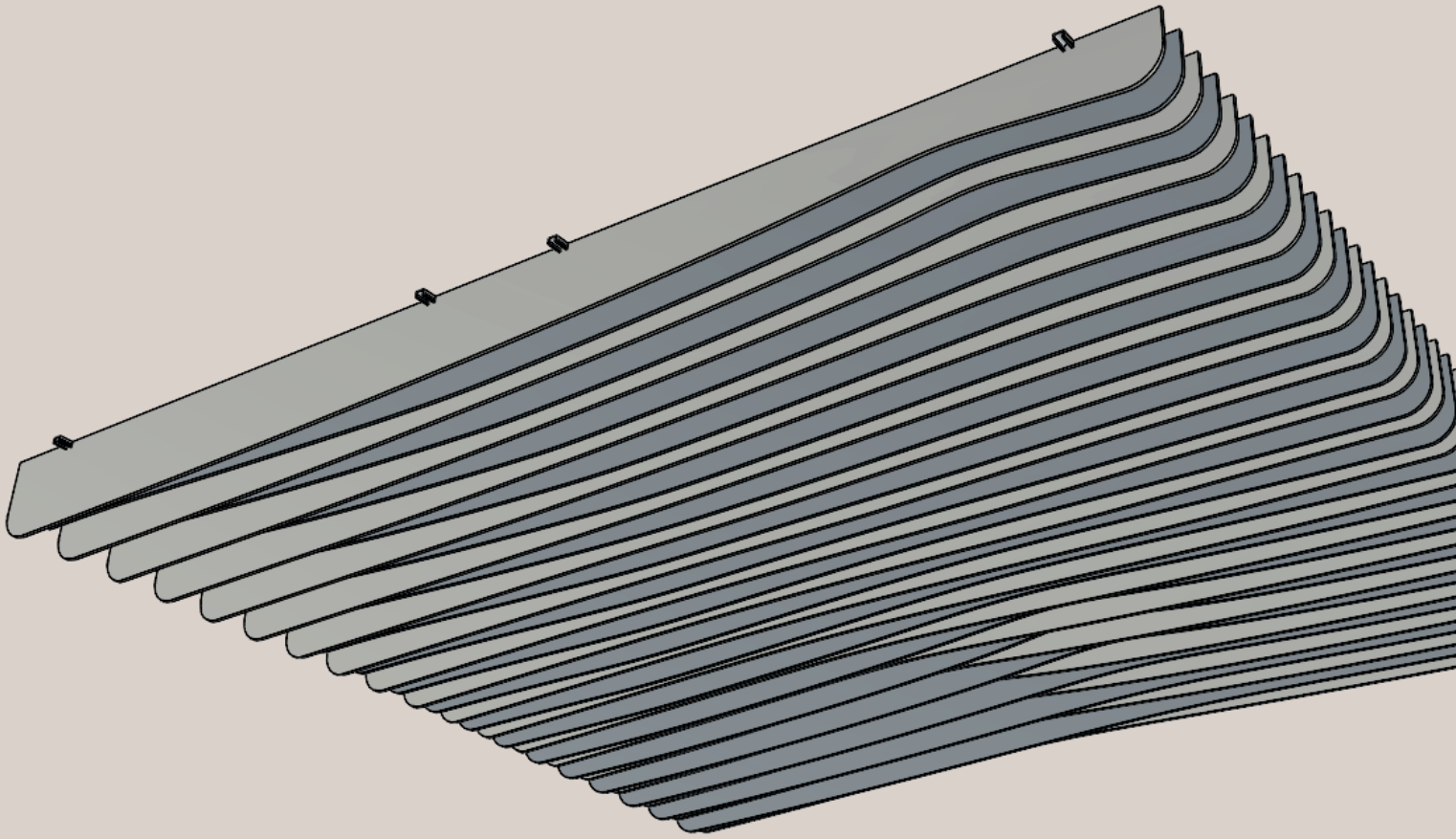
IMPACT ACOUSTIC®



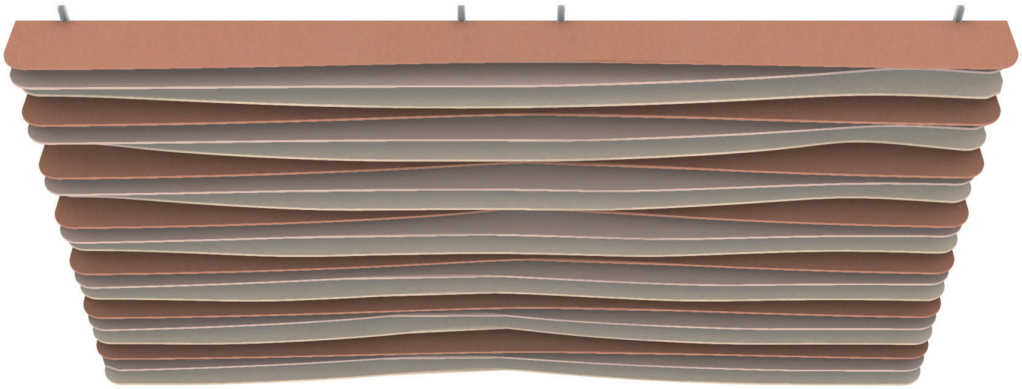
Fusion
Baffle System

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

Dimensions[1]

