

# FLOATING CEILING & WALL SOLUTIONS

**KNAUF**CEILING  
*Solutions*



# CONTENTS

Introduction	3
Floating Ceiling & Wall Solutions	4

## Explore a World of Possibilities

<b>Unravel Your Design Aspirations</b>	<b>8</b>		
Shapes & Dimensions	10	Material & Grouping System	15
Trendsetting Colour Palette	12	Limitless Possibilities for All Applications	18

## Product Portfolio

<b>Understand Our Solutions</b>	<b>20</b>		
Range Overview	22	Wall Absorber Range	70
Baffle Range	24	Definition of Technical Performance Icons	84
Canopy Range	44	Acoustic Technical Glossary	86

# KNAUF CEILING SOLUTIONS

**We believe that the ceiling is an integral part of every interior space.**

It helps give us a wonderful sense of well-being and safety. A seamless connection between form and function, it enhances and protects the spaces in which we live, work, recover and grow. It balances acoustics, provides healthy air to breathe and influences how we think and feel.

Ultimately, it is our customers who create the perfect space using our solutions. To help them realise more exciting visions, two of the world's most recognised ceiling manufacturers have combined strengths to offer the best of both in one market- leading brand – Knauf Ceiling Solutions.

Spectacular projects can only become reality if the possibilities between functionality and design live in harmony.

With a boundless multi-material approach, Knauf Ceiling Solutions enables you to experience more choice, more inspiration and more support, to help find the unique solution you're looking for.

# FLOATING CEILING & WALL SOLUTIONS

## BAFFLES

---

Express a new narrative with vertical linear baffles and create a look to visually tell a story with a solution that will spark your imagination.

## CANOPIES

---

Open up an almost endless range of dramatic design possibilities with canopies that can be suspended from any soffit.

## WALL ABSORBERS

---

Wall solutions come in a variety of designs to provide a stunning visual durable enough for high-impact or high traffic areas. Coordinate with ceilings and other interior finishes to create signature spaces.



**DISCOVER  
IMMERSIVE  
FLOATING  
CEILING  
AND WALL  
SOLUTIONS.**

1 MINERAL Baffle Element  
(Stiegelmeier Kępcno sp. z o.o., Poland, © Szymon Polański)  
2 METAL Sky Element Hook, triangular shaped, Rg 0701, RAL 9010  
(Austria Center Vienna, Austria, © Ludwig Schedl)  
3 METAL Wallcoustic Horizon 1000  
(Wirral Waters, Tower Wharf, United Kingdom, © Infinite 3D Limited)

**BE INSPIRED**  
BY A TRULY  
VERSATILE  
APPROACH

## **A RANGE OF SOLUTIONS** AS BIG AS YOUR IMAGINATION

With such a unique and boundless range of multi-material ceiling and wall solutions, there are no limits to what you can achieve.

Whether it's acoustic performance, contemporary design, hygiene or comfort, Knauf Ceiling Solutions can tailor the perfect material for every application. The classical appeal of smooth or textured mineral tiles; the cool strength of metal ceilings; the sustainability of wood wool and the natural warmth of real wood.

From styling to detailing, let's think big, challenge convention and be different.



# UNRAVEL YOUR DESIGN ASPIRATIONS

**Breathe new life into your ceiling architecture — with creative design, impressive simplicity and high performance.**

Our **flexible criteria** allows you to mix or match standard, configurable (Vario Design) and bespoke solutions.

Combine shapes and dimensions, trendsetting colours, material systems and performances to make your project stand out from the rest.

Our portfolio of standard, configurable and bespoke floating ceilings and wall solutions gives you the freedom and flexibility to create unique solutions to fit every space.

With Knauf Ceiling Solutions, your wildest ideas become a reality.



## DESIGNED FOR FLEXIBILITY

METAL Baffle Element, RAL 5001 & RAL 5009  
(Klimahaus®, Germany, © Bettina Meckel – Fotodesign)

## 1 SHAPES & DIMENSIONS

Choose the most suitable solution from a large variety of flexible shapes, dimensions and layouts to create the design that meets your vision.

## 2 COLOURS & TEXTURES

Our mineral, metal and wood wool ranges bring colours to your interiors, and help change the atmosphere of a space depending on the material used. With a large choice of trendsetting colours, as well as wood effects for our metal range, you can create designs as colourful as your imagination.

## 3 MATERIAL SYSTEMS

A multi-material offer is at the core of Knauf Ceiling Solutions vision for every space allowing you to choose configurable solutions from our mineral, metal and wood wool range.

## 4 PERFORMANCES

Knauf Ceiling Solutions allow for a rich range of performance possibilities, from acoustics to design features, helping create the perfect versatile solution for every space.

## VARIO DESIGN OPTIONS










Unleash your design freedom and create any configurable solution that match your vision thanks to our **Vario Design** options.

# SHAPES & DIMENSIONS

Choose and combine shapes to express your project individuality.

Our Vario Design configurator tool will help you choose the most suitable solution from a large variety of flexible designs.



-  SQUARE
-  RECTANGLE
-  TRAPEZOID
-  HEXAGON
-  PARALLELOGRAM
-  CONCAVE & CONVEX
-  CIRCLE
-  TRIANGLE
-  VERTICAL

Configurable shapes and dimensions can be achieved with our Vario Design range.

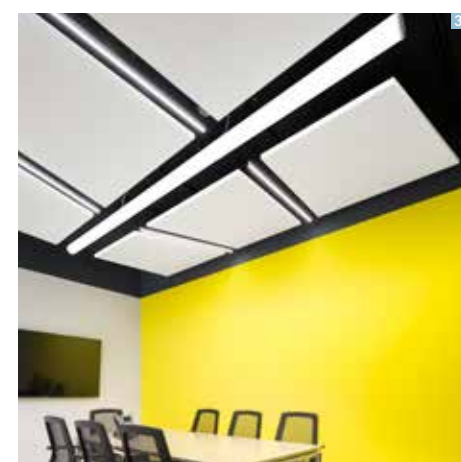
Please contact your local representative or visit [knaufceilingsolutions.com](http://knaufceilingsolutions.com).



SQUARE



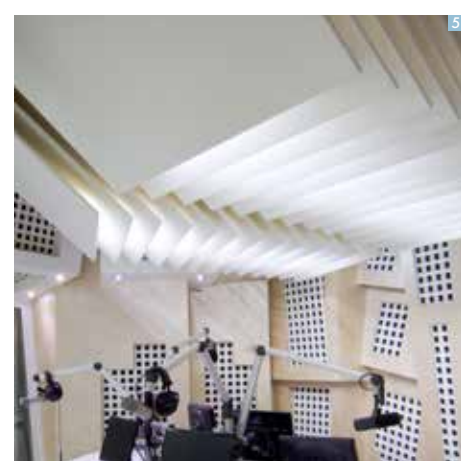
RECTANGLE



TRAPEZOID



HEXAGON



PARALLELOGRAM



CONCAVE & CONVEX



CIRCLE



TRIANGLE

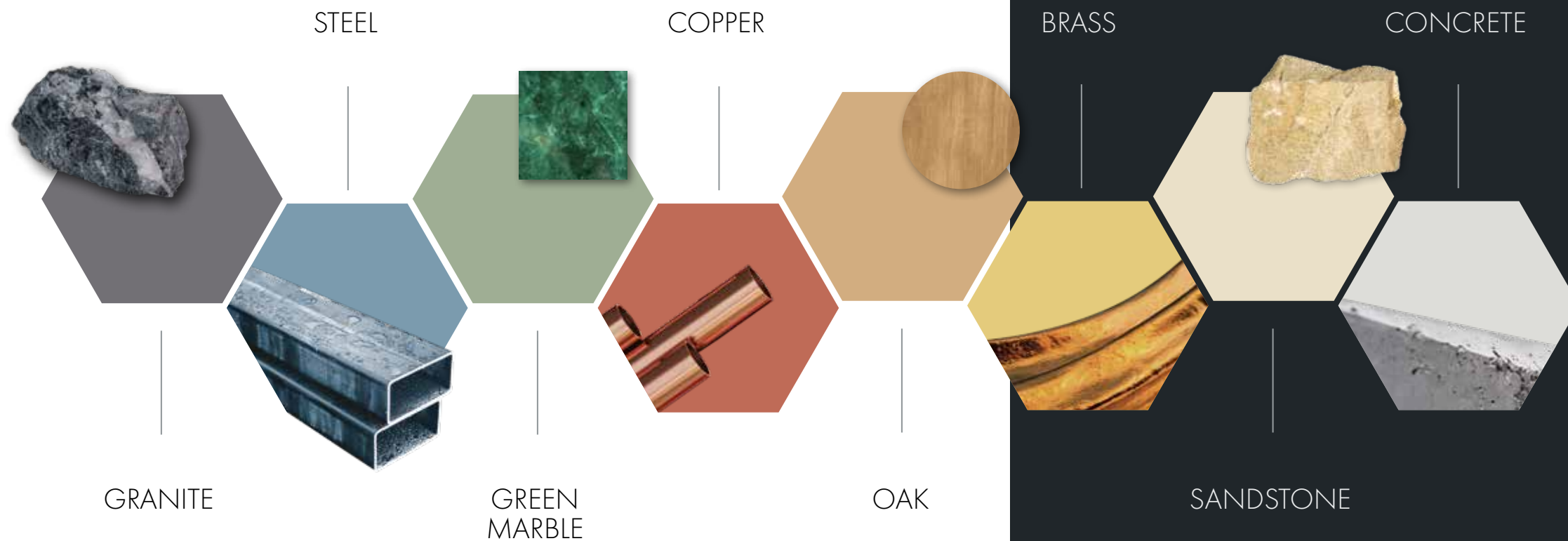


VERTICAL

1 MINERAL Sonic Element, Square (PwC, Poland, © Szymon Polański)  
 2 MINERAL Sonic Element, Rectangle (Atende, Praskie Koneser, Poland, © Szymon Polański)  
 3 MINERAL Sonic Element, Trapezoid (Stanley Black & Decker, Poland, © Szymon Polański)  
 4 MINERAL Baffle Element, Hexagon (TNO, Netherlands, © Gerard van Beek)  
 5 MINERAL Sonic Element, Left Parallelogram & Right Parallelogram (Radio S, Croatia, © Boris Wezmar)  
 6 MINERAL Sonic Element, Concave & Convex (Advent Underwriting, United Kingdom, © Philip Durrant)  
 7 MINERAL Sonic Element, Circle (Pizza Express, United Kingdom, © John Sturrock)  
 8 METAL Sonic Element, Triangle (Austria Center Vienna, Austria, © Ludwig Schedl)  
 9 HERADESIGN® Baffle Element (Applike, Germany, © Hafencyfstudios + BAID)



# TRENDSETTING COLOUR PALETTE



GRANITE

STEEL

GREEN MARBLE

COPPER

OAK

BRASS

SANDSTONE

CONCRETE

## Design to Impact

People feel comfortable and motivated when they live and work in pleasing and visually stimulating spaces.

With bold and long-lasting colours, architects not only impact the design of a room but will inspire and add a new dimension to interiors. Combining aesthetics and high product performance, our acoustic solutions help create relaxing, beautiful spaces that help boost our health and wellbeing. Our vast

choice of edge details, shapes, dimensions and colours help architects create spaces everyone can enjoy with their eyes and ears.

Taking part in the latest design trends, Knauf Ceiling Solutions curated a new palette of eight vibrant hues, peeking at elemental influences on wellbeing and nature for its core inspiration.

BRASS

CONCRETE

SANDSTONE

Granite, steel, green marble, copper, oak, sandstone, brass and concrete, natural elements or refined ones, all carved and revealed in their natural beauty by craftsmanship.

The colours are available across our open plenum mineral, metal and wood wool range, from baffles to canopies to wall absorber solutions, so that designers can create multi-sensory experiences through sound and colour.



## MATERIAL & GROUPING SYSTEM

**Imagine a unique, one-fits-all structure to adapt all kinds of floating solutions. No matter which product layout or material you opt for.**

The universal U-Profile suspension system is our solution for an endless combination of designs, allowing architects to mix and match materials, shapes and colours within our floating solutions range.

Providing ease of installation, the grouping system couples superior rigidity with perfect alignment and spacing, while minimising the hanging points.



# MATERIAL & GROUPING SYSTEM

Whether it's acoustic performance, contemporary design or comfort, Knauf Ceiling Solutions can tailor the perfect material for every application.

From the classical appeal of smooth mineral, the cool strength of metal or yet the sustainability of wood wool.

With our universal U-Profile suspension system, your wildest ideas become a reality, allowing you to find the right mix of shapes, colours and textures to unleash your creativity.

METAL

MINERAL

WOOD  
WOOL

## Compatible Products:

### Baffle Element

- MINERAL Baffle Element
- METAL Baffle Element
- MINERAL Baffle Element Arc
- HERADESIGN® Baffle Element Arc
- HERADESIGN® Baffle Element Profile

### Baffle Line

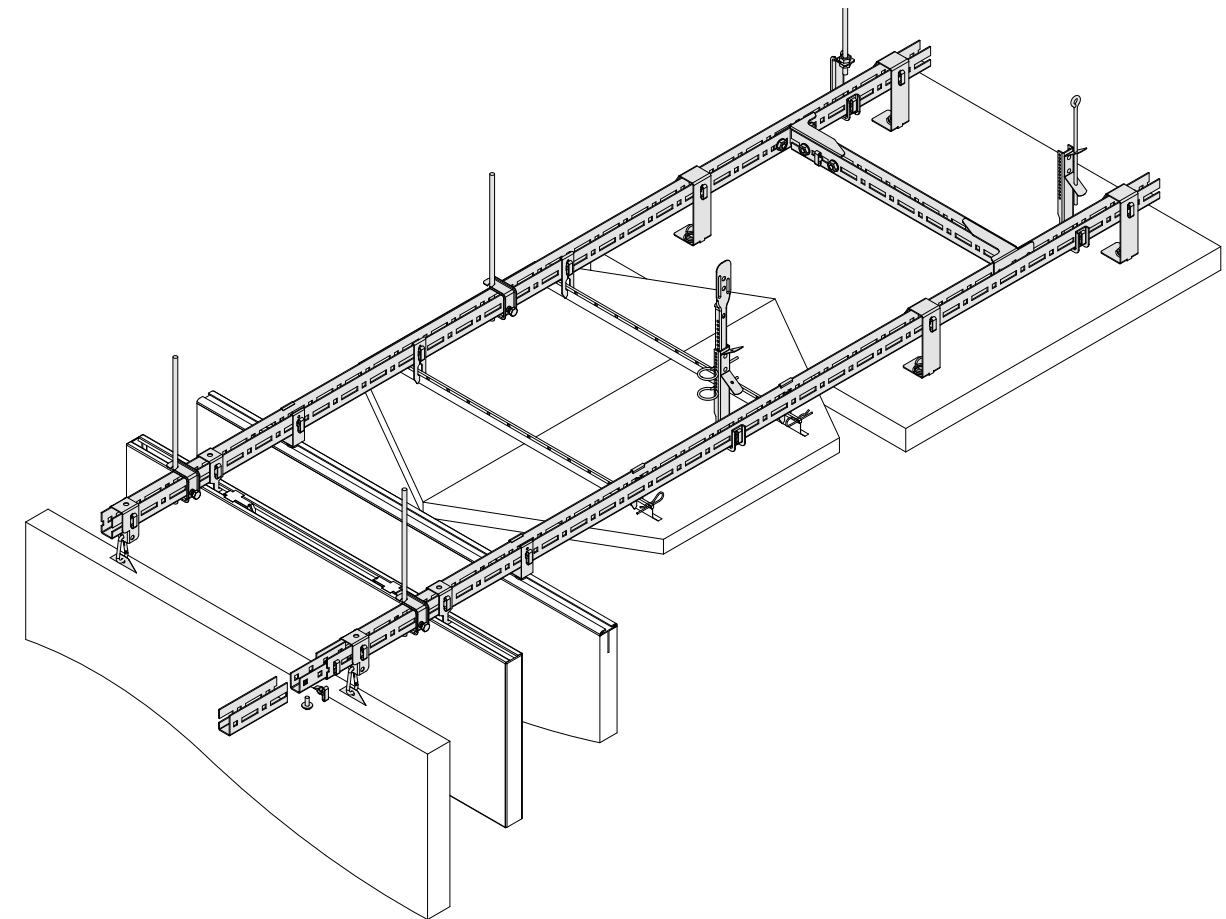
- MINERAL Baffle Line L
- HERADESIGN® Baffle Line

### Sonic Element

- MINERAL Sonic Element
- HERADESIGN® Sonic Element

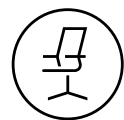
### Sonic Sky Element

- METAL Sky Element Clip





# LIMITLESS POSSIBILITIES FOR ALL APPLICATIONS



## OFFICE

**WORKPLACES THAT WORK BETTER**

Over our lifetimes, the average person spends around 90,000 hours in the workplace. It's our responsibility to make these spaces better for everyone.



## EDUCATION

**CREATE SPACES TO INSPIRE**

Having an education that will last a lifetime is down to outstanding, inspirational teachers that deliver learning with knowledge and passion — but these tutors need the right spaces in which to do this.



## RETAIL

**SHAPING THE RETAIL EXPERIENCE**

The path to purchase is never straightforward. There's a world of factors along the way that can sway a decision. And a major one of these is the retail environment — and the experience it creates.



## LEISURE & HOSPITALITY

**MAKE YOURSELF AT HOME**

Rest and relaxation is crucial for everyone's way of life — especially as everyone's way of life is different. But whatever people get up to in their downtime, their leisure spaces should be as enriching as their pastimes.



## HEALTHCARE

**CREATING SPACES TO HEALING**

Healthcare places huge demands on architecture — no matter if it's a waiting room in a local surgery or the intense environment of the operating theatre. In every space, there's a host of considerations critical to lives.



## TRANSPORT

**ARCHITECTURE THAT MOVES PEOPLE**

Our world is always in motion — billions of people travelling from city to city, continent to continent. And the buildings in which they arrive and depart need to play their part in making every journey better.



1 MINERAL Baffle Element (Adris Group Headquarters, Croatia, © Vedrana Ergic)  
 2 MINERAL Sonic Element, Circle (Chur Cantonal School, Switzerland, © Foto Lautenschlager)  
 3 METAL Baffle Element, RAL 5001 & RAL 5009 (Klimahaus®, Germany, © Bettina Meckel – Fotodesign)

4 MINERAL Sonic Element (Café Otto, France, © StudioYU)  
 5 MINERAL Baffle Element, MINERAL Sonic Element Circle (OZG Hospital, Netherlands, © Rob van Esch)  
 6 METAL Wallcoustic Horizon 1100 (Dubai International Airport, Dubai, © Beppe Rasò)

# UNDERSTAND OUR SOLUTIONS

## MATERIAL



## SOLUTION



## FRAME



## ATTRIBUTES

<b>MINERAL</b>		<b>Baffle</b> Individual Baffle	
<b>METAL</b>		<b>Baffle Sky</b> Modular Baffles	
<b>MESH</b>		<b>Sonic</b> Individual Canopy	
<b>HERADESIGN® WOOD WOOL</b>		<b>Sky</b> Modular Canopies	
<b>FABRIC</b>		<b>Wallcoustic</b> Individual Wall Absorber	
		<b>Wallcoustic Horizon</b> Modular Wall Absorbers	

<b>Element</b> Frameless	
<b>Line</b> With Frame	

<b>Arc</b> Curved effect	
<b>Angle</b> Geometric effect	
<b>L/</b> Fixing tabs for hook <b>N/</b> M6 screw fixing	
<b>Plus</b> Upstand + acoustic infill	
<b>Profile</b> Aluminium profile on top edge	
<b>90/50/20x20</b> Canopy edge details	
<b>1000/1100</b> Wall suspension type	
<b>Clip</b> Clip-In panels	
<b>Hook</b> Hook-On panels	
<b>MT</b> Welded + solid frame	
<b>20/27/50</b> Frame thickness	

Canopy shapes are part of the product description only.



# PRODUCT PORTFOLIO

## Baffle Range

### Baffle Element

MINERAL Baffle Element	26
METAL Baffle Element	28
HERADESIGN® Baffle Element	30
MINERAL Baffle Element Arc	32
HERADESIGN® Baffle Element Arc	34
HERADESIGN® Baffle Element Profile	36

### Baffle Line

MINERAL Baffle Line L / N	38
HERADESIGN® Baffle Line	40

### Baffle Sky Element

METAL Baffle Sky Element	42
--------------------------	----

## Canopy Range

### Sonic Element

MINERAL Sonic Element	46
METAL Sonic Element	48
HERADESIGN® Sonic Element	50
METAL Sonic Element Arc	52
MESH Sonic Element MT	54
HERADESIGN® Sonic Element Plus	56

### Sky Element

METAL Sky Element Clip / Hook	62
MESH Sky Element Hook MT	64
HERADESIGN® Sky Element	66

### Sky Line

HERADESIGN® Sky Line	68
----------------------	----

### Sonic Line

MINERAL Sonic Line	58
MINERAL Sonic Line Arc	60

## Wall Absorber Range

### Wallcoustic Element

MINERAL Wallcoustic Element	72
METAL Wallcoustic Element	74
HERADESIGN® Wallcoustic Element	76

### Wallcoustic Line

MINERAL Wallcoustic Line	78
FABRIC Wallcoustic Line 20 / 27 / 50	80

### Wallcoustic Horizon

METAL Wallcoustic Horizon	82
---------------------------	----



## BAFFLES

Express a new narrative with vertical linear baffles and create a look to visually tell a story with a solution that will spark your imagination.

## CANOPIES

Open up an almost endless range of dramatic design possibilities with canopies that can be suspended from any soffit.

## WALL ABSORBERS

Wall solutions come in a variety of designs to provide a stunning visual durable enough for high-impact or high traffic areas. Coordinate with ceilings and other interior finishes to create signature spaces.

