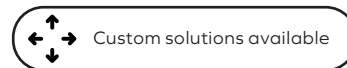


Strut Track
(Default Option)
page 8



Direct Gripper

Fusion Baffle

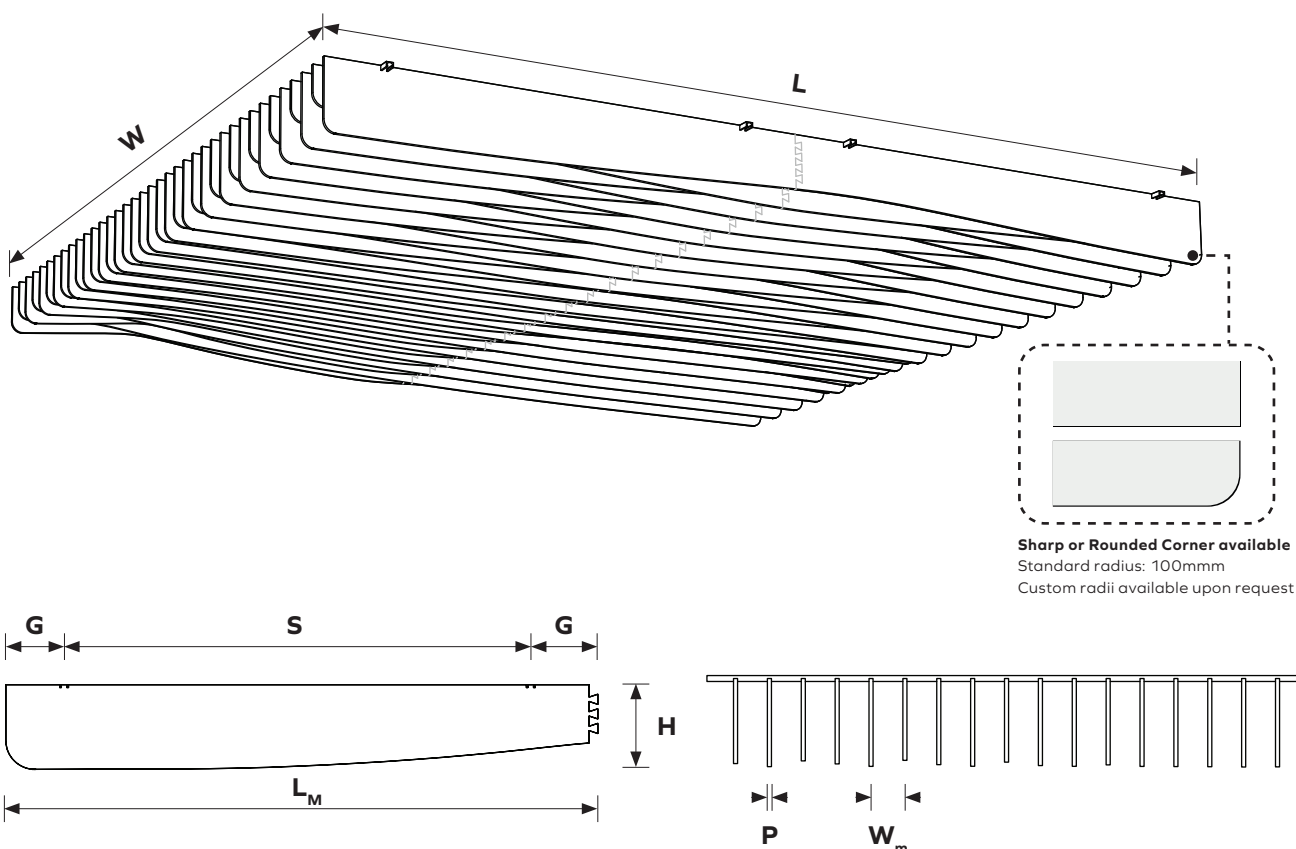


Geometry Information

Fusion - Ceiling Application

Explore the various standard and custom sizes in our product families. See the drawing below for an overview of basic dimensions, modules and ranges.

Customize our **Fusion** products beyond the presented values - contact us for details.