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

Weight[2]

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 years[3]

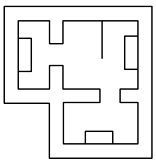
1 - all dimentions are nominal 2 - all weight values are nominal 3 - Impact Acoustic warranty terms apply

(Switzerland) connect@impactacoustic.com (+41) 41 244 14 00
(USA) usa@impactacoustic.com (+1) 646 918 1581
(Philippines) philippines@impactacoustic.com (+63) 285 80 02 50

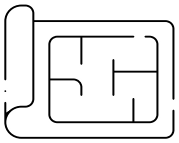
Fusion Baffle
Specification Guide

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)



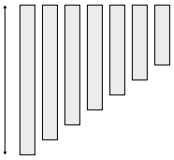
Ceiling Plans (RCP)
and/or Elevations

page 8

Other Considerations

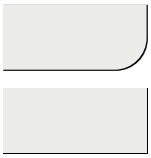
page 8

2 Specify your Baffles:



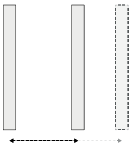
Height

page 4



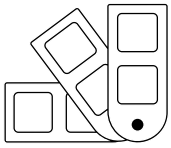
Corner Shape

page 4



Spacing

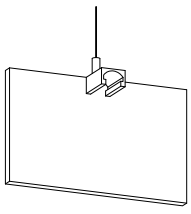
page 4-6



Colors
(2 or 3)

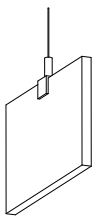
page 9

3 Select installation method:



Strut Track
(Default Option)

page 8



Direct Gripper

Fusion Baffle

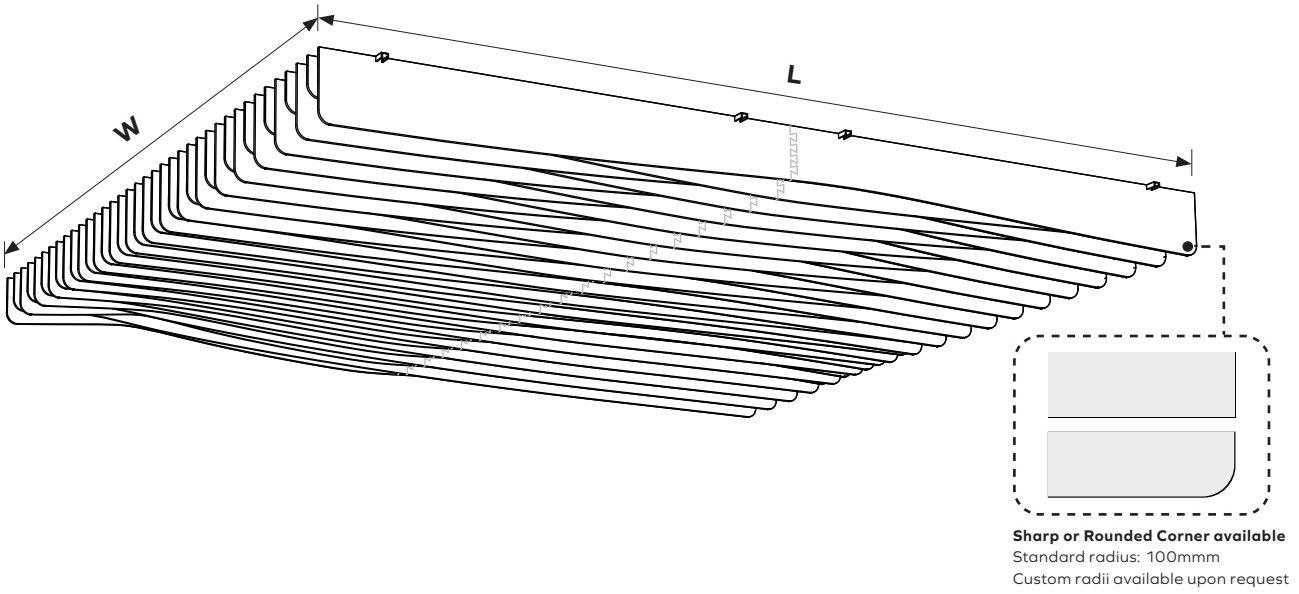
Geometry Information

Custom solutions available

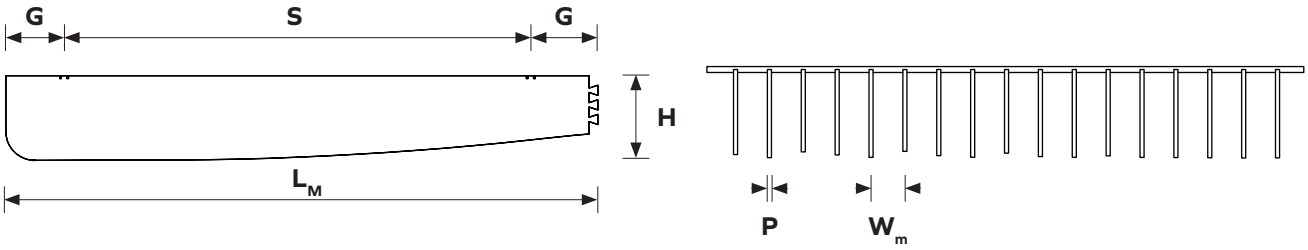
Fusion - Ceiling Application

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.



Sharp or Rounded Corner available
Standard radius: 100mmm
Custom radii available upon request



Dimensions table

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

(Switzerland) connect@impactacoustic.com (+41) 41 244 14 00
(USA) usa@impactacoustic.com (+1) 646 918 1581
(Philippines) philippines@impactacoustic.com (+63) 285 80 02 50

Fusion Baffle

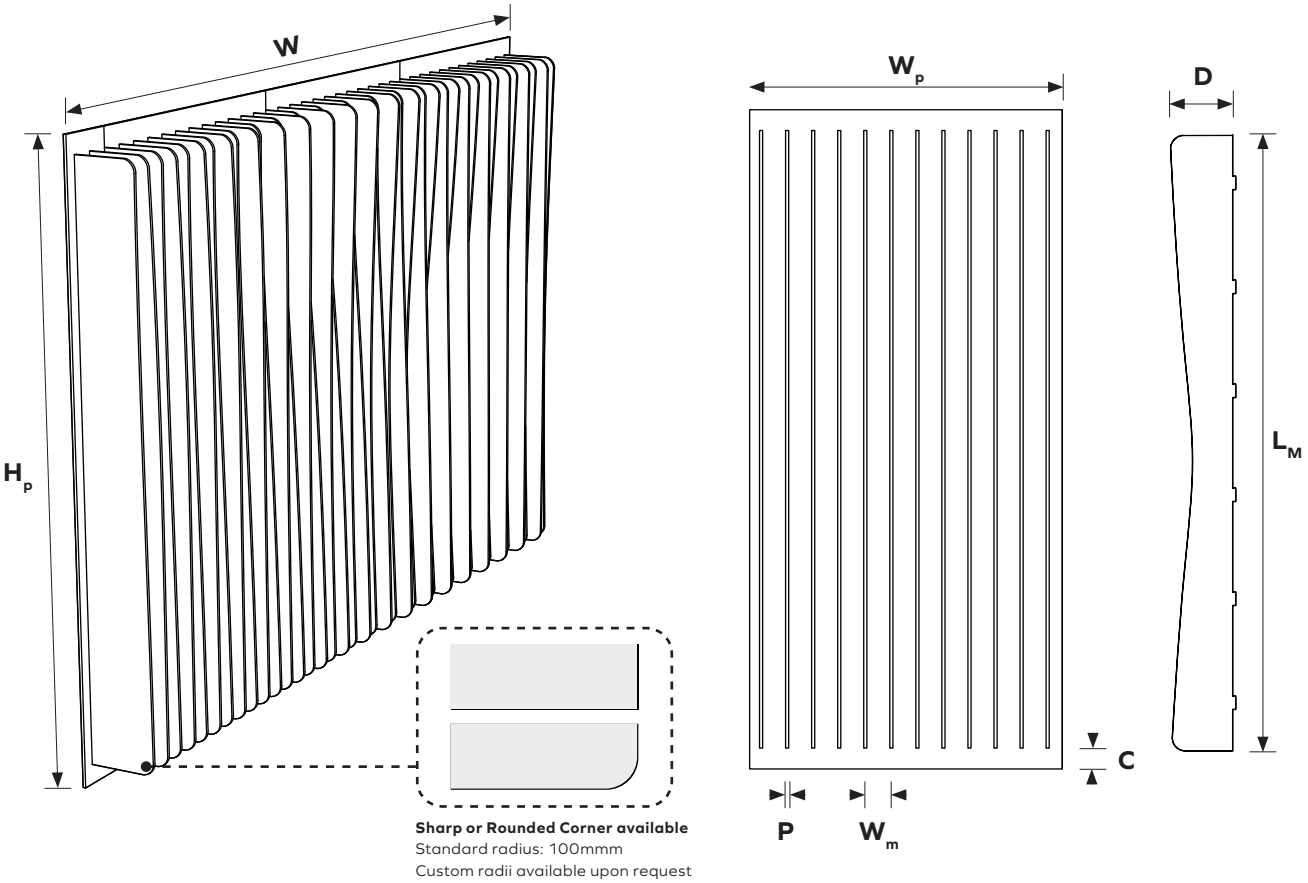
Geometry Information

Custom solutions available

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.