1 MINERAL Baffle Element (Stiegelmeier Kepno sp. z o.o., Poland, © Szymon Polański)  
 2 METAL Sky Element Hook, triangular shaped, Rg 0701, RAL 9010 (Austria Center Vienna, Austria, © Ludwig Schedl)  
 3 METAL Wallcoustic Horizon 1000 (Wirral Waters, Tower Wharf, United Kingdom, © Infinite 3D Limited)





## BAFFLE RANGE

**Vertical baffles perfectly answer today's trend for linear ceilings.**

Knauf Ceiling Solutions' mineral, metal, mesh and wood wool baffles bring an enhanced acoustic experience and high-end visual to any project.

From making a bold statement with a complete room installation using our grouping system to individual baffles used to accentuate specific areas, our range will bring you a wide choice of shapes, colours and textures.


























Vertical Baffle Systems  
**MINERAL Baffle Element**  
 (OPTIMA Baffle)  
 Individual / Grouped

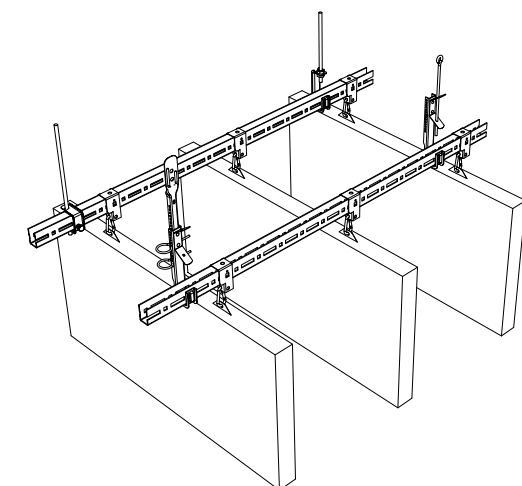
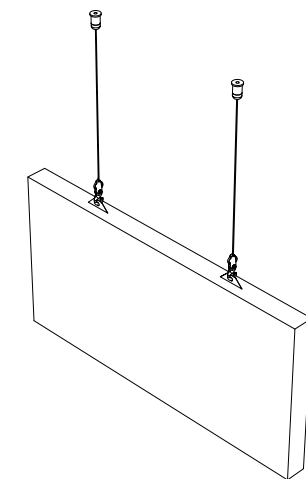


- MINERAL Baffle Element is a range of high performance acoustical baffles with a white laminate surface for a modern linear appearance.
- Good sound absorption: reduce noise levels, increase intelligibility and reduce reverberation time in a space
- Typically used to provide high levels of acoustic absorption in offices, leisure centres, transport hubs, etc



Vertical Baffle Systems  
**MINERAL Baffle Element**  
 Individual / Grouped

<b>Thickness (mm)</b>		39																			
<b>Dimensions (mm)</b> Additional dimensions available on request		1200 x 300 1200 x 400	1800 x 300 1800 x 400																		
<b>System</b>		Hanging Wire Kit U Profile grouping option T Grid grouping option																			
<b>Weight</b>		1200 x 300: 3.8 kg / pc 1200 x 400: 5.0 kg / pc	1800 x 300: 5.6 kg / pc 1800 x 400: 7.5 kg / pc																		
<b>Colour &amp; design</b>		 White  Granite  Steel  Green Marble  Copper  Oak  Brass  Sandstone  Concrete <b>vo Vario Design Colours</b>																			
<b>Sound absorption</b>		EN ISO 354 $\alpha_w = 0.50(MH)$ (300mm) as per EN ISO 11654 - <b>Class D</b> Frequency $f$ (Hz) <table border="1"> <tr> <td>125</td> <td>250</td> <td>500</td> <td>1000</td> <td>2000</td> <td>4000</td> </tr> <tr> <td>Baffles 1200 x 300mm</td> <td>0.15</td> <td>0.25</td> <td>0.45</td> <td>0.90</td> <td>0.90</td> </tr> <tr> <td><math>\alpha_p</math> Row distances 300mm</td> <td></td> <td></td> <td></td> <td></td> <td>0.95</td> </tr> </table> NRC = <b>0.65</b> (300mm) as per ASTM C 423		125	250	500	1000	2000	4000	Baffles 1200 x 300mm	0.15	0.25	0.45	0.90	0.90	$\alpha_p$ Row distances 300mm					0.95
125	250	500	1000	2000	4000																
Baffles 1200 x 300mm	0.15	0.25	0.45	0.90	0.90																
$\alpha_p$ Row distances 300mm					0.95																
<b>Fire reaction</b>		Euroclass <b>A2-s1,d0</b> as per EN 13501-1																			
<b>Humidity resistance</b>		90%																			
<b>Indoor air quality</b>		 A+  E1  IACG																			
<b>Cleanability</b>																					
<b>Sustainability</b>																					



**vo** Options with this icon are available from our **Vario Design** range. Products may vary from country to country. Please contact your local sales representative. For further information and legal notice, please visit our website.





## Vertical Baffle Systems

# METAL Baffle Element

(METAL Baffle / V-P 500)  
Individual / Grouped





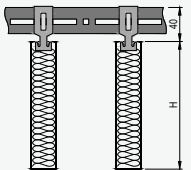














- METAL Baffle Element solutions are typically used in acoustically-challenged spaces - airports, rail terminals, semi-exposed soffit buildings, offices, retail, leisure centres, etc.
- Linear layout.
- Fully configurable solution with variable baffles spacing.
- Different baffle height combinations and radial installations possible.
- Suitable solution for corridors.
- Quick and easy to install with adjustable hanging wires (individual).
- Installed on a U-profile system for a perfect alignment and with optional face covers (grouped).
- Delivered with an acoustic pad fitted inside.
- Further dimensions and options available on request.
- Easy service integration into the ceiling space.
- Additional design options available as part of our Vario Design range.



## Vertical Baffle Systems

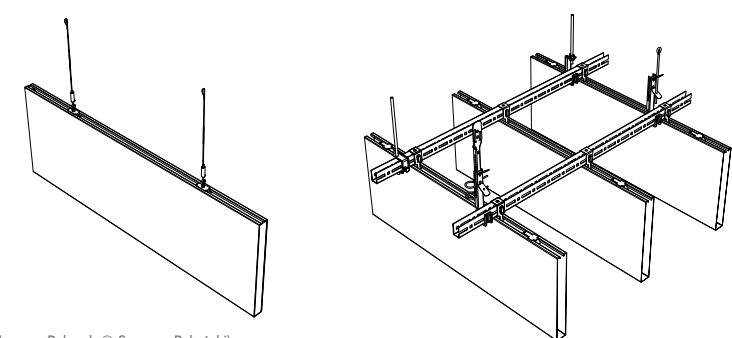
# METAL Baffle Element

Individual / Grouped

<b>Edge details</b>		<b>METAL Baffle Element [Individual]</b> 	<b>METAL Baffle Element [Grouped]</b> 
<b>System</b>		METAL Baffle Element Hanging Wire Kit (length 4000mm) Face covers and connectors available as separate items. <i>Not included.</i>	U-Profile
<b>Dimensions (mm)</b>		1800 x 300 x 30 <i>Available in 2 pieces/carton.</i>	Baffle length: various dimensions Baffle width: 30 Baffle height: 150 / 200 / 250 / 300
<b>Material &amp; perforations</b>		Powder-coated galvanised steel, 0.7mm	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  Unperforated         </div> <div style="text-align: center;">  Standard perforation <b>Rg 2516</b> Ø: 2.5mm Open area: 16%         </div> <div style="text-align: center;">  Micro-perforation <b>Rd 1522</b> Ø: 1.5mm Open area: 22%         </div> <div style="text-align: center;">  Extramicro perforation <b>Rg 0701</b> Ø: 0.7mm Open area: 1.5%         </div> <div style="text-align: center;"> <small>(both vertical sides) Acoustic pad 25mm, 25 kg/m<sup>2</sup></small> </div> </div>
		<b>Other perforations</b>	
		<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> Rd 1511</div> <div style="text-align: center;"> Rg 1511</div> <div style="text-align: center;"> Rg 1821</div> <div style="text-align: center;"> Rg 3013</div> <div style="text-align: center;"> Qg 4025</div> </div>	
<b>Colours</b>		<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">  RAL 9010         </div> <div style="width: 45%;"> <b>Vario Design colours</b> <div style="display: grid; grid-template-columns: repeat(8, 1fr); gap: 5px;"> <div style="background-color: #444; width: 20px; height: 20px;"></div> Granite</div> <div style="background-color: #888; width: 20px; height: 20px;"></div> Steel</div> <div style="background-color: #999; width: 20px; height: 20px;"></div> Green Marble</div> <div style="background-color: #c00; width: 20px; height: 20px;"></div> Copper	

**Wood effects**

Ash

 Natural Bamboo

[Previous page] METAL Baffle Element, Grouped (E&Y, Warsaw, Poland, © Szymon Polański)

**vb** Options with this icon are available from our Vario Design range. Products may vary from country to country. Please contact your local sales representative. For further information and legal notice, please visit our website.





Vertical Baffle Systems  
**HERADESIGN® Baffle Element**  
 (HERADESIGN® Baffle Plain)  
 Individual

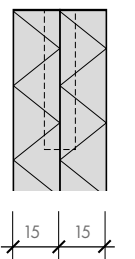
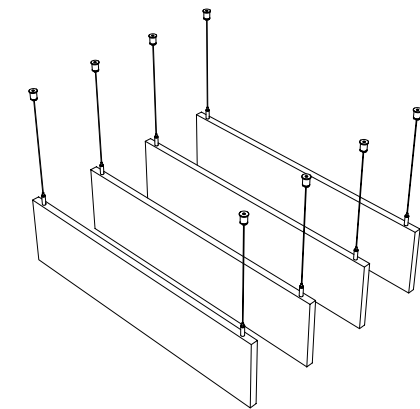


- HERADESIGN® Baffle Element is a cost-effective, wood wool acoustic solution
- Two-layer baffle with HERADESIGN® cover layers and concealed sleeves for fastening the supplied hangers
- Delivered as a kit, making them quick and easy to install
- Baffles are available with a HERADESIGN® Fine and Superfine surface
- Available in 1200x600, 1200x300, 600x600 and 600x300mm dimensions
- Available in Vario Design and RAL and NCS colours



Vertical Baffle Systems  
**HERADESIGN® Baffle Element**  
 Individual

<b>Surface</b>		<b>HERADESIGN® Fine, Fine A2</b>	<b>HERADESIGN® Superfine, Superfine A2</b>						
<b>Thickness (mm)</b>		30							
<b>Dimensions (mm)</b>		600 x 300 1200 x 300 600 x 600 1200 x 600							
<b>System</b>		Including Hanging Wire Kit in 200mm or 500mm							
<b>Weight</b>		HERADESIGN® Fine 600 x 300: 3.1 kg/pc 1200 x 300: 6.3 kg/pc 600 x 600: 6.1 kg/pc 1200 x 600: 12.2 kg/pc	HERADESIGN® Fine A2 600 x 300: 4.8 kg/pc 1200 x 300: 9.7 kg/pc 600 x 600: 9.5 kg/pc 1200 x 600: 19 kg/pc	HERADESIGN® Superfine 600 x 300: 3.0 kg/pc 1200 x 300: 6.0 kg/pc 600 x 600: 5.8 kg/pc 1200 x 600: 11.6 kg/pc	HERADESIGN® Superfine A2 600 x 300: 4.5 kg/pc 1200 x 300: 8.9 kg/pc 600 x 600: 8.8 kg/pc 1200 x 600: 17.6 kg/pc				
<b>Colours</b>		<b>Standard colours</b>		<b>Vario Design colours</b>					
		 White Similar to RAL 9010	 Beige Natural tone 13						
		<ul style="list-style-type: none"> <li>• Other colours from popular RAL and NCS colour systems are available.</li> <li>• Deviations in colour and visual appearance may occur due to the rough fibre and panel surface.</li> </ul>							
<b>Sound absorption</b>		HERADESIGN® Baffle Element Fine $\alpha_w$ = up to <b>0.55</b> NRC = up to <b>0.60</b>		HERADESIGN® Baffle Element Superfine $\alpha_w$ = up to <b>0.55</b> NRC = up to <b>0.60</b>					
<b>Fire reaction</b>		Euroclass <b>B-s1,d0</b> and <b>A2-s1,d0</b> according EN 13501-1							
<b>Light reflectance</b>		HERADESIGN® Fine <b>76%</b> HERADESIGN® Superfine <b>72%</b>							
<b>Humidity resistance</b>		Not suitable for indoor swimming pools, underground garages and outdoor areas							
<b>Cleanability</b>									
<b>Sustainability</b>									



Two-layer baffle with HERADESIGN® cover layers and concealed sleeves for fastening the supplied hangers.

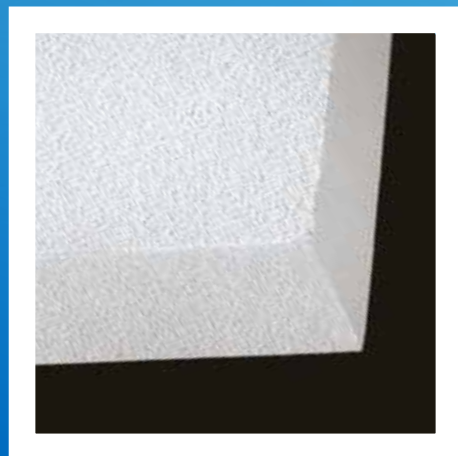
[Previous page] HERADESIGN® Baffle Element (Partner Construction & Design, Kiev © Sergiy Kadulin)

**VO** Options with this icon are available from our **Vario Design** range. Some combinations of colours and/or perforations are not available for every product. Products may vary from country to country. Please contact your local sales representative. For further information and legal notice, please visit our website.










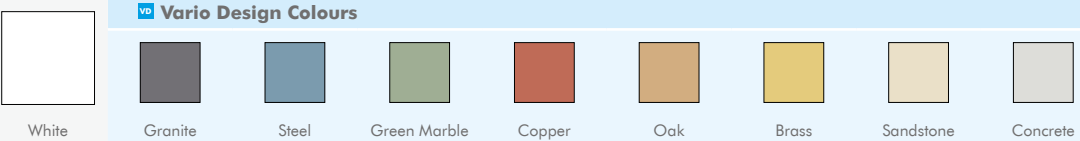











Vertical Baffle Systems  
**MINERAL Baffle Element Arc**  
 (OPTIMA Baffle Curves)  
 Individual / Grouped



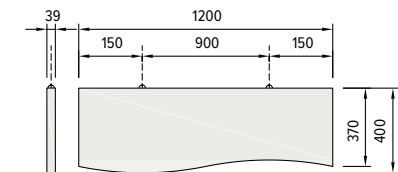
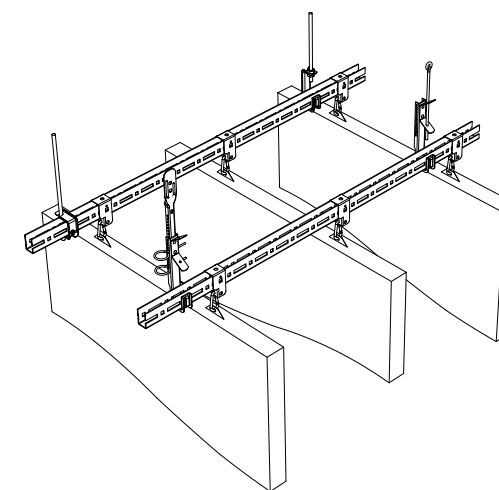
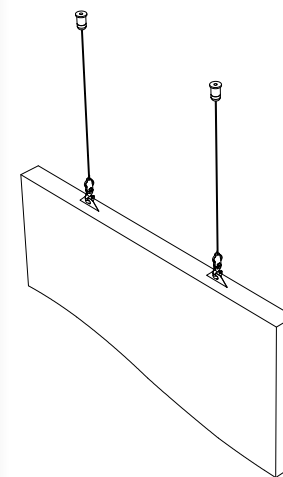
- With MINERAL Baffle Element Arc you can create exciting interiors without compromising acoustic performance, even with modern exposed soffit ceilings
- Modern curved appearance
- Reduce noise levels, increase speech intelligibility and reduce reverberation time in the space
- Install individually or in groups
- Typically used in schools, offices, leisure centres, transport hubs, etc.



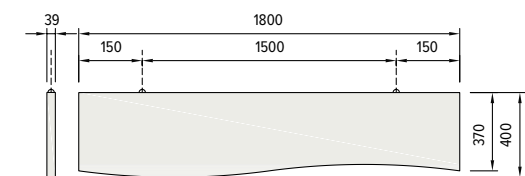
Vertical Baffle Systems  
**MINERAL Baffle Element Arc**  
 Individual / Grouped

<b>Thickness (mm)</b>		39														
<b>Dimensions (mm)</b> Additional sizes on request		1200 x 400 1800 x 400														
<b>System</b>		Hanging Wire Kit U-Profile grouping option T-Grid Main Runner grouping option														
<b>Weight</b>		1200 x 400: 5.0 kg/pc 1800 x 400: 7.5 kg/pc														
<b>Colour &amp; design</b>		 <p>Vario Design Colours</p> <p>White Granite Steel Green Marble Copper Oak Brass Sandstone Concrete</p>														
<b>Sound absorption</b>		EN ISO 354 $\alpha_w = 0.50(MH)$ as per EN ISO 11654 - <b>Class D</b> Frequency $f$ (Hz) <table border="1" data-bbox="1884 751 2804 787"> <tr> <td></td> <td>125</td> <td>250</td> <td>500</td> <td>1000</td> <td>2000</td> <td>4000</td> </tr> </table> $\alpha_p$ Row distances 300mm <table border="1" data-bbox="1884 793 2804 829"> <tr> <td></td> <td>0.15</td> <td>0.25</td> <td>0.45</td> <td>0.90</td> <td>0.90</td> <td>0.95</td> </tr> </table> NRC = <b>0.65</b> as per ASTM C 423		125	250	500	1000	2000	4000		0.15	0.25	0.45	0.90	0.90	0.95
	125	250	500	1000	2000	4000										
	0.15	0.25	0.45	0.90	0.90	0.95										
<b>Fire reaction</b>		Euroclass <b>A2-s1,d0</b> as per EN 13501-1														
<b>Humidity resistance</b>		<b>90%</b>														
<b>Indoor air quality</b>		 A+  E1  IACG														
<b>Cleanability</b>																
<b>Sustainability</b>																


MINERAL Baffle Element Arc



Module 1200 x 400 mm



Module 1800 x 400 mm

 Options with this icon are available from our Vario Design range. Products may vary from country to country. Please contact your local sales representative. For further information and legal notice, please visit our website.





Vertical Baffle Systems  
**HERADESIGN® Baffle Element Arc**  
 (HERADESIGN® Baffle Basic Creative)  
 Individual / Grouped

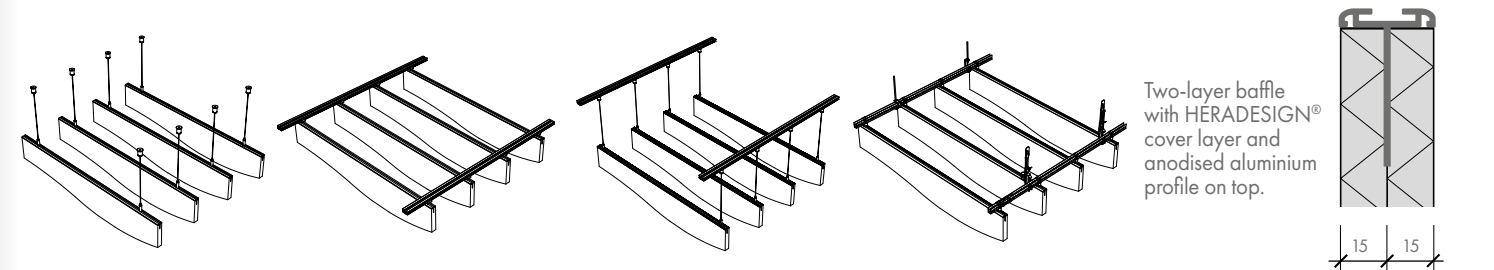


- HERADESIGN® Baffle Element Arc is a decorative wood wool acoustic ceiling baffle that offers unlimited design possibilities
- Baffles are available with a HERADESIGN® Fine and Superfine surface
- Two-layer baffle with HERADESIGN® cover layers and anodised aluminium profile on the top side
- Available in 1200mm and 2400mm lengths in predefined shapes to create unique ceiling designs
- Available in Vario Design and RAL and NCS colours



Vertical Baffle Systems  
**HERADESIGN® Baffle Element Arc**  
 Individual / Grouped

<b>Surface</b>		<b>HERADESIGN® Fine, Fine A2</b> 	<b>HERADESIGN® Superfine, Superfine A2</b> 																																													
<b>Thickness (mm)</b>		30																																														
<b>Dimensions (mm)</b>		Available in 2400mm and 1200mm lengths																																														
<b>System</b>		Hanging wire kit (with/without ceiling rail) option Short hanger kit with ceiling rail option U-Profile grouping system																																														
<b>Weight</b>		HERADESIGN® Fine Baffle type XL: 11.8 kg/pc Baffle type L: 5.9 kg/pc	HERADESIGN® Fine A2 Baffle type XL: 16.8 kg/pc Baffle type L: 8.4 kg/pc																																													
<b>Colours</b>		<b>Standard colours</b>  White (Similar to RAL 9010) Beige (Natural tone 13)	<b>Vario Design colours</b>  • Other colours from popular RAL and NCS colour systems are available. • Deviations in colour and visual appearance may occur due to the rough fibre and panel surface.																																													
<b>Sound absorption</b>		<table border="1"> <thead> <tr> <th rowspan="2">Baffle</th> <th rowspan="2">SH [mm]</th> <th rowspan="2">B [mm]</th> <th colspan="7">Frequency [Hz], <math>\alpha_p</math></th> <th colspan="2">Entire range</th> <th rowspan="2">Class</th> </tr> <tr> <th>125</th> <th>250</th> <th>500</th> <th>1000</th> <th>2000</th> <th>4000</th> <th>NRC</th> <th><math>\alpha_w</math></th> </tr> </thead> <tbody> <tr> <td>HERADESIGN® Superfine</td> <td>200</td> <td>200</td> <td>0.15</td> <td>0.20</td> <td>0.30</td> <td>0.45</td> <td>0.75</td> <td>0.85</td> <td>0.40</td> <td>0.40 (H)</td> <td>D</td> </tr> <tr> <td>HERADESIGN® Superfine</td> <td>200</td> <td>300</td> <td>0.10</td> <td>0.15</td> <td>0.25</td> <td>0.35</td> <td>0.65</td> <td>0.75</td> <td>0.35</td> <td>0.35 (H)</td> <td>D</td> </tr> </tbody> </table>		Baffle	SH [mm]	B [mm]	Frequency [Hz], $\alpha_p$							Entire range		Class	125	250	500	1000	2000	4000	NRC	$\alpha_w$	HERADESIGN® Superfine	200	200	0.15	0.20	0.30	0.45	0.75	0.85	0.40	0.40 (H)	D	HERADESIGN® Superfine	200	300	0.10	0.15	0.25	0.35	0.65	0.75	0.35	0.35 (H)	D
Baffle	SH [mm]	B [mm]	Frequency [Hz], $\alpha_p$							Entire range		Class																																				
			125	250	500	1000	2000	4000	NRC	$\alpha_w$																																						
HERADESIGN® Superfine	200	200	0.15	0.20	0.30	0.45	0.75	0.85	0.40	0.40 (H)	D																																					
HERADESIGN® Superfine	200	300	0.10	0.15	0.25	0.35	0.65	0.75	0.35	0.35 (H)	D																																					
<b>Fire reaction</b>		Euroclass <b>B-s1,d0</b> and <b>A2-s1,d0</b> according to EN 13501-1																																														
<b>Humidity resistance</b>		Not suitable for use in indoor swimming pools, underground car parks and external applications																																														



[Previous page] HERADESIGN® Baffle Element Arc (ERC Group Bank, Kiev, © Sergiy Kadulin)

**vo** Options with this icon are available from our **Vario Design** range. Some combinations of colours and/or perforations are not available for every product. Products may vary from country to country. Please contact your local sales representative. For further information and legal notice, please visit our website.