Dimensions table

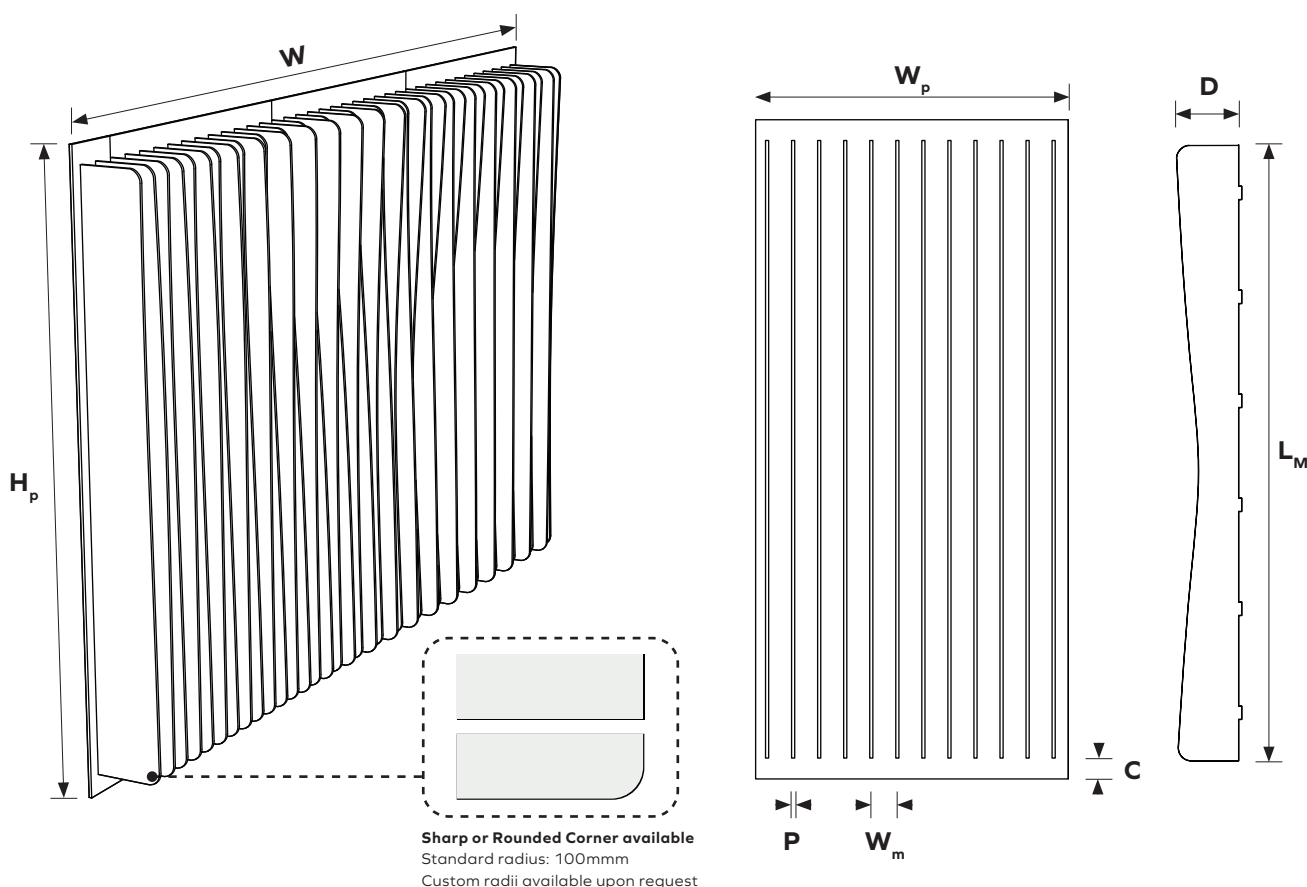
W	Total width	on demand	on demand	<i>bespoke</i>
W_m	Spacing	100mm or 200mm	4" or 8"	<i>standard or bespoke</i>
L	Total length	on demand	on demand	<i>bespoke</i>
L_m	Length module	1200-2800mm	48"-110"	<i>standard</i>
G	Overhang	max. 400mm	15.75"	<i>standard</i>
S	Support spacing	max. 900	max. 35.5"	<i>standard</i>
H	Baffle height	125-295mm	5"-11.5"	<i>standard or bespoke</i>
P	PET material thickness	12mm	0.47"	<i>fixed</i>

Geometry Information

Fusion - Wall Application

Explore the various standard and custom sizes in our product families. See the drawing below for an overview of basic dimensions, modules and ranges.

Customize our **Fusion** products beyond the presented values - contact us for details.



Dimensions table

H_p	Panel height	max. 2800	110.25"	standard
W	Total width	on demand	on demand	bespoke
W_p	Panel width	max. 1200mm	47.25"	standard
W_m	Spacing	100mm or 200mm	4" or 8"	standard or bespoke
L_m	Length module	1200-2800mm	48"-110"	standard
C	Floor clearance	80mm	3"	recommended
D	Baffle depth	125-295mm	5"-11.5"	standard or bespoke
P	PET material thickness	12mm	0.47"	fixed

Fusion Baffle

Product Family Overview

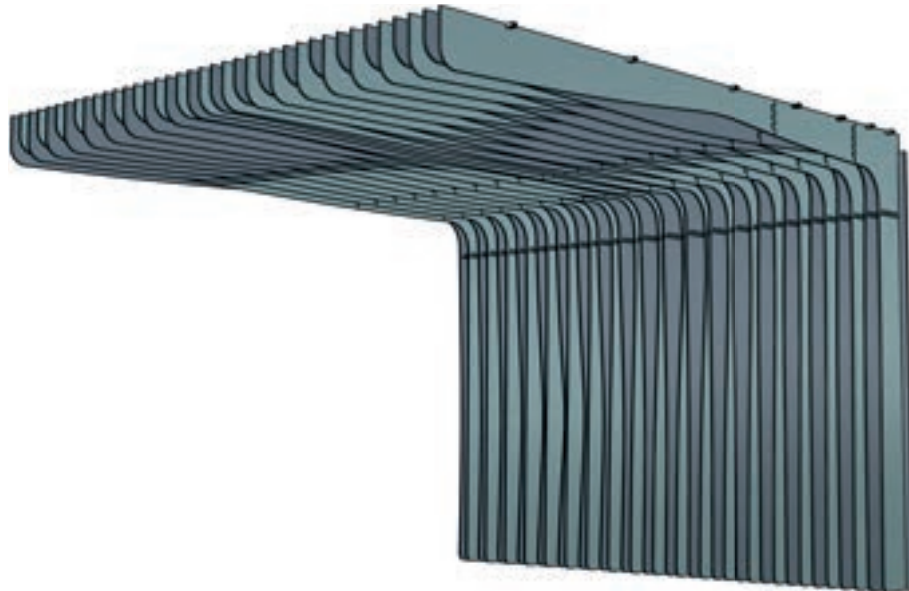
1 Fusion 2 Color Baffles - 100mm Spacing

713.12.46.000.00 - Baffle 2 Color Fusion

(S4")



Customizable product



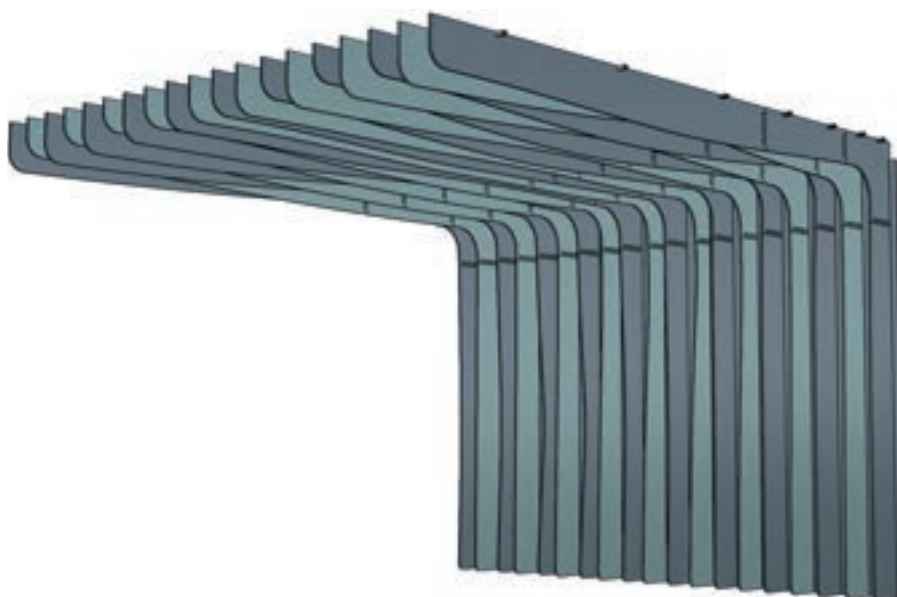
2 Fusion 2 Color Baffles - 200mm Spacing

713.12.47.000.00 - Baffle 2 Color Fusion

(S8")



Customizable product



Fusion Baffle

Product Family Overview

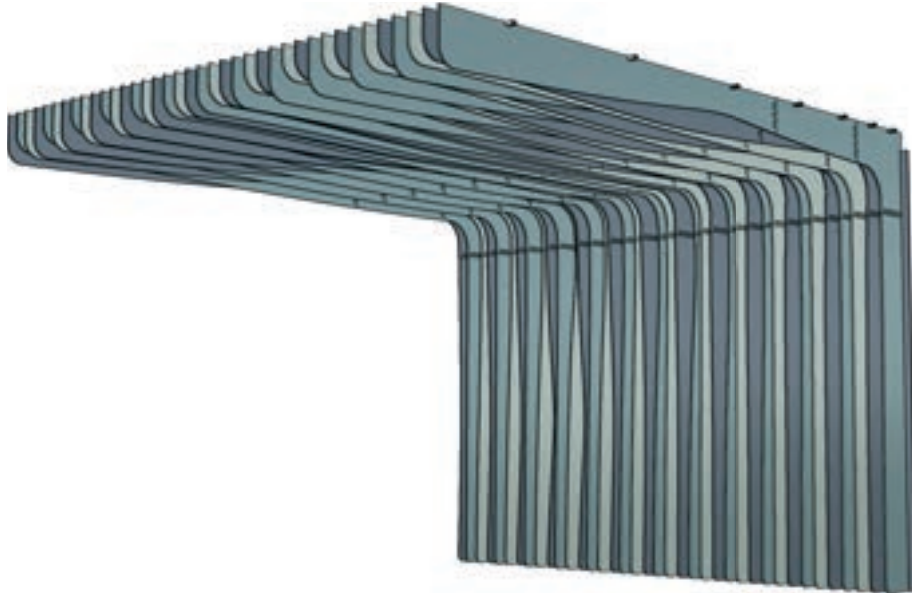
3 Fusion 3 Color Baffles - 100mm Spacing



