

for good architecture



Ceiling Systems

2008

... for good architecture

People's demand for liveable, positive, and sustainable surroundings is greater than ever. Architects, planners and builders around the world must face up to this challenge.

Our mission is to make the best possible contribution to this, and to put products into the hands of architects and planners that make it possible for them to meet this challenge.

Our contribution is ecologically sound materials that are equipped with the best functionality, and an almost limitless variety of designs to ensure a pleasant living environment.

We are proud of this.

Helmut G. Walten Heradesign Ceiling Systems

References for Good Architecture

Products / Colours & Technical Details

The New Heradesign Product Architecture



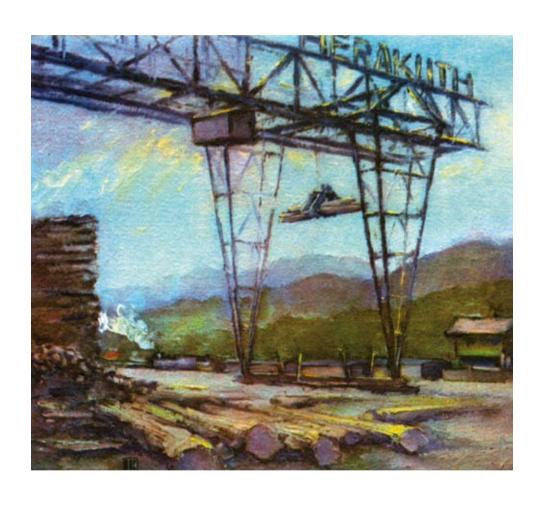














100 Years Natural Materials Wood Wool - Magnesite

The history of magnesite bonded wood wool panels began in 1908 with pioneer work. Robert Scherer registered his process for the production of a magnesite bonded wood wool lightweight building panel with the Imperial Royal Patent Office in Vienna. Just a few years later, after the introduction of the products in the south of Austria by the Austro-American Company, the wood wool panel with its excellent values revolutionised the building industry. In the 1920s, it made its ultimate triumphant entry onto the world market under the product name "Heraklith Panel" and became a standard product in residential and commercial construction.

In 1935, the "Heraklith Panel" was used for the first time as an acoustic panel and from then on was used in many well-known and interesting buildings up until the late sixties. After a period of stagnation in the eighties and nineties, a new concept was developed at the beginning of 2000 to renew the "shopwom" image of the product. Under the new brand name "Heradesign", the design components have been mainly moved into the foreground.

Today, architects and planners around the entire world appreciate the design variety of this natural product.

Timelessly Modern and In Demand Worldwide











Airport building at Aruba Airport 1976

Loft in Metzingen 2005

Success stories such as the magnesite bonded wood wool panel are always a combination of a clear vision, innovation, and consistency. Introduced in 1908 as a revolutionary building product, the wood wool panel has undergone very impressive development. The road to becoming a cult object began in 1935 with the first steps towards function

& design. From Japan to the USA, from Finland to South Africa, it was, and still is today the eye-catcher in the ceilings of many well-known buildings.

Highly functional and timelessly attractive – it has met the challenges of changing building styles and functional demands.



Modern Technology - Traditional Values

Since the invention of the magnesite bonded wood wool panel 100 years ago, production conditions have changed drastically. Ultramodern, electronically controlled systems have dramatically increased capacity, whilst maintaining constantly high quality.

In spite of all the progress, the principle of production is the same as it was 100 years ago. Wood wool, water, and magnesite are still the main components of the Heradesign decorative panels. Up to 1mm of fine wood wool is blended with caustically burned magnesite while adding water and then strip moulded.

This unique combination of raw materials and manufacturing method is the basis for the decorative Heradesign products, their functionality and the endless varieties and designs.









Nature Meets Trend

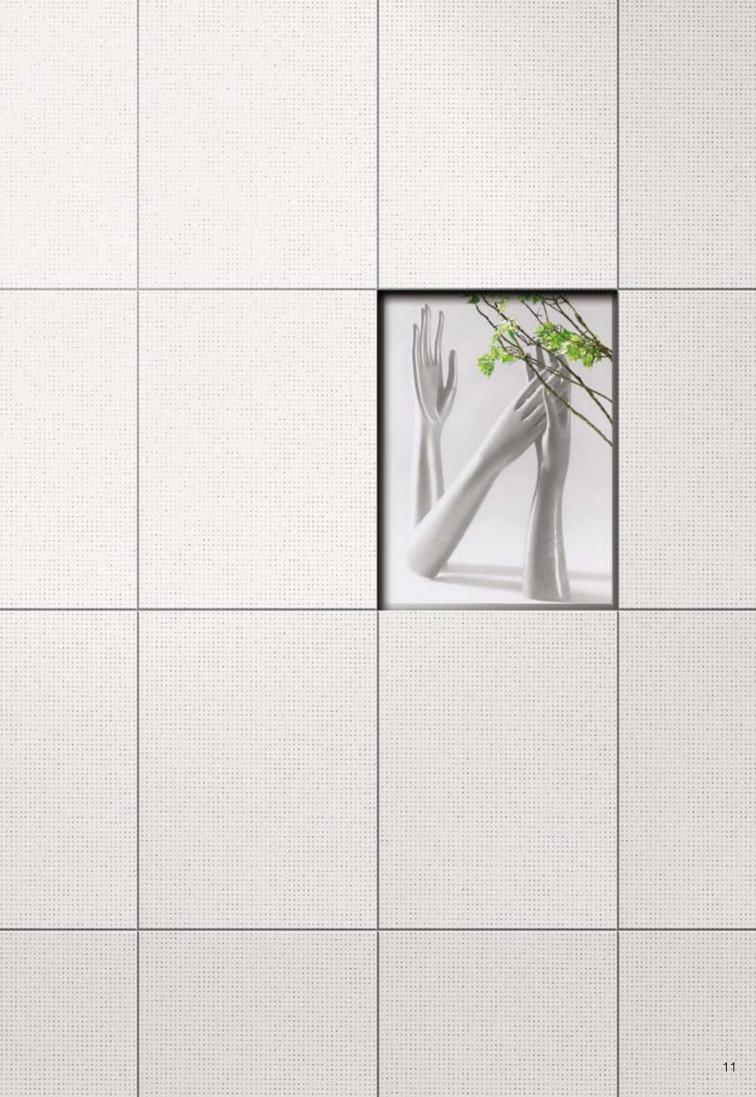
Ecological and environmental protection have always been part of our philosophy. We regard it to be our duty to manufacture in a way that protects resources and to produce and offer ecologically sound products, by using natural raw materials such as magnesite, water, and wood. Wood is brilliant – and magnesite is too! Combining these raw materials, results in a decorative panel that has many positive properties: it is sound absorbing, flame resistant, climate regulating and emission free, has a diffusing open structure, is hygroscopic and resilient.

If Heradesign is on it, then nature is in it. Demonstrably certified and confirmed by seals of quality:

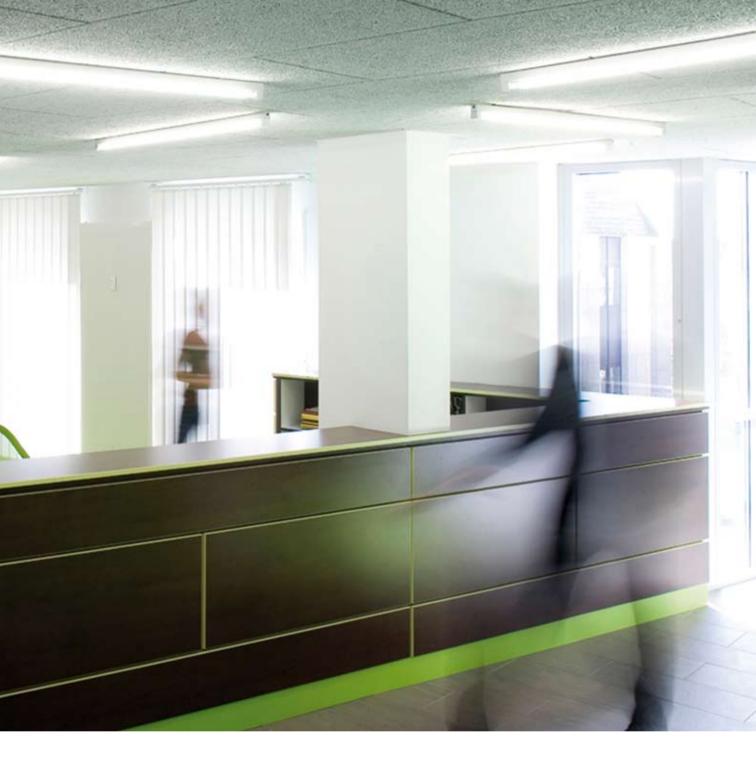












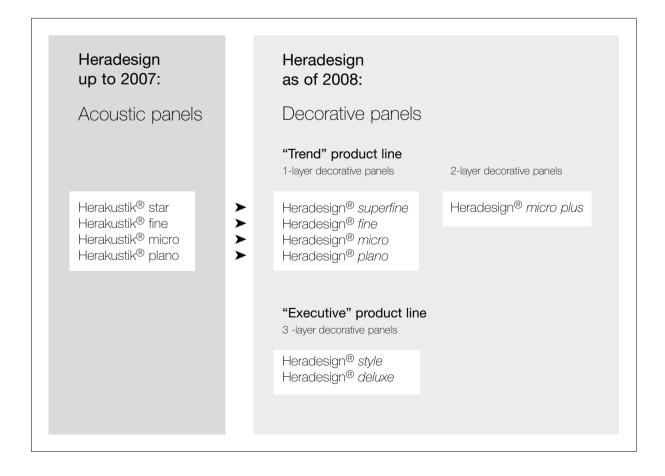
The New Heradesign Product Architecture

In order to better meet customer requirements and to further expand market leadership in this sector, we have expanded the product diversity, developed new material combinations, and created an almost endless variety of colours. For better clarity, the product architecture has been reorganised and grouped into two product lines. Take a look yourself!

The Product Lines

at a Glance

The Heradesign 2008 product range is based on the currently known acoustic panels. It is reorganised into the two product lines called "Trend" and "Executive" and organised into 1-layer, 2-layer, and 3-layer decorative panels. In the future, good acoustics can be used "visibly and invisibly".



Trend

Decorative panel, 1-layer / 2-layer

Heradesign[®] superfine



1-layer magnesite bonded wood wool decorative panel (fibre width: 1 mm). Exquisite surface structure, acoustically effective, building biologically recommended.

Heradesign® fine



1-layer magnesite bonded wood wool decorative panel (fibre width: 2 mm). Very characteristic surface structure, acoustically effective, building biologically recommended.

Heradesign[®] fine A2



1-layer, non-combustible magnesite bonded wood wool decorative panel (fibre width: 2 mm).
Very characteristic surface structure, acoustically effective, building biologically recommended.

Heradesign[®] *micro*



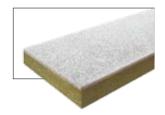
1-layer magnesite bonded wood wool decorative panel with fine pored structure, acoustically effective, building biologically recommended.

Heradesign[®] plano



1-layer 1-layer magnesite bonded wood wool decorative panel with closed surface, building biologically recommended.

Heradesign[®] micro plus



2-layer, magnesite bonded, wood wool decorative panel with fine pored surface and glued-on rock wool layer. Exclusive solution for special applications (like covered walkways, passages, parking decks,...). Special colours for relaxing effect without daylight.

 $\begin{tabular}{ll} \textbf{Available in all colours} (soft tone, full tone, metallic) \\ \end{tabular}$

EXECUTIVE Decorative panel 3-layer

Heradesign® style



3-layer, magnesite bonded wood wool decorative panel with HPL coating on both sides (Micro-perforation: 5/5 - 1.3 mm). Closed surface with top acoustic absorption values.

Heradesign® deluxe



3-layer, magnesite bonded wood wool decorative panel with real wood veneer on both sides (Micro-perforation: 5/5 - 1.3 mm). Closed surface with top acoustic absorption values.

A choice of a great variety of surface and colour variations

A choice of a great variety of wood decorations

Design Examples Trend Product Line



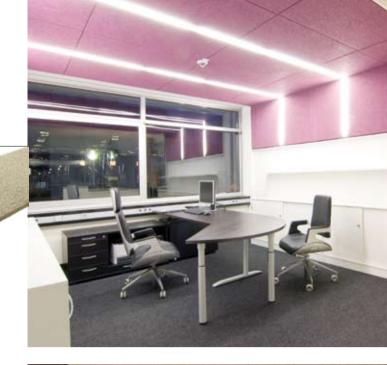






Heradesign[®] fine





Heradesign[®] micro

14.00



Heradesign® plano



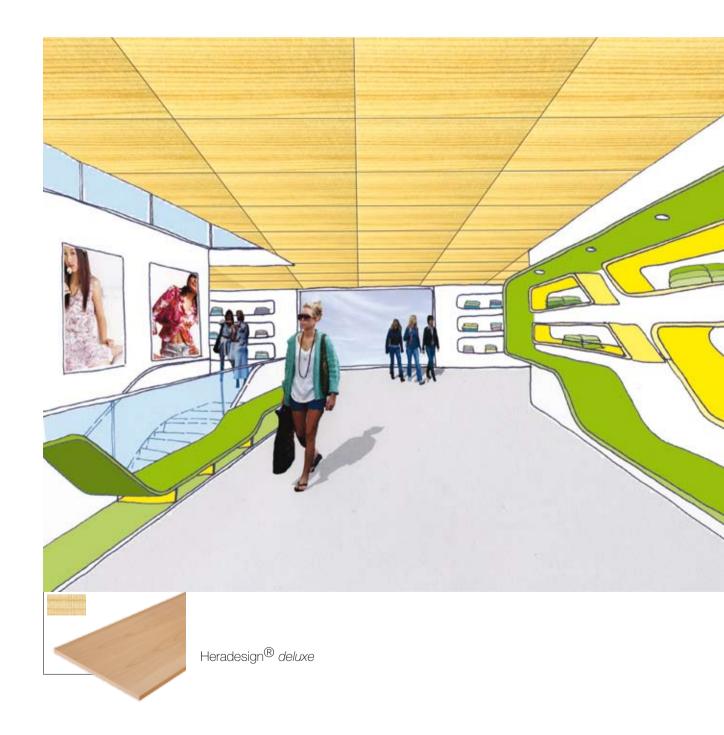
Heradesign® micro plus



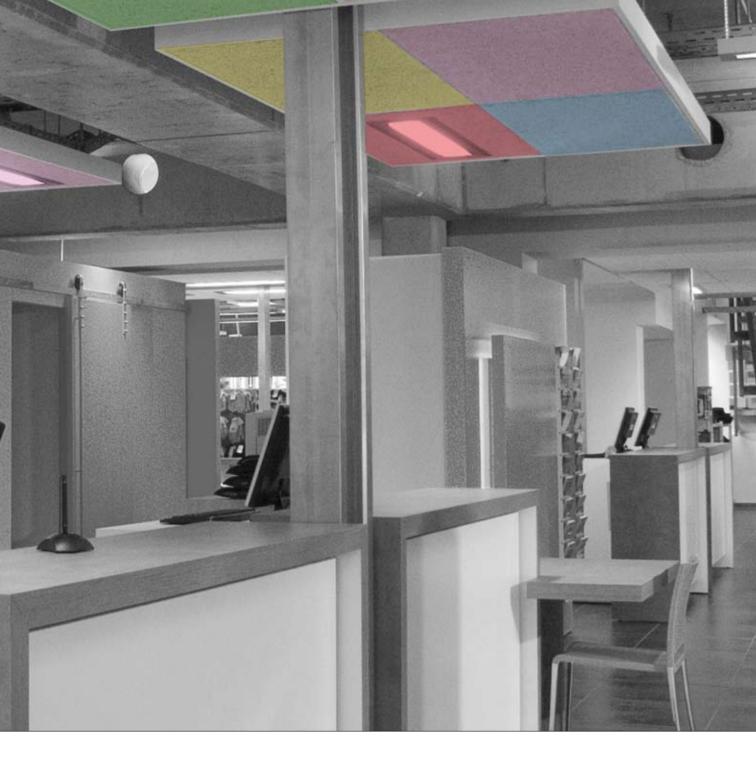
Design Studies Executive Product Line



Heradesign[®] style







Products / Colours & Technical Details

The new Heradesign decorative panels combine a wide range of design possibilities, surface structures, formats, and colours with the already known properties relating to sound absorption, fire protection, safety against ball throwing, climate regulation, and building biology.

In the following pages, we document how to work with our new Heradesign products in a clearly organised way. Well thought out constructions, easy processing, open systems, and accessories meet architectural challenges.

Heradesign[®] superfine



Nominal size mm	600x600, 625x625 1200x600, 1250x625					
Thickness mm	15	25	35			
Weight kg/m ²	7.3	10.8	15.0			

Standard colours: white, similar to RAL 9010, natural tone 13 (beige)

Sound absorption value α_{W} up to 0.95

Reaction to fire according to EN 13501-1: B-s1, d0

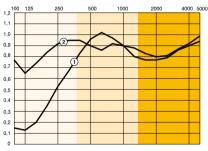
Product declaration:

WW-EN 13168-L3-W2-T2-S3-P2-CS(10) 200-Cl3



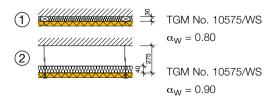
EC Conformity Certificate Reg. No.: K1-0751-CPD-209.0-02-01/05

Sound absorption values



Degree of Sound Absorption

Heradesign[®] superfine, 25 mm With mineral wool lining



Heradesign® fine



Nominal size mm	600x600, 625x625 1200x600, 1250x625			
Thickness mm	15	25	35	
Weight kg/m ²	8.0	12.0	16.0	
Standard colours: white, similar to RAL 9010, natural tone 13 (beig				

Sound absorption value α_{W} up to 0.80

Reaction to fire according to EN 13501-1: B-s1, d0

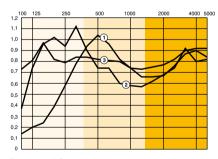
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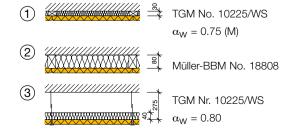
EC Conformity Certificate Reg. No.: K1-0751-CPD-209.0-02-01/05

Sound absorption values



Degree of Sound Absorption

Heradesign[®] fine, 25 mm With mineral wool lining



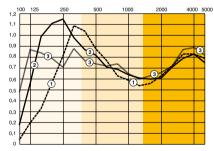
Heradesign® fine/A2



Nominal size mm	600x600 1200x600			
Thickness mm	25			
Weight kg/m ²	17.5			
Standard colours: white, similar to RAL 9010, natural tone 13 (beige)				
Sound absorption value α_W up to 0.70				
Reaction to fire according to EN 13501-1: A2-s1, d0				
Product declaration: WW-EN 13168-L3-W2-T1-S3-P2-CS(10) 200-Cl3				
EC Conformity Certificate Reg. No.:				

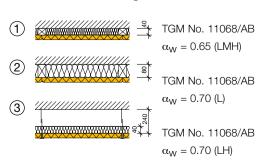


Sound absorption values



Degree of Sound Absorption

Heradesign® fine/A2, 25 mm With mineral wool lining





Heradesign® micro



Nominal size mm	600x600, 1200x600	625x625), 1250x625
Thickness mm	25	35
Weight kg/m ²	14.5	18.5

Standard colours: white, similar to RAL 9010, natural tone 13 (beige)

Sound absorption value α_{W} up to 0.50

Reaction to fire according to EN 13501-1: B-s1, d0

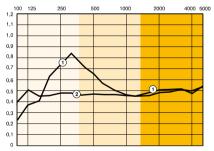
Product declaration

WW-EN 13168-L3-W2-T2-S3-P2-CS(10) 200-Cl3



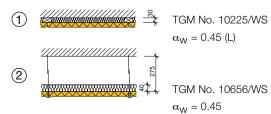
EC Conformity Certificate Reg. No.: K1-0751-CPD-209.0-02-01/05

Sound absorption values



Degree of Sound Absorption

Heradesign[®] *micro*, 25 mm With mineral wool lining



Heradesign® plano



Nominal size mm	600x600 1200x600			
Thickness mm	25			
Weight kg/m ²	14.5			
Standard colours: natural tone 13 (beige)				
Sound absorption value α_{W} up to 0.30				
Reaction to fire according to EN 13501-1: B-s1, d0				
Product declaration: WW-EN 13168-L3-W2-T2-S3-P2-CS(10) 200-Cl3				
FC Conformity Cartificate Rea No.				

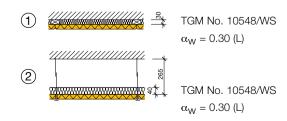
€ C Conformity Certificate Reg. No.: K1-0751-CPD-209.0-02-01/05

Sound absorption values



Degree of Sound Absorption

Heradesign[®] plano, 25 mm With mineral wool lining





Colour Variations for Decorative Panels, 1-Layer

The naturally charming texture of wood wool is extremely well suited as a base material for creative colour design. There is an almost endless range of colours to choose from - almost any colour can be selected from popular colour systems such as RAL, NCS, or StoColor, Silicate paint based on potassium silicate and organic bonding agents is used for colouring Heradesign decorative panels in white, pastel and solid colours. The building biology properties of the panels are retained in the process. The decorative panels Heradesign® superfine, fine and fine/A2 can be painted several times without losing their sound absorbing properties. Since the colour effect when installed is always a combination of the panel structure (surface), the colour and the light source, deviations in the colours compared to the colour charts are possible.





















Metallic Colours

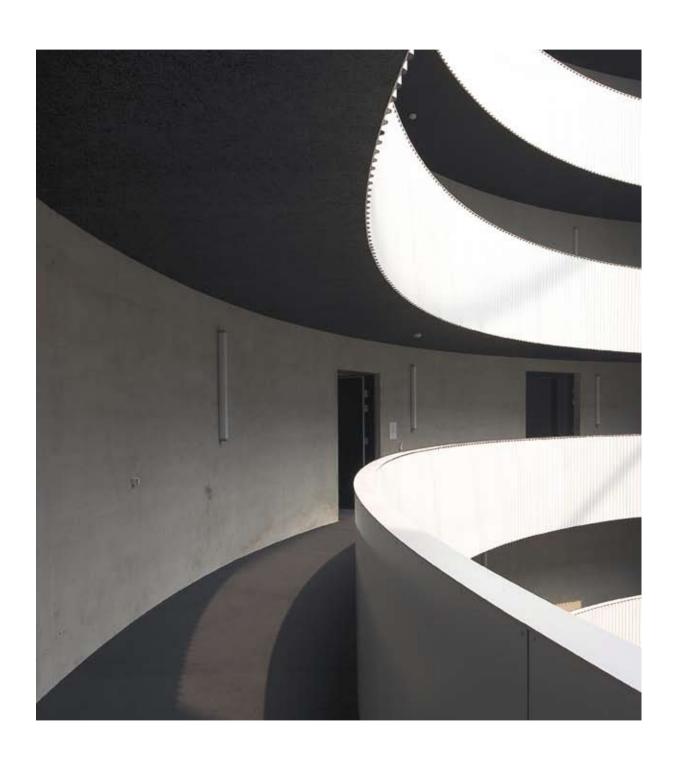
With the 12 colours of the Heradesign metallic collection, metallised colour effects can be conjured up on Heradesign surfaces.

Paint with a Function

Active interior paint: Special paints with a photocatalytic effect are offered for better air in the room. This means that organic air pollutants are reduced under the effect of light.

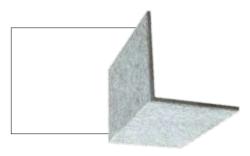
Well-Being Effect without Daylight

Eleven special colours are especially well suited for applications without daylight. They provide a friendly atmosphere and a nice, secure feeling.



Accessories for 1-Layer Decorative Panels





Heradesign Maintenance Opening

The maintenance opening for Heradesign decorative panels makes it possible to have permanent access to cavities in suspended ceilings and walls. Based on two inseparable aluminium frames, the maintenance opening is equipped with a pressure lock and safety catch. Whether it is an individual element or pre-installed in the Heradesign decorative panel, the installation is easier than you think.

Heradesign Ceiling Bracket

As an independent design element, the Heradesign ceiling bracket is used for both covering structural elements as well as for individual ceiling and wall design. Made of Heradesign decorative panels, the ceiling bracket is convincing due to the lively surface as well as the tried and proven acoustic and optical properties. It can be produced in almost any colour on request.

Acoustic Linings for 1-Layer Decorative Panels

Acoustic linings are mineral wool panels that are used as a sound absorbing backfilling or lining in wall and ceiling constructions.

The following products can be chosen to meet individual functional requirements:

Product	Heralan AP-GS	Heralan DP-4, DP-5	Heralan WP
Requirement	Sound absorption, fire and trickle protection	Sound absorption and fire protection	Sound absorption



Heradesign Retaining Claw

With the Heradesign retaining claw, installation of the Heradesign decorative panels on ceilings, walls, and even on pitched roofs becomes even easier. The rustproof assembly profile facilitates concealed applications, which are always true to size. After installation, the fastener is no longer visible!



Heradesign Screws

Rust protected, universal dry-wall screw for attaching Heradesign decorative panels to laths.

Concrete Screws DDS

Rust-protected screw with a special thread and screw head with wood wool texture for attaching 1 and 2-layer Heradesign decorative panels to concrete.

When using a mineral wool lining, we recommend putting a PE film between the mineral wool and the Heradesign panel as trickle protection.

Edge Designs for 1-Layer Decorative Panels

The Heradesign decorative panels can be equipped with various edge designs in order to match the architectural concept and the planned method of installation.

As a result, Heradesign decorative panels can be used for almost all commercially available hanging systems and installation methods.

Installation pattern in cross joints requires very careful installation, because four

visible panel edges have to meet at one point.

Abbreviation	Design	for		Heradesign [®] su <i>perfine</i>			Heradesign [®] fine		Heradesign®fine/A2***)	Horodonian ®mioro	neradesign - <i>milaro</i>	Heradesign® <i>plano***</i>)	Recommended profile width	References	Grid dimensions 2) 3)	Panel dimensions
		mm	15	25	35	15	25	35	25	25	35	25	mm		mm	
Recomn	nended sta	andard edge designs and grid dimensions														,
GK		straight edge on all sides for screw mounting												1 3	600/600 1200/600	600/600 1200/600
AK-00		bevelled on long sides (5 mm bevel) for screw mounting												3	600/600, 625/625 1200/600, 1250/625	600/600, 625/625 1200/600, 1250/625
AK-01		bevelled on all sides (5 mm bevel) for screw mounting													600/600, 625/625 1200/600, 1250/625	600/600, 625/625 1200/600, 1250/625
SK-04*)		straight edges only for visible T-section undercut as of 35 mm thickness											24	1 2	600/600, 625/625 1200/600, 1250/625	594/594, 619/619 1194/594, 1244/619
SK-08		straight on the long side, front side with bevelled edges for Omega section (5 mm bevel)											20	2	620, 645	595/600, 620/625 595/1200, 620/1250
Special	Designs															
AK-02		shiplap on all sides for screw mounting												3	600/600, 1200/600 625/625, 1250/625	600/600, 1200/600 625/625, 1250/625
AK-03	<u></u>	shiplap on all sides with 5 mm bevel for screw mounting													600/600, 1200/600 625/625, 1250/625	600/600, 1200/600 625/625, 1250/625
SK-05	P	shiplap on all sides for visible T-section											24	2	600/600, 1200/600 625/625, 1250/625	594/594, 619/619 1194/594, 1244/619
SK-06	ر الر	shiplap on all sides with 5 mm bevel for T-section											24	2	600/600, 1200/600 625/625, 1250/625	594/594, 619/619 1194/594, 1244/619
VK-09**)		concealed T-section for push-in mounting – panels grooved and bevelled on all sides (5 mm bevel)											35	3	600/600, 625/625 1200/600, 1250/625	600/600, 625/625 1200/600, 1250/625
VK-10**)		concealed T-section – panels can be disassembled – panels grooved and bevelled on all sides.											35	2	600/600 1200/600	615/600 615/1200
VK-12	5	shiplap all round on alternating sides with 5 mm bevel.												2	1190/590 1240/615	1200/600 1250/625
System	Edges					•										
SY-01		straight edges on all sides, grooved on the long sides, undercut on the cross sides for modo ceiling system													600/600 1200/600	596/600 1200/596
SY-02		grooved on the long sides, bevelled on all sides for Heradesign retaining claw												3	600/600, 625/625 1200/600, 1250/625	600/600, 625/625 1200/600, 1250/625

express request of the customer.

***) Heradesign $^{\circledR}$ plano: : Panel thickness only 25 mm, max. width 600 mm; for edge VK-09: bevel only 3 mm

Heradesign® fine/A2: Panel thickness only 25 mm, max. width 600 mm

² The billing dimensions or alternatively the ordering dimensions are always the

**) Heradesign[®] fine and Heradesign[®] superfine are only available in the format 600/600 or alternatively 625/625 for a thickness of 15 mm and edge SK-04.

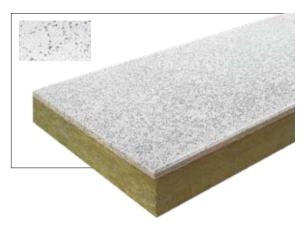
**) Custom formats only on request – length ≤ 1800 mm (contact technical customer service)

Fire Protection - Building Component Classification

Construction	Description *	Classification Cer	
	Heradesign [®] fine / Heradesign [®] micro, $d \ge 25$ mm in T-track system suspended as insertion installation, with Heralan DP-5 lining $d \ge 2 \times 50$ mm or with Heralan DP-4 lining $d \ge 2 \times 60$ mm	F 30 as independent ceiling element	
	Heradesign [®] fine / Heradesign [®] micro, $d \ge 35$ mm in T-track system suspended as push-in mounting (VK-09), with Heralan DP-5 lining $d \ge 2 \times 50$ mm or with Heralan DP-4 lining $d \ge 2 \times 60$ mm	F 30 as independent ceiling element	Classification report No. 3327/3079 ABP 3413/9499 IBMB Braunschweig D
	Heradesign [®] fine / Heradesign [®] micro, $d \ge 25$ mm screwed to wood laths 40/60 and suspended, with Heralan DP-5 lining $d \ge 80$ mm	F 30 as independent ceiling element	Classification report No. 3327/3079 ABP 3413/9499 IBMB Braunschweig D
	Heradesign [®] fine / Heradesign [®] micro, $d \ge 25$ mm screwed to CD sections and suspended, with Heralan DP-5 lining $d \ge 80$ mm	F 30 as independent ceiling element	Classification report No. 3327/3079 ABP 3413/9499 IBMB Braunschweig D
	Heradesign [®] superfine, $d=25 \text{ mm}$ in T-track system suspended as insertion installation, with Heralan DP-5 lining $d \ge 2 \times 50 \text{ mm}$	El 30 (a≪-b)	Classification report No. MA39-VFA 2004- 1945.02 (A)
	Heradesign® superfine, $d = 25 \text{ mm}$ screwed to CD sections $2 \times 60/27$, with Heralan DP-5 lining $d \ge 2 \times 30 \text{ mm}$	EI 30 (a≪-b)	Classification report No. MA39-VFA 2006 0699.01 (A)
	Heradesign [®] fine/A2, d = 25 mm screwed to wood laths 80/40, with Heralan DP-5 lining d = 40 mm	EI 30 (a≪-b)	Classification report No. MA39-VFA 2005- 0567.01 (A)
	Heradesign [®] fine/A2, $d = 25 \text{ mm}$ screwed to CD sections $2 \times 60 \times 27$, with Heralan DP-5 lining $d \ge 40 \text{ mm}$	El 30 (a<−b)	Classification report No. MA39-VFA 2006 0641.01 (A)
	Heradesign [®] fine, d = 25 mm screwed to wood laths 80/50, with Heralan DP-5 lining d = 50 mm	El 30 (a<−b)	Classification report No. MA39-VFA 2005 05401.01 (A)
	Reinforced concrete slab on IPE 140 supports with suspended counter ceiling made of Heradesign[®] micro panels, d = 25 mm, edge VK-12, screwed to wood laths.	F 30 Counter ceiling alone, in combination with rein- forced concrete ceiling or wooden beam ceiling	Fire protection - approval No. Z 3251 from VKF-AEAI Bern/CH, 19.11.2003
	Reinforced concrete slab on IPE 140 supports with suspended counter ceiling made of Heradesign[®] fine panels, d = 35 mm, edge AK-01, screwed to sheet steel sections. Lining of 40 mm rock wool panel, RD = 100 kg/m ² on Heradesign panels and profiled sections.	F 30 Counter ceiling alone, in combination with rein- forced concrete ceiling or wooden beam ceiling	Fire protection – approval No. Z 5818 from VKF-AEAI Bern/CH, 19.11.2003

^{*} Attention: The classification only applies to certified assembly. A reduction of the gross density of the mineral wool or the thickness of the lining or alternatively the panel thickness is not permitted. Only F 30 or F 60 certified hanging systems may be used as a substructure.