Vertical Baffle Systems

# HERADESIGN® Baffle Element Profile

(HERADESIGN® Baffle Basic)  
Individual / Grouped



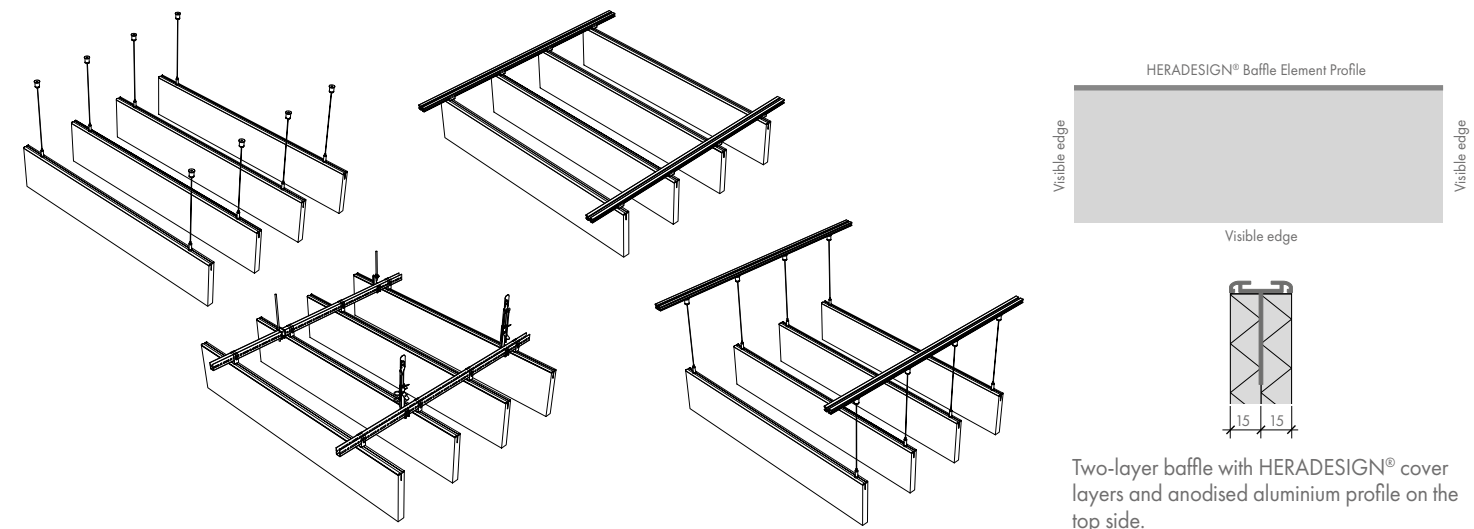
- HERADESIGN® Baffle Element Profile is a range of high performance, wood wool acoustical baffles, available in a variety of surfaces and dimensions
- Baffles are available with a HERADESIGN® Fine and Superfine surface
- Two-layer baffle with HERADESIGN® cover layers and anodised aluminium profile on the top side
- Available with a 2500mm maximum length and 200mm minimum height
- Available in Vario Design and RAL and NCS colours
- Various pre-assembled HERADESIGN® hangers can be selected for extra flexibility
- Special shapes and dimensions available on request



## Vertical Baffle System HERADESIGN® Baffle Element Profile

Individual / Grouped

<b>Surface</b>		<b>HERADESIGN® Fine, Fine A2</b>		<b>HERADESIGN® Superfine, Superfine A2</b>	
<b>Thickness (mm)</b>		30			
<b>Dimensions (mm)</b>		600 x 300 1200 x 300 1800 x 300	600 x 600 1200 x 600 1800 x 600	Additional dimensions available on request. Maximum length = 2500mm	
<b>System</b>		Hanging wire kit (with/without ceiling rail) Short hanger kit with ceiling rail option U-Profile grouping option			
<b>Weight</b>		HERADESIGN® Fine 600 x 300: 3.1 kg/pc 1200 x 300: 6.3 kg/pc 1800 x 300: 9.4 kg/pc 600 x 600: 6.1 kg/pc 1200 x 600: 12.2 kg/pc 1800 x 600: 18.3 kg/pc	HERADESIGN® Fine A2 600 x 300: 4.8 kg/pc 1200 x 300: 9.7 kg/pc 1800 x 300: 14.5 kg/pc 600 x 600: 9.5 kg/pc 1200 x 600: 19.0 kg/pc 1800 x 600: 28.5 kg/pc	HERADESIGN® Superfine 600 x 300: 3.0 kg/pc 1200 x 300: 6.0 kg/pc 1800 x 300: 9.0 kg/pc 600 x 600: 5.8 kg/pc 1200 x 600: 11.6 kg/pc 1800 x 600: 17.4 kg/pc	HERADESIGN® Superfine A2 600 x 300: 4.5 kg/pc 1200 x 300: 8.9 kg/pc 1800 x 300: 13.4 kg/pc 600 x 600: 8.8 kg/pc 1200 x 600: 17.6 kg/pc 1800 x 600: 26.4 kg/pc
<b>Colours</b>		<b>Standard colours</b>		<b>Vario Design colours</b>	
		White Similar to RAL 9010	Beige Natural tone 13	Granite	Steel
				Green Marble	Copper
				Oak	Brass
				Sandstone	Concrete
		• Other colours from popular RAL and NCS colour systems are available. • Deviations in colour and visual appearance may occur due to the rough fibre and panel surface.			
<b>Sound absorption</b>		HERADESIGN® Baffle Element Profile Fine $\alpha_w$ = up to <b>0.55</b> NRC = up to <b>0.60</b>		HERADESIGN® Baffle Element Profile Superfine $\alpha_w$ = up to <b>0.55</b> NRC = up to <b>0.60</b>	
<b>Fire reaction</b>		Euroclass <b>B-s1,d0</b> and <b>A2-s1,d0</b> according EN 13501-1			
<b>Humidity resistance</b>		Not suitable for indoor swimming pools, underground garages and outdoor areas			
<b>Cleanability</b>					
<b>Sustainability</b>					



[Previous page] HERADESIGN® Baffle Element Profile (ASTARTA Organic Business Center, Ukraine)

**vo** Options with this icon are available from our **Vario Design** range. Some combinations of colours and/or perforations are not available for every product. Products may vary from country to country. Please contact your local sales representative. For further information and legal notice, please visit our website.





Vertical Baffle Systems  
**MINERAL Baffle Line L/N**  
 (THERMATEX® Baffle)  
 Individual / Grouped (only MINERAL Baffle Line L)



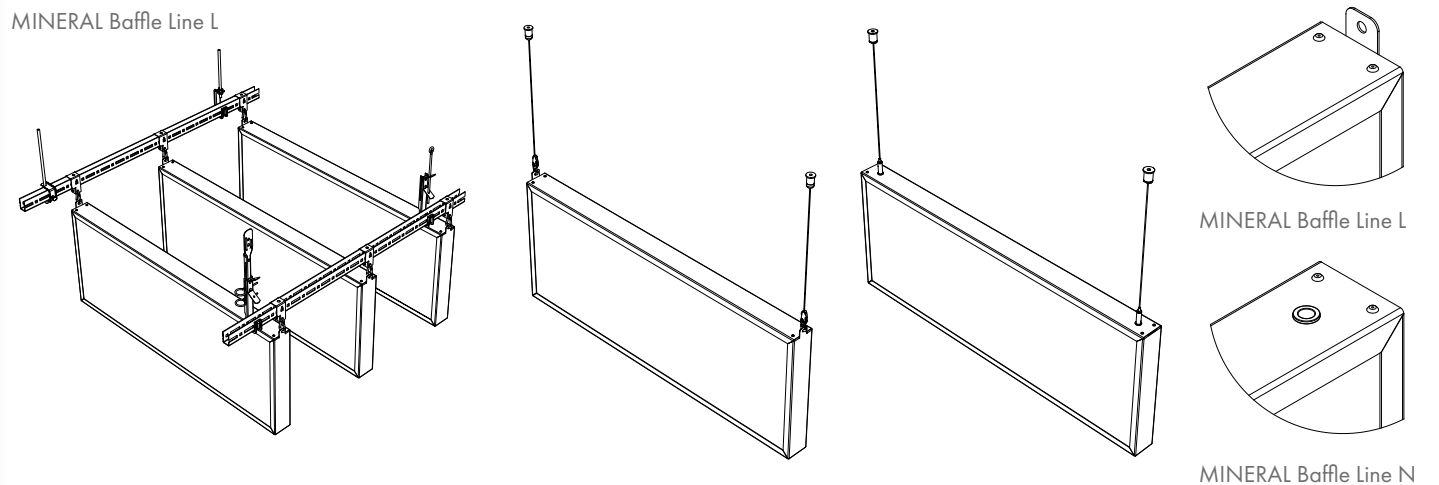
- MINERAL Baffle Line L and Line N features an aluminium frame and white laminate surface for a modern linear appearance. MINERAL Baffle Line L and Line N are also available in a variety of colours or customised graphic prints on request
- Good sound absorption: reduce noise levels, increase intelligibility and reduce reverberation time in a space
- Typically used to provide high levels of acoustic absorption in offices, leisure centres, transport hubs, etc



Vertical Baffle Systems  
**MINERAL Baffle Line L/N**  
 Individual / Grouped (only MINERAL Baffle Line L)

<b>Thickness (mm)</b>		50																						
<b>Dimensions (mm)</b> Additional sizes on request		1200 x 300 1200 x 400	1800 x 300 1800 x 400																					
<b>System</b>		MINERAL Baffle Line N - wire hanger with top screw thread MINERAL Baffle Line L - wire hanger with tab connector MINERAL Baffle Line L - U-Profile and carabiner with tab connector																						
<b>Weight</b>		1200 x 300: 3.2 kg/pc 1200 x 400: 4.1 kg/pc	1800 x 300: 4.7 kg/pc 1800 x 400: 6.0 kg/pc																					
<b>Colour &amp; design</b>		<b>Frame:</b> Anodised Aluminium, White, Colours White Granite Steel Green Marble Copper Oak Brass Sandstone Concrete <b>Motif:</b> Custom Graphic Print																						
<b>Sound absorption</b>		EN ISO 354 $\alpha_w = 0.60(\text{MH})$ (300mm) as per EN ISO 11654 - <b>Class C</b> <table border="1"> <thead> <tr> <th>Frequency <i>f</i> (Hz)</th> <th>125</th> <th>250</th> <th>500</th> <th>1000</th> <th>2000</th> <th>4000</th> </tr> </thead> <tbody> <tr> <td>Baffles 1200 x 300mm</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><math>\alpha_p</math> Row distances 300mm</td> <td>0.35</td> <td>0.40</td> <td>0.55</td> <td>0.90</td> <td>0.90</td> <td>0.90</td> </tr> </tbody> </table> NRC = <b>0.65</b> as per ASTM C 423		Frequency <i>f</i> (Hz)	125	250	500	1000	2000	4000	Baffles 1200 x 300mm							$\alpha_p$ Row distances 300mm	0.35	0.40	0.55	0.90	0.90	0.90
Frequency <i>f</i> (Hz)	125	250	500	1000	2000	4000																		
Baffles 1200 x 300mm																								
$\alpha_p$ Row distances 300mm	0.35	0.40	0.55	0.90	0.90	0.90																		
<b>Fire reaction</b>		Euroclass <b>A2-s1,d0</b> as per EN 13501-1																						
<b>Light reflectance</b>		<b>88%</b>																						
<b>Humidity resistance</b>		<b>90%</b>																						
<b>Cleanability</b>																								
<b>Sustainability</b>		 EC 1272/2008 Annex II																						

MINERAL Baffle Line L



Options with this icon are available from our **Vario Design** range. Products may vary from country to country. Please contact your local sales representative. For further information and legal notice, please visit our website.





Vertical Baffle Systems  
**HERADESIGN® Baffle Line**  
 (HERADESIGN® Baffle Aludesign)  
 Individual / Grouped

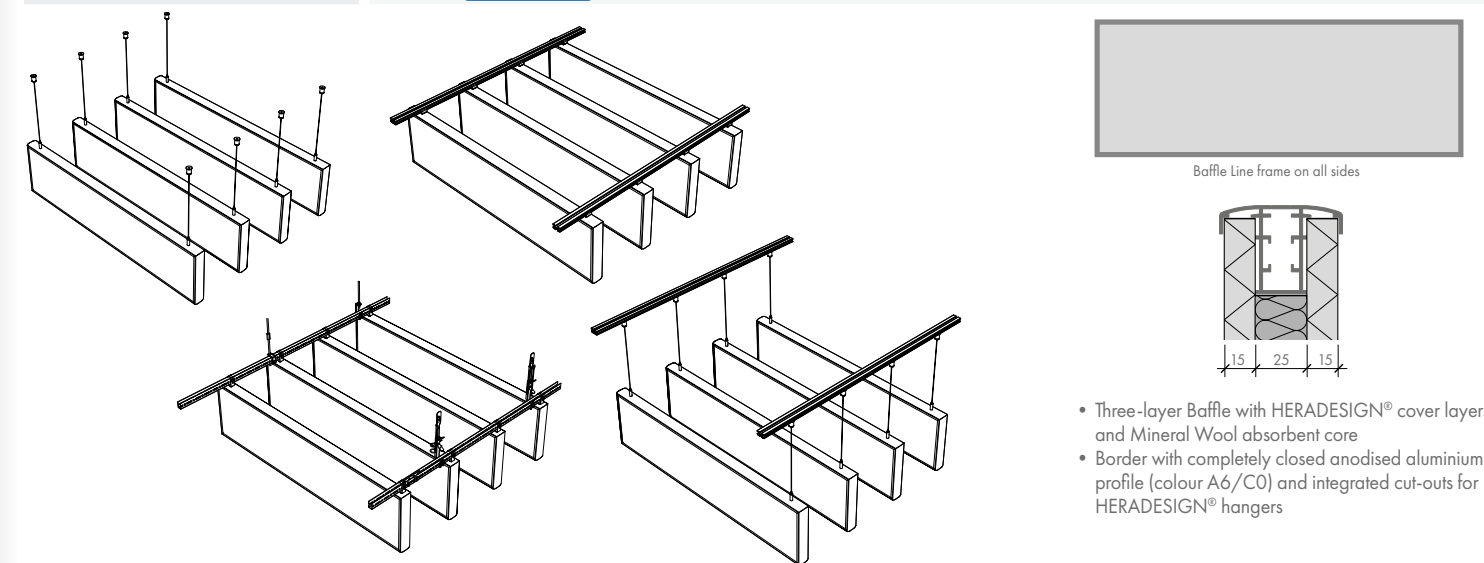


- HERADESIGN® Baffle Line is a range of high performance, wood wool acoustical baffles, available in a variety of surfaces and dimensions
- Baffles are available with a HERADESIGN® Fine and Superfine surface texture
- High sound absorption performance
- Three-layer baffle with HERADESIGN® cover layers and mineral wool absorbent core
- Available with a 2500mm maximum length and 200mm minimum height. Special sizes on request, depending on quantity
- Various pre-assembled HERADESIGN® hangers can be selected for extra flexibility
- Framing with completely closed anodised aluminium profile and integrated cut-outs for HERADESIGN® hangers
- Available in Vario Design and RAL and NCS colours for HERADESIGN® cover layers



Vertical Baffle Systems  
**HERADESIGN® Baffle Line**  
 Individual / Grouped

<b>Surface</b>		<b>HERADESIGN® Fine, Fine A2</b>	<b>HERADESIGN® Superfine, Superfine A2</b>		
<b>Thickness (mm)</b>		55			
<b>Dimensions (mm)</b>		600 x 300 1200 x 300 1800 x 300	600 x 600 1200 x 600 1800 x 600	Additional dimensions available on request. Maximum length = 2500mm	
<b>System</b>		Hanging wire kit (with/without ceiling rail) Short hanger kit with ceiling rail option U-Profile grouping option			
<b>Weight</b>		HERADESIGN® Fine 600 x 300: 4.5 kg/pc 1200 x 300: 8.7 kg/pc 1800 x 300: 12.9 kg/pc	HERADESIGN® Fine A2 600 x 300: 6.1 kg/pc 1200 x 300: 12.0 kg/pc 1800 x 300: 17.8 kg/pc	HERADESIGN® Superfine 600 x 300: 4.4 kg/pc 1200 x 300: 8.4 kg/pc 1800 x 300: 12.5 kg/pc	HERADESIGN® Superfine A2 600 x 300: 5.8 kg/pc 1200 x 300: 11.3 kg/pc 1800 x 300: 16.8 kg/pc
<b>Colours</b>		<b>Standard colours</b> vs <b>Vario Design colours</b>  White (Similar to RAL 9010)   Beige (Natural tone 13)   Granite   Steel   Green Marble   Copper   Oak   Brass   Sandstone   Concrete • Other colours from popular RAL and NCS colour systems are available. • Deviations in colour and visual appearance may occur due to the rough fibre and panel surface.			
<b>Sound absorption</b>		HERADESIGN® Baffle Line Fine $\alpha_w$ = up to <b>0.75</b> NRC = up to <b>0.70</b>	HERADESIGN® Baffle Line Superfine $\alpha_w$ = up to <b>0.80</b> NRC = up to <b>0.75</b>	HERADESIGN® Baffle Line Superfine A2 $\alpha_w$ = up to <b>0.75</b> NRC = up to <b>0.75</b>	
<b>Fire reaction</b>		Euroclass <b>B-s1,d0</b> and <b>A2-s1,d0</b> according EN 13501-1			
<b>Humidity resistance</b>		Not suitable for indoor swimming pools, underground garages and outdoor areas			
<b>Cleanability</b>					
<b>Sustainability</b>					



[Previous page] HERADESIGN® Baffle Line (FH Rhein Waal, Germany)

**vo** Options with this icon are available from our **Vario Design** range. Some combinations of colours and/or perforations are not available for every product. Products may vary from country to country. Please contact your local sales representative. For further information and legal notice, please visit our website.







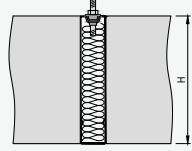












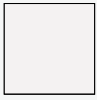









































Vertical Baffle Systems  
**METAL Baffle Sky Element**  
 (METAL V-K 500)  
 Grouped

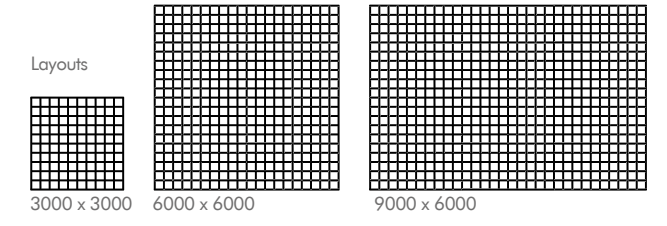
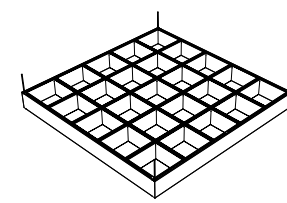


- METAL Baffle Sky Element is an acoustic ceiling system well suited to busy and noisy open plan spaces.
- Crossed layout.
- Delivered as a kit of predefined baffle types in different lengths for standard fields sizes.
- Simple to assemble, no cutting required.
- Easy service integration into the ceiling space.
- Further dimensions and options available on request.
- Additional design options available as part of our **Vario Design** range.