Customizable product

713.12.48.000.00 - Baffle 3 Color Fusion

(S4")



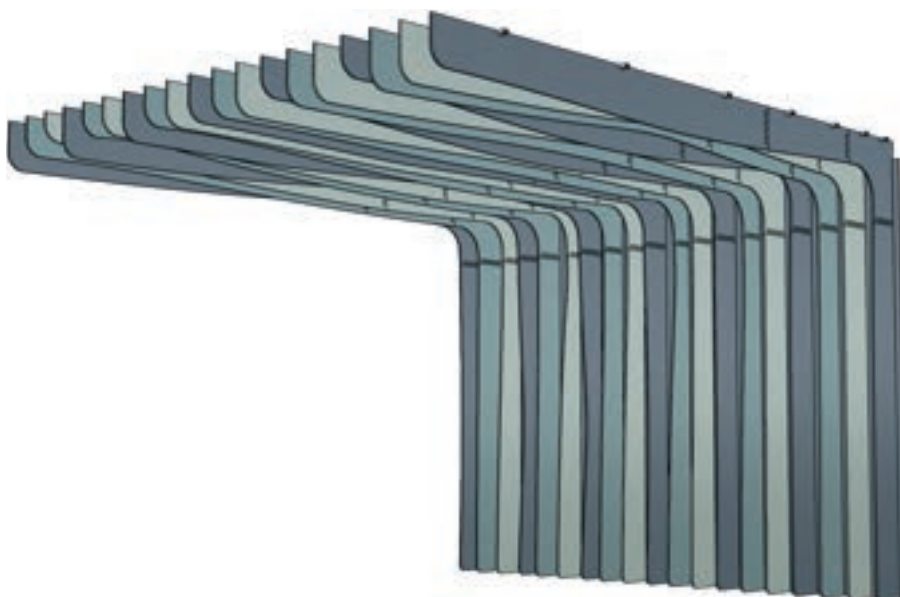
4 Fusion 3 Color Baffles - 200mm Spacing



Customizable product

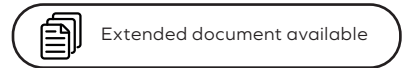
713.12.49.000.00 - Baffle 3 Color Fusion

(S8")



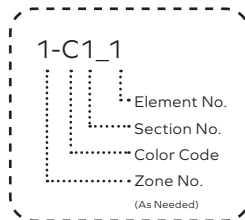
Fusion Baffle

Installation Overview



1 Verify and organize

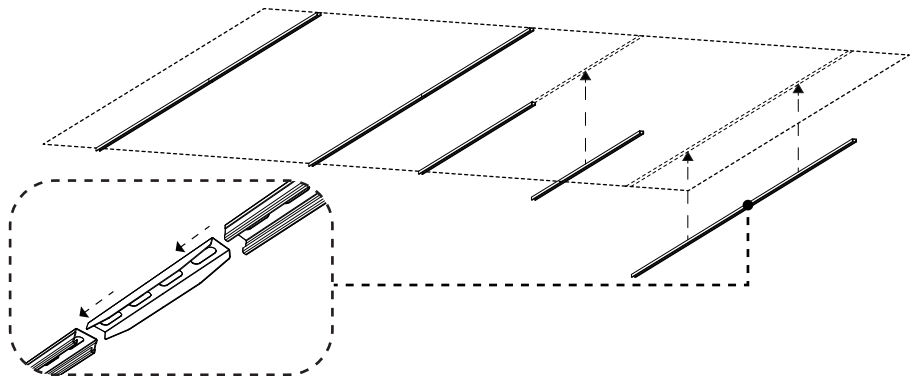
Verify all delivered elements and organize them based on the included labeling of each part and the supplied drawings.



1-A1_1	1-A1_2
1-B1_1	1-B1_2
1-C1_1	1-C1_2
1-A2_1	1-A2_2
1-B2_1	1-B2_2
1-C2_1	1-C2_2

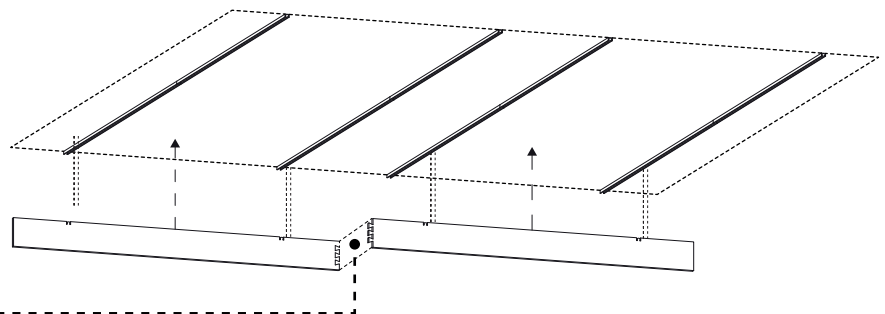
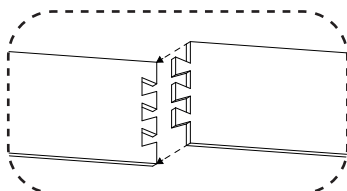
2 Install mounting hardware

Measure, mark and fix suspension hardware to your ceiling.