Sharp or Rounded Corner available
Standard radius: 100mmm
Custom radii available upon request

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*

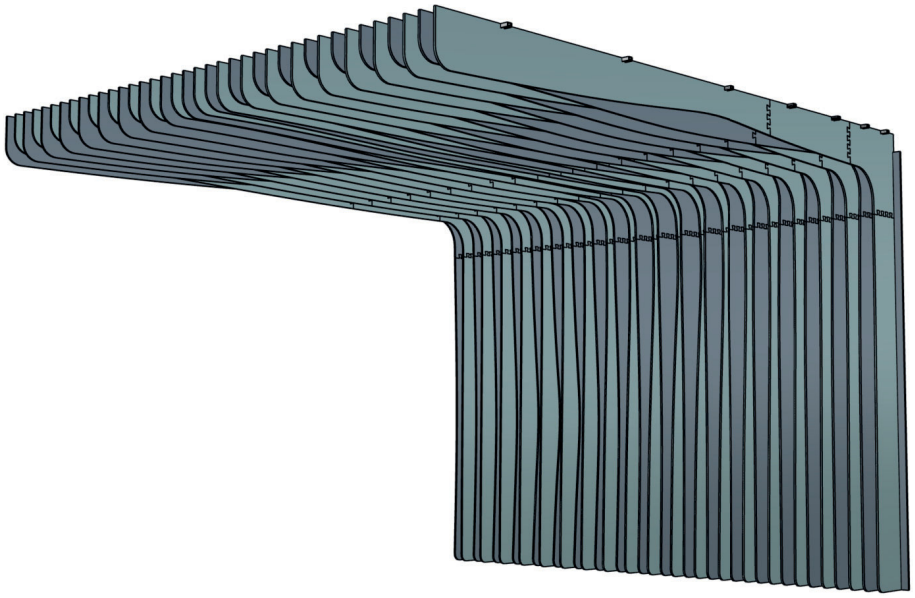
(Switzerland) connect@impactacoustic.com (+41) 41 244 14 00
(USA) usa@impactacoustic.com (+1) 646 918 1581
(Philippines) philippines@impactacoustic.com (+63) 285 80 02 50

Fusion Baffle
Product Family Overview

1 Fusion 2 Color Baffles - 100mm Spacing

Customizable product

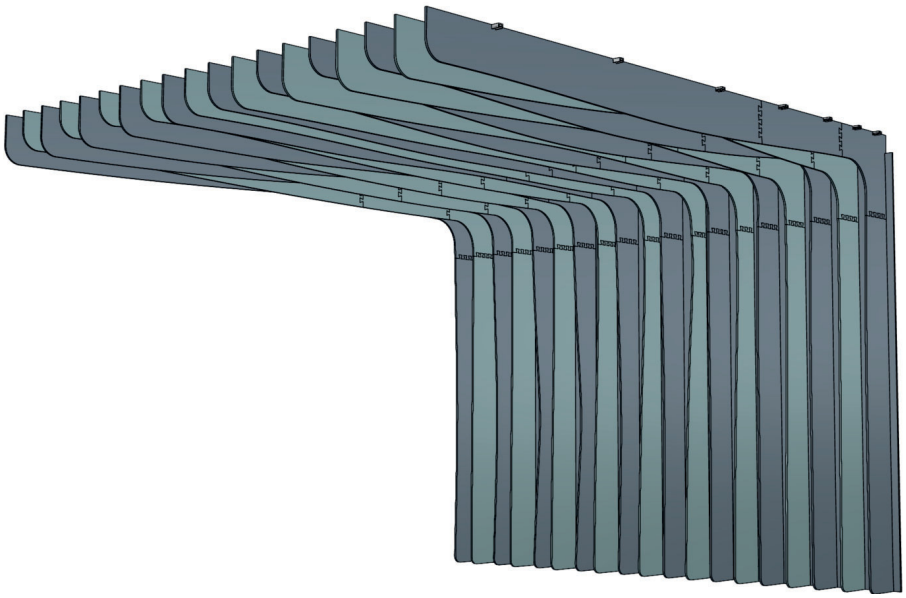
713.12.46.000.00 - Baffle 2 Color Fusion (S4")



2 Fusion 2 Color Baffles - 200mm Spacing

Customizable product

713.12.47.000.00 - Baffle 2 Color Fusion (S8")



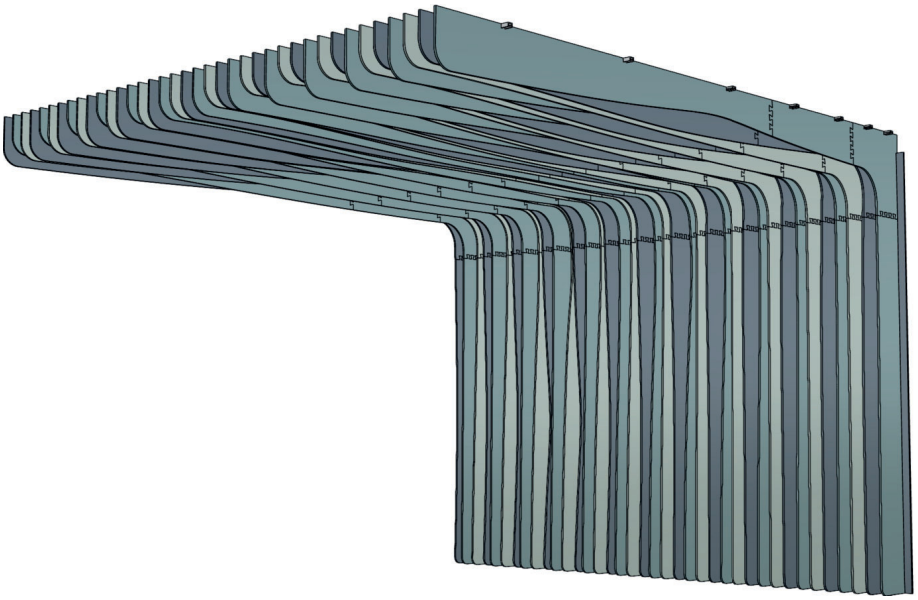
(Switzerland) connect@impactacoustic.com (+41) 41 244 14 00
(USA) usa@impactacoustic.com (+1) 646 918 1581
(Philippines) philippines@impactacoustic.com (+63) 285 80 02 50