Vertical Baffle Systems  
**METAL Baffle Sky Element**  
 Grouped

<b>Edge details</b>	 <b>METAL Baffle Sky Element</b> 
	
<b>System</b>	 Direct suspended (by threaded rod)
<b>Dimensions (mm)</b>	 Standard modules/fields: 3000 x 3000 x 30 6000 x 6000 x 30 9000 x 6000 x 30
<b>Material &amp; perforations</b>	 Post-coated galvanised steel, 0,7mm
	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> Unperforated</div> <div style="text-align: center;"> Standard perforation <b>Rg 2516</b> <small>Ø: 2.5mm Open area: 16%</small></div> <div style="text-align: center;"> Micro-perforation <b>Rd 1522</b> <small>Ø: 1.5mm Open area: 22%</small></div> <div style="text-align: center;"> Extramicro perforation <b>Rg 0701</b> <small>Ø: 0.7mm Open area: 1.5%</small></div> </div>
	<b>Other perforations</b>
	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> Rd 1511</div> <div style="text-align: center;"> Rg 1511</div> <div style="text-align: center;"> Rg 1821</div> <div style="text-align: center;"> Rg 3013</div> <div style="text-align: center;"> Qg 4025</div> </div>
<b>Colours</b>	<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">  RAL 9010         </div> <div style="width: 40%;"> <b>Vario Design colours</b>   Granite   Steel   Green Marble   Copper   Oak   Brass   Sandstone   Concrete   RAL 9003   RAL 9005   RAL 9006   RAL 9007   RAL 9016         </div> <div style="width: 25%;"> <b>Wood effects*</b> <small>*Baffles only.</small>   Ash   Natural Bamboo   Caramel Bamboo   Maple   Oak   American Cherry   American Walnut         </div> </div>
<b>Weight</b>	 <b>Unperforated</b> 2.0 - 3.6 kg/lm <b>Rg 2516</b> 1.7 - 3.1 kg/lm <b>Rd 1522</b> 1.6 - 2.9 kg/lm <b>Rg 0701</b> 1.9 - 3.5 kg/lm
<b>Acoustics</b>	 Acoustic performances will depend on baffle heights, row distance between the baffles and distance from the soffit. Acoustic values available on request.
<b>Fire reaction</b>	 Euroclass <b>A2-s1, d0</b> as per EN 13501-1 <span style="float: right;"><small>Values applicable for RAL 9010 solutions only.</small></span>
<b>Humidity resistance</b>	 <b>90% RH</b>
<b>Indoor air quality</b>	  A  E1
<b>Cleanability</b>	     (Unperforated only)
<b>Sustainability</b>	     ≈14%
<b>Design options</b>	 Dimensions  Colours  Perforations  Acoustic Infills



[Previous page] METAL Baffle Sky Element (© Knauf Ceiling Solutions)

**vd** Options with this icon are available from our **Vario Design** range. Products may vary from country to country. Please contact your local sales representative. For further information and legal notice, please visit our website.



## CANOPY RANGE

**Enhance the design and acoustic performance with canopy and raft ceiling options.**

Canopy and raft ceiling options can be especially effective for noise reduction since they absorb sound from the front and back of the panels.

Select from a wide range of shapes, colours, and materials to create the visual impact you're looking for.





©Szymon Polanski

Floating Canopy Systems  
**MINERAL Sonic Element**  
 (TOPIQ® Sonic Element, Optima Canopy)  
 Individual / Grouped

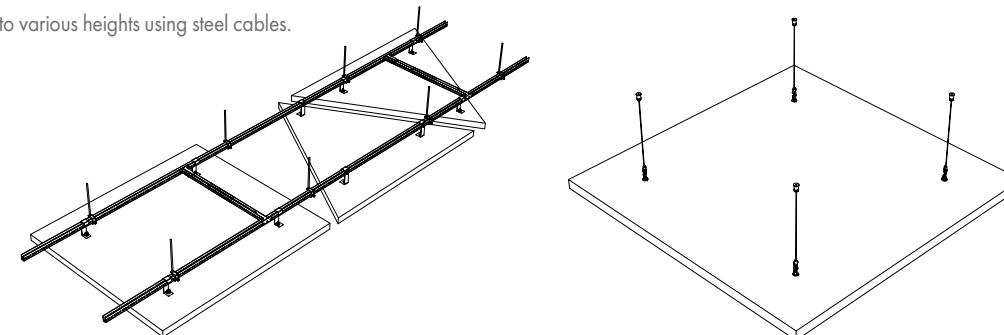


- MINERAL Sonic Element is a frameless and jointless ceiling raft. It also benefits from a fully colour coated face and reverse laminate fleece
- The monolithic ceiling raft design offers excellent sound absorption properties and when installed gives the appearance of a free floating ceiling cloud

Floating Canopy Systems  
**MINERAL Sonic Element**  
 Individual / Grouped

<b>Thickness (mm)</b>		40																																										
<b>Dimensions (mm)</b>		<table border="0"> <tr> <td>Trapezoid</td> <td>1180 x 870</td> <td>Rectangle</td> <td>1780 x 1180</td> </tr> <tr> <td>Hexagon</td> <td>1363 x 1180</td> <td>Rectangle</td> <td>2380 x 1180</td> </tr> <tr> <td>Left Parallelogram</td> <td>1180 x 1180</td> <td>Circle</td> <td>Ø800</td> </tr> <tr> <td>Right Parallelogram</td> <td>1180 x 1180</td> <td>Circle</td> <td>Ø1200</td> </tr> <tr> <td>Square</td> <td>800 x 800</td> <td>Circle</td> <td>Ø1600</td> </tr> <tr> <td>Square</td> <td>1180 x 1180</td> <td>Convex</td> <td>1170 x 1170</td> </tr> <tr> <td>Rectangle</td> <td>1180 x 580</td> <td>Concave</td> <td>1170 x 1020</td> </tr> <tr> <td>Rectangle</td> <td>1780 x 880</td> <td>Triangle</td> <td>1180 x 1022</td> </tr> </table>	Trapezoid	1180 x 870	Rectangle	1780 x 1180	Hexagon	1363 x 1180	Rectangle	2380 x 1180	Left Parallelogram	1180 x 1180	Circle	Ø800	Right Parallelogram	1180 x 1180	Circle	Ø1200	Square	800 x 800	Circle	Ø1600	Square	1180 x 1180	Convex	1170 x 1170	Rectangle	1180 x 580	Concave	1170 x 1020	Rectangle	1780 x 880	Triangle	1180 x 1022										
Trapezoid	1180 x 870	Rectangle	1780 x 1180																																									
Hexagon	1363 x 1180	Rectangle	2380 x 1180																																									
Left Parallelogram	1180 x 1180	Circle	Ø800																																									
Right Parallelogram	1180 x 1180	Circle	Ø1200																																									
Square	800 x 800	Circle	Ø1600																																									
Square	1180 x 1180	Convex	1170 x 1170																																									
Rectangle	1180 x 580	Concave	1170 x 1020																																									
Rectangle	1780 x 880	Triangle	1180 x 1022																																									
<b>Additional sizes and shapes on request</b>																																												
<b>System</b>		Individual: Wire Hanger Grouped: U-Profile																																										
<b>Weight</b>		6.0 kg/m <sup>2</sup>																																										
<b>Colour &amp; design</b>		<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; width: 30px; height: 30px; background-color: white; margin-right: 5px;"></div> <div style="margin-left: 5px;"> <p><b>vo Vario Design Colours</b></p> <table border="0"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>White</td> <td>Granite</td> <td>Steel</td> <td>Green Marble</td> <td>Copper</td> <td>Oak</td> <td>Brass</td> <td>Sandstone</td> <td>Concrete</td> </tr> </table> </div> </div>										White	Granite	Steel	Green Marble	Copper	Oak	Brass	Sandstone	Concrete																								
White	Granite	Steel	Green Marble	Copper	Oak	Brass	Sandstone	Concrete																																				
<b>Sound absorption</b>		<p>EN ISO 354</p> <table border="1"> <thead> <tr> <th>Frequency f (Hz)</th> <th>125</th> <th>250</th> <th>500</th> <th>1000</th> <th>2000</th> <th>4000</th> </tr> </thead> <tbody> <tr> <td>Equivalent Absorption Area Aobj*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Square: 1180 x 1180mm / Suspension height 190mm</td> <td>0.40</td> <td>1.20</td> <td>2.20</td> <td>2.40</td> <td>2.40</td> <td>2.30</td> </tr> <tr> <td>Rectangle: 1780 x 1180mm / Suspension height 190mm</td> <td>0.80</td> <td>2.10</td> <td>3.10</td> <td>3.30</td> <td>3.50</td> <td>3.40</td> </tr> <tr> <td>Rectangle: 2380 x 1180mm / Suspension height 190mm</td> <td>0.80</td> <td>2.70</td> <td>4.20</td> <td>4.40</td> <td>4.50</td> <td>4.30</td> </tr> <tr> <td>Circle: Ø1200mm / Suspension height 150mm</td> <td>0.40</td> <td>1.00</td> <td>1.70</td> <td>1.80</td> <td>2.00</td> <td>1.90</td> </tr> </tbody> </table> <p><small>*Values shown are the average of the 3 one third octave band values</small></p>	Frequency f (Hz)	125	250	500	1000	2000	4000	Equivalent Absorption Area Aobj*							Square: 1180 x 1180mm / Suspension height 190mm	0.40	1.20	2.20	2.40	2.40	2.30	Rectangle: 1780 x 1180mm / Suspension height 190mm	0.80	2.10	3.10	3.30	3.50	3.40	Rectangle: 2380 x 1180mm / Suspension height 190mm	0.80	2.70	4.20	4.40	4.50	4.30	Circle: Ø1200mm / Suspension height 150mm	0.40	1.00	1.70	1.80	2.00	1.90
Frequency f (Hz)	125	250	500	1000	2000	4000																																						
Equivalent Absorption Area Aobj*																																												
Square: 1180 x 1180mm / Suspension height 190mm	0.40	1.20	2.20	2.40	2.40	2.30																																						
Rectangle: 1780 x 1180mm / Suspension height 190mm	0.80	2.10	3.10	3.30	3.50	3.40																																						
Rectangle: 2380 x 1180mm / Suspension height 190mm	0.80	2.70	4.20	4.40	4.50	4.30																																						
Circle: Ø1200mm / Suspension height 150mm	0.40	1.00	1.70	1.80	2.00	1.90																																						
<b>Fire reaction</b>		Euroclass <b>A2-s1,d0</b> as per EN 13501-1																																										
<b>Light reflectance</b>		Up to <b>88%</b>																																										
<b>Humidity resistance</b>		<b>90%</b>																																										
<b>Indoor air quality</b>		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  A         </div> <div style="text-align: center;">  E1         </div> <div style="text-align: center;">  IAC         </div> </div>																																										
<b>Cleanability</b>																																												
<b>Sustainability</b>																																												

Flexible design and adjustable to various heights using steel cables.



vo Options with this icon are available from our Vario Design range. Products may vary from country to country. Please contact your local sales representative. For further information and legal notice, please visit our website.



## Floating Canopy Systems METAL Sonic Element (METAL Canopy) Individual

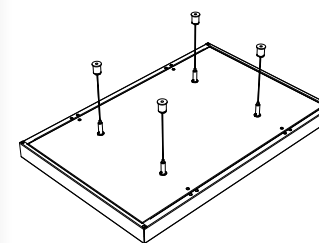


- **METAL Sonic Element** is a fully configurable metal canopy. It is suspended by an adjustable hanging wire kit and is quick and easy to install.
- Metal provides a high-value appearance.
- Fully configurable solution, available with different edge details (90°/50°/20x20mm edge).
- An optional rear cover with perforation and an acoustic pad allows for better sound absorption and 360° visibility.
- An easy to install retrofit solution that can be used under an existing ceiling.
- Can be installed as a wall absorber by using a wall hanging kit (see **METAL Wallcoustic Element**).
- Resistant and durable.
- Ideal for showrooms, entrance halls, transport hubs, meeting rooms, retail and waiting areas.

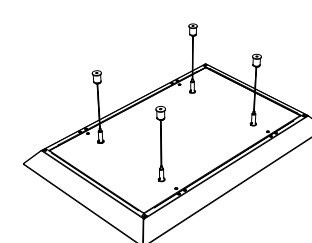


## Floating Canopy Systems METAL Sonic Element Individual

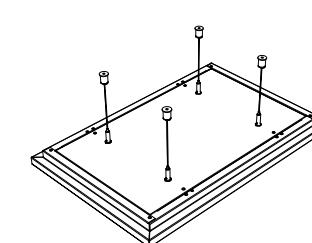
<b>Edge details</b>	<b>METAL Sonic Element</b> [90° edge]	<b>METAL Sonic Element</b> [50° edge]	<b>METAL Sonic Element</b> [20 x 20mm edge]
<b>System</b>	Hanging Wire Kit M6 (length 4000mm)		Not included
<b>Dimensions (mm)</b>	Panel length: 600 - 1800 Panel width: 600 - 1200 Panel thickness: 40		
<b>Material &amp; perforations</b>	Post-coated galvanised steel, 0.7mm		
	<b>Front side</b>		<b>Rear side</b>
	Standard perforation <b>Rg 2516</b> Ø: 2.5mm Open area: 16%	Micro-perforation <b>Rd 1522</b> Ø: 1.5mm Open area: 22%	Extramicro perforation <b>Rg 0701</b> Ø: 0.7mm Open area: 1.5%
			Standard perforation <b>Rg 2516</b> Ø: 2.5mm Open area: 16%
<b>Colours</b>	RAL 9010 <b>Vario Design colours</b> Granite, Steel, Green Marble, Copper, Oak, Brass, Sandstone, Concrete, RAL 9003, RAL 9005, RAL 9006, RAL 9007, RAL 9016		<b>Wood effects</b> Ash, Natural Bamboo, Caramel Bamboo, Maple, Oak, American Cherry, American Walnut
<b>Weight</b>	<b>Unperforated</b> 4.3 - 26.0 kg/m <sup>2</sup>	<b>Rg 2516</b> 4.0 - 23.0 kg/m <sup>2</sup>	<b>Rd 1522</b> 3.9 - 21.9 kg/m <sup>2</sup>
<b>Fire reaction</b>	Euroclass <b>A1</b> (Perforated + No Infill) Euroclass <b>A2-s2, d0</b> (Perforated + Acoustic Fleece) as per EN 13501-1		<b>RUS KM1 (G1, V1, D1, T1)</b> as per 123-FZ <i>Values applicable for RAL 9010 solutions only.</i>
<b>Light reflectance</b>	<b>Unperforated</b> 85%	<b>Rg 2516</b> 70%	<b>Rd 1522</b> 65%
<b>Humidity resistance</b>	<b>90% RH</b>		
<b>Indoor air quality</b>	A+, E1		
<b>Cleanability</b>	(Unperforated only)		
<b>Sustainability</b>	≈14%, Silver*		<i>*Value applicable for RAL 9010 solutions only.</i>
<b>Design options</b>	Dimensions, Colours, Perforations, Acoustic Infills, Cut-Outs		



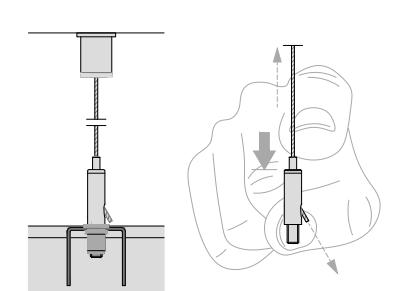
METAL Sonic Element, 90° edge



METAL Sonic Element, 50° edge



METAL Sonic Element, 20x20mm edge



Hanging Wire Kit

[Previous page] METAL Sonic Element, 90° edge (Community Room, Penzlin, Germany, © Bernd Gallandi)

Options with this icon are available from our **Vario Design** range. Products may vary from country to country. Please contact your local sales representative. For further information and legal notices, please visit our website.





Floating Canopy Systems  
**HERADESIGN® Sonic Element**  
 Individual / Grouped

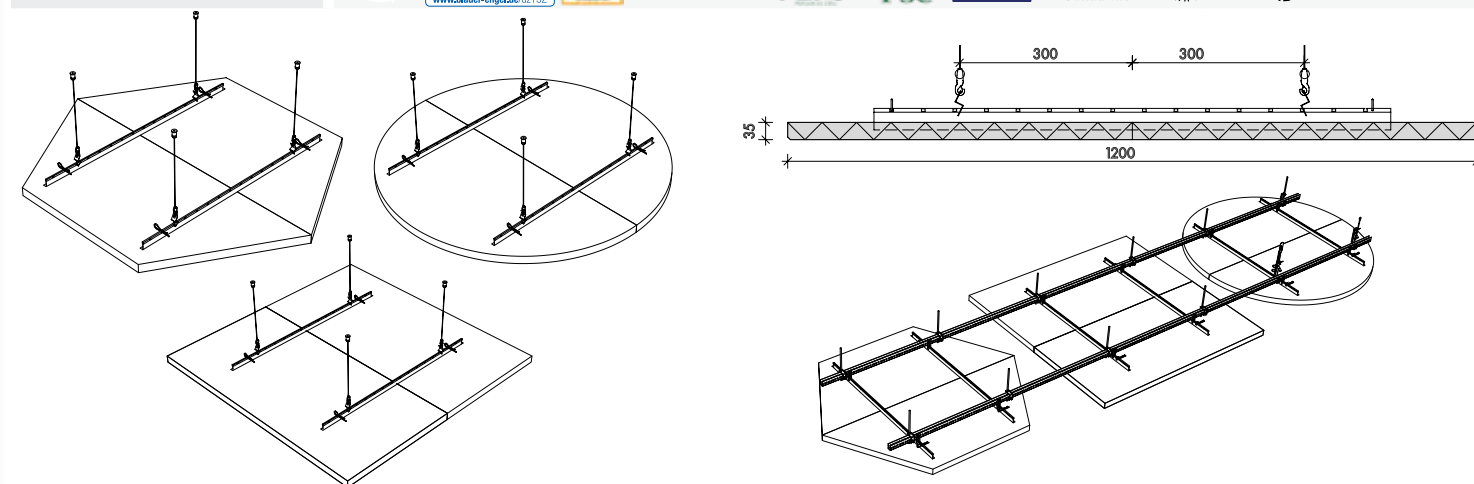


- HERADESIGN® Sonic Element is a decorative wood wool acoustic ceiling canopy that offers unlimited design possibilities
- HERADESIGN® Sonic Element is available with a HERADESIGN® Superfine surface
- Delivered as a pre-assembled kit making it quick and easy to install
- Available in Vario Design and RAL and NCS colours
- Canopy kit includes substructure and suspension hangers
- Quick and simple installation thanks to high level of pre-assembly



Floating Canopy Systems  
**HERADESIGN® Sonic Element**  
 Individual / Grouped

<b>Surface</b>		<b>HERADESIGN® Superfine</b> 																																														
<b>Thickness (mm)</b>		35																																														
<b>Dimensions (mm)</b>		HERADESIGN® Sonic Element Circle: Ø 1200mm HERADESIGN® Sonic Element Square: 1200 x 1200mm HERADESIGN® Sonic Element Hexagon: 1200 x 1040mm																																														
<b>System</b>		Canopy kit includes substructure and suspension hangers Simple and quick installation with four cable hangers Cable length 1000mm U-Profile grouping system option																																														
<b>Weight</b>		HERADESIGN® Sonic Element Circle: 19.4 kg/pc HERADESIGN® Sonic Element Square: 24.8 kg/pc HERADESIGN® Sonic Element Hexagon: 16.2 kg/pc																																														
<b>Colours</b>		<table border="0"> <tr> <th colspan="2">Standard colours</th> <th colspan="7">Vario Design colours</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>White Similar to RAL 9010</td> <td>Beige Natural tone 13</td> <td>Granite</td> <td>Steel</td> <td>Green Marble</td> <td>Copper</td> <td>Oak</td> <td>Brass</td> <td>Sandstone</td> <td>Concrete</td> </tr> </table> <ul style="list-style-type: none"> <li>• Other colours from popular RAL and NCS colour systems are available.</li> <li>• Deviations in colour and visual appearance may occur due to the rough fibre and panel surface.</li> </ul>	Standard colours		Vario Design colours																	White Similar to RAL 9010	Beige Natural tone 13	Granite	Steel	Green Marble	Copper	Oak	Brass	Sandstone	Concrete																	
Standard colours		Vario Design colours																																														
White Similar to RAL 9010	Beige Natural tone 13	Granite	Steel	Green Marble	Copper	Oak	Brass	Sandstone	Concrete																																							
<b>Sound absorption</b>		<table border="1"> <thead> <tr> <th rowspan="2">Ceiling canopy [mm]</th> <th rowspan="2">TCH [mm]</th> <th colspan="6">Equivalent absorption area Aobj [m²]</th> </tr> <tr> <th colspan="6">Frequency [Hz], α<sub>v</sub></th> </tr> <tr> <th></th> <th></th> <th>125</th> <th>250</th> <th>500</th> <th>1000</th> <th>2000</th> <th>4000</th> </tr> </thead> <tbody> <tr> <td>HERADESIGN® Sonic Element Circle</td> <td>200</td> <td>0.20</td> <td>0.60</td> <td>0.90</td> <td>0.70</td> <td>1.10</td> <td>1.40</td> </tr> <tr> <td>HERADESIGN® Sonic Element Square</td> <td>200</td> <td>0.10</td> <td>0.70</td> <td>1.10</td> <td>0.90</td> <td>1.40</td> <td>1.70</td> </tr> <tr> <td>HERADESIGN® Sonic Element Hexagon</td> <td>200</td> <td>0.10</td> <td>0.50</td> <td>0.70</td> <td>0.70</td> <td>1.00</td> <td>1.20</td> </tr> </tbody> </table> <p>* Total construction height</p>	Ceiling canopy [mm]	TCH [mm]	Equivalent absorption area Aobj [m²]						Frequency [Hz], α <sub>v</sub>								125	250	500	1000	2000	4000	HERADESIGN® Sonic Element Circle	200	0.20	0.60	0.90	0.70	1.10	1.40	HERADESIGN® Sonic Element Square	200	0.10	0.70	1.10	0.90	1.40	1.70	HERADESIGN® Sonic Element Hexagon	200	0.10	0.50	0.70	0.70	1.00	1.20
Ceiling canopy [mm]	TCH [mm]	Equivalent absorption area Aobj [m²]																																														
		Frequency [Hz], α <sub>v</sub>																																														
		125	250	500	1000	2000	4000																																									
HERADESIGN® Sonic Element Circle	200	0.20	0.60	0.90	0.70	1.10	1.40																																									
HERADESIGN® Sonic Element Square	200	0.10	0.70	1.10	0.90	1.40	1.70																																									
HERADESIGN® Sonic Element Hexagon	200	0.10	0.50	0.70	0.70	1.00	1.20																																									
<b>Fire reaction</b>		Euroclass <b>B-s1,d0</b> according EN 13501-1																																														
<b>Humidity resistance</b>		Not suitable for use in indoor swimming pool or spa areas																																														
<b>Cleanability</b>																																																
<b>Sustainability</b>																																																



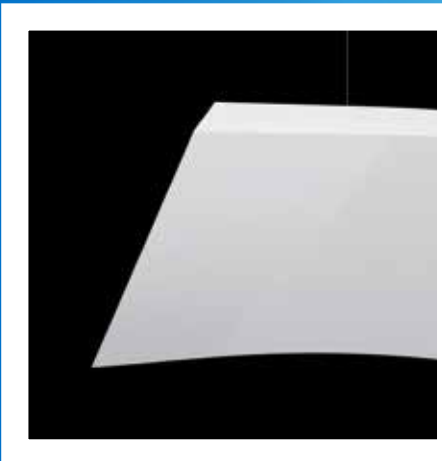
[Previous page] HERADESIGN® Sonic Element (© Knauf Ceiling Solutions)

**VO** Options with this icon are available from our **Vario Design** range. Some combinations of colours and/or perforations are not available for every product. Products may vary from country to country. Please contact your local sales representative. For further information and legal notice, please visit our website.