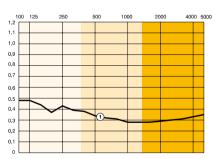
Heradesign® micro plus



Nominal size mm	1200x60	0			
Total thickness mm	100	125			
Element construction	25/75	25/100			
Weight kg/m ²	21.0	23.0			
Sound absorption value α_W up to 0.35					
Standard colours: 12 defined colours					
Reaction to fire according to EN 13501-1: B-s1, d0					
Product declaration:					

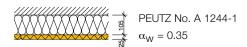
WW-EN 13168-L3-W2-T2-S3-P2-CS(10) 200-TR5-Cl3

Sound absorption values



Degree of Sound Absorption

Heradesign[®] micro plus, 25 mm With 105 Heralan DP-9 mineral wool



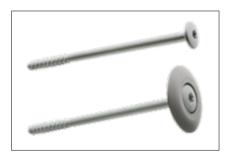
Special colours for applications without daylight

Conscious colour design in rooms with very little or no daylight creates a sense of well-being and security. This makes functional rooms more attractive.



Concrete Decorative Screws

As an alternative to the exclusive concrete decorative screws for installing 2-layer decorative panels, the tried and proven DDS concrete screws (see page 29) can also be used.



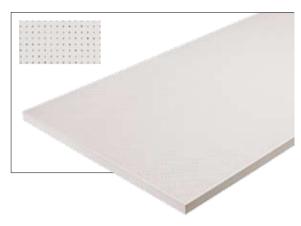
Concrete Decorative Screws



DDS Concrete Screws



Heradesign[®] style



Nominal size mm	1200x600, 600x600			
Total thickness mm	25			
Weight kg/m ²	17.5			
Sound absorption value α_{W} up to 0.85				
WW-EN 13168-L3-W2-T2-S3-P2-CS(10-Y) 20-TR5-Cl3				

Heradesign Absorber Core

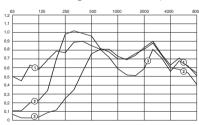
Reaction to fire according to EN 13501-1: A2-s1, d0 Product declaration: WW-EN 13168-L3-W2-T2-S3-P2-CS(10) 200-Cl3



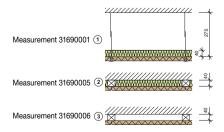
EC Conformity Certificate Reg. No.: K1-0751-CPD-209.0-02-01/05

Sound absorption values

Surface: Line grid 5/5 - 1.3, open surface 5 %



Degree of Sound Absorption

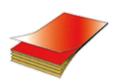


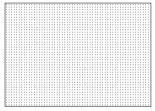
Coating:

- Laminate decoration (HPL High Pressure Laminate) with imprinted decorative paper
- Perforated coating on both sides
- Back side designed as blind HPL not an exposed side
- Thickness 0.8 mm
- Meets the highest demands regarding resistance to impact, scratching, and abrasion as per EN 438 / ISO 4586
- · Light-fast and stable colour

Construction of coating:

- With overlay
- Decorative paper
- Multiple layers of craft paper





Surface pattern:

Open surface: 5.0 % Grid/perforation: 5/5 - 1.3 Perforation-free overleaf edge with 10 mm

Colours:

- 72 NCS colours in Argolite collection
- Other colours according to RAL and NCS are possible
- Surface standards: matt, satin, high-gloss
- The edge is designed in the same colour as the surface.





Heradesign® deluxe



Nominal size mm	1200x600, 600x600			
Total thickness mm	25			
Weight kg/m ²	17.5			
Sound absorption value α_{W} up to 0.85				
WW-EN 13168-L3-W2-T2-S3-P2-CS(10-Y) 20-TR5-Cl3				

Heradesign absorber core

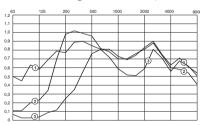
Reaction to fire according to EN 13501-1: A2-s1, d0
Product declaration:
WW-EN 13168-L3-W2-T2-S3-P2-CS(10) 200-Cl3
FO O (* *) O ! (*



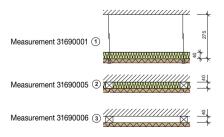
C EC Conformity Certificate Reg. No.: K1-0751-CPD-209.0-02-01/05

Sound absorption values

Surface: Line grid 5/5 -1.3, open surface 5 %



Degree of Sound Absorption



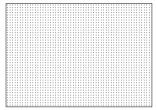
Coating:

- Laminate decoration (HPL High Pressure Laminate) with 0.2 mm real wood veneer
- Perforated coating on both sides
- Back side designed as blind veneer not an exposed side
- Thickness 0.8 mm
- · Veneer made of exquisite natural material

Construction of coating:

- With overlay
- Real wood veneer
- Multiple layers of craft paper



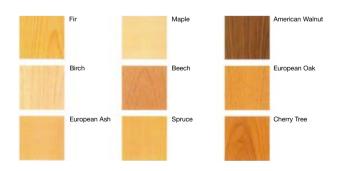


Surface pattern:

Open surface: 5.0 % Grid/perforation: 5/5 - 1.3 Perforation-free overleaf edge with 10 mm

Veneers:

- 9 standard veneers can be chosen
- Other veneers are possible on request
- Grain: wire/half wire shifted
- The edge is designed with the same veneer as the surface





Edge Designs for 3-Layer Decorative Panels

Abbreviation	Design	Heradesign® style	Heradesign® deluxe	Section width	Grid size ¹⁾	Panel size
		25 mm	25 mm	mm	mm	mm
E-TP-01	Straight edge for visible T-section			24	600x600 1200x600	594x594 1194x594
E-HP-01	Straight edge for top hat section, visible			33	614x600 613x1200	600x600 1200x600
E-HP-02	Grooved edge for top hat section, 1 mm panel joint			27	601x600 601x1200	600x600 1200x600
E-HP-03	Grooved edge for top hat section, 5 mm panel joint			27	605x600 605x1200	600x600 1200x600

Note: 1) Grid sizes refer to the spacing of the top hat sections, or alternatively the Z-sections

Acoustic Linings

We recommend Heralan-AP-GS as absorber layers (see page 28). See page 31 for other absorber layers.

Area of Application

For 3-layer Heradesign decorative panels, it is necessary to not exceed relative air humidity of 35 – 65 % at 10 - 30° C when working with the panels (processing conditions). High construction humidity can have negative consequences. The guideline for the shrinkage and swelling is 0.5 mm over 1000 mm, and 1.0 mm over 1000 mm for very high air humidity. These products must be very specifically protected against moisture at the construction site. Absolute dry storage is mandatory. When sorting or laying out the panels, the supplied protective film must always be used between the panels.

In this connection, please also observe the possibility of rising damp in new buildings.

Colour and Surface

Heradesign[®] style

The HPL decorations from the Argolite collection are colour consistent. If custom colours from RAI or

NCS are selected where a paint coating is needed, then minor colour deviations can not be excluded in spite of close monitoring of the colour mixing.

Heradesign® deluxe

The HPL bases with real wood veneer are wire/half wire shifted as a standard. Irregularities in the growth, swirls and deviations in the grain and colour are natural. For large quantities, you must specify which panels will be installed in the same room or on the same wall because of the veneer colour. One must proceed on the assumption that different veneer sources may be used.

The characteristics of natural wood surfaces given here are permissible according to a defined tolerance framework, and are not subject to complaints. We recommend sorting the elements before installation! The colour of stained or painted surfaces may deviate from samples prepared in advance. The same also applies to the lustre of the coating.

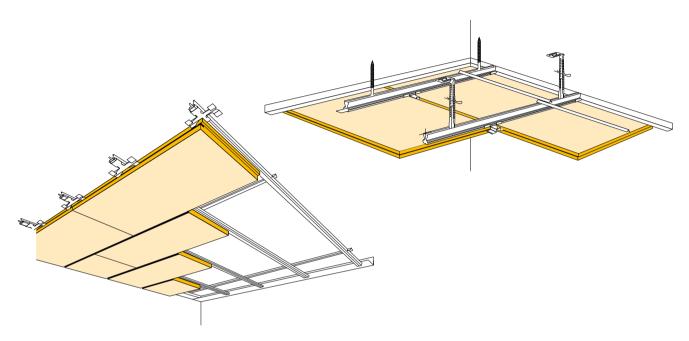
Original illustration of the surface structure

Open surface: 5.0 % Grid/perforation: 5/5 - 1.3 Sound absorption value $\alpha_W^{}$ up to 0.85

modo Ceiling System

The effect of the complete solution is captivating for large size surfaces. It provides an impressive, closed ceiling area. The system consists of three components: the Heradesign[®] superfine decora-

tive panels, the tracks, and the system clips. The style of installation is easier and faster than you think, i.e. a stretcher bond with shadow gap, an exact, straight edge and innovative clip mounting.



Product	Thickness mm	Weight kg/m²	Edge Design	Track spacing	Panel dimensions mm
Heradesign® superfine	25	10.8	SY-01	600	600/596 1200/596

Please note: Width of the panel joints: 4 mm on all sides

The modo ceiling system is not suitable for swimming pools, sports halls, and outdoor applications.

System Components:

The complete system as delivered consists of the Heradesign $^{\circledR}$ superfine decorative panels, tracks, and the specific holders.

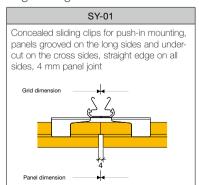
Heradesign® superfine



Tracks / Holders

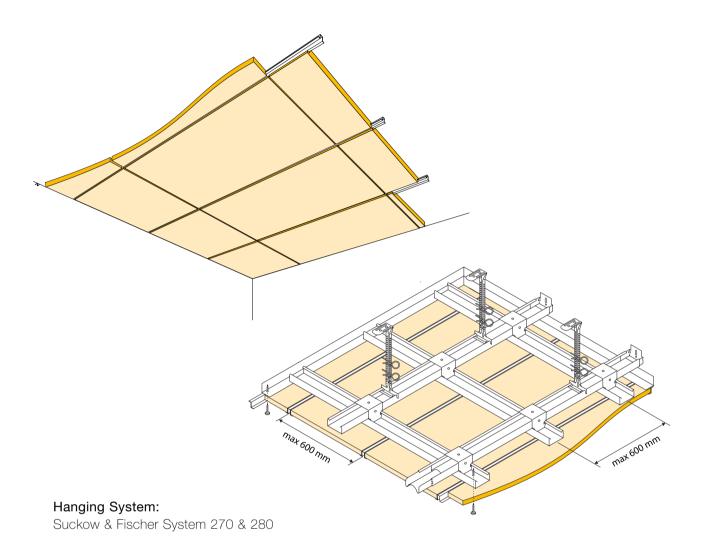


Edge Design: SY-01



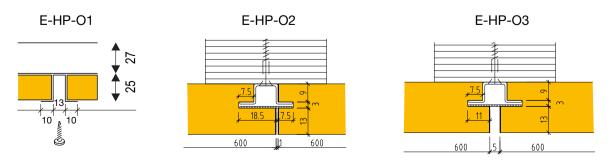


Installation with Top Hat Sections on CD Sections

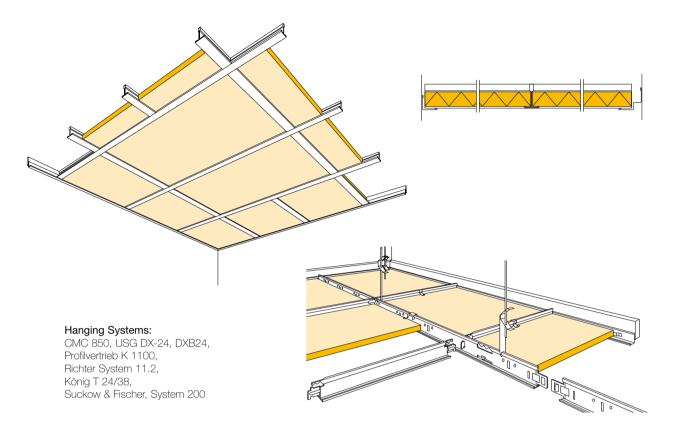


Product	Thickness mm	Weight kg/m ²	Edge Design	Grid dimensions mm	Panel dimensions mm
Heradesign [®] style	25	17.5	E-HP-01 E-HP-02 E-HP-03	variabel	600/600 1200/600
Heradesign [®] deluxe	25	17.5	E-HP-01 E-HP-02 E-HP-03	variabel	600/600 1200/600

Please note: Heradesign is not a system holder in terms of DIN-EN 13964



Insertion Installation in Visible T-Sections



Product	Thickness mm	Weight kg/m²	Edge Design	Grid dimensions mm	Panel dimensions mm
Heradesign [®] superfine Heradesign [®] fine	15 15	7.3 8.0	SK-04 SK-04	600/600 625/625	594/594; 1194/594* 619/619; 1244/619*
Heradesign [®] superfine Heradesign [®] fine	25, 35	10.8/15.0 12.0/16.0	SK-04, SK-05, SK-06	600/600; 1200/600 625/625; 1250/625	594/594; 1194/594 619/619; 1244/619
Heradesign [®] plano	25	14.0	SK-04	600/600; 1200/600	594/594; 1194/594
Heradesign [®] micro	25, 35	14.5/18.5	SK-04, SK-05, SK-06	600/600; 1200/600 625/625; 1250/625	594/594; 1194/594 619/619; 1244/619
Heradesign [®] fine/A2	25	17.5	SK-04	600/600; 1200/600	594/594; 1194/594
Heradesign [®] style	25	17.5	E-TP-01	600/600; 1200/600	594/594; 1194/594
Heradesign [®] deluxe	25	17.5	E-TP-01	600/600; 1200/600	594/594; 1194/594

^{*} Large format not suitable for outdoor applications! For indoor applications up to max. stress class B as per EN 13964

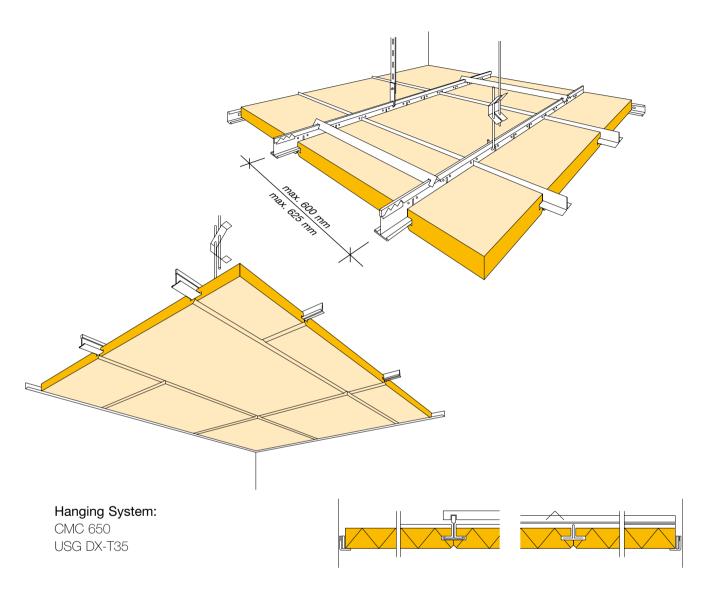
Please note: Max. span of the panels: 625 mm. Heradesign is not a system holder in terms of DIN-EN 13964. For edge designs as well as El 30 and F 30 ceiling structures see pages 30 and 31.

Minimum hanger heights:

In order to be able to insert the panels in pre-installed hanging systems, the following minimum hanger heights (AH = lower edge of T-section to lower edge of rough surface) must be maintained.

Panel thickness	15 mm	min. AH	100 mm
Panel thickness	25 mm	min. AH	125 mm
Panel thickness	35 mm	min. AH	150 mm

Push-in Mounting with Concealed T-Sections Panel can not be dissambled

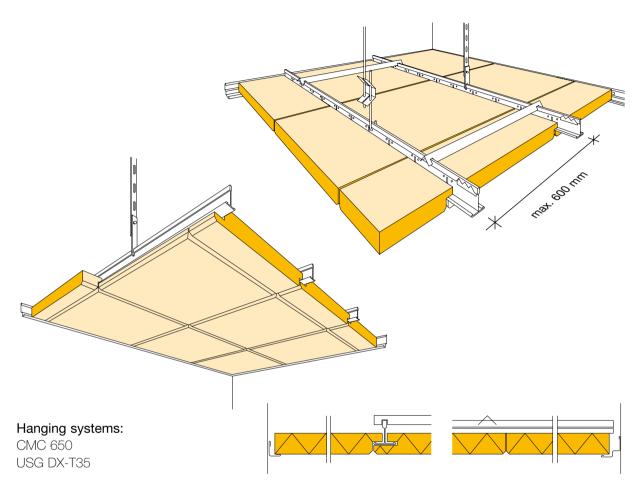


Product	Thickness (mm)	Edge Design	Grid dimensions (mm)	Panel dimensions (mm)	
Heradesign® superfine Heradesign® fine	25, 35 25, 35		600: 625	600/600; 625/625	
Heradesign® micro	25, 35	VK-09		1200/600; 1250/625	
Heradesign® plano	25		600	600/600	
Heradesign® fine/A2	25		000	000/000	

Please note: For edge designs as well as E I30 and F 30 ceiling structures see pages 30 and 31. Max. span of panel 625 mm. Heradesign is not a system holder in terms of DIN-EN 13964. Special formats only on request, max. length 1800 mm.

Access to the ceiling cavity: The ceiling cavity can be accessed through panels with integrated maintenance openings. Spacers must be used for cross-bracing the system. Max. distance 1250 mm.

Panel can be disassembled



Product	Thickness (mm)	Edge Design	Grid dimensions (mm)	Panel dimensions (mm)	
Heradesign® superfine	35			615/600	
Heradesign® fine	35	VK-10	600	615/1200	
Heradesign® micro	35			015/1200	

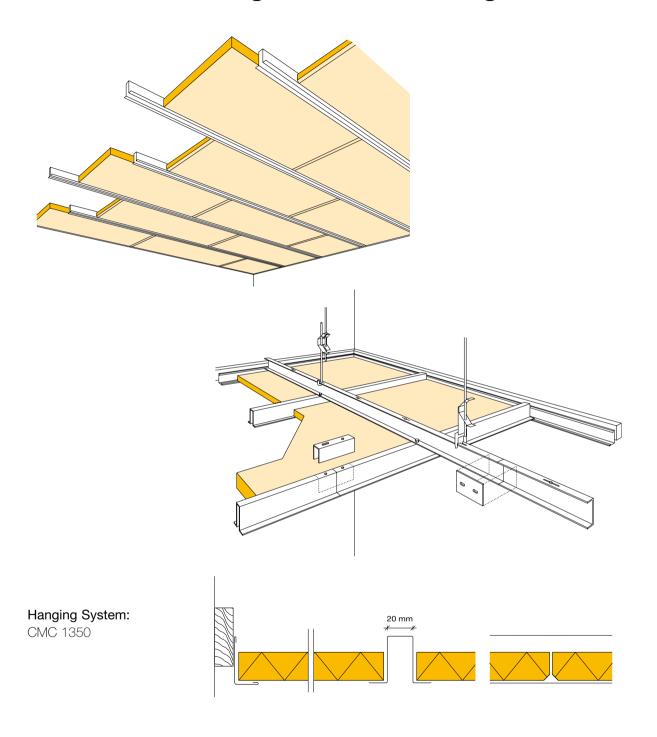
Please note: For edge designs as well as El 30 and F 30 ceiling structures see pages 30 and 31. Max. span of panel 600 mm. Heradesign is not a system holder in terms of DIN-EN 13964. Special formats only on request, max. length 1800 mm.

Minimum hanger height: To make perfect installation of the panels possible, the hanger height must be at least the following (bottom edge of T-section to upper edge of load-bearing ceiling). For a mineral wool lining, the hanging height must be increased by the thickness of the mineral wool.

Product	Panel thickness mm	Hanger (see drawing above for models)	Minimum hanging height mm
Heradesign® superfine		Hanging wire with hooks	140
Heradesign® fine Heradesign® micro	35	Flat hangers	140
Tioradeolgii Tiiore		Hanging with sliders	190

Access to the ceiling cavity: Every second panel can be dismantled. Test to find out which end of the panel is free. Push the panel up here and lift it diagonally out of the track grid. For larger access openings, remove the spacers from the neighbouring panels and remove the panels. When inserting the ceiling panels, replace the removed spacers without exception.

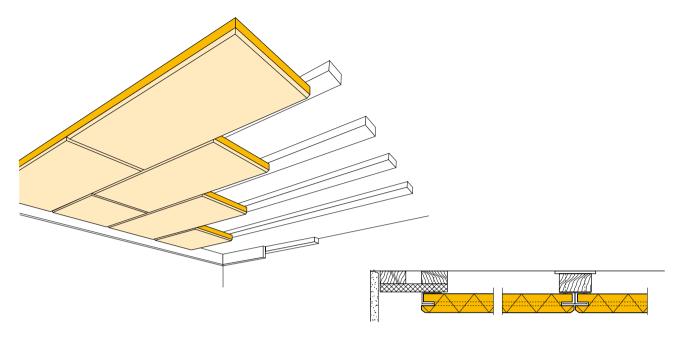
Insertion mounting with visible omega-sections



Product	Thickness (mm)	Edge Design	Grid dimensions (mm)	Panel dimensions (mm)	
Heradesign® superfine	25, 35	SK-08		505/600; 600/605	
Heradesign [®] fine Heradesign [®] micro	25, 35 25, 35	SK-08 SK-08	620; 645	595/600; 620/625 595/1200; 620/1250	

Please note: Heradesign is not a system holder in terms of DIN-EN 13964. Special formats only on request, max. length 1800 mm.

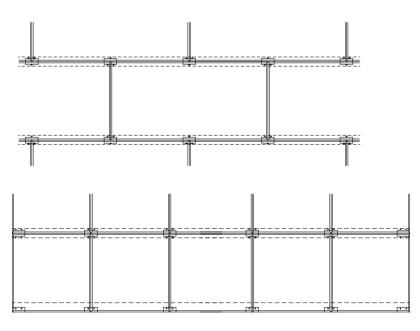
Installation with Heradesign retaining claws

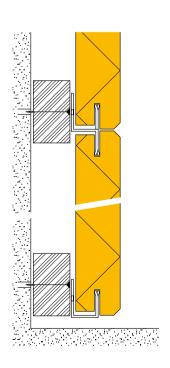


Product	Thickness (mm)	Edge Design	Centre Distance of the Lath	Panel dimensions (mm)
Heradesign® superfine	25, 35	SY-02	600; 625	600/600; 1200/600
Heradesign [®] fine	25, 35	SY-02	600; 625	625/625; 1250/625
Heradesign® <i>micro</i>	25, 35	SY-02	600; 625	
Heradesign [®] plano	25	SY-02	600	600/600; 1200/600
Heradesign® fine/A2	25	SY-02	600	000/600, 1200/600

Please note: Heradesign is not a system holder in terms of DIN-EN 13964

Claw pattern:

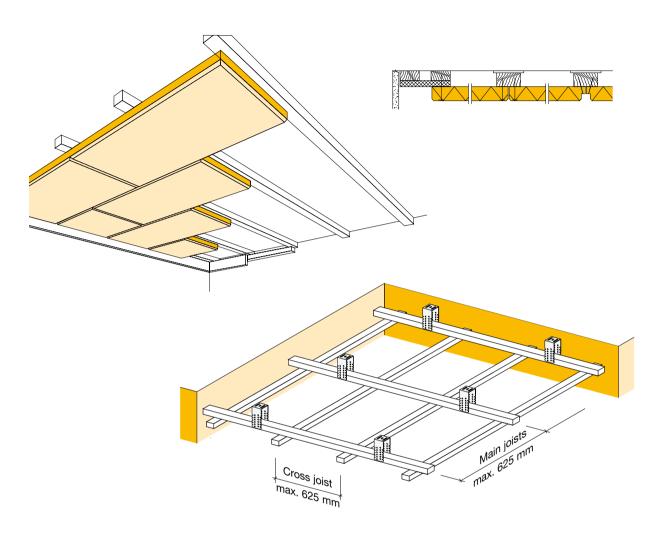




bottom row of panels

Constructions and Structures

Screw Installation on Wood Laths



Product	Thickness mm	Weight kg/m ²	Edge Design	Centre Distance of the Lath	Panel dimensions mm
Heradesign [®] superfine	15	7.3	AK-01	300; 312.5 ¹⁾	
Heradesign [®] fine	15	8.0	AK-01	300; 312.5 ¹⁾	
Heradesign [®] superfine ²⁾	25, 35	10.8 / 15.0	AK-01, AK-02, AK-03	600; 625	
Heradesign [®] fine ²⁾	25, 35	12.0 / 16.0	AK-01, AK-02, AK-03	600; 625	600/600 1200/600
Heradesign [®] micro	25, 35	14.5 / 18.5	AK-01, AK-02, AK-03	600; 625	625/625 1250/625
Heradesign [®] superfine	35	15.0	VK-12	590; 615	1200/020
Heradesign [®] fine	35	16.0	VK-12	590; 615	
Heradesign [®] micro	35	18.5	VK-12	590; 615	
Heradesign [®] fine/A2	25	17.5	AK-01	600	1200/600; 600/600

For panel dimensions 1200/600 and 1250/625, a centre distance of the lath of 1/3 the panel length is permitted as an alternative.
 Please note: Edge design GK – straight edge without bevel, for screw installation on wood laths, only carry this out with shadow gaps of ≥ 4mm between the panels. Increased care is necessary during installation. Pay attention to the changed grid dimensions!

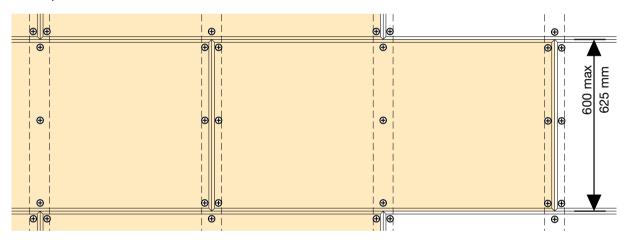
Please note: For edge designs as well as El 30 and F 30 ceiling structures see pages 30 and 31. For indoor and outdoor applications up to max. stress class B as per EN 13964. Pay attention to the required corrosion protection. Heradesign is not a system holder in terms of DIN-EN 13964.

Design that is safe against ball throwing according to DIN 18032/Part 3 or alternatively EN 13964, Appendix D

Due to their high mechanical strength, Heradesign decorative panels are especially well suited for highly effective, acoustic ceiling and wall coverings that are safe against ball throwing in sports halls.

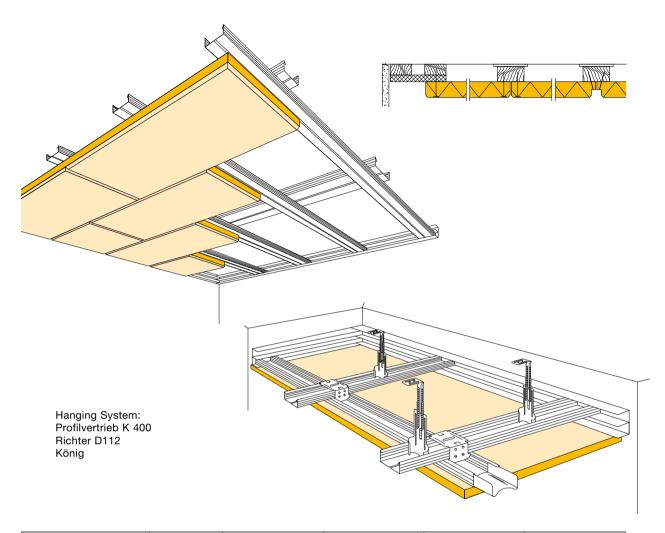
Product	Thickness (mm)	Weight kg/m ²	Edge Design	Centre Distance of the Lath	Dimensioning of the laths in mm	Panel dimensions (mm)
Heradesign® superfine	35	15.0	AK-01	600		1200/600
Heradesign® fine	35	16.0	AK-01	600; 625	≥ 60 x 30	1200/600
Heradesign® micro	35	18.5	AK-01	600; 625		1250/625

Screw pattern:



Please note: You can find extensive detailed information on system structures, expert's reports, and installation on our website at www.heradesign.at, as well as in the Heradesign Processing Primer.

Screw Mounting on CD-Sections



Product	Thickness mm	Weight kg/m ²	Edge Design	Centre Distance of the Lath	Panel dimensions mm
Heradesign [®] superfine	15	7.3	AK-01	300; 312.5 ¹⁾	
Heradesign [®] fine	15	8.0	AK-01	300; 312.5 ¹⁾	
Heradesign [®] superfine ²⁾	25, 35	10.8 / 15.0	AK-01, AK-02, AK-03	600; 625	600/600 1200/600 625/625 1250/625
Heradesign [®] fine ²⁾	25, 35	12.0 / 16.0	AK-01, AK-02, AK-03	600; 625	
Heradesign [®] micro	25, 35	14.5 / 18.5	AK-01, AK-02, AK-03	600; 625	
Heradesign [®] superfine	35	15.0	VK-12	590; 615	
Heradesign [®] fine	35	16.0	VK-12	590; 615	
Heradesign [®] micro	35	18.5	VK-12	590; 615	
Heradesign [®] fine/A2	25	17.5	AK-01	600	1200/600; 600/600

¹⁾ For panel dimensions 1200/600 and 1250/625, a centre distance of the lath of 1/3 the panel length is permitted as an alternative.

Please note: For edge designs as well as El 30 and F 30 ceiling structures see pages 30 and 31. For indoor and outdoor applications up to max. stress class B as per EN 13964. Pay attention to the required corrosion protection. Heradesign is not a system holder in terms of DIN-EN 13964.

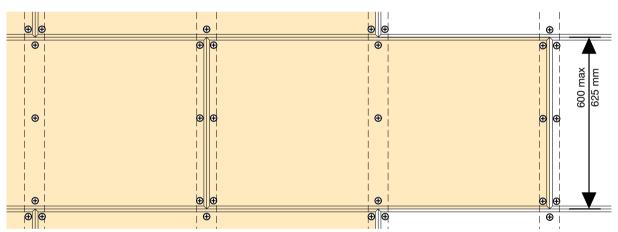
²⁾ Please note: Edge design GK – straight edge without bevel, for screw installation on wood laths, only carry this out with shadow gaps of ≥ 4mm between the panels. Increased care is necessary during installation. Pay attention to the changed grid dimensions!

Design that is safe against ball throwing according to DIN 18032/Part 3 or alternatively EN 13964, Appendix D

Due to their high mechanical strength, Heradesign decorative panels are especially well suited for highly effective, acoustic ceiling and wall coverings that are safe against ball throwing in sports halls.

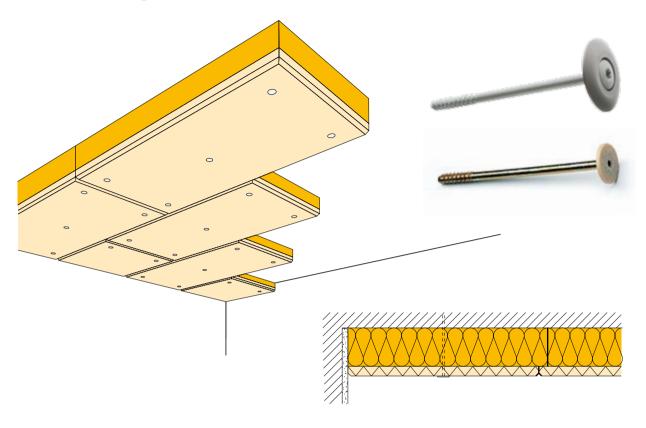
Product	Thickness (mm)	Weight kg/m ²	Edge Design	Centre distance of the cross sections (mm)	Spacing of the load-bearing sections (mm)	Spacing of the C vernier hangers (mm)
Heradesign® superfine	35	15.0	AK-01	600; Section type: CD section 60/27/0.7	850; Section type: CD section 60/27/0.7	850
Heradesign [®] fine Heradesign [®] micro	35 35	16.0 18.5	AK-01 AK-01	600; 625 Section type: CD section 60/27/0.7	850; Section type: CD section 60/27/0.7	850

Screw pattern:



Please note: You can find extensive detailed information on system structures, expert's reports, and installation on our website at www.heradesign.at, as well as in the Heradesign Processing Primer.

Direct mounting on concrete ceilings with Heradesign Concrete Decorative Screws

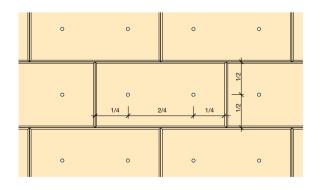


Product	Thickness (mm)w	Edge Design	Panel dimensions (mm) *
Heradesign [®] micro plus 25 mm/MW	100, 125	AK-01	1200/600

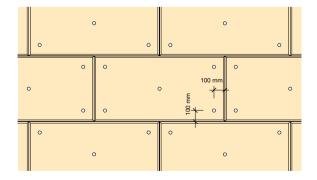
^{*} Covering dimensions of the visual panel:

For alternately positioned shiplap, the panel dimensions increase by 15 mm in each case to 1215/615 mm.

Fastening schema for 2 fastening points*



Recommended fastening schema for 5 fastening points



*Please note:

Panel corners can drop by more than 3 mm over time and exceed Class 2 evenness according to DIN EN 13168.

Fastening to concrete

Mounting Information:

- Check surface for unevenness (remove ridges, smooth out unevenness)
- Distribute the ceiling symmetrically (equal border fields)
- Press the panels in and align them in the bracing.
 Fasten with Heradesign concrete decorative screws. For each panel, place at least 2 screws in the quarter points of the elements or alternatively 5 fastening elements.

Panel thickness: 100 125 mm Screw length: 125 150 mm

Please note:

Heradesign concrete decorative screws or DDS concrete screws are not suitable for hollow corners, porous concrete or brick substrate.

More extensive detailed information and drawings can be found on our website www.heradesign.at or local Heradesign websites.

General information

Handling and Storage at the Construction Site:

Heradesign decorative panels are high-quality visual panels that are carefully packed and checked and delivered to the construction site. For storage conditions, see the "Heradesign Installation Guide", page 48 to 52 or see www.heradesign.at.

Stack a maximum of two pallets at the construction site. Store the panels dry, flat, and protected against moisture and dust. The existing packaging is not protection against the rain.

Material and Air Humidity

Due to the organic component, wood, in the Heradesign panels, slight deviations in the format cannot be excluded. Likewise, the panels also contract and expand if there is strongly fluctuating air humidity.

Manufacturing tolerance to the nominal size: \pm 1 mm, for lengths greater than 1250 mm: \pm 2 mm.

Final Shrinkage

Final shrinkage in a standard climate of 23° C / 50 % r.h. is max. \pm 1 %. Therefore, special attention must be given to the temperature and air humidity during installation (if necessary heat, ventilate, back-ventilate the ceiling or dehumidify the air under constant monitoring), in order to ensure constant installation conditions. Don't install or store any panels in rooms where the relative humidity is greater than 75 %, the temperature falls below $+10^{\circ}$ C or climbs above $+30^{\circ}$ C.

Climatic Conditions

Heradesign decorative panels can be used in up to 90 % relative air humidity. Stress class B as per DIN-EN 13064. Building physics consultation

is recommended for use with constant relative humidity that is \geq 80 % or alternatively < 90 %.

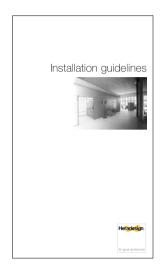
Correct Installation

- The installation of Heradesign ceilings is part of interior decorating and must only be carried out under controlled humidity and temperature conditions. All dust-causing construction measures must be completed before starting the installation.
- The hanging system must be installed in accordance with the manufacturer's guidelines.
- After installing the Heradesign ceiling, other tradesmen may only perform finishing work on the ceiling.
- Colour and Structure: As a consequence of the natural raw materials magnesite and wood, minor differences in the colour and structure may occur between individual panels. Only the same type of panels may be installed in a ceiling. Therefore, constantly check the panels before installation as well as the overall impression of the ceiling, right from the beginning. Coloured panels (except RAL 9010) are only ordered externally. No liability can be assumed for colour deviations in the event of partial deliveries.
- The panels can be processed with woodworking tools. Cut the panels such that the exposed surfaces are not dirtied by sawdust. If possible, the finishing work should be done outdoors. Always work with clean hands and clean tools.
- Film (thickness < 15µm) is recommended as trickle protection for mineral wool lining.

Maximum span of the panel: 625 mm.

Your questions are important to us!

To make sure that you can correctly plan and process your Heradesign products, we provide extensive informational and display material.



We have compiled the installation guidelines for you in "pocket size":

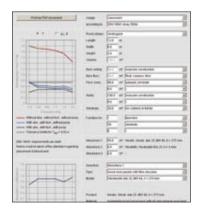
1. General installation guidelines

Request for free at office@heradesign.at, call us in Austria at Tel. +43-4245-2001 3003 or call our local partner.

Information around the clock - on our homepage at www.heradesign.at

In the extensive FAQ area, you will find many answers to frequently asked questions as well as the associated informational material in each case. In the download area, you have fast access to datasheets, constructions, RFP text, and many other technical specifications. Everything is in a user-friendly pdf format.

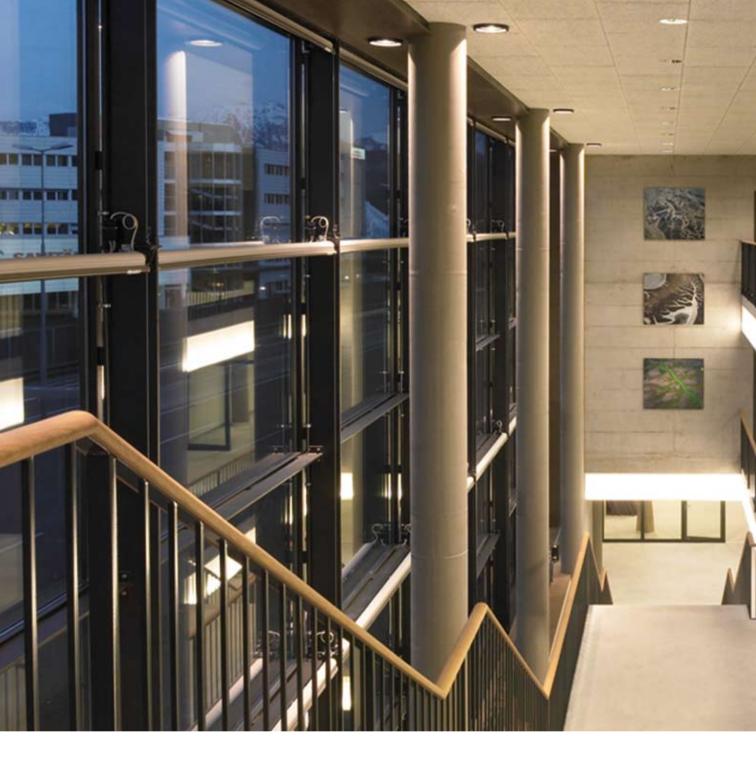


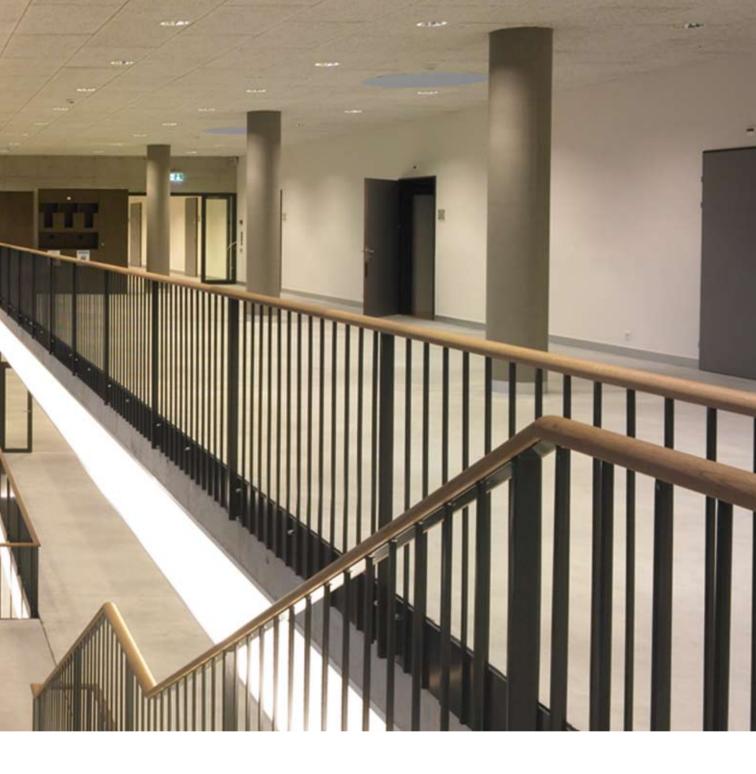


Acoustics calculator

Telephone technical advice for builders, planners, and architects.

Our technical experts would be happy to help you with any specific technical questions in all aspects of the Heradesign product range. You can reach them in Austria at: +43-4245-2001 3332





Heradesign: References for Good Architecture

Heradesign's many national and international reference properties are very interesting to describe: from sumptuous to exotic, from classic to rectilinear, and from extravagant to subtle. But they confirm one thing, above all: the acceptance of

a mature product range that meets the different styles and demands worldwide. Catch the spirit and take a trip through a world of design possibilities that have been undreamt-of until now.













Infrastructure: Thrilling room and colour concepts are in demand, especially in infrastructure buildings. It's perfect when the material has the design possibilities as well as all functional requirements (such as being safe against ball throwing or fire protection, for example).

- 1.1 In order to improve the acoustics at City Hall in Baden, Vienna, Heradesign decorative panels were installed on the wall. Coloured orange, they fit in excellently into the colour concept.
- 1.2 In the Stubai glacier gondola in Austria, Heradesign® superfine in a natural colour creates a striking contrast to the exposed concrete.
- 1.3 In the Heuwiese Training Centre in Switzerland, wood was combined with wood, and it looks outstanding. The Heradesign[®] fine panels are also safe against ball throwing.
- 1.4 In the Pestalozzi School in Schwäbisch Gmünd, a continuous surface design was requested. Therefore, Heradesign[®] fine and fine/A2 were chosen in order to meet all the requirements.
- 1.5 Regarding defence, Switzerland makes use of design in the Tactical Training Centre in Kriens. And to ensure good acoustics, Heradesign was used in this training site.



Sport/Recreation: Wellness and spa applications are booming. The value of planning recreation time is higher than ever before. Hence, the demand in this sector for ecological materials with distinctive flexibility regarding colour is higher than ever before.

- 2.1 In the Hapimag Holiday Complex in Winterberg, Heradesign decorative panels provide a warm and appealing ambience in the wellness zone.
- 2.2 Even sports studios and gymnasiums, like the one here in Göllheim in Germany, can look immediately appealing and have a lower noise level. Heradesign[®] fine decorative panels are optimal for this.
- 2.3 Quiet and a pleasant atmosphere are especially important when in rehab. In the new rehabilitation centre in Luxemburg, the ceiling panels were equipped with white Heradesign decorative panels.
- 2.4 In the Pedagogical Sport College in Xuzhou, China, Heradesign® *micro* panels were installed alternately in white and blue.













Lifestyle: The characteristic surfaces of the magnesite bonded decorative panels harmonise perfectly with cool, modern, building materials such as steel, exposed concrete, aluminium, and glass.

- 3.1 Pablo Picasso would have had a great deal of fun with these subsequently painted Heradesign® superfine panels. By the way, the Spanish restaurant was named after him.
- 3.2 White Heradesign® superfine panels fit perfectly in this stylish kitchen in a loft in Metzingen, Germany.
- 3.3 The ceiling (Heradesign® *micro*) in this event location not only looks good, but is also provides top acoustics during the music events.
- 3.4 Design down to the last details: the new conference centre and opera house in La Coruna in Spain. On the ceiling is Heradesign® superfine in a natural colour.
- 3.5 The restaurant at the ski academy at Arlberg can be recommended for refined cuisine and good après ski. Heradesign® superfine in white is responsible for the ceiling design and the acoustics.





Office: Today, the design of office rooms is more demanding and attractive than ever before. Heradesign decorative panels make major strides here through their excellent acoustic properties and diverse design possibilities.

- 4.1 At HUG AG in Malters, Switzerland, the white Heradesign $^{(\!R\!)}$ superfine decorative panels slip seamlessly into the classical design.
- 4.2 The furnishings in the architects' office of Marciel Spaan in Holland are Spartan. Heradesign® fine in a natural colour, which was attached to the sliding doors, provide good acoustics and a warm atmosphere.
- 4.3 There are cheery colours in the Citizen's Advice Bureau in Weinstadt, Germany. Blackberry coloured Heradesign® superfine brings in freshness and supports the room concept. Of course, they ensure good acoustics as well.
- 4.4 You can get good advice here: the law firm in Iserlohn is immediately convincing with its design and acoustics concept. White Heradesign® fine was installed.
- 4.5 At Trumpf in Ditzingen, Germany, Heradesign decorative panels were placed on the old surface in the training rooms, and the accessories were used as well. Here is the maintenance opening.

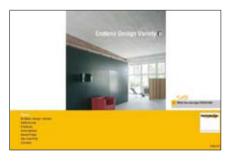


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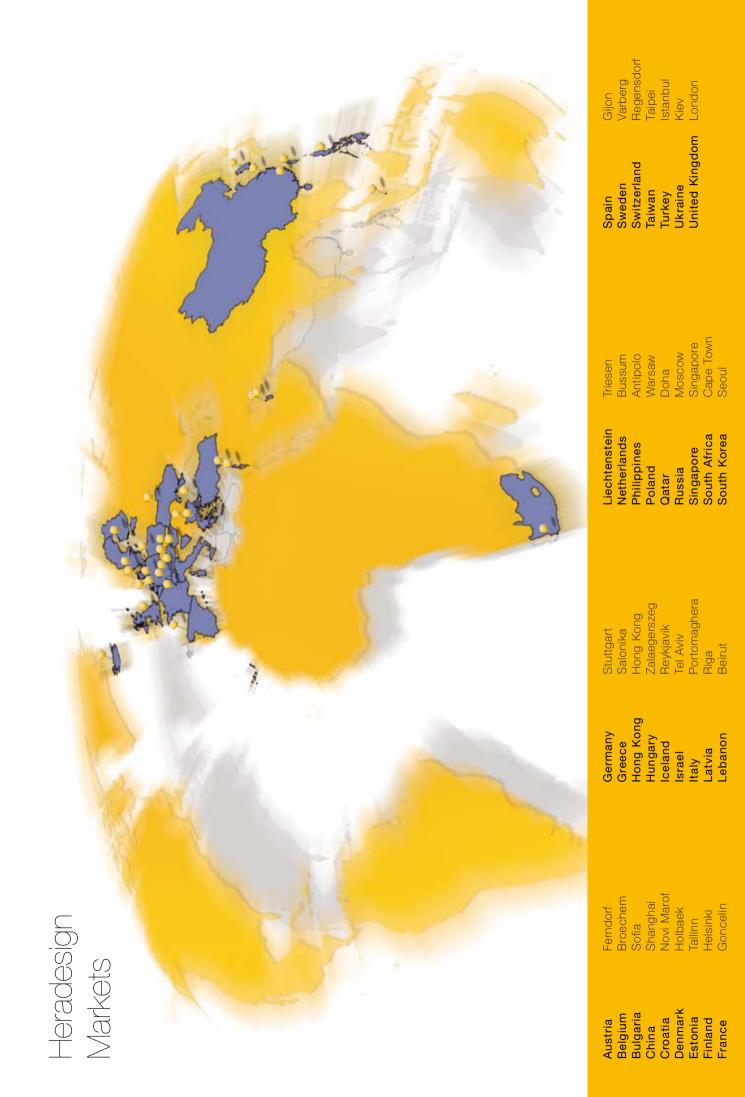
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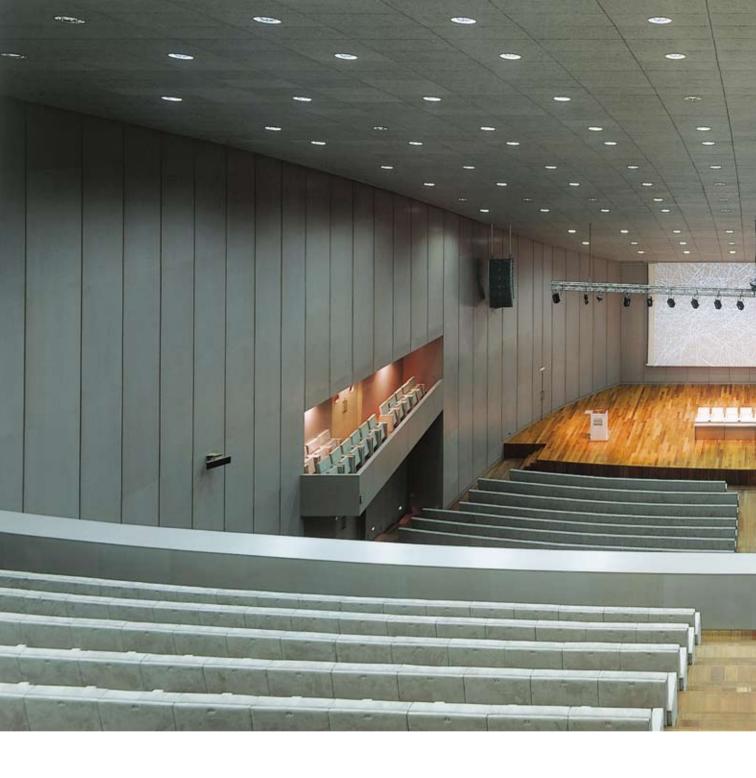
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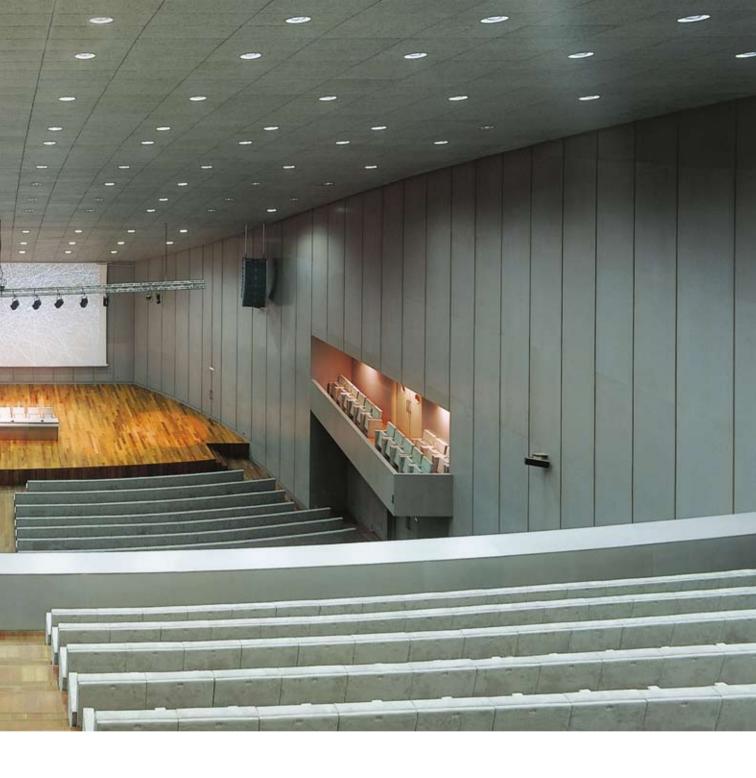
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The stars are always above

To do justice to good architecture, materials today must be able to do much more than simply look good. Functionality is rarely requested - it is a basic requirement. Meanwhile, harmony between people, the environment, and building materials are so much more important. If this can't be achieved, then it is difficult to strike a balance.

We are proud that we can make a contribution to this balance with our product range and simultaneously meet all demands in terms of functionality, ecology, and design.

Notes



for good architecture

A business unit of Knauf Insulation GmbH - Fürnitz, Austria

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