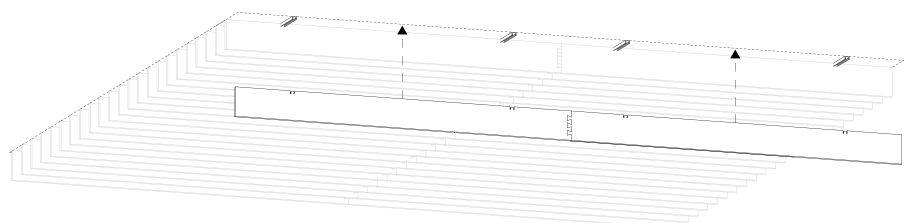
3 Install baffles

Fix baffle segments to mounting hardware and connect them together using the dovetail joints.



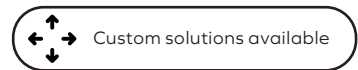
4 Repeat until done

Repeat Step 3, installing one baffle row at a time, and using the supplied Spacer Element to keep always the same spacing.

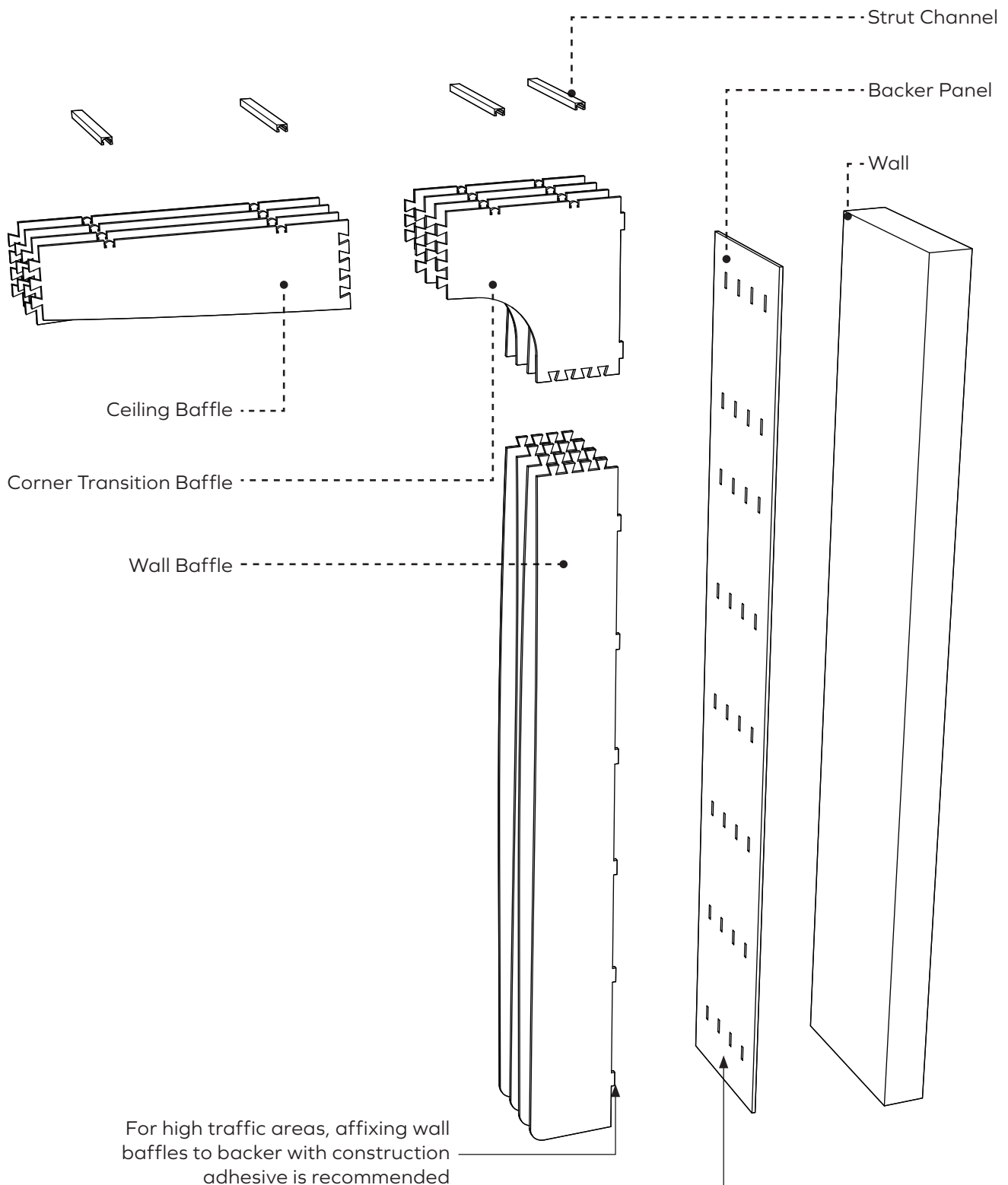


Fusion Baffle

Components and Assembly



Custom solutions available



A clearance of 80mm from the finished floor to the bottom edge of the Fusion wall baffles is recommended for optimal installation.

Fusion Baffle



Extended document available

Planning Considerations

When planning the addition of a Fusion Ceiling Baffle System to your space, please consider the following aspects.

1 Project Area

Check and verify the project area where the Ceiling Baffle System will be installed. This will allow us to provide you with an accurate quote.

2 Reflected Ceiling Plans

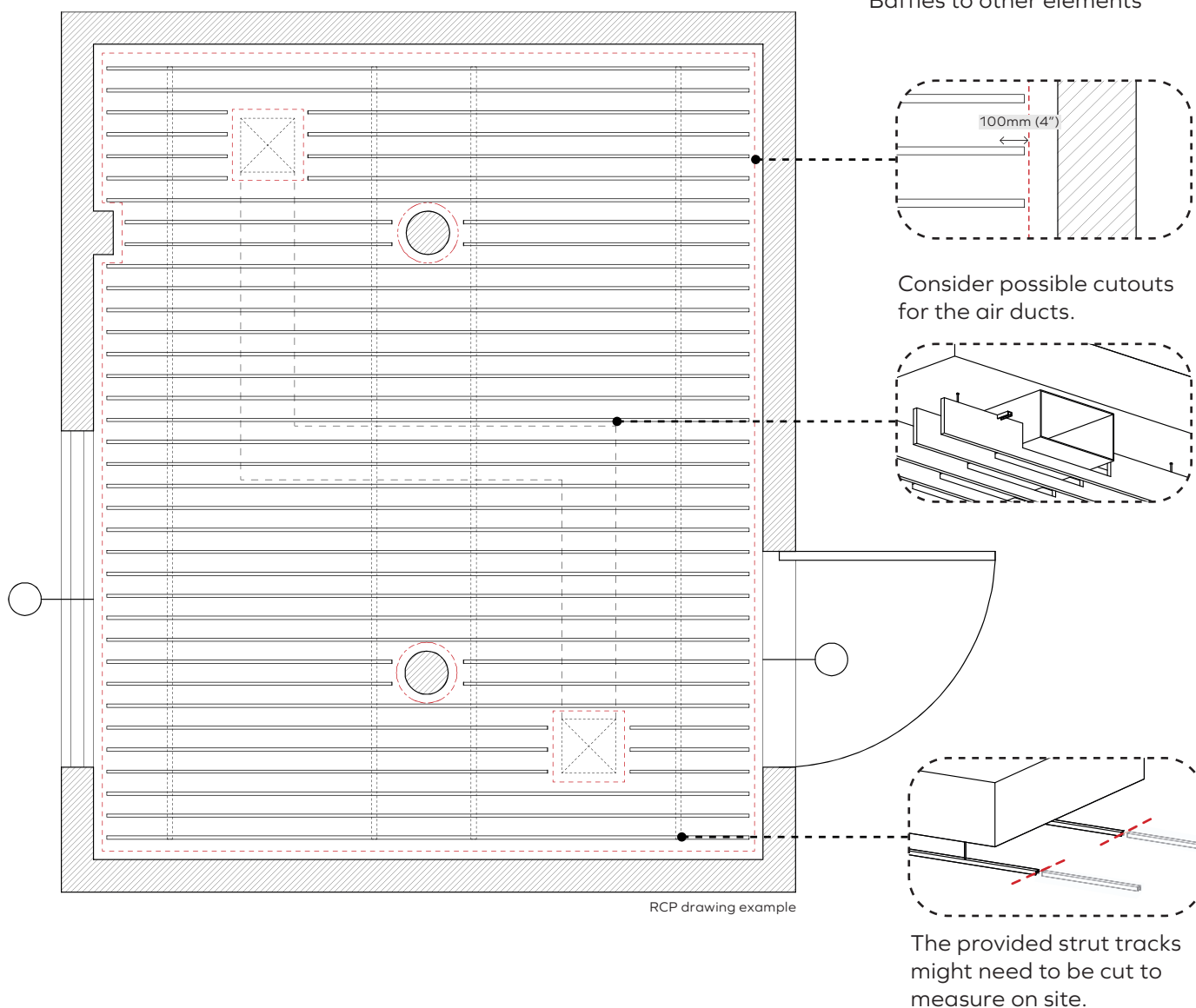
Verify if RCP drawings for the space are available. This will help plan for any obstacles like columns and air-ducts that might collide with the Baffles.