## Floating Canopy Systems METAL Sonic Element Arc (METAL Canopy Concave & Convex) Individual

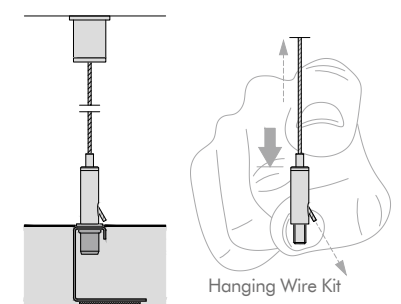
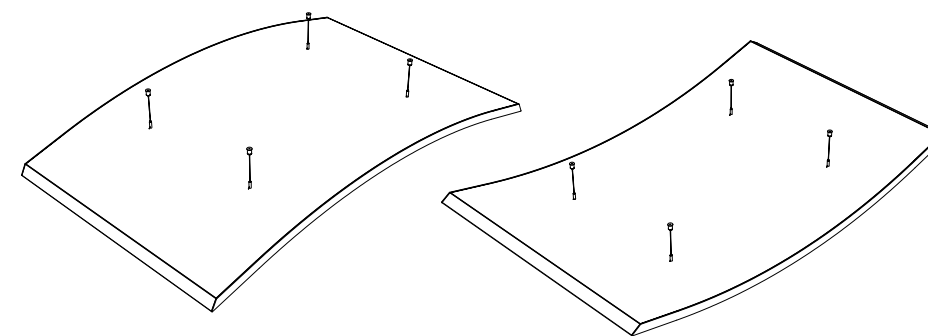


- **METAL Sonic Element Arc** is a range of floating solutions. Easily suspended from the building structure, they define spaces and help accentuate an area.
- With a 360° visibility, they provide focus and create ceiling sculptures while controlling sound reverberation.
- Define spaces without any visible frame or grid.
- Adjust to various heights and angles.
- An easy to install retrofit solution that can be used under an existing ceiling.
- Visible sides are extramicro perforated to offer a smooth appearance, while standard perforation on the rear side allows for better sound absorption.
- Ideal for showrooms, entrance halls, transport hubs, meeting rooms, retail and waiting areas.



## Floating Canopy Systems METAL Sonic Element Arc Individual

<b>Edge details</b>	<b>METAL Sonic Element Arc Concave</b>	<b>METAL Sonic Element Arc Convex</b>																																		
	1890	1890																																		
<b>System</b>	Hanging Wire Kit M6 (length 4000mm) <span style="float: right;">Included</span>																																			
<b>Dimensions (mm)</b>	<b>Concave</b> 1890 x 1181 x 40	<b>Convex</b> 1890 x 1181 x 40 <span style="float: right;">Available in 1 piece/carton.</span>																																		
<b>Material &amp; Perforations</b>	Powder-coated galvanised steel panels, 0.7mm																																			
	<b>Front side</b> Extramicro perforation <b>Rg 0701</b> Ø: 0.7mm Open area: 1.5%	<b>Rear side</b> Standard perforation <b>Rg 2516</b> Ø: 2.5mm Open area: 16%																																		
	Black acoustic fleece + acoustic pad 20mm, 25 kg/m <sup>3</sup>																																			
<b>Colours</b>	<b>Vario Design Colours</b> 																																			
<b>Weight</b>	<b>Concave</b> 28.3 kg/pc	<b>Convex</b> 28.3 kg/pc																																		
<b>Acoustics</b>	<table border="1"> <thead> <tr> <th rowspan="2"></th> <th colspan="6">EN ISO 354</th> </tr> <tr> <th colspan="6">Frequency (Hz) α<sub>p</sub>*</th> </tr> <tr> <th></th> <th>125</th> <th>250</th> <th>500</th> <th>1000</th> <th>2000</th> <th>4000</th> </tr> </thead> <tbody> <tr> <td>Concave</td> <td>0.80</td> <td>1.50</td> <td>2.50</td> <td>2.80</td> <td>2.60</td> <td>2.20</td> </tr> <tr> <td>Convex</td> <td>0.80</td> <td>1.50</td> <td>2.50</td> <td>2.80</td> <td>2.60</td> <td>2.20</td> </tr> </tbody> </table> <p>*Values shown are the average of the 3 one third octave band value.</p>			EN ISO 354						Frequency (Hz) α <sub>p</sub> *							125	250	500	1000	2000	4000	Concave	0.80	1.50	2.50	2.80	2.60	2.20	Convex	0.80	1.50	2.50	2.80	2.60	2.20
	EN ISO 354																																			
	Frequency (Hz) α <sub>p</sub> *																																			
	125	250	500	1000	2000	4000																														
Concave	0.80	1.50	2.50	2.80	2.60	2.20																														
Convex	0.80	1.50	2.50	2.80	2.60	2.20																														
<b>Fire reaction</b>	Euroclass <b>B-s2, d0</b> as per EN 13501-1																																			
<b>Light reflectance</b>	<b>80%</b>																																			
<b>Humidity resistance</b>	<b>90% RH</b>																																			
<b>Indoor air quality</b>	 A+ E1																																			
<b>Cleanability</b>	 (Unperforated only)																																			
<b>Sustainability</b>	 =14%																																			



[Previous page] METAL Sonic Element Arc, Concave (Nice Airport, France, © Grigori Rassinier)

**va** Options with this icon are available from our **Vario Design** range. Products may vary from country to country. Please contact your local sales representative. For further information and legal notice, please visit our website.







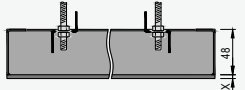




























Floating Canopy Systems  
**MESH Sonic Element MT**  
 (MESH Canopy MT)  
 Individual

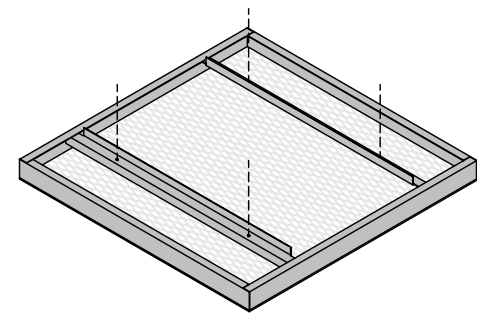


- **MESH Sonic Element MT** provides a contemporary industrial look and feel. Breathe new life into your ceiling architecture – with a creative design, impressive simplicity and high performance.
- Flat visible side, without upturn, with welded stiffening profiles on all edges.
- Canopies delivered with stiffeners on the back and suspended by threaded rods or adjustable hanging wire kits.
- Standard single item solution.
- For the grouping option, the canopy can be delivered on request with additional bolt holes on the edges.
- Additional design options available as part of our **Vario Design** range.
- Ideal for open spaces and large rooms with flexible partitioning.

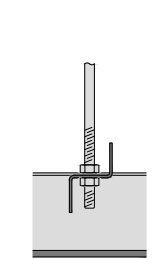


Floating Canopy Systems  
**MESH Sonic Element MT**  
 Individual

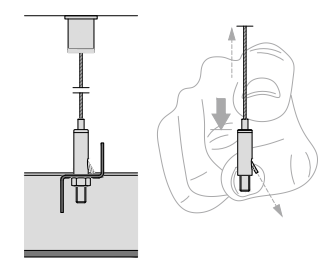
<b>Edge details</b>	 <b>MESH Sonic Element MT</b> 		X = Mesh thickness
<b>System</b>	 Direct suspended (by threaded rod or wires)	Not included.	
<b>Dimensions (mm)</b>	 Panel length: 800 - 1200 Panel width: (RB25) 800 - 1202 (in steps of 8mm) / (RB35, RB55) 800 - 1200		
<b>Material &amp; patterns</b>	 Galvanised steel RB25 = 1.0mm RB35 / RB55 = 1.5mm	 <b>RB25</b> R16 x 8 - 2 x 1 Open area: 50%	 <b>RB35</b> R28 x 10 - 2 x 1.5 Open area: 58%
		 <b>RB55</b> R43 x 13 - 2.5 x 1.5 Open area: 62%	
<b>Colours</b>	  RAL 9010	<b>Other colours</b>	
		 RAL 9005	 RAL 9006
		 RAL 9007	
<b>Weight</b>	 <b>RB25</b> 6.4 - 11.5 kg/m <sup>2</sup>	<b>RB35</b> 6.9 - 12.6 kg/m <sup>2</sup>	<b>RB55</b> 6.6 - 12.0 kg/m <sup>2</sup>
<b>Fire reaction</b>	 Euroclass <b>A2-s1, d0</b> as per EN 13501-1	Values applicable for RAL 9010 solutions only.	
<b>Humidity resistance</b>	 <b>95% RH</b>		
<b>Indoor air quality</b>	  A+		
<b>Cleanability</b>	   		
<b>Sustainability</b>	  	*Value applicable for RAL 9010 solutions only.	
<b>Design options</b>	    	Dimensions Colours Patterns Cut-Outs Shape	




Threaded Rod M6



Hanging Wire Kit



[Previous page] MESH Sonic Element MT (©Knauf Ceiling Solutions)

 Options with this icon are available from our **Vario Design** range. Products may vary from country to country. Please contact your local sales representative. For further information and legal notice, please visit our website.





Floating Canopy Systems  
**HERADESIGN® Sonic Element Plus**  
 (HERADESIGN® Sonic Element 1200x1200/2400x1200)  
 Individual

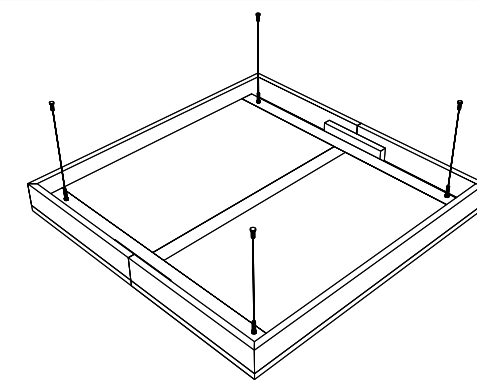


- HERADESIGN® Sonic Element Plus is an acoustic ceiling canopy with a unique HERADESIGN® Fine or HERADESIGN® Superfine surface
- Delivered as a kit making it quick and easy to install
- Available in Vario Design and RAL and NCS colours
- Ceiling canopy kit including sub-construction and suspension
- Quick and simple installation thanks to high level of pre-assembly
- HERADESIGN® Sonic Element Plus is available in 1200 x 1200 and 2400 x 1200mm dimensions
- Integrated upstand 125mm
- All required connectors and screws included
- Pre-assembled hanger with precise height adjustment



Floating Canopy Systems  
**HERADESIGN® Sonic Element Plus**  
 Individual

<b>Surface</b>		<b>HERADESIGN® Fine</b>		<b>HERADESIGN® Superfine</b>								
<b>Edge details</b>		AK-01										
<b>Thickness (mm)</b>		25										
<b>Dimensions (mm)</b>		1200 x 1200 x 125 (L x W x H) 2400 x 1200 x 125 (L x W x H)										
<b>System</b>		Acoustic lining: 50mm fleece-lined mineral wool										
<b>Weight</b>		1200 x 1200: 29.2 kg/pc 2400 x 1200: 57.9 kg/pc		1200 x 1200: 27.1 kg/pc 2400 x 1200: 53.7 kg/pc								
<b>Colours</b>		<b>Standard colours</b>	<b>Vario Design colours</b>									
		 White Similar to RAL 9010	 Beige Natural tone 13									
		<ul style="list-style-type: none"> <li>• Other colours from popular RAL and NCS colour systems are available.</li> <li>• Deviations in colour and visual appearance may occur due to the rough fibre and panel surface.</li> </ul>										
<b>Sound absorption</b>		Board type 1200 x 1200 x 125mm (L x W x H)										
		Product	Thickness [mm]	SH [mm]	HERADESIGN® Acoustic lining [mm]	HERADESIGN® Acoustic lining [kg/m³]	Equivalent absorption area Aobj [m²]					
						Frequencies [Hz]						
						125	250	500	1000	2000	4000	
		HERADESIGN® Superfine	25	200	50	50	0.70	1.70	2.30	2.10	2.20	2.10
		HERADESIGN® Superfine	25	400	50	50	1.00	1.70	2.20	2.30	2.50	2.40
		HERADESIGN® Superfine	25	600	50	50	1.10	1.50	2.30	2.50	2.70	2.50
		Board type 2400 x 1200 x 125mm (L x W x H)										
		HERADESIGN® Fine	25	200	50	50	1.50	3.60	4.00	3.70	4.10	3.90
		HERADESIGN® Superfine	25	200	50	50	1.40	3.70	4.30	4.40	4.30	4.80
<b>Fire reaction</b>		Euroclass <b>B-s1,d0</b> according EN 13501-1										
<b>Humidity resistance</b>		Not suitable for use in indoor swimming pools or thermal baths										
<b>Cleanability</b>												
<b>Sustainability</b>												



[Previous page] HERADESIGN® Sonic Element Plus (© Knauf Ceiling Solutions)

**VO** Options with this icon are available from our **Vario Design** range. Some combinations of colours and/or perforations are not available for every product. Products may vary from country to country. Please contact your local sales representative. For further information and legal notice, please visit our website.





Floating Canopy Systems  
**MINERAL Sonic Line**  
 (THERMATEX® Sonic Modern)  
 Individual

4

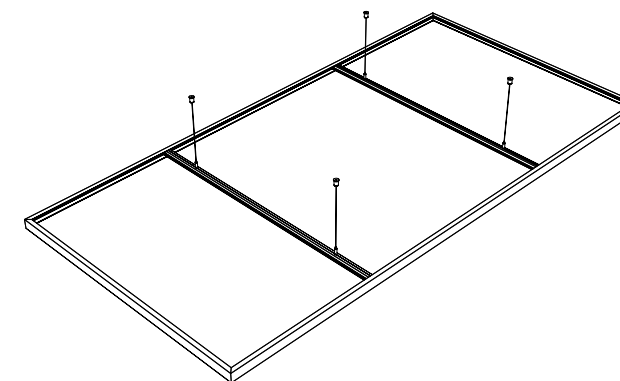


- MINERAL Sonic Line is a ceiling raft with an aluminium frame. The flexible suspension with fine, steel cables enables the height to be individually adjusted as required
- Available with a standard white laminate surface and can be customised in a variety of colours or bespoke printed motifs on request
- Aesthetically defines spaces in schools, offices leisure centres, retail spaces etc.

Floating Canopy Systems  
**MINERAL Sonic Line**  
 Individual

<b>Thickness (mm)</b>		43																												
<b>Dimensions (mm)</b>		1200 x 600 1200 x 1200 1800 x 1200 2400 x 1200																												
<b>System</b>		Wire Hanger																												
<b>Weight</b>		1200 x 600: 5.0 kg/pc 1200 x 1200: 10.0 kg/pc 1800 x 1200: 15.0 kg/pc 2400 x 1200: 20.0 kg/pc																												
<b>Colour &amp; design</b>		<p><b>Frame:</b> Anodised Aluminium, White, Colours</p> <p><b>Vario Design Colours</b></p> <p><b>Motif:</b> Custom Graphic Print</p>																												
<b>Sound absorption</b>		<p>EN ISO 354</p> <table border="1"> <thead> <tr> <th>Frequency f (Hz)</th> <th>125</th> <th>250</th> <th>500</th> <th>1000</th> <th>2000</th> <th>4000</th> </tr> </thead> <tbody> <tr> <td>Equivalent Absorption Area Aobj*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>1200 x 1200mm Suspension height 193mm</td> <td>0.40</td> <td>1.10</td> <td>1.60</td> <td>2.00</td> <td>2.10</td> <td>2.00</td> </tr> <tr> <td>2400 x 1200mm Suspension height 193mm</td> <td>0.90</td> <td>1.90</td> <td>3.00</td> <td>3.40</td> <td>3.80</td> <td>3.70</td> </tr> </tbody> </table> <p>*Values shown are the average of the 3 one third octave band values</p>	Frequency f (Hz)	125	250	500	1000	2000	4000	Equivalent Absorption Area Aobj*							1200 x 1200mm Suspension height 193mm	0.40	1.10	1.60	2.00	2.10	2.00	2400 x 1200mm Suspension height 193mm	0.90	1.90	3.00	3.40	3.80	3.70
Frequency f (Hz)	125	250	500	1000	2000	4000																								
Equivalent Absorption Area Aobj*																														
1200 x 1200mm Suspension height 193mm	0.40	1.10	1.60	2.00	2.10	2.00																								
2400 x 1200mm Suspension height 193mm	0.90	1.90	3.00	3.40	3.80	3.70																								
<b>Fire reaction</b>		Euroclass <b>A2-s1,d0</b> as per EN 13501-1																												
<b>Light reflectance</b>		Up to <b>88%</b>																												
<b>Humidity resistance</b>		<b>90%</b>																												
<b>Cleanability</b>																														
<b>Sustainability</b>																														

Ceiling rafts are delivered in one piece making them quick and easy to install. Flexible design and adjustable to various heights using steel cables.



Options with this icon are available from our **Vario Design** range. Products may vary from country to country. Please contact your local sales representative. For further information and legal notice, please visit our website.



Floating Canopy Systems  
**MINERAL Sonic Line Arc**  
 (THERMATEX® Sonic Arc)  
 Individual



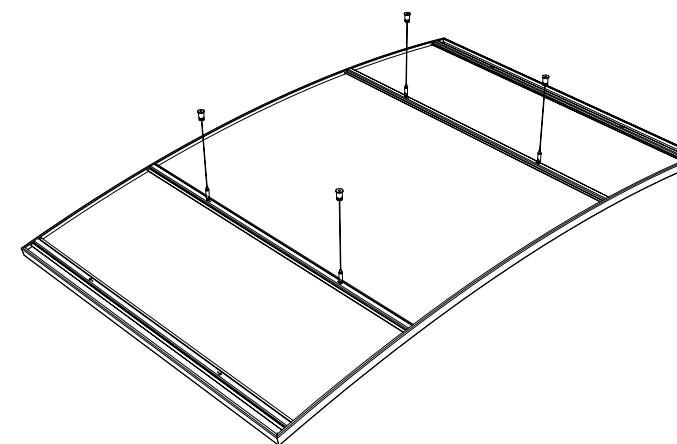
- Create unique, elegant designs with an array of MINERAL Sonic Line Arc concave and convex canopies
- Play with custom colours to create exciting contrasting effects
- MINERAL Sonic Line Arc allows you express your creativity and accentuate an area using new spacial effects



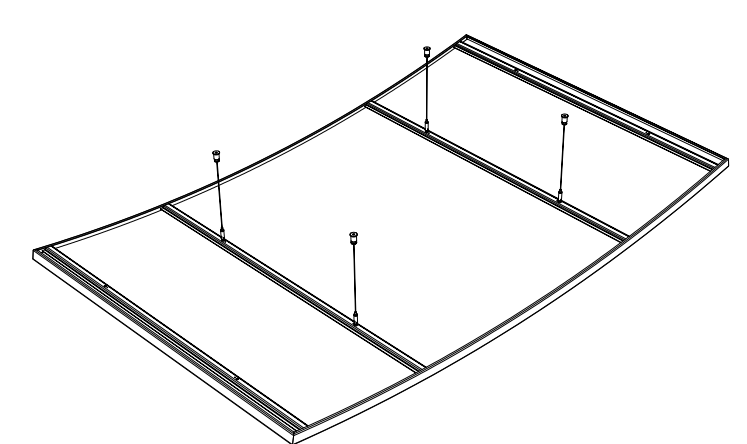
Floating Canopy Systems  
**MINERAL Sonic Line Arc**  
 Individual

<b>Edge details</b>		<b>MINERAL Sonic Line Arc Concave</b> 	<b>MINERAL Sonic Line Arc Convex</b> 														
<b>Thickness (mm)</b>		35															
<b>Dimensions (mm)</b>		1910 x 1180															
<b>System</b>		Wire Hanger															
<b>Weight</b>		16.0 kg/pc															
<b>Colour &amp; design</b>		White          Granite          Steel          Green Marble          Copper          Oak          Brass          Sandstone          Concrete															
<b>Sound absorption</b>		EN ISO 354 Frequency $f$ (Hz) Equivalent Absorption Area $A_{obj}^*$ <table border="1"> <tr> <td></td> <td>125</td> <td>250</td> <td>500</td> <td>1000</td> <td>2000</td> <td>4000</td> </tr> <tr> <td>Suspension height 185mm</td> <td>0.40</td> <td>1.60</td> <td>2.40</td> <td>2.70</td> <td>3.20</td> <td>3.40</td> </tr> </table>			125	250	500	1000	2000	4000	Suspension height 185mm	0.40	1.60	2.40	2.70	3.20	3.40
	125	250	500	1000	2000	4000											
Suspension height 185mm	0.40	1.60	2.40	2.70	3.20	3.40											
<b>Fire reaction</b>		Euroclass <b>A2-s1,d0</b> as per EN 13501-1															
<b>Light reflectance</b>		Up to <b>88%</b>															
<b>Humidity resistance</b>		<b>90%</b>															
<b>Cleanability</b>																	
<b>Sustainability</b>																	

MINERAL Sonic Line Arc Concave



MINERAL Sonic Line Arc Convex



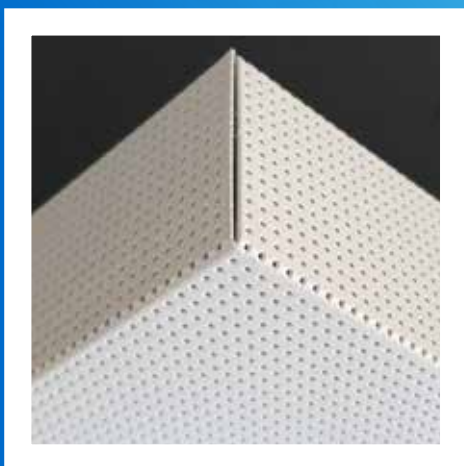
Ceiling rafts are delivered in one piece making them quick and easy to install. Flexible design and adjustable to various heights using steel cables.

Options with this icon are available from our **Vario Design** range. Products may vary from country to country. Please contact your local sales representative. For further information and legal notice, please visit our website.










































































## Floating Canopy Systems METAL Sky Element Clip / Hook (METAL D-Clip / D-H 700) Grouped



- METAL Sky Element Clip and METAL Sky Element Hook systems are floating modular solutions for optimum flexibility. The product range features Clip-In and Hook-On rectangular panels that can be arranged to create distinctive design elements. In combination with Knauf Ceiling Solutions suspension systems it allows a minimal-height installation without any extra engineering required.
- Modular concept for optimum flexibility with fully configurable large size panels. Installed in a row or as a single item.
- Standard, end and single panels available.
- Modern absorber solution for exposed concrete soffit.
- METAL Sky Element Clip with optional swing-down function or lock function.
- METAL Sky Element Hook is suitable for chilled ceilings.
- Additional design options available as part of our Vario Design range.
- Ideal for offices, meeting rooms, retail, auditoriums, multi-purpose halls and cafeterias.



## Floating Canopy Systems METAL Sky Element Clip / Hook Grouped

<b>Edge details</b>	 <b>METAL Sky Element Clip</b> 	 <b>METAL Sky Element Hook</b> 																																																																
<b>System</b>	 U-Profile + DP12 A-Bar	 U-Profile (cross connected)																																																																
<b>Dimensions (mm)</b>	 Panel length: 600 - 2500 Panel width: 250 - 600 Max size (m <sup>2</sup> ): 1.5	 Panel length: 600 - 2750 (in steps of 25mm) Panel width: 250 - 600 (in steps of 25mm) Max size (m <sup>2</sup> ): 1.65																																																																
<b>Material &amp; perforations</b>	 Post-coated galvanised steel, 0.6 - 0.7mm																																																																	
	 Unperforated  Standard perforation <b>Rg 2516</b> Ø: 2.5mm Open area: 16%  Micro-perforation <b>Rd 1522</b> Ø: 1.5mm Open area: 22%  Extramicro-perforation <b>Rg 0701</b> Ø: 0.7mm Open area: 1.5%																																																																	
	<b>vo Other perforations</b>																																																																	
	 Rd 1511  Rg 1511  Rg 1821  Rg 3013  Qg 4025																																																																	
<b>Colours</b>	  RAL 9010 <b>vo Vario Design colours</b>  Granite  Steel  Green Marble  Copper  Oak  Brass  Sandstone  Concrete <b>vo Wood effects</b>  Ash  Natural Bamboo  Caramel Bamboo  Maple  Oak  American Cherry  American Walnut  RAL 9003  RAL 9005  RAL 9006  RAL 9007  RAL 9016																																																																	
<b>Weight</b>	 <b>Unperforated</b> 6.4 - 9.5 kg/m <sup>2</sup>	<b>Rg 2516</b> 5.6 - 8.8 kg/m <sup>2</sup> <b>Rd 1522</b> 5.3 - 8.5 kg/m <sup>2</sup> <b>Rg 0701</b> 6.3 - 9.4 kg/m <sup>2</sup>																																																																
<b>Acoustics</b>	 <table border="1"> <thead> <tr> <th rowspan="3"></th> <th rowspan="3">α<sub>w</sub>**</th> <th rowspan="3">Class</th> <th colspan="7">EN ISO 354</th> <th rowspan="3">NRC**</th> </tr> <tr> <th colspan="7">Frequency (Hz) α<sub>p</sub></th> </tr> <tr> <th>125</th> <th>250</th> <th>500</th> <th>1000</th> <th>2000</th> <th>4000</th> </tr> </thead> <tbody> <tr> <td>Unperforated</td> <td>0.10(L)</td> <td>NC</td> <td>0.25</td> <td>0.15</td> <td>0.05</td> <td>0.05</td> <td>0.10</td> <td>0.10</td> <td>0.10</td> </tr> <tr> <td>Rg 2516 + Fleece</td> <td>0.75(L)</td> <td>C</td> <td>0.35</td> <td>0.80</td> <td>0.95</td> <td>0.70</td> <td>0.75</td> <td>0.75</td> <td>0.80</td> </tr> <tr> <td>Rd 1522 + Fleece</td> <td>0.70</td> <td>C</td> <td>0.30</td> <td>0.65</td> <td>0.90</td> <td>0.65</td> <td>0.70</td> <td>0.75</td> <td>0.70</td> </tr> <tr> <td>Rg 0701 + Fleece</td> <td>0.55(L)</td> <td>D</td> <td>0.45</td> <td>0.70</td> <td>0.70</td> <td>0.55</td> <td>0.55</td> <td>0.45</td> <td>0.65</td> </tr> </tbody> </table> <p>* as per EN ISO 11654      ** as per ASTM C 423-01</p>			α <sub>w</sub> **	Class	EN ISO 354							NRC**	Frequency (Hz) α <sub>p</sub>							125	250	500	1000	2000	4000	Unperforated	0.10(L)	NC	0.25	0.15	0.05	0.05	0.10	0.10	0.10	Rg 2516 + Fleece	0.75(L)	C	0.35	0.80	0.95	0.70	0.75	0.75	0.80	Rd 1522 + Fleece	0.70	C	0.30	0.65	0.90	0.65	0.70	0.75	0.70	Rg 0701 + Fleece	0.55(L)	D	0.45	0.70	0.70	0.55	0.55	0.45	0.65
	α <sub>w</sub> **	Class				EN ISO 354								NRC**																																																				
						Frequency (Hz) α <sub>p</sub>																																																												
			125	250	500	1000	2000	4000																																																										
Unperforated	0.10(L)	NC	0.25	0.15	0.05	0.05	0.10	0.10	0.10																																																									
Rg 2516 + Fleece	0.75(L)	C	0.35	0.80	0.95	0.70	0.75	0.75	0.80																																																									
Rd 1522 + Fleece	0.70	C	0.30	0.65	0.90	0.65	0.70	0.75	0.70																																																									
Rg 0701 + Fleece	0.55(L)	D	0.45	0.70	0.70	0.55	0.55	0.45	0.65																																																									
<b>Fire reaction</b>	 Euroclass <b>A1</b> (Perforated + No Infill) Euroclass <b>A2-s2, d0</b> (Perforated + Acoustic Fleece) as per EN 13501-1	 <b>RUS KM1 (G1, V1, D1, T1)</b> as per 123-FZ																																																																
<b>Light reflectance</b>	 <b>Unperforated</b> 85%	<b>Rg 2516</b> 70% <b>Rd 1522</b> 65% <b>Rg 0701</b> 80%																																																																
<b>Humidity resistance</b>	 <b>90% RH</b>																																																																	
<b>Indoor air quality</b>	  A+  E1																																																																	
<b>Cleanability</b>	   (Unperforated only)  (TrioGuard™ only)   																																																																	
<b>Sustainability</b>	 ≈14%  EPD  Silver*																																																																	
<b>Design options</b>	 Dimensions  Colours  Perforations  Acoustic Infills  Cut-Outs  Swing-Down Function  METAL Sky Element Clip  METAL Sky Element Hook  Secure Function  TrioGuard™																																																																	

[Previous page] METAL Sky Element Hook, Rd 1522, RAL 9010 (Siemens, Rome, Italy, ©Beppe Raso)

**vo** Options with this icon are available from our Vario Design range. Products may vary from country to country. Please contact your local sales representative. For further information and legal notice, please visit our website.

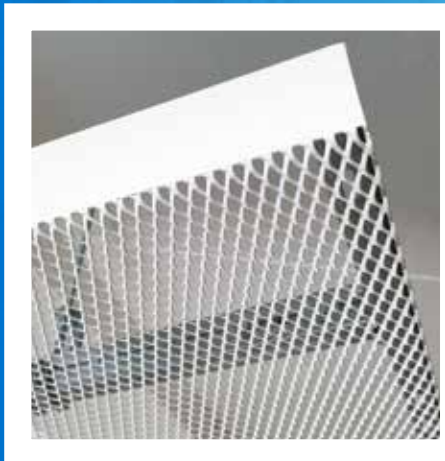




## Floating Canopy Systems

# MESH Sky Element Hook MT



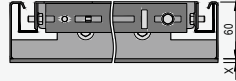




























(MESH Canopy MT)  
Grouped

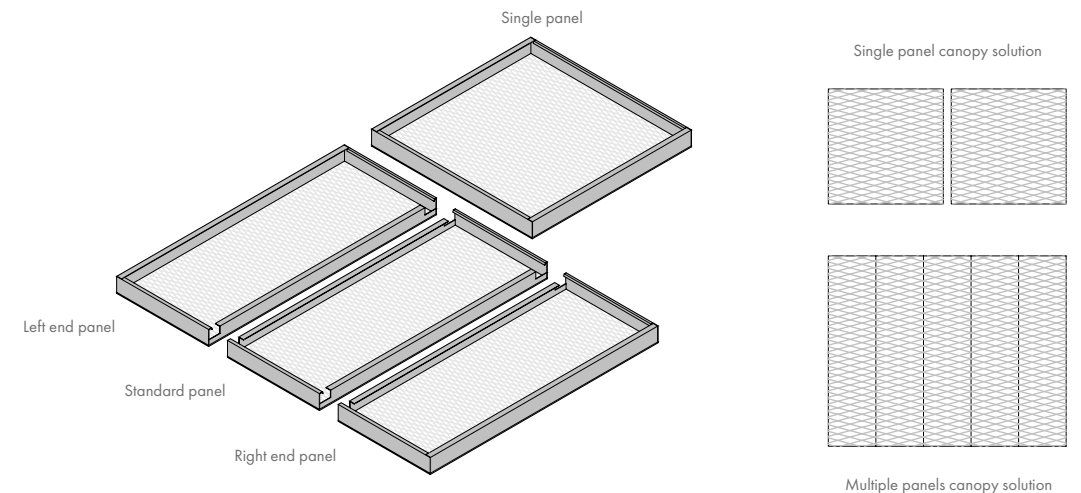


- MESH Sky Element Hook MT offers optimum flexibility and design freedom. Breathe new life into your ceiling architecture – with a creative design, impressive simplicity and high performance.
- Flat visible side, without upturn, with welded stiffening profiles on all edges.
- Standard, end and single panels available.
- Fully configurable large size panels.
- Additional design options available as part of our **Vario Design** range.
- Ideal for open spaces and large rooms with flexible partitioning.



## Floating Canopy Systems MESH Sky Element Hook MT Grouped

<b>Edge details</b>	 <b>MESH Sky Element Hook MT</b> 
	 X = Mesh thickness
<b>System</b>	 U-Profile (cross-connected)
<b>Dimensions (mm)</b>	 Panel length: 585 - 2485 (in steps of 25mm) Panel width: (RB25) 298 - 602 (in steps of 8mm) / (RB35, RB55) 247 - 700
<b>Material &amp; patterns</b>	 Galvanised steel RB25 = 1.0mm RB35 / RB55 = 1.5mm
	 <b>RB25</b>  <b>RB35</b>  <b>RB55</b>
	R16 x 8 - 2 x 1 Open area: 50%      R28 x 10 - 2 x 1.5 Open area: 58%      R43 x 13 - 2.5 x 1.5 Open area: 62%
<b>Colours</b>	  RAL 9010
	<b>Other colours</b>
	 RAL 9005  RAL 9006  RAL 9007
<b>Weight</b>	 <b>RB25</b> 6.8 - 14.0 kg/m <sup>2</sup> <b>RB35</b> 7.6 - 16.0 kg/m <sup>2</sup> <b>RB55</b> 7.2 - 15.5 kg/m <sup>2</sup>
<b>Fire reaction</b>	 Euroclass <b>A2-s1, d0</b> as per EN 13501-1 <span style="float: right;"><small>*Value applicable for RAL 9010 solutions only.</small></span>
<b>Humidity resistance</b>	 <b>95% RH</b>
<b>Indoor air quality</b>	  A+
<b>Cleanability</b>	   
<b>Sustainability</b>	   Silver* <span style="float: right;"><small>*Value applicable for RAL 9010 solutions only.</small></span>
<b>Design options</b>	    



[Previous page] MESH Sky Element Hook MT (© Knauf Ceiling Solutions)

**VO** Options with this icon are available from our **Vario Design** range. Products may vary from country to country. Please contact your local sales representative. For further information and legal notice, please visit our website.





Floating Canopy Systems  
**HERADESIGN® Sky Element**  
 (HERADESIGN® Sonic Modular)  
 Individual

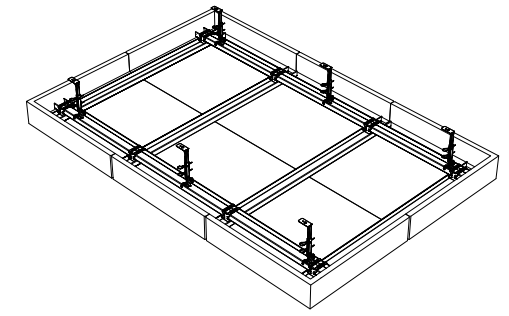


- HERADESIGN® Sky Element is a decorative wood wool acoustic canopy that offers unlimited design possibilities
- HERADESIGN® Sky Element is available with a HERADESIGN® Superfine, Superfine A2, Fine and Fine A2 surface
- To be used in new spaces or to rejuvenate or renovate an existing area
- Provides effective sound absorption
- A variety of prefabricated canopies available in different dimensions
- Integrated upstand 125mm (other dimensions available on request)
- Modular system for flexible design
- Concealed / indirect lighting possibilities



Floating Canopy Systems  
**HERADESIGN® Sky Element**  
 Individual

<b>Surface</b>		<b>HERADESIGN® Fine, Fine A2</b>		<b>HERADESIGN® Superfine, Superfine A2</b>																																																													
<b>Edge details</b>		AK-01																																																															
<b>Thickness (mm)</b>		25																																																															
<b>Dimensions (mm)</b>		Corner piece: 600 x 600 x 125mm Corner piece: 1200 x 600 x 125mm	Side piece: 600 x 600 x 125mm Side piece: 1200 x 600 x 125mm	Standard: 600 x 600mm Standard: 1200 x 600mm																																																													
<b>System</b>		Metal or wooden double layer grid system for screw mounting																																																															
<b>Weight</b>		HERADESIGN® Fine: Corner piece 600: 6.3 kg/pc Corner piece 1200: 11.7 kg/pc Side piece 600: 5.4 kg/pc Side piece 1200: 10.8 kg/pc Standard 600: 4.5 kg/pc Standard 1200: 8.9 kg/pc		HERADESIGN® Superfine: Corner piece 600: 5.8 kg/pc Corner piece 1200: 10.7 kg/pc Side piece 600: 4.9 kg/pc Side piece 1200: 9.8 kg/pc Standard 600: 4.1 kg/pc Standard 1200: 8.1 kg/pc																																																													
<b>Colours</b>		<b>Standard colours</b>	<b>Vario Design colours</b>																																																														
		White Similar to RAL 9010	Beige Natural tone 13																																																														
			<ul style="list-style-type: none"> <li>• Other colours from popular RAL and NCS colour systems are available.</li> <li>• Deviations in colour and visual appearance may occur due to the rough fibre and panel surface.</li> </ul>																																																														
<b>Sound absorption</b>		Board type 2400 x 1200 x 125mm (L x W x H)																																																															
		<table border="1"> <thead> <tr> <th rowspan="2">Product</th> <th rowspan="2">Thickness [mm]</th> <th rowspan="2">SH [mm]</th> <th colspan="2">HERADESIGN® Acoustic lining [mm] [kg/m³]</th> <th colspan="6">Equivalent absorption area Aobj [m²]</th> </tr> <tr> <th>125</th> <th>250</th> <th colspan="5">Frequencies [Hz]</th> </tr> </thead> <tbody> <tr> <td>HERADESIGN® Fine</td> <td>25</td> <td>200</td> <td>0</td> <td>0</td> <td>1.00</td> <td>2.20</td> <td>1.80</td> <td>2.50</td> <td>3.70</td> <td>3.70</td> </tr> <tr> <td>HERADESIGN® Fine</td> <td>25</td> <td>200</td> <td>50</td> <td>50</td> <td>1.50</td> <td>3.60</td> <td>4.00</td> <td>3.70</td> <td>4.10</td> <td>3.90</td> </tr> <tr> <td>HERADESIGN® Superfine</td> <td>25</td> <td>200</td> <td>0</td> <td>0</td> <td>0.80</td> <td>2.00</td> <td>1.80</td> <td>2.50</td> <td>3.50</td> <td>4.20</td> </tr> <tr> <td>HERADESIGN® Superfine</td> <td>25</td> <td>200</td> <td>50</td> <td>50</td> <td>1.40</td> <td>3.70</td> <td>4.30</td> <td>4.40</td> <td>4.30</td> <td>4.80</td> </tr> </tbody> </table>	Product	Thickness [mm]	SH [mm]	HERADESIGN® Acoustic lining [mm] [kg/m³]		Equivalent absorption area Aobj [m²]						125	250	Frequencies [Hz]					HERADESIGN® Fine	25	200	0	0	1.00	2.20	1.80	2.50	3.70	3.70	HERADESIGN® Fine	25	200	50	50	1.50	3.60	4.00	3.70	4.10	3.90	HERADESIGN® Superfine	25	200	0	0	0.80	2.00	1.80	2.50	3.50	4.20	HERADESIGN® Superfine	25	200	50	50	1.40	3.70	4.30	4.40	4.30	4.80	
Product	Thickness [mm]	SH [mm]				HERADESIGN® Acoustic lining [mm] [kg/m³]		Equivalent absorption area Aobj [m²]																																																									
			125	250	Frequencies [Hz]																																																												
HERADESIGN® Fine	25	200	0	0	1.00	2.20	1.80	2.50	3.70	3.70																																																							
HERADESIGN® Fine	25	200	50	50	1.50	3.60	4.00	3.70	4.10	3.90																																																							
HERADESIGN® Superfine	25	200	0	0	0.80	2.00	1.80	2.50	3.50	4.20																																																							
HERADESIGN® Superfine	25	200	50	50	1.40	3.70	4.30	4.40	4.30	4.80																																																							
<b>Fire reaction</b>		Euroclass <b>B-s1,d0</b> and <b>A2-s1,d0</b> according EN 13501-1																																																															
<b>Humidity resistance</b>		Suitable for rooms with a constant humidity of up to 90%. For applications where there is a constant humidity in excess of 80%, construction physics advice is recommended																																																															
<b>Cleanability</b>																																																																	
<b>Sustainability</b>																																																																	



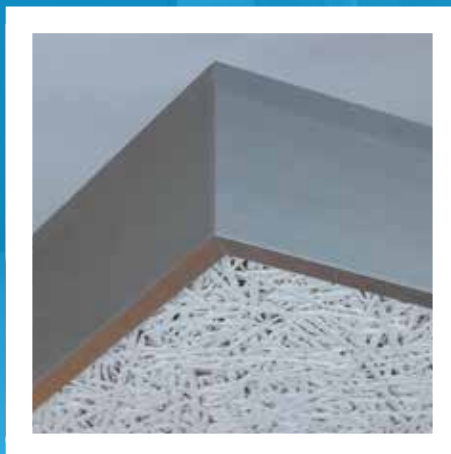
[Previous page] HERADESIGN® Sky Element (JOLO Fashion, Breda, Netherland)

**VO** Options with this icon are available from our **Vario Design** range. Some combinations of colours and/or perforations are not available for every product. Products may vary from country to country. Please contact your local sales representative. For further information and legal notice, please visit our website.







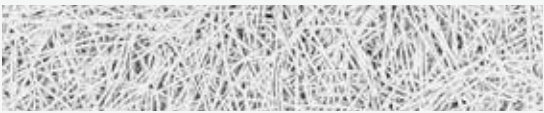






















Floating Canopy Systems  
**HERADESIGN® Sky Line**  
 (HERADESIGN® End Profile)  
 Individual

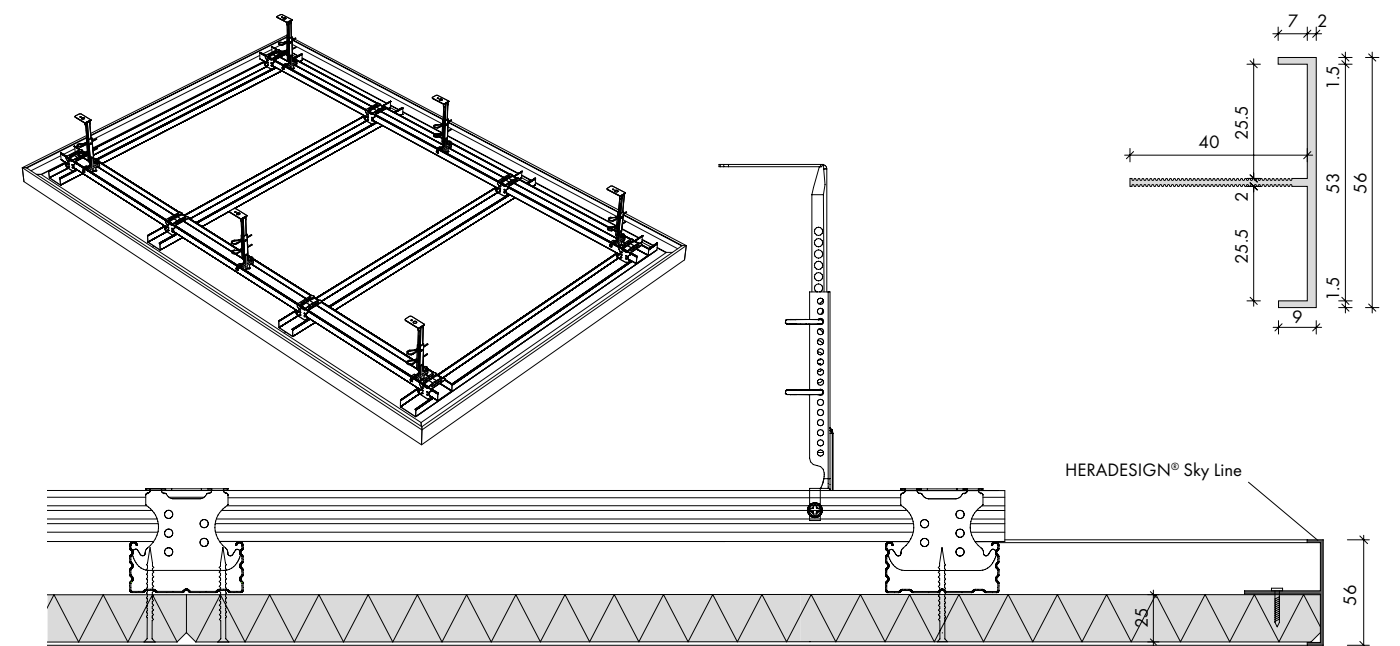


- HERADESIGN® Sky Line is an anodised profile edge piece, that can be fixed to the sides of the HERADESIGN® ceiling canopy
- HERADESIGN® Sky Line is available with a HERADESIGN® Superfine, Fine, Macro, Micro or Plano surface
- Quick and easy to install
- Available in Vario Design and RAL and NCS colours for HERADESIGN® cover layers



Floating Canopy Systems  
**HERADESIGN® Sky Line**  
 Individual

<b>Surface</b>		<b>HERADESIGN® Fine, Fine A2</b>	<b>HERADESIGN® Superfine, Superfine A2</b>						
									
		<b>HERADESIGN® Micro</b>	<b>HERADESIGN® Macro</b>	<b>HERADESIGN® Plano</b>					
									
<b>Edge details</b>		 AK-01	 GK	 AK-02/5					
<b>Thickness (mm)</b>		25							
<b>Dimension of profile (mm)</b>		56/42mm, profile length 3000mm							
<b>System</b>		Symmetrical profile for HERADESIGN® 25mm thick panels Metal or wooden double layer grid system for screw mounting							
<b>Profile weight</b>		0.54 kg/m							
<b>Colours</b>		<b>Standard colours</b>	<b>va Vario Design colours</b>						
		 White Similar to RAL 9010	 Beige Natural tone 13	 Granite	 Steel	 Green Marble	 Copper	 Oak	 Brass
		<ul style="list-style-type: none"> <li>• The colour options listed refer to <b>HERADESIGN® cover layers only</b>.</li> <li>• Other colours from popular RAL and NCS colour systems are available.</li> <li>• Deviations in colour and visual appearance may occur due to the rough fibre and panel surface.</li> </ul>							
<b>Fire reaction</b>		Euroclass <b>B-s1,d0</b> and <b>A2-s1,d0</b> according EN 13501-1							
<b>Humidity resistance</b>		Suitable for rooms with a constant humidity of up to 90% For applications where there is a constant humidity in excess of 80%, construction physics advice is recommended							



[Previous page] HERADESIGN® Sky Line (© Knauf Ceiling Solutions)

**va** Options with this icon are available from our **Vario Design** range. Some combinations of colours and/or perforations are not available for every product. Products may vary from country to country. Please contact your local sales representative. For further information and legal notice, please visit our website.



## WALL ABSORBER RANGE

**Mineral, fabric, metal and wood wool wall absorbers are acoustical panels providing sound absorption for noise control in a wide range of interior applications.**

In addition to optimal acoustical performances, wall absorbers are easy to install over any smooth, structurally sound interior wall surface.

Choose from a variety of sizes, colours, and designs to match any space.





Wall Systems

## MINERAL Wallcoustic Element

(OPTIMA Canopy, OPTIMA L Canopy, TOPIQ® Line Element)  
Individual

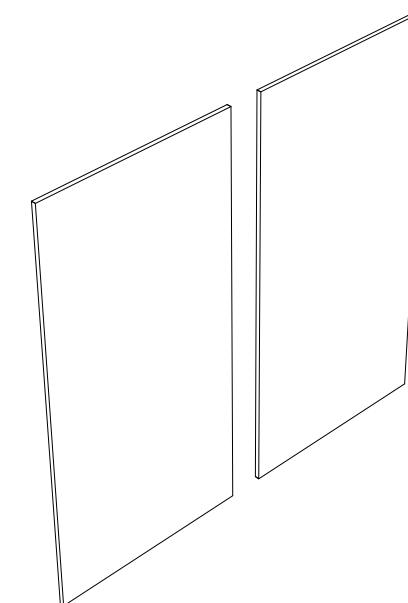


- MINERAL Wallcoustic Element is a frameless and jointless wall absorber. It also benefits from a fully colour coated face and reverse laminate fleece
- The monolithic wall absorber offers excellent sound absorption properties and endless design possibilities for ambitious architects, who seek to raise the visual and acoustic quality of interior spaces
- The wall panel is delivered in one piece and is quick and easy to install using spiral anchors and wall brackets



## Wall Systems MINERAL Wallcoustic Element Individual

<b>Thickness (mm)</b>		40																												
<b>Dimensions (mm)</b>		Square 1180 x 1180 Square 800 x 800 Rectangle 1180 x 580 Rectangle 1780 x 880 Rectangle 1780 x 1180																												
<b>Additional sizes on request</b>																														
<b>System</b>		Spiral anchor Wall brackets																												
<b>Weight</b>		6.0 kg/m <sup>2</sup>																												
<b>Colour &amp; design</b>		<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; width: 30px; height: 30px; background-color: white; margin-right: 10px;"></div> <div> <p><b>vo Vario Design Colours</b></p> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <div style="width: 20px; height: 20px; background-color: #444; border: 1px solid black;"></div> <div style="width: 20px; height: 20px; background-color: #888; border: 1px solid black;"></div> <div style="width: 20px; height: 20px; background-color: #666; border: 1px solid black;"></div> <div style="width: 20px; height: 20px; background-color: #999; border: 1px solid black;"></div> <div style="width: 20px; height: 20px; background-color: #c00; border: 1px solid black;"></div> <div style="width: 20px; height: 20px; background-color: #a52a2; border: 1px solid black;"></div> <div style="width: 20px; height: 20px; background-color: #d4af37; border: 1px solid black;"></div> <div style="width: 20px; height: 20px; background-color: #f0e68c; border: 1px solid black;"></div> <div style="width: 20px; height: 20px; background-color: #ccc; border: 1px solid black;"></div> </div> </div> </div>																												
<b>Sound absorption</b>		<p>EN ISO 354</p> <table border="1"> <thead> <tr> <th>Frequency f (Hz)</th> <th>125</th> <th>250</th> <th>500</th> <th>1000</th> <th>2000</th> <th>4000</th> </tr> </thead> <tbody> <tr> <td>Equivalent Absorption Area Aobj*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Square: 1180 x 1180mm</td> <td>0.40</td> <td>1.20</td> <td>1.90</td> <td>1.90</td> <td>1.90</td> <td>1.80</td> </tr> <tr> <td>Rectangle: 1780 x 1180mm</td> <td>0.50</td> <td>1.70</td> <td>2.70</td> <td>2.80</td> <td>2.80</td> <td>2.60</td> </tr> </tbody> </table> <p><small>*Values shown are the average of the 3 one third octave band values</small></p>	Frequency f (Hz)	125	250	500	1000	2000	4000	Equivalent Absorption Area Aobj*							Square: 1180 x 1180mm	0.40	1.20	1.90	1.90	1.90	1.80	Rectangle: 1780 x 1180mm	0.50	1.70	2.70	2.80	2.80	2.60
Frequency f (Hz)	125	250	500	1000	2000	4000																								
Equivalent Absorption Area Aobj*																														
Square: 1180 x 1180mm	0.40	1.20	1.90	1.90	1.90	1.80																								
Rectangle: 1780 x 1180mm	0.50	1.70	2.70	2.80	2.80	2.60																								
<b>Fire reaction</b>		Euroclass <b>A2-s1,d0</b> as per EN 13501-1																												
<b>Light reflectance</b>		Up to <b>88%</b>																												
<b>Humidity resistance</b>		<b>90%</b>																												
<b>Cleanability</b>																														
<b>Sustainability</b>																														



**vo** Options with this icon are available from our **Vario Design** range. Products may vary from country to country. Please contact your local sales representative. For further information and legal notice, please visit our website.





## Wall Systems METAL Wallcoustic Element (METAL Canopy Wall Absorber) Individual



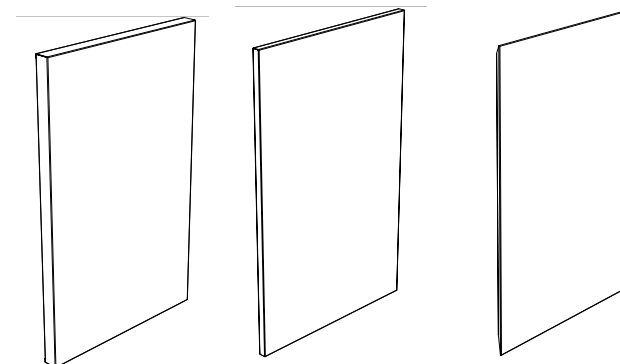
- METAL Wallcoustic Element is a range of wall solutions that help structure and define spaces and accentuate an area. They provide a focus or create wall sculptures that help control sound reverberation within a space.
- Simple and fast installation by using a wall hanging kit.
- Durable, easy to clean and maintain.
- Fully configurable solution, available with different edge details (90°/50°/20x20mm edge).
- Optional with an acoustic pad allow for better sound absorption.
- The same product can be installed as a ceiling canopy (see METAL Sonic Element).
- The product can be installed upright or reclined.
- Additional design options available as part of our **Vario Design** range.
- Ideal for offices, meeting rooms, retail auditoriums, multi-purpose halls and cafeterias.



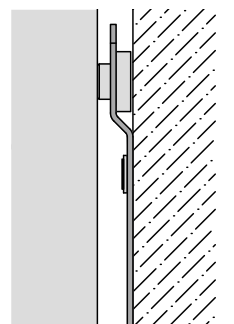
## Wall Systems METAL Wallcoustic Element Individual

<b>Edge details</b>	<b>METAL Wallcoustic Element</b> <sup>vo</sup> [90° edge]	<b>METAL Wallcoustic Element</b> <sup>vo</sup> [50° edge]	<b>METAL Wallcoustic Element</b> <sup>vo</sup> [20 x 20mm edge]
<b>System</b>	Wall Hanging Kit (4 fixing points to the wall)		Not included
<b>Dimensions (mm)</b>	Panel length: 600 - 1800 Panel width: 600 - 1200 Panel thickness: 40		
<b>Material &amp; perforations</b>	Post-coated galvanised steel, 0,7mm		
	Standard perforation <b>Rg 2516</b> ∅: 2.5mm Open area: 16%	Micro-perforation <b>Rd 1522</b> ∅: 1.5mm Open area: 22%	Extramicro perforation <b>Rg 0701</b> ∅: 0.7mm Open area: 1.5%
<b>Colours</b>	RAL 9010	<b>vo Vario Design colours</b>	
		<b>vo Wood effects</b>	
<b>Weight</b>	<b>Unperforated</b> 4.3 - 26.0 kg/m <sup>2</sup>	<b>Rg 2516</b> 4.0 - 23.0 kg/m <sup>2</sup>	<b>Rd 1522</b> 3.9 - 21.9 kg/m <sup>2</sup>
<b>Light reflectance</b>	<b>Rg 2516</b> 70%	<b>Rd 1522</b> 65%	<b>Rg 0701</b> 80%
<b>Humidity resistance</b>	<b>90% RH</b>		
<b>Indoor air quality</b>	A+ E1		
<b>Cleanability</b>	(Unperforated only)		
<b>Sustainability</b>	≈14% Silver*		
<b>Design options</b>	Dimensions Colours Perforations Acoustic Infills Cut-Outs		

METAL Wallcoustic Element  
(90° / 50° / 20x20mm edge)



Wall Hanging Kit



[Previous page] METAL Wallcoustic Element, 20 x 20mm edge, Rd 1522 / 90° edge, Rg 2516 / 50° edge, Rg 0701, RAL 9007 (©Knauf Ceiling Solutions)

<sup>vo</sup> Options with this icon are available from our **Vario Design** range. Products may vary from country to country. Please contact your local sales representative. For further information and legal notices, please visit our website.





Wall Systems  
**HERADESIGN® Wallcoustic Element**  
 (HERADESIGN® Wall Absorber)  
 Individual

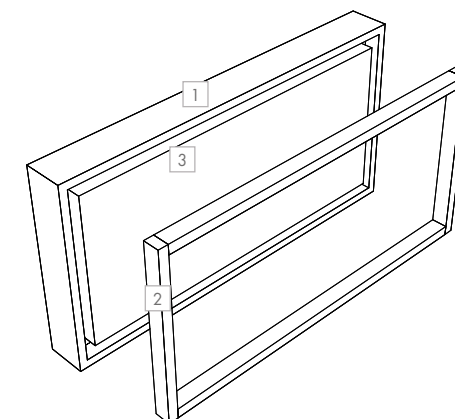


- The HERADESIGN® Wallcoustic Element is a magnesite bonded wood wool acoustic wall panel bonded to a 50mm or 100mm acoustic lining
- Available in four different sizes with a HERADESIGN® Superfine surface
- Delivered as a kit making it quick and easy to install



Wall Systems  
**HERADESIGN® Wallcoustic Element**  
 Individual

<b>Surface</b>		<b>HERADESIGN® Superfine</b>									
<b>Panel Thickness (mm)</b>		25									
<b>Dimensions (mm)</b>		1200 x 600 x 125 (L x W x H): 1200 x 600 x 75 (L x W x H):	Mineral wool lining [mm] 100mm 50mm	600 x 600 x 125 (L x W x H): 600 x 600 x 75 (L x W x H):	Mineral wool lining [mm] 100mm 50mm						
<b>System</b>		The wall absorber is delivered in one piece, ready for installation, and can be quickly mounted onto a supporting vertical substrate in any position using the included wooden frame.									
<b>Weight</b>		1200 x 600 x 125: 18.3 kg/pc 1200 x 600 x 75: 15.9 kg/pc		600 x 600 x 125: 10.5 kg/pc 600 x 600 x 75: 8.4 kg/pc							
<b>Colours</b>		<b>Standard colours</b>  White Similar to RAL 9010 Beige Natural tone 13	<b>Vario Design colours</b>  Granite Steel Green Marble Copper Oak Brass Sandstone Concrete • Other colours from popular RAL and NCS colour systems are available. • Deviations in colour and visual appearance may occur due to the rough fibre and panel surface.								
<b>Sound absorption</b>		Board type + dimensions L x W x H [mm]	Thickness [mm]	HERADESIGN® Acoustic lining [mm]	[kg/m <sup>2</sup> ]	Equivalent absorption area Aobj [m <sup>2</sup> ] Frequencies [Hz]					
						125	250	500	1000	2000	4000
		HERADESIGN® Superfine: 1200 x 600 x 125	25	100	50	0.60	1.30	1.40	1.20	1.10	1.10
		HERADESIGN® Superfine: 1200 x 600 x 75	25	50	50	0.20	0.80	1.10	0.90	1.00	0.90
		HERADESIGN® Superfine: 600 x 600 x 125	25	100	50	0.30	0.70	0.80	0.70	0.60	0.60
		HERADESIGN® Superfine: 600 x 600 x 75	25	50	50	0.10	0.40	0.60	0.50	0.50	0.50
<b>Fire reaction</b>		Euroclass <b>B-s1,d0</b> according EN 13501-1									
<b>Humidity resistance</b>		The wall absorber is not suitable for use in indoor swimming pools or thermal baths									
<b>Cleanability</b>											
<b>Sustainability</b>											



- 1 HERADESIGN® Wallcoustic Element
- 2 Mounting frame
- 3 Bonded acoustic lining

[Previous page] HERADESIGN® Wallcoustic Element (HERADESIGN® Campus, Austria, ©Foto Glanzig)

Options with this icon are available from our **Vario Design** range. Some combinations of colours and/or perforations are not available for every product. Products may vary from country to country. Please contact your local sales representative. For further information and legal notice, please visit our website.





Wall Systems  
**MINERAL Wallcoustic Line**  
 (THERMATEX® Line Modern)  
 Individual

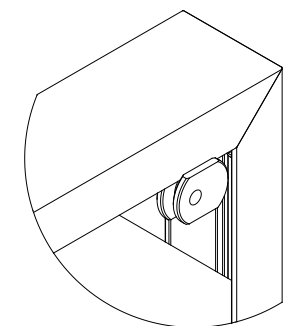
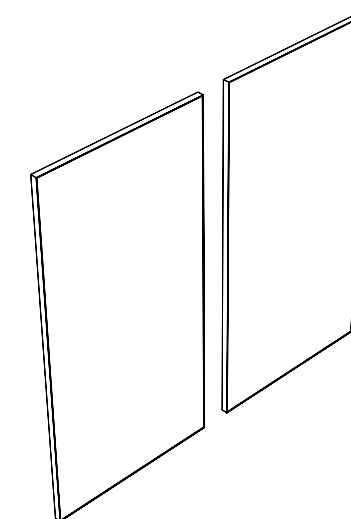


- MINERAL Wallcoustic Line is a pre-assembled aluminium framed wall absorber with a standard white, laminate surface finish. It can also be ordered in a variety of colours or customised printed motifs on request
- Customise and enhance the visual appearance and acoustic ambience in any space
- The wall panel is delivered in one piece and is quick and easy to install using eccentric screws and installation key