Fusion Baffle
Product Family Overview

3 Fusion 3 Color Baffles - 100mm Spacing

Customizable product

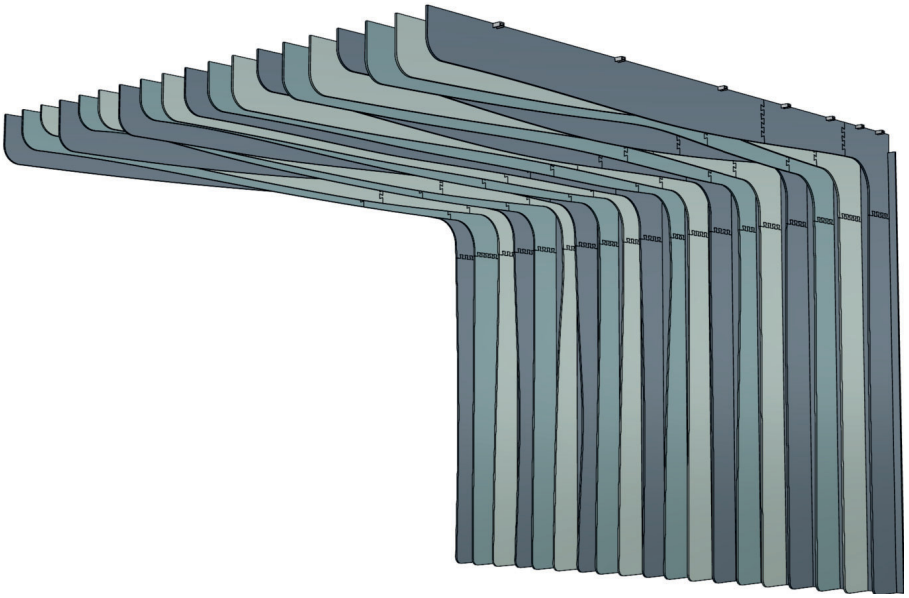
713.12.48.000.00 - Baffle 3 Color Fusion (S4")



4 Fusion 3 Color Baffles - 200mm Spacing

Customizable product

713.12.49.000.00 - Baffle 3 Color Fusion (S8")



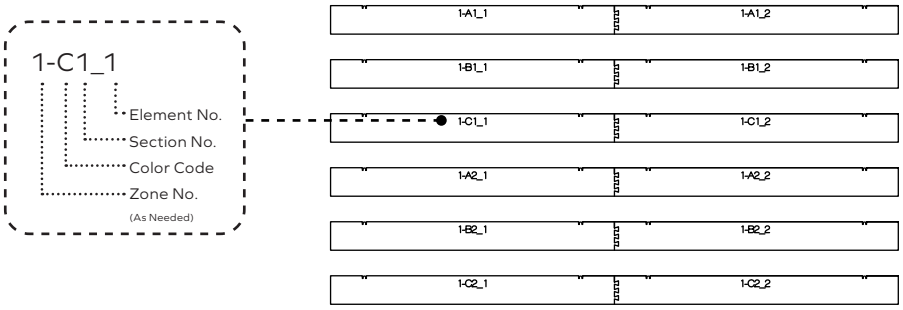
(Switzerland) connect@impactacoustic.com (+41) 41 244 14 00
(USA) usa@impactacoustic.com (+1) 646 918 1581
(Philippines) philippines@impactacoustic.com (+63) 285 80 02 50