3 Additional considerations

Consider access to high windows and doors.

Verify the type of material to which the support elements will be mounted.

Plan for providing min. 100mm (4") safe space distance from Baffles to other elements



ARCHISONIC® Felt Colors



Name	Snow White	Milk	Cloud	Gull	Smoke	Ground	Charcoal	Slate	Raven
Code	500	404	103	144	442	108	542	444	550
NCS	S 0300-N	S 0502-Y	S 1002-B	S 2502-Y	S 3005-R80B	S 5005-Y20R	S 7502-B	S 4500-N	S 8500-N

Name	Nordic Pine	Grove	Fern	Moss	Spearmint	Ice Blue	Succulent	Deep Sea	True Navy
Code	311	317	180	439	706	304	712	918	194
NCS	S 5030-G10Y	S 7020-G30Y	S 6010-G90Y	S 2040-G40Y	S 1010-B90G	S 0510-B	S 3020-B30G	S 5020-R90B	S 8005-B

Name	Lichen	Linen	Shell Pink	Jute	Warm Stone	Terracotta	Soft Coral	Honeycomb	Sunshine
Code	160	107	102	920	105	239	516	139	846
NCS	S 4005-Y	S 1505-Y30R	S 0510-R30B	S 3010-Y30R	S 3010-Y50R	S 4040-Y70R	S 2020-Y90R	S 2050-Y20R	S 1040-Y10R

Name	Garnet	Hot Pink	Poster Red	Electric Orange	Winter Sky	Pacific Ocean	Midnight	Grape	Marine Blue
Code	724	140	662	464	410	432	810	540	864
NCS	S 5040-R10B	S 2060-R20B	S 1080-R	S 0580-Y70R	S 2020-R90 B	S 3040-B	S 7020-R70B	S 5040-R40B	S 4050-R70B

These NCS codes are the closest visual match available and may not be exact to blended fibres.

ARCHISONIC®

Colors

Experience our ARCHISONIC® Felt material with a stunning selection of 36 colors across 8 distinct families, thoughtfully curated by *Colour Hive* in London. Effortlessly combine colors harmoniously to suit your preferences. Discover more in our Materials brochure and order your free sample box today.

Color fastness

Class 6

ISO 105-B02:A1

Order a free sample box



Fusion Baffle

Reference Projects



ARCHISONIC®

Material Specification

Product Name	Archisonic® Felt	
Content	100% PET (60% certified post-consumer content)	
Thickness¹	12mm (0.47")	
Max. Size	1200x2800mm (47"x110")	
Acoustic^{2, 4}	ASTM: NRC=0.6 ISO: αw=0.65	
Density¹	2400 g/m ² (0.49 lbs/ sqft)	
Color Fastness⁴	Class 6 ISO 105-B02:A1	
Color	36 colors (see Archisonic® Felt Color page for more information)	
Maintenance	To prevent dust and stains, regularly dust or vacuum with a soft brush. Avoid tools that might scratch the surface. Use mild detergents sparingly for tough stains, blotting instead of rubbing with a microfiber cloth. Test cleaning methods on a hidden area first to check for adverse effects.	
Production Lead Time^{3, 4}	21 days	
Fire Rating⁴	DIN EN 13501-1: B-s1, d0	ASTM E84 Class A
VOC Emission⁴	28 Days French Regulation A+ ASTM E84 Pass Breeam® (International, UK, NL, SE, NOR) Exemplary CDPH (CDPH/EHLB/Standard-Methode V1.2) Pass	
Certifications⁴	Declare label, Cradle to Cradle, UL Environmental Product Declaration, Member of US Green Building Council, Ecobau 1st Priority, Climmate-KIC, VOC emissions in LEED EQ credit (low-emitting products), SCS Recycled Content	
Ink Certifications	UL Greenguard, No NVC, No VOCs, No TPO, Vegan, compliant with California Prop65 (CP65) and European Directive RoHS3	
Durability	Contract	

1 - all values are nominal 2 - measured with 300mm air cavity 3 - depending on the location and type of product



Climate-KIC is supported by the EIT, a body of the European Union



Fusion Baffle

Acoustic Performance



Testing Standards

ISO 354:2003	Acoustics — Measurement of sound absorption in a reverberation room
ISO 11654:1997	Acoustics — Sound absorbers for use in buildings — Rating of sound absorption
ISO 20189:2018	Acoustics — Screens, furniture and single objects intended for interior use — Rating of sound absorption and sound reduction of elements based on laboratory measurements
ASTM C423-17	Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method
ASTM E795-16	Standard Practices for Mounting Test Specimens During Sound Absorption Tests

Acoustic Test Results

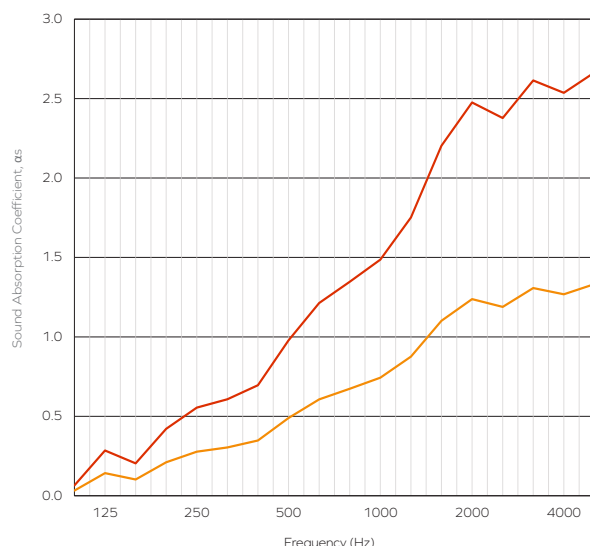
	α_w	SAA	NRC
Fusion, 125mm - 295mm height, spaced 100mm on center	0.85 (H)	1.00	1.00
Fusion, 125mm - 295mm height, spaced 200mm on center	0.50 (MH)	0.70	0.67

The NRC rating is calculated as the average of the absorption coefficients measured at frequencies of 250Hz, 500Hz, 1000Hz and 2000Hz and round to the nearest 0.05. SAA rating is calculated as the average of the sound absorption coefficients of a material for the twelve one-third octave bands from 200Hz through 2500Hz and rounded off to the nearest 0.01.

Acoustic Performance

Frequency (Hz)		125	250	500	1000	2000	4000
Fusion, 125mm - 295mm height, spaced 100mm on center ¹	α_p	0.20	0.55	0.95	1.55	2.35	2.60
Fusion, 125mm - 295mm height, spaced 200mm on center ¹	α_p	0.10	0.25	0.50	0.75	1.20	1.30

1 - Measured with 200mm distance to ceiling



- Fusion, 125mm - 295mm height, spaced 100mm on center
- Fusion, 125mm - 295mm height, spaced 200mm on center

The table represents the practical sound absorption coefficient (α_p) in accordance with ISO 11654. The graph represents the sound absorption coefficients (α_s) in the third octave band center frequencies in accordance with ISO 354. The sound absorption coefficient presented is calculated from the total surface area covered by the test sample. The results provided are limited to the specific configuration, and any modifications to the configuration will affect the resulting values.

Fusion Baffle

Additional Information

Online Resources

A variety of resources are available online for all of our products. Please visit the product's page for more information.



CAD files



Spec sheets and
Installation Guide



Color families



Instruction
videos



Associated
products specs.

Ordering Process

Our experienced team of Project Consultants will guide and support you throughout the order process. We fulfill the majority of our orders in as little as 21 days¹ from your first point of contact, allowing you to focus on what truly matters to you.



Contact our
consultant

Quote¹

48h



Order Confirmation

Production¹

14-21 days



Dispatch

Transit

location based



Delivery

Contact Us

Ready to make an impact? We are just an email or call away to discuss your project and answer any question.



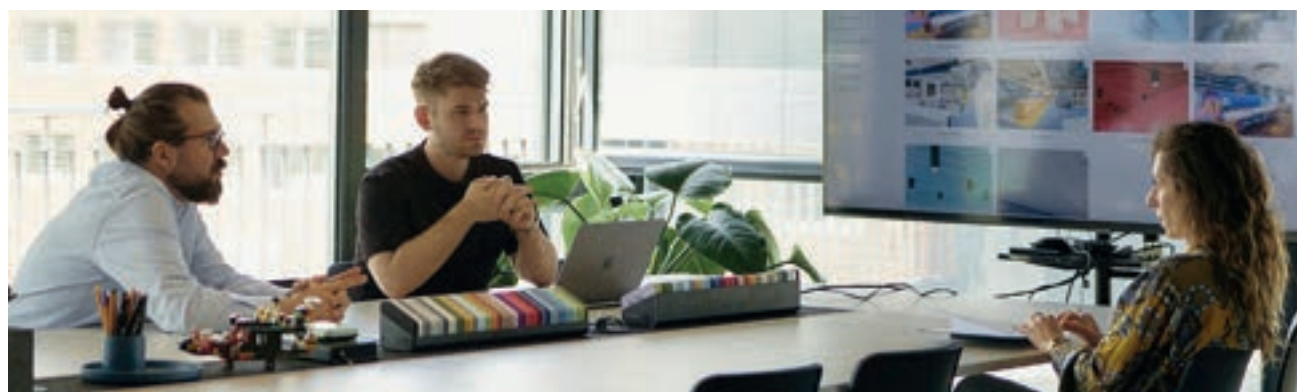
+41 41 244 14 00



connect@impactacoustic.com



Online form



¹ - Quote and Production times may vary.

**#We
Make An
Impact**

connect@impactacoustic.com | www.impactacoustic.com