Wall Systems  
**MINERAL Wallcoustic Line**  
 Individual

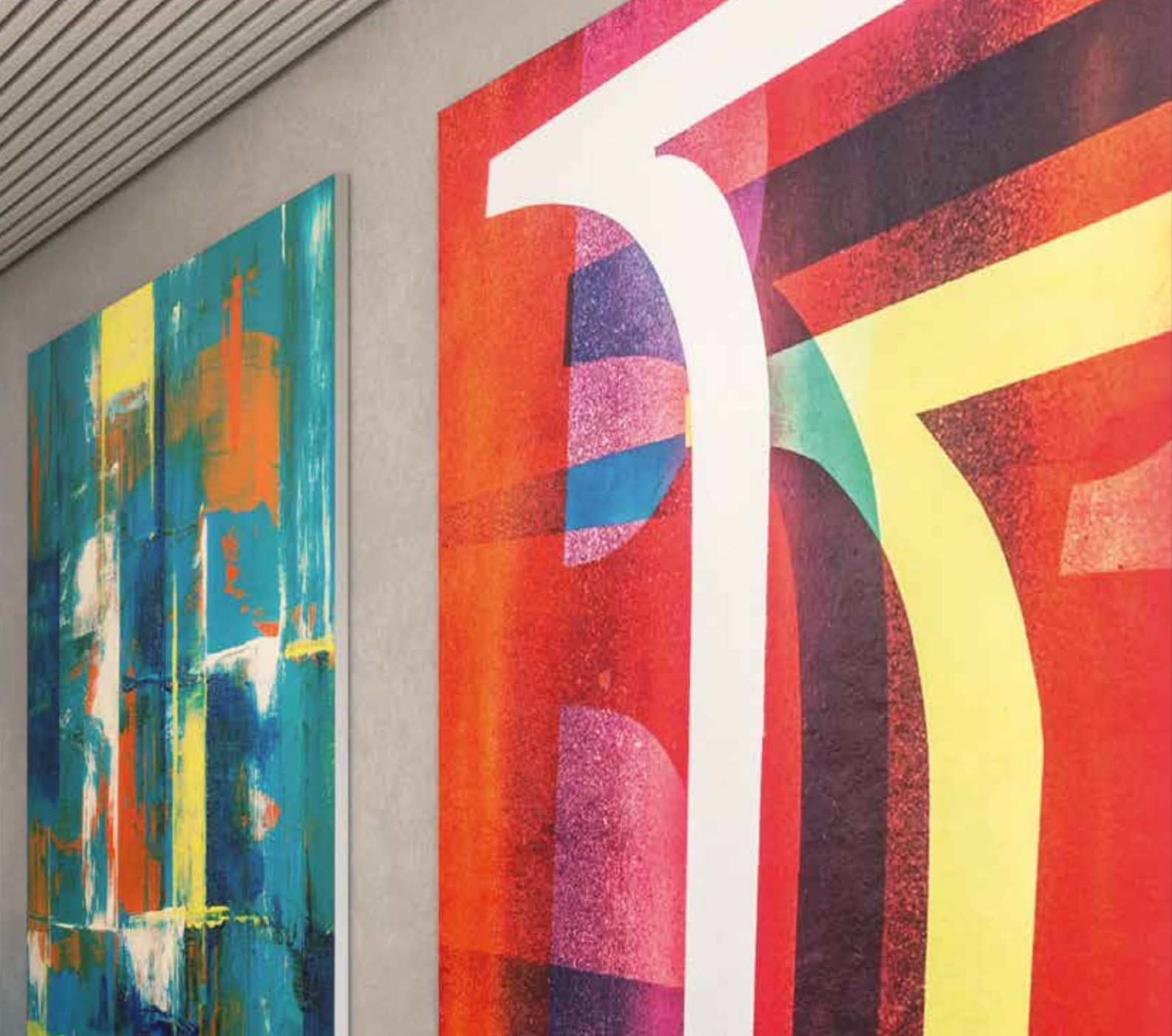
<b>Thickness (mm)</b>		43																																										
<b>Dimensions (mm)</b>		1200 x 600 1200 x 1200 1800 x 1200 2400 x 1200																																										
<b>Additional sizes on request</b>																																												
<b>System</b>		Eccentric bracket																																										
<b>Weight</b>		9.4 kg/m <sup>2</sup>																																										
<b>Colour &amp; design</b>		<b>Frame:</b> Anodised Aluminium, White, Colours White Granite Steel Green Marble Copper Oak Brass Sandstone Concrete  <b>Motif:</b> Custom Graphic Print																																										
<b>Sound absorption</b>		EN ISO 354 <table border="1"> <thead> <tr> <th>Frequency f (Hz)</th> <th>125</th> <th>250</th> <th>500</th> <th>1000</th> <th>2000</th> <th>4000</th> </tr> </thead> <tbody> <tr> <td>Equivalent Absorption Area Aobj*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Rectangle: 1200 x 600mm</td> <td>0.20</td> <td>0.60</td> <td>1.00</td> <td>0.90</td> <td>0.80</td> <td>0.90</td> </tr> <tr> <td>Square: 1200 x 1200mm</td> <td>0.50</td> <td>1.10</td> <td>1.60</td> <td>1.50</td> <td>1.50</td> <td>1.50</td> </tr> <tr> <td>Rectangle: 1800 x 1200mm</td> <td>0.60</td> <td>1.90</td> <td>2.50</td> <td>2.40</td> <td>2.20</td> <td>2.40</td> </tr> <tr> <td>Rectangle: 2400 x 1200mm</td> <td>1.10</td> <td>2.20</td> <td>3.10</td> <td>3.10</td> <td>3.00</td> <td>3.10</td> </tr> </tbody> </table> <p>*Values shown are the average of the 3 one third octave band values</p>	Frequency f (Hz)	125	250	500	1000	2000	4000	Equivalent Absorption Area Aobj*							Rectangle: 1200 x 600mm	0.20	0.60	1.00	0.90	0.80	0.90	Square: 1200 x 1200mm	0.50	1.10	1.60	1.50	1.50	1.50	Rectangle: 1800 x 1200mm	0.60	1.90	2.50	2.40	2.20	2.40	Rectangle: 2400 x 1200mm	1.10	2.20	3.10	3.10	3.00	3.10
Frequency f (Hz)	125	250	500	1000	2000	4000																																						
Equivalent Absorption Area Aobj*																																												
Rectangle: 1200 x 600mm	0.20	0.60	1.00	0.90	0.80	0.90																																						
Square: 1200 x 1200mm	0.50	1.10	1.60	1.50	1.50	1.50																																						
Rectangle: 1800 x 1200mm	0.60	1.90	2.50	2.40	2.20	2.40																																						
Rectangle: 2400 x 1200mm	1.10	2.20	3.10	3.10	3.00	3.10																																						
<b>Fire reaction</b>		Euroclass <b>A2-s1,d0</b> as per EN 13501-1																																										
<b>Light reflectance</b>		Up to <b>88%</b>																																										
<b>Humidity resistance</b>		<b>90%</b>																																										
<b>Cleanability</b>																																												
<b>Sustainability</b>		 BIO-BASED WOLLE EC 1272/2008 Annex 2																																										



Detail: Eccentric bracket

Options with this icon are available from our Vario Design range. Products may vary from country to country. Please contact your local sales representative. For further information and legal notice, please visit our website.





Wall Systems  
**FABRIC Wallcoustic Line**  
 (LINE Style)  
 Individual



- FABRIC Wallcoustic Line is a fabric covered wall absorber with an elegant aluminium frame and can be easily customised using individual patterns or images. The aluminium frame is supplied with an all-round groove into which the printed fabric is inserted. The fabric covering can be easily removed and replaced with a new fabric design, without using any special tools
- FABRIC Wallcoustic Line 20: Lightweight profile for one-sided coverings in small sizes
- FABRIC Wallcoustic Line 27: Profile for all sizes with one-sided coverings
- FABRIC Wallcoustic Line 50: Profile for all sizes with one-sided coverings and a highly absorbing acoustic filling

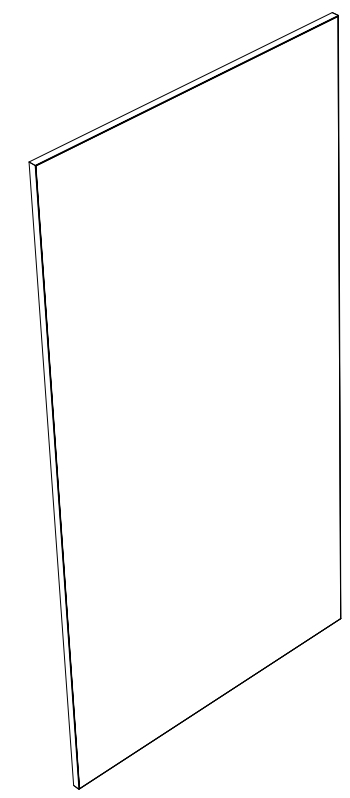


Wall Systems  
**FABRIC Wallcoustic Line**  
 Individual

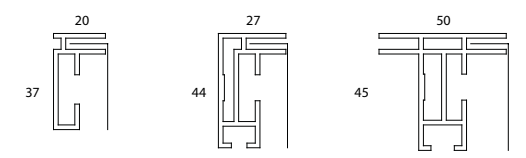
<b>Thickness (mm)</b>		20	27	50															
<b>Dimensions (mm)</b>		600 x 600 1 200 x 600	1200 x 1200 1800 x 1200 2400 x 1200 2400 x 2400	600 x 600 1200 x 600 1200 x 1200 1800 x 1200 2400 x 1200 2400 x 2400															
<b>System</b>		Wall bracket																	
<b>Weight</b>		3.0 - 6.0 kg/m <sup>2</sup>																	
<b>Colour &amp; design</b>		<b>Frame:</b> anodised aluminium, white, RAL colours <b>FABRIC Wallcoustic Line 20:</b> fabric, white or Custom Graphic Print <b>FABRIC Wallcoustic Line 27:</b> fabric, white or Custom Graphic Print <b>FABRIC Wallcoustic Line 50:</b> fabric, white or Custom Graphic Print																	
<b>Sound absorption</b>		EN ISO 354 Frequency f (Hz) Equivalent Absorption Area Aobj* <table border="1"> <thead> <tr> <th></th> <th>125</th> <th>250</th> <th>500</th> <th>1000</th> <th>2000</th> <th>4000</th> </tr> </thead> <tbody> <tr> <td>1200 x 1200mm (50mm thickness)</td> <td>0.30</td> <td>0.90</td> <td>1.90</td> <td>1.90</td> <td>1.80</td> <td>1.60</td> </tr> </tbody> </table>					125	250	500	1000	2000	4000	1200 x 1200mm (50mm thickness)	0.30	0.90	1.90	1.90	1.80	1.60
	125	250	500	1000	2000	4000													
1200 x 1200mm (50mm thickness)	0.30	0.90	1.90	1.90	1.80	1.60													
<b>Humidity resistance</b>		90%																	
<b>Cleanability</b>																			

\*Values shown are the average of the 3 one third octave band values

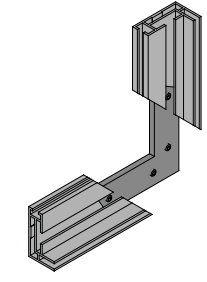
FABRIC Wallcoustic Line



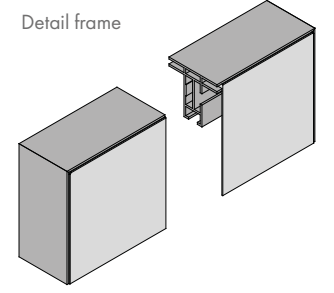
Profile cross-sections



Corner connection



Detail frame

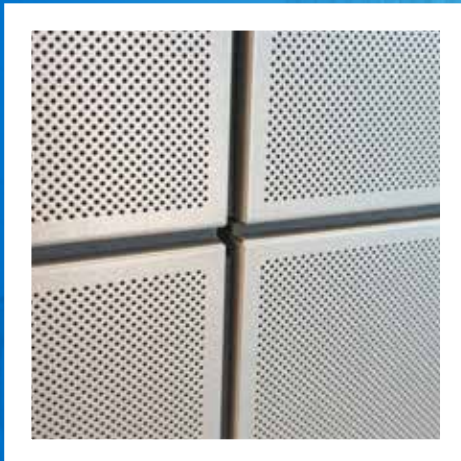


Options with this icon are available from our Vario Design range. Products may vary from country to country. Please contact your local sales representative. For further information and legal notice, please visit our website. [knaufceilingsolutions.com](http://knaufceilingsolutions.com)









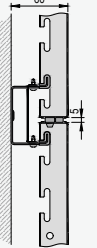
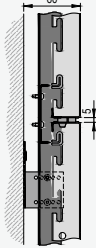












































Wall Systems  
**METAL Wallcoustic Horizon 1000 / 1100**  
 (METAL W-H 1000 / W-H 1100)  
 Grouped

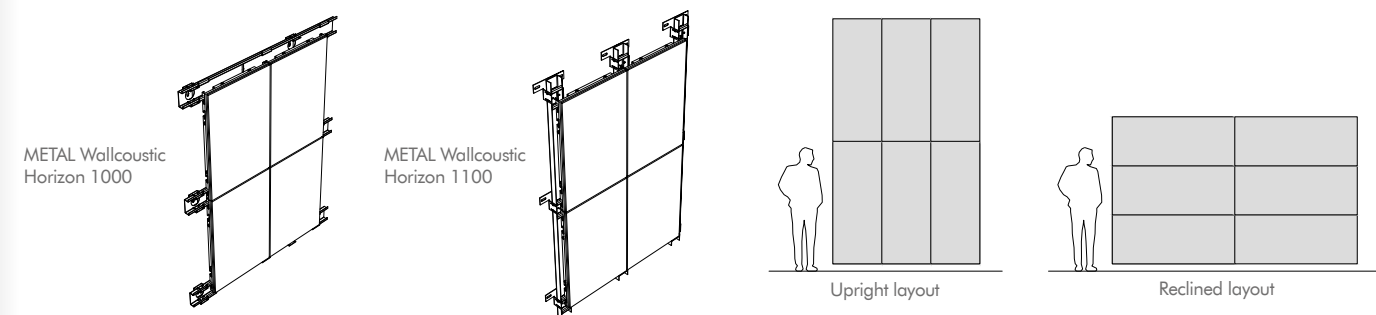


- METAL Wallcoustic Horizon 1000 and METAL Wallcoustic Horizon 1100 are Hook-On wall cladding systems without visible fasteners which enable faster installation.
- Space saving system with a small adjustable offset distance.
- Panels can be oriented upright or reclined.
- METAL Wallcoustic Horizon 1000 with C-Wall profile is installed horizontally, while METAL Wallcoustic Horizon 1100 with U-Wall profile is installed vertically. The size and orientation of the panels will guide the choice of a system over the other.
- Fast to install and dismantle.
- A complete wall solution that meets the acoustic performance of a space.
- Additional design options available as part of our **Vario Design** range.
- Acoustic and architectural design elements for market segments such as office, education or transportation.




Wall Systems  
**METAL Wallcoustic Horizon 1000 / 1100**  
 Grouped

<b>Edge details</b>	 <b>METAL Wallcoustic Horizon 1000</b> 	 <b>METAL Wallcoustic Horizon 1100</b> 
		
<b>System</b>	 C-Wall Profile	U-Wall Profile
<b>Dimensions (mm)</b>	Panel length: 600 - 3000 Panel width: 250 - 1000 Max size (m <sup>2</sup> ): 3	Panel length: 600 - 3000 Panel width: 250 - 1000 Max size (m <sup>2</sup> ): 3
<b>Material &amp; perforations</b>	Post-coated galvanised steel, 1.0mm	
	 Unperforated	 Standard perforation <b>Rg 2516</b> Ø: 2.5mm Open area: 16%
		 Micro-perforation <b>Rd 1522</b> Ø: 1.5mm Open area: 22%
	<b>Other perforations</b>	
	 Rd 1511	 Rg 1511
		 Rg 3013
<b>Colours</b>	  RAL 9010	<b>Vario Design colours</b>  Granite  Steel  Green Marble  Copper  Oak  Brass  Sandstone  Concrete  RAL 9003  RAL 9005  RAL 9006  RAL 9007  RAL 9016  Global White
		<b>Wood effects</b>  Ash  Natural Bamboo  Caramel Bamboo  Maple  Oak  American Cherry  American Walnut
<b>Weight</b>	 <b>Unperforated</b> 8.6 - 11.3 kg/m <sup>2</sup>	<b>Rg 2516</b> 7.3 - 10.0 kg/m <sup>2</sup>
		<b>Rd 1522</b> 6.7 - 9.6 kg/m <sup>2</sup>
		<i>Weight varies depending on the edge detail and acoustic infill.</i>
<b>Light reflectance</b>	 <b>Unperforated</b> 85%	<b>Rg 2516</b> 70%
		<b>Rd 1522</b> 65%
		<i>Values applicable for RAL 9010 solutions only.</i>
<b>Humidity resistance</b>	 <b>90% RH</b>	
<b>Cleanability</b>	     (Unperforated only)	
<b>Sustainability</b>	   =14% Silver*	<i>*Value applicable for RAL 9010 solutions only.</i>
<b>Design options</b>	 Dimensions  Colours  Perforations	



[Previous page] METAL Wallcoustic Horizon 1100 (Dubai International Airport, Dubai, UAE, © Beppe Roso)

 Options with this icon are available from our **Vario Design** range. Products may vary from country to country. Please contact your local sales representative. For further information and legal notice, please visit our website.



# DEFINITION OF TECHNICAL PERFORMANCE ICONS



### Sound Absorption

A single-number rating for random incidence sound absorption coefficients as calculated by reference to EN ISO 11654 ( $\alpha_w$ ) or to ASTM C 423-01 (NRC).



### Sound Absorption Class

A classification for sound absorption (A – E) based upon the sound absorption  $\alpha_w$  value.



### Sound Reduction

A single-number rating for airborne sound transmission (single pass) as calculated by reference to EN ISO 717-1.



### Sound Attenuation

A single-number rating for flanking sound transmission between adjacent rooms, as calculated by reference to EN ISO 717-1.



### Fire Reaction

Reaction to fire classification in accordance with EN 13501-1 expressed as Euroclass (A1 – F).



### Humidity Resistance

Maximum relative humidity conditions for installation and lifetime of ceiling.



### Light Reflectance

Light reflection is the proportion of incident light that is reflected back off the product.



### Edge Details

Indicates the different edge details available for the product of reference.



### Dimensions

Indicates the sizes available for the product of reference.



### Systems

Indicates the suspension systems compatible with the product of reference.



### Colours

Custom colours available for products with this icon.



### Weight

Weight per unit area of the product (kg/m<sup>2</sup>)



### Scratch Resistance

Solutions with this icon offer a superior level of surfact scratch resistance.



### Product Handling & Durability

Solutions with enhanced durability for improved handling and resistance damage.



### Acoustic Infills

Custom acoustic infills available for products with this icon.



### Cut-Outs

Custom factory cut-outs for service integration available for products with this icon.



### Perforations/Patterns

Custom perforations/patterns available for products with this icon.



### Shapes

Custom shapes available for products with this icon.



### Impact Resistance

Impact solutions ceiling tiles available for products with this icon.



### Recycled Content

The recycled content of the product, as calculated in accordance with ISO 14021.



### VOC

The VOC emission performance in accordance with the French labelling requirements.



### Formaldehyde (E1)

Formaldehyde emission level (E1 = lowest test result possible).



### Environmental Product Declaration (EPD)

EPD are independently verified and registered documents that communicate transparent and comparable information about the life-cycle environmental impact of products.



### Cradle to Cradle Certified®

Products with this icon are C2C Certified®, providing a transparent mechanism to compare the sustainability performance of products, showing that they are designed for recycling and can help protect and sustain our environment for future generations by keeping resources in the economy for longer.



### Blue Angel

The Blue Angel ecolabel is awarded by an independent jury to environmentally-friendly products. Each label specifies that the product meets a list of criteria considering environments and health-related aspects.



### Biosoluble Wool

The mineral wool used in our products is biosoluble and therefore not a health hazard. The two quality labels RAL and EUCEB ensure the biosolubility of the wool through regular testing.



### Indoor Air Comfort Gold

Higher level "Indoor Air Comfort GOLD - Certified Product" shows additional compliance of product emissions with the criteria of many of the voluntary specifications issued by most relevant ecolabels and similar specifications in the EU and requirements for sustainable building certifications. Certified products are those with the best-in-class low emissions, thus good for indoor air quality.



### ISO 9001 & ISO 14001

This icon demonstrates Knauf Ceiling Solutions ability to consistently provide products and services that meet customer and regulatory quality management system requirements (ISO 9001) and environmental management system requirements (ISO 14001).



### M1

The Finnish emission label for building products is one of the leading test labels in the Scandinavian region. M1 is the best category and stands for "low emission". The M1 classification sets requirements for the emission of VOC, formaldehyde, ammonia and other substances.



### FSC

Our product are FSC on request. The FSC label means that the product contains wood from an FSC-certified forest. When we specify a product with the FSC logo, you can have confidence that you are ensuring that forests are alive for future generations.

## CLEANING AND DISINFECTION

The frequency and cleaning method of a ceiling varies from one application to another. All products can at least be cleaned with a dry cloth or vacuum cleaner.



For standard cleaning of dust, loose dirt or deposit, a soft brush, a clean, dry, soft white cloth, a normal vacuum cleaner with a soft brush or focus compressed air can be used.



For more intensive cleaning, the surfaces can be damp cleaned. This should be carried out with a wrung-out soft cloth or sponge. After cleaning, the surfaces of the tile should be dried with a soft cloth.



Can be cleaned using focus compressed air. The apparatus used should be a cleaner that generates steam under pressure (8 bar and 175°C).



# ACOUSTIC TECHNICAL GLOSSARY

## WEIGHTED SOUND ABSORPTION COEFFICIENT, $\alpha_w$

A single-number rating for random incidence sound absorption coefficients calculated by reference to EN ISO 11654. With this method measured values obtained in accordance with EN ISO 354, are converted into octave bands at 250, 500, 1000, 2000 and 4000 Hz and are plotted onto a graph. A standard reference curve is then shifted towards the measured values in steps of 0.05 until a "best fit" is obtained. The derived value of  $\alpha_w$  will vary between 0.00 and 1.00 but is only expressed in multiples of 0.05, e.g.  $\alpha_w = 0.65$ .

## SHAPE INDICATOR

With reference to EN ISO 11654, the calculated value of  $\alpha_w$  may be qualified by one or more letters (in brackets) to indicate if the product has excess sound absorption at low (L), medium (M) or high (H) frequencies.

## SOUND ABSORPTION CLASS

With reference to EN ISO 11654, the calculated value of  $\alpha_w$  may additionally be allocated into one of six descriptive classes in accordance with the following table:

Sound Absorption Class	$\alpha_w$
A	0.90; 0.95; 1.00
B	0.80; 0.85
C	0.60; 0.65; 0.70; 0.75
D	0.30; 0.35; 0.40; 0.45; 0.50; 0.55
E	0.15; 0.20; 0.25
Not Classified	0.00; 0.05; 0.10

## NOISE REDUCTION COEFFICIENT, NRC

A single-number descriptor of random incidence sound absorption coefficients. Defined in ASTM C423-01 as the arithmetical average, to the nearest multiple of 0.05, of the measured sound absorption coefficients for the four one-third octave band centre frequencies of 250, 500, 1,000 and 2,000 Hz.

## EQUIVALENT ABSORPTION AREA, $A_{obj}$

The equivalent absorption is a measure of the total sound absorption by discrete objects (canopies, screens, furniture etc) when installed in an architectural space. Because these types of absorbers have more than one surface and may be irregular in form, it is not meaningful to assign sound absorption coefficients to them. Hence the Equivalent Absorption Area per unit (measured in Sabines) is preferred to characterise the absorption provided by an individual 'space absorber'.



YOUR CEILING  
OUR SOLUTIONS

**Knauf Ceilings Solutions GmbH & Co. KG**

Elsenthal 15,  
94481 Grafenau, Germany  
Phone: +49 8552 422-0  
Fax: +49 9323 318-881-856  
[www.knaufceilingsolutions.com](http://www.knaufceilingsolutions.com)  
E-Mail: [info.kcs@knauf.com](mailto:info.kcs@knauf.com)

Registered court: Passau district court,  
Registration No.: HRB 1023  
VAT No. pursuant to § 27a of the German VAT Act  
(Umsatzsteuergesetz): DE131249009  
Managing Director:  
Karl Wenig