Fusion Baffle
Installation Overview

Extended document available

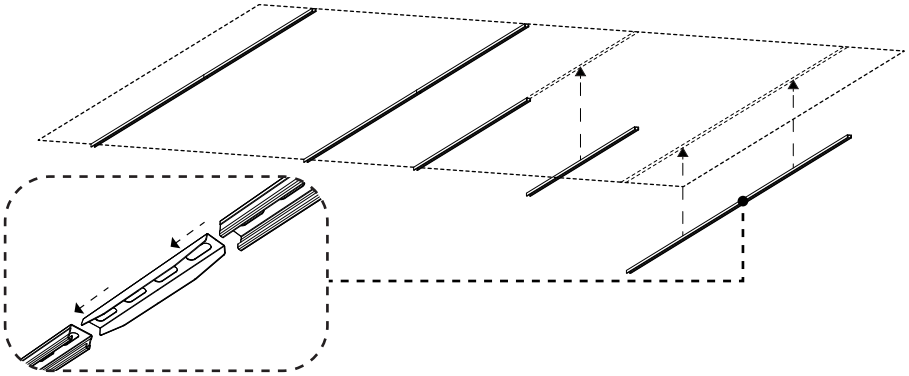
1 Verify and organize

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



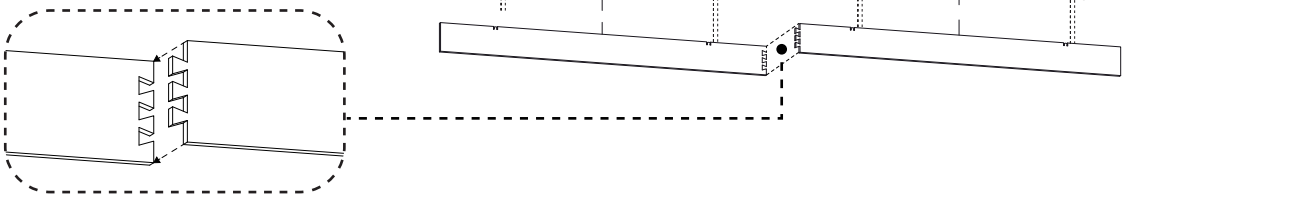
2 Install mounting hardware

Measure, mark and fix suspension hardware to your ceiling.



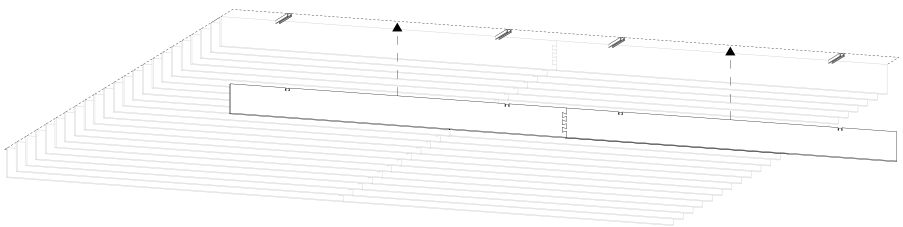
3 Install baffles

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.

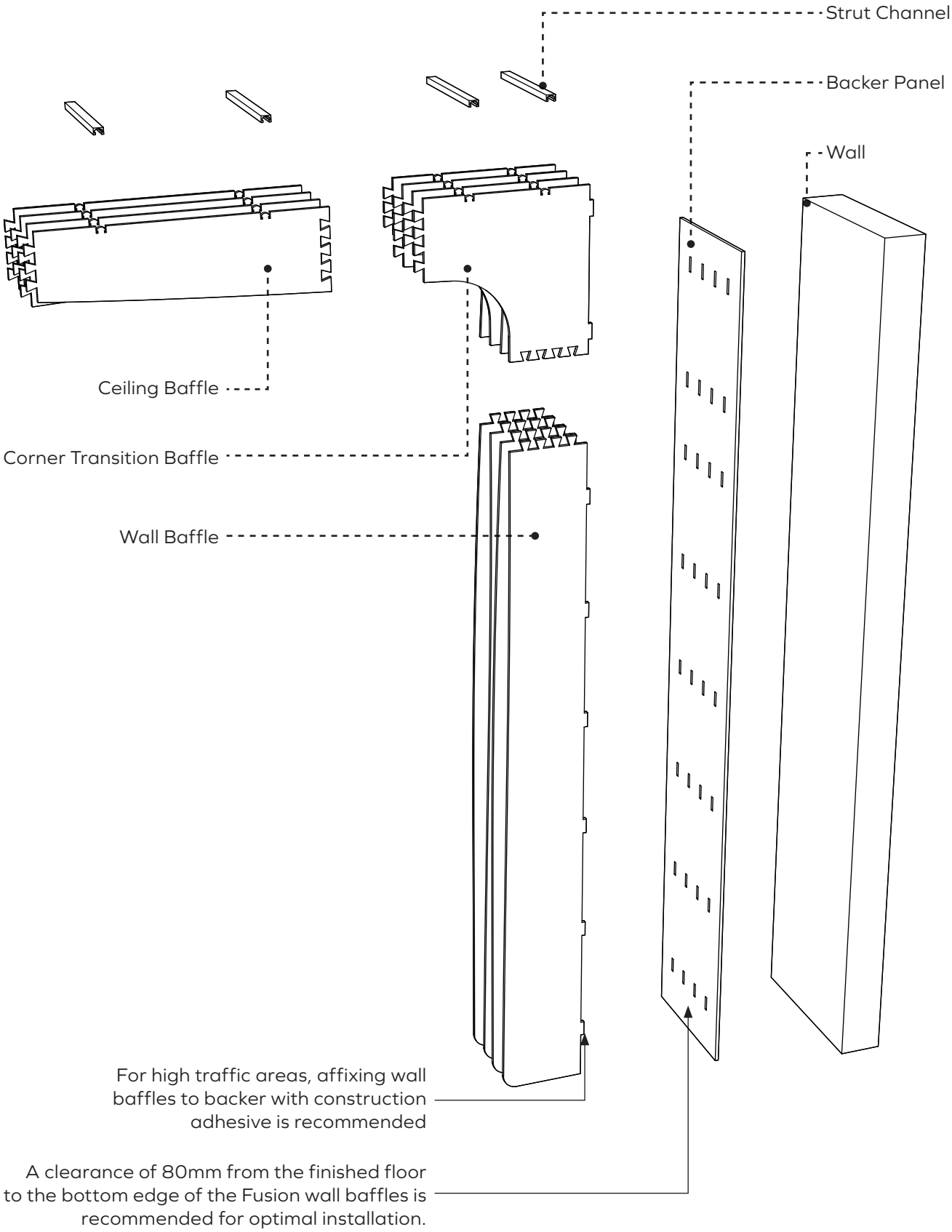


(Switzerland) connect@impactacoustic.com (+41) 41 244 14 00
(USA) usa@impactacoustic.com (+1) 646 918 1581
(Philippines) philippines@impactacoustic.com (+63) 285 80 02 50

Fusion Baffle

Components and Assembly

Custom solutions available



(Switzerland) connect@impactacoustic.com (+41) 41 244 14 00
(USA) usa@impactacoustic.com (+1) 646 918 1581
(Philippines) philippines@impactacoustic.com (+63) 285 80 02 50

Fusion Baffle
Planning Considerations

Extended document available

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

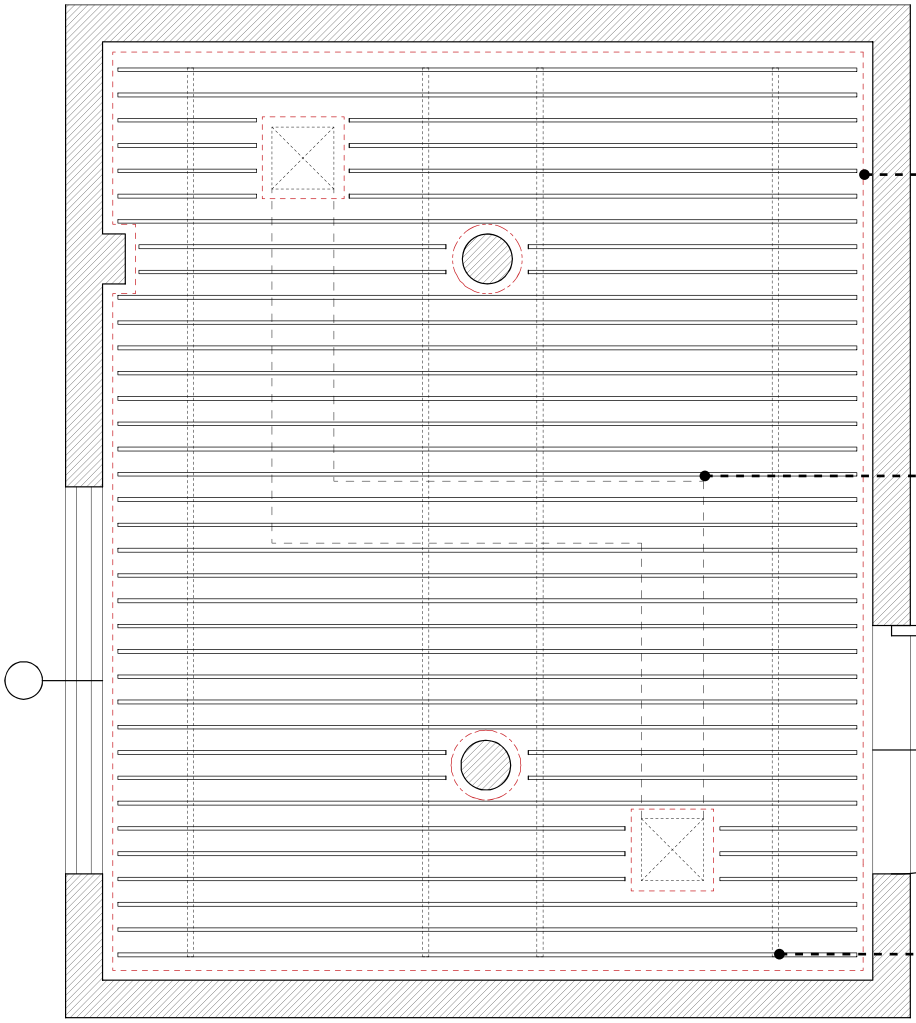
Verify if RCP drawings for the space are available. This will help plan for any obstacles like columns and air-ducts that might collide with the Baffles.

3 Additional considerations

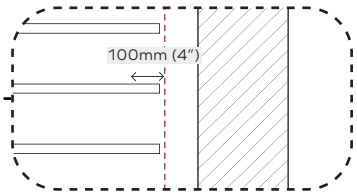
Consider access to high windows and doors.

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

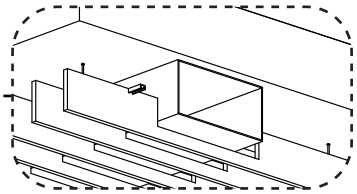
Plan for providing min. 100mm (4") safe space distance from Baffles to other elements

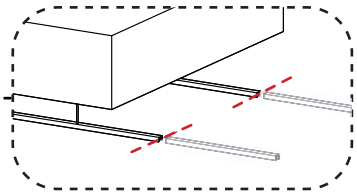


RCP drawing example



Consider possible cutouts for the air ducts.





The provided strut tracks might need to be cut to measure on site.

ARCHISONIC® Felt Colors

Material brochure available

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	S2502-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	S6010-G90Y	S 2040-G40Y	S 1010-B90G	S 0510-B	S 3020-B30G	S 5020-R90B	S8005-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	S4005-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)
Thickness[1]	12mm (0.47")
Max. Size	1200x2800mm (47"x110")
Acoustic[2, 4]	**ASTM:** NRC=0.6 **ISO**: αw=0.65
Density[1]	2400 g/m² (0.49 lbs/ sqft)
Color Fastness[4]	**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 Rating[4]	DIN EN 13501-1: **B-s1, d0** ASTM E84 **Class A**
VOC Emission[4]	28 Days French Regulation **A+** ASTM E84 **Pass** Breeam® (International, UK, NL, SE, NOR) **Examplary** CDPH (CDPH/EHLB/Standard-Methode V1.2) **Pass**
Certifications[4]	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

(Switzerland) connect@impactacoustic.com (+41) 41 244 14 00
(USA) usa@impactacoustic.com (+1) 646 918 1581
(Philippines) philippines@impactacoustic.com (+63) 285 80 02 50

Fusion Baffle
Acoustic Performance

Testing Standards

University of Stuttgart
Germany

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

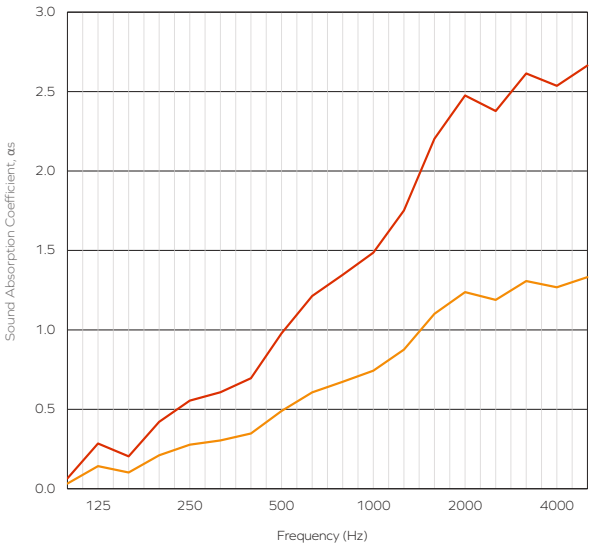
Acoustic Test Results	αw	SAA	NRC
Fusion, 125mm - 295mm height, spaced 100mm on center	0.85 (H)	1.00	1.00
Fusion, 125mm - 295mm height, spaced 200mm on center	0.50 (MH)	0.70	0.67

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 100mm on center

The table represents the practical sound absorption coefficient (α_p) in accordance with ISO 11654. The graph represents the sound absorption coefficients (αs) 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.

(Switzerland) connect@impactacoustic.com (+41) 41 244 14 00
(USA) usa@impactacoustic.com (+1) 646 918 1581
(Philippines) philippines@impactacoustic.com (+63) 285 80 02 50

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

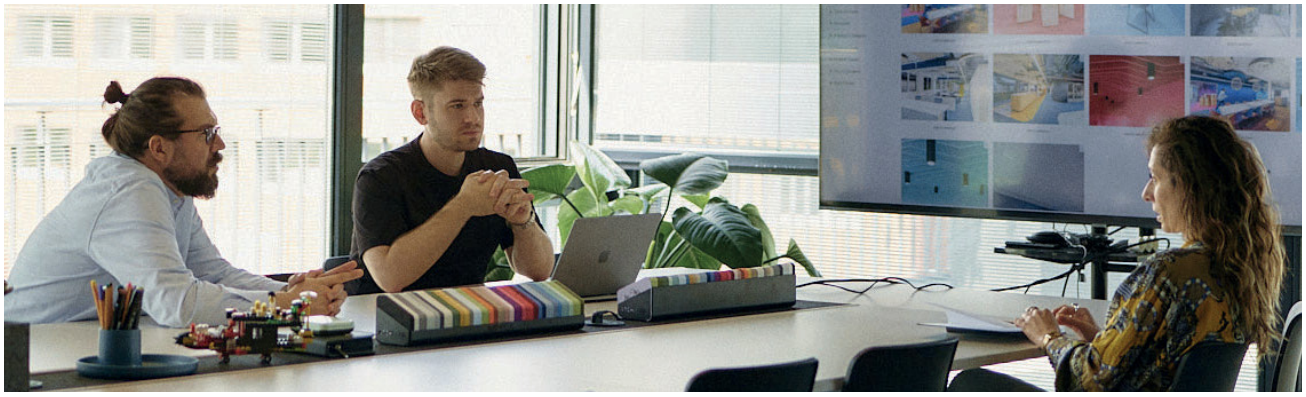
Our experienced team of Project Consultants will guide and support you throughout the order process. We fulfill the majority of our orders in as little as 21 days[1] from your first point of contact, allowing you to focus on what truly matters to you.

Contact our consultant → Quote[1] 48h → Order Confirmation → Production[1] 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 MakeAn Impact

connect@impactacoustic.com I www.impactacoustic.com