MINERAL SOLUTIONS





Experience More Innovation

WITH FUNCTIONAL, NATURAL AND SUSTAINABLE MINERAL SOLUTIONS

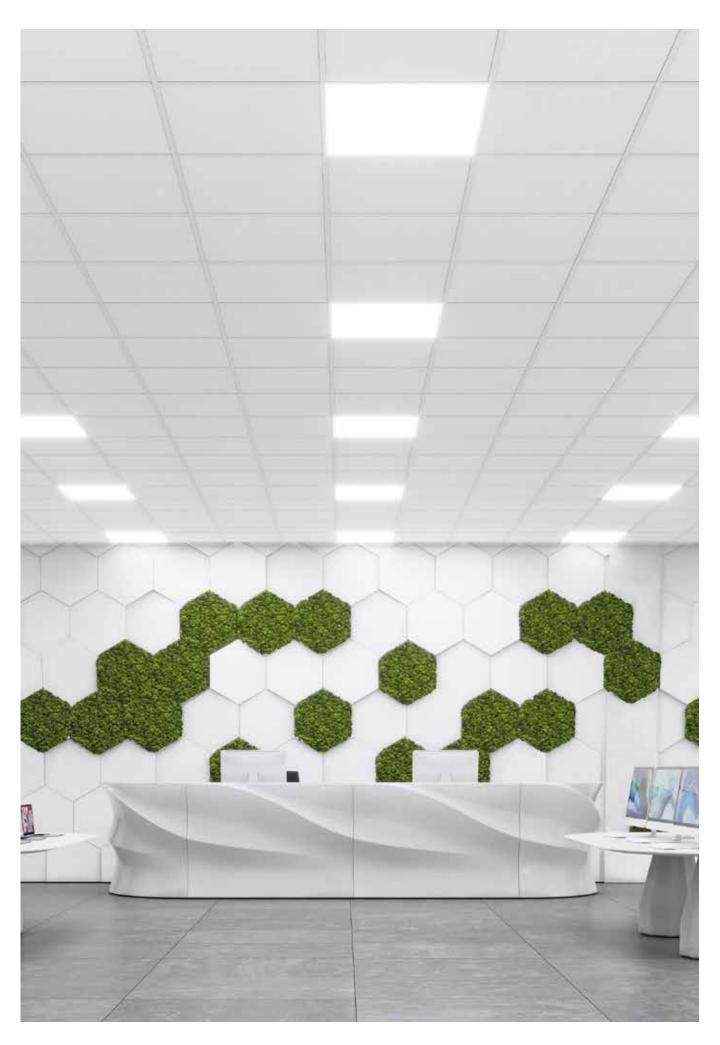
We believe that the ceiling is an integral part of every interior space. It helps give us a wonderful sense of well-being and safety. A seamless connection between form and function, it enhances and protects the spaces in which we live, work, recover and grow. It balances acoustics, provides healthy 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, Armstrong Ceiling Solutions and Knauf AMF 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. Our new harmonised Mineral Solutions range enables customers endless varieties of sizes, shapes and edge designs in all system layouts.

The high-quality mineral tiles are produced in a wet-felt tile process that uses natural, sustainable raw materials, including biosoluble mineral wool, perlite, clay and starch.

By embodying the best of both worlds and building on our long-standing experience, Knauf Ceiling Solutions is setting the standard for safety, comfort, efficiency and performance. With a boundless multi-material approach that enables you to experience more choice, more inspiration and more support, to help find the unique solution you're looking for.

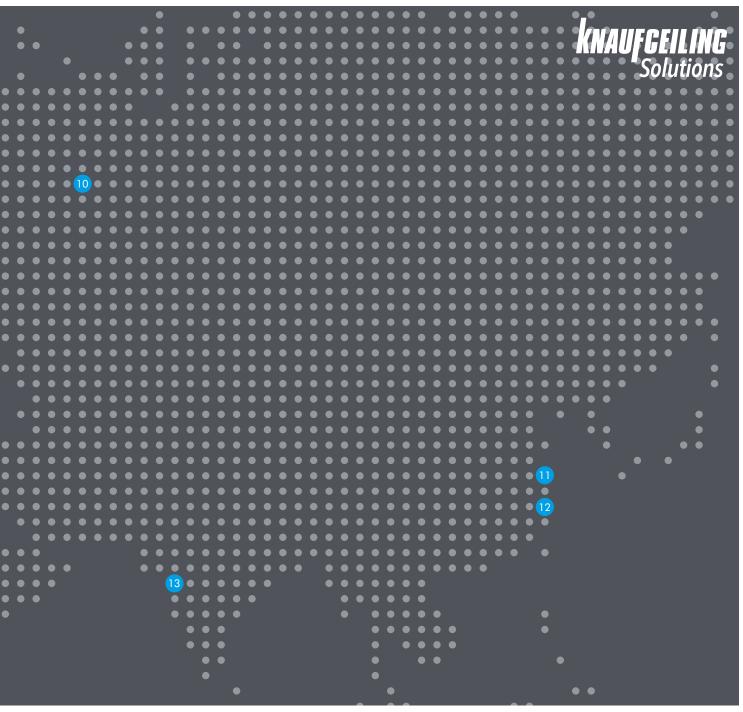




Production Network

EXPERIENCE OUR LARGE AND COMPREHENSIVE NETWORK

Through the local presence of thirteen state-of-the-art production facilities in eight countries across Europe and Asia, we are able to deliver high-quality ceiling solutions on time. In order to provide our customers consistent and reliable supply processes, we rely on our proven production values that meet the highest standards worldwide in quality, environment and safety.





EMEA

- **01** Grafenau (DE) Mineral & Grid
- **02** Viersen (DE) Grid
- **03** Stafford (UK) Metal
- **04** Pontarlier (FR)
- Mineral
 Valenciennes (FR)
 Grid
- **06** Dreux (FR) Grid
- **07 Ferndorf (AT)** Wood Wool
- **08 Rankweil (AT)**Metal

- **09** Antwerp (BE) Slitting
- 10 Alabuga (RU) Mineral



APAC

- 11 Wujiang (CN)
 Mineral
- **12 Shanghai (CN)** Grid
- **13 Pune (IN)** Grid





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 (a,,) or to ASTM C 423 (NRC).



SOUND ABSORPTION CLASS

A classification for sound absorption (A – E) based upon the sound absorption a, 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 (D_{nfw}) and/or ASTM E413-10 (CAC).



FIRE REACTION

Reaction to fire classification in accordance with EN 13501-1 expressed as Euroclass (A1 – F). Additionally in accordance with ASTM E84, expressed as Class A and 123-FZ, expressed as KM0 – KM2.



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, when tested in accordance with EN ISO 7724-2 and 3.



LIGHT DIFFUSION

The percentage of reflected light which is diffused.



INDOOR AIR QUALITY

The Eurofins Indoor Air Comfort (Gold) certification ensures that all product-related health criteria on product emissions are sufficiently fulfilled. It is a sign confirming the quality claim of the manufacturer and its contribution to a healthy indoor climate. Mainly VOCs emissions can pose a serious risk, especially to children. Limiting VOC from indoor building products is the subject of many national regulations and voluntary quality labels. A lot of these regulations are covered by IAC(G).



AIR PERMEABILITY

Tested in accordance with DIN 18177, the air permeability rating indicates the cubic metres of air leakage per hour per square metre.



RECYCLED CONTENT

The recycled content of the product, as calculated in accordance with ISO 14021:2016.



CERTIFIED CRADLE TO CRADLE

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.



ENVIRONMENTAL PRODUCT DECLARATION (EPD)

are independently verified and registered documents that communicate transparent and comparable information about the life-cycle environmental impact of products. Knauf Ceiling Solutions EPDs have been third party certified by IBU (Institut Bauen und Umwelt e.V. (IBU) as conforming to the requirements of ISO 14025.



M1 CLASSIFICATION

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.



VOC

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



FORMALDEHYDE (E1)

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



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 environmental and health-related aspects.

(www.blauer-engel.de/uz132)



ISO 9001

This icon demonstrates Knauf Ceiling Solutions ability to consistently provide products and services that meet customer and regulatory quality management system requirements.





THERMAL CONDUCTIVITY

Tested in accordance with EN 12667, the thermal conductivity rating measures the rate of heat flow through a material.



WFIGHT

Weight per unit area of the product (kg/m²).



EDGE DETAILS

Indicates the different edge details available for the ceiling tile of reference.



COLOURS

Custom colours available for products with this icon.



THICKNESS

Indicates the thickness for the ceiling tile of reference.



ANTIMICROBIAL

Antimicrobial finish on standard mineral tiles and available as a custom option on metal products with this icon.



DIMENSIONS

Indicates the sizes available for the ceiling tile of reference.



SCRATCH RESISTANCE

Products with this icon offer a superior level of surface scratch resistance, evaluated with the Hess Rake test.



SYSTEMS

Indicates the suspension systems compatible with the ceiling tile of reference.



PRODUCT HANDLING & DURABILITY

Solutions with enhanced durability for improved handling and resistance to damage.

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 deposits, 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.



Wet cleaning should be carried out with lukewarm water (up to 40°C), using a sponge and mild cleaning agent (with a pH value between 7 and 9), and using medium pressure. After cleaning, the surface should be dried with a soft cloth.



Can be cleaned using a high pressure water spray. After cleaning, the surface should be dried.



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



Can be cleaned with specific disinfectants commonly used in healtchare premises. Disinfectants should be used as a spray on wipes.

CE MARKING

In Europe, the Construction Products Regulations (305/2011/ EU) defines essential requirements for products (and projects) such that they are safe and fit for their intended use. Harmonized Product Standards respond to these essential requirements and set out what tests must be conducted and how the performance must be communicated. For suspended ceilings the applicable product standard is EN 13964 Suspended Ceilings – Requirements & Test Methods.

The essential requirements identified for suspended ceiling membranes (tiles & baffles) include:

- Reaction to Fire (mandatory)
- Formaldehyde Emissions (mandatory)
- Sound Absorption
- Flexural Tensile Strength / Durability
- Thermal conductivity

It is mandatory to CE Mark products within the scope of EN 13964 and provide a Declaration of Performance in order to place the product on the market.

All Knauf Ceiling Solutions Declarations of Performance can be found on Knauf Ceiling Solutions website.

ACOUSTIC TECHNICAL GLOSSARY

WEIGHTED SOUND ABSORPTION COEFFICIENT, a.,

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 a_w will vary between 0.00 and 1.00 but is only expressed in multiples of 0.05, e.g. $a_w = 0.65$.

WEIGHTED SUSPENDED CEILING NORMALISED LEVEL DIFFERENCE, D_{new}

A single-number rating of the laboratory measurement of room-to-room (horizontal) airborne sound insulation of a suspended ceiling above adjacent rooms sharing a common ceiling plenum. It is determined in accordance with EN ISO 717-1 from measurements made in accordance with EN 20140-9. Note: EN 20149-9 has now been withdrawn and superseded by EN ISO 10848-2 (see D_{nfw}), although D_{now} test results still continue to be valid.

SHAPE INDICATOR

With reference to EN ISO 11654, the calculated value of w may be qualified by one or max. two (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 w may additionally be allocated into one of six descriptive classes in accordance with the following table:

Sound Absorption Class	a _w					
Α	0.90; 0.95; 1.00					
В	0.80; 0.85					
С	0.60; 0.65; 0.70; 0.75					
D	0.30; 0.35; 0.40; 0.45; 0.50; 0.55					
Е	0.15; 0.20; 0.25					
Not Classified	0.00; 0.05; 0.10					

WEIGHTED SUSPENDED CEILING NORMALISED FLANKING LEVEL DIFFERENCE, D. Fw.

A single-number rating of the laboratory measurement of room-to-room (horizontal) airborne flanking sound transmission of a suspended ceiling above adjacent rooms sharing a common ceiling plenum. It is determined in accordance with EN ISO 717-1 from measurements made in accordance with EN ISO 10848-2. This has now superseded EN 20149-9. (see D_{now}).

WEIGHTED SOUND REDUCTION INDEX, R

A single-number rating of the laboratory measurement of (vertical) airborne sound reduction of a suspended ceiling. It is determined by reference to EN ISO 717-1 from measurements of sound reduction index made in accordance with EN ISO 140-3.



RAIN NOISE SOUND INTENSITY LEVEL, L,

The laboratory measurement of the sound intensity in a room below a roof construction when subjected to rainfall. It is determined by reference to EN ISO 140-18:2006 – Laboratory measurement of sound generated by rainfall on building elements. The roof's performance can be tested with or without a suspended ceiling beneath. The intensity of the rainfall tested can be selected from the options given in the standard. A combined A-weighted single-number (LIA) can also be determined. Unlike $D_{\rm nfw}$ and $R_{\rm w}$ data, where the higher the value the better the insulation provided, the lower the intensity value (weighted LIA) the better the insulation performance of the ceiling and roof combination.

EQUIVALENT ABSORPTION AREA (EAA)

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'.

SOUND REDUCTION

A term used in relation to the vertical transmission of sound through a suspended ceiling.

SOUND ATTENUATION

A term used in relation to the horizontal transmission of sound through a suspended ceiling above adjacent rooms sharing a common ceiling plenum.

NOISE REDUCTION COEFFICIENT, NRC

A single-number descriptor of random incidence sound absorption coefficients. Defined in ASTM C423 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.

ACOUSTICAL SOLUTIONS FOR EVERY SPACE

Meet all expections of acoustical comfort with Knauf Ceiling Solutions

Knauf Ceiling Solutions provide three densities of ceiling tiles to achieve high absorption, high attenuation or a good balance between the two of to meet all requirements in every space.

BALANCED ACOUSTICS

Standard range provides a unique combination of good sound absorption and sound attenuation that enhance intelligibility for workplace effectiveness.

Speech intelligibility addresses the need for comprehension of verbal communication whether naturally spoken or broadcast by an amplified system, within a given space.

Intelligibility can be expressed as the difference in decibels between the level of speech and the background noise (signal to noise ratio) as heard at the listener's position.

To ensure excellent intelligibility, this difference at the listeners position is recommended to be 10-15 dB minimum for people with good hearing and 20-30 dB for hearing impairing of users of headsets.

HIGH ATTENUATION

Our dB range offers excellent sound attenuation and good sound absorption that enhances privacy and confidentiality.

Speech privacy is a measure for defining the degree to which conversation cannot be overheard.

For good privacy between adjacent spaces, it's necessary to focus on room-to-room sound attenuation and the background noise level.

HIGH ABSORPTION

Products with high absorption levels are recommended when concentration is needed. They dramatically improve the acoustic comfort in open spaces, call centres, etc.

Concentration can be disturbed by different types of noise, such as other peoples' voices, phones ringing, ventilation, keyboard, equipment, impacts, road and air traffic...

Intrusive noise will disturb concentration and therefore needs to be considered as another key factor in the design of the acoustical environment.

FIRE REACTION



STRUCTURAL FIRE PROTECTION

Throughout Europe, there is a requirement for a building's structure to be protected from fire. This is primarily for the structure to remain stable during a fire to allow the occupants to escape and also to enable fire fighters to work without threat of the building's collapse. The duration of the required protection will usually depend upon the height of, and location within, the building (i.e. typical floor, basement, roof construction etc), whether there is any active methods of fire protection (sprinklers etc.) and the type of construction to be protected (steel beams, timber or mezzanine floors etc). In the case of structural fire protection, the suspended ceiling is classified together with the soffit and the complete construction.

Knauf Ceiling Solutions ceilings achieve building component classifications of REI30 to REI120, depending on the type of soffit. Regular fire testing is carried out to ensure the highest up to date system quality and built in safety for our customers.

INDEPENDENT FIRE RESISTANCE

Independent fire rated ceilings provide fire protection both from above (ceiling void) as well as from the underside of the ceiling. Fittings, such as lighting, loudspeakers and signage etc. as well as the connection to light-weight partition systems, bulkheads etc. are tested and classified as well.

In case of a fire in the ceiling void (incidentally, the most common fire source) the underlying escape routes are protected by AMF THERMATEX® Uno fire rated ceiling for 30 minutes.

Fire resistant certificates such as the German abP- certificates are available on request.

BUILDING REGULATIONS

Fire reaction performance for suspended ceilings is shown using the Euroclass fire reaction classification. Most Knauf Ceiling Solutions products are reaching A2-s1,d0 acc. to EN 13501-1.

For more information, please contact us or visit www.knaufceilingsolutions.com

HEALTHY INTERIORS

CHALLENGE

The World Health Organization reports that 30% of new and renovated buildings receive excessive complaints related to indoor air quality.

In addition, poor air quality, and elevated temperatures consistently lowered employee performance by up to 10%.

SOLUTION

Knauf Ceiling Solutions:

- achieve low or very low VOC and formaldehyde emission levels.
- have all been classified E1 for formaldehyde (best test result possible).
- for a large majority, achieve A+ (the best performance level under the stringent French VOC labelling system).

In certain indoor spaces such as laboratories

It is essential to limit the number of airborne particles by creating a Clean Room-type environment using products certified in accordance with ISO 14644-1.

Knauf Ceiling Solutions offers solutions for areas requiring minimal to the most stringent requirements.





CHALLENGE

The light reflectance of the ceiling, floor and wall surfaces play the second most important role for overall illumination of the room, directly affecting working comfort, wellbeing and productivity.

SOLUTION

Specifying high light reflectance ceilings contribute to LEED®, BREEAM, HQE, DGNB and Well Building Standard credits.

A well-design ceiling with high light reflectance:

- Improves space illumination, allowing for fewer light fixtures
- Reduces electrical light output and lowers maintenance costs
- Reduces cooling load

High light reflectance ceilings up to 87% of the light back into the space.

Rafts and canopy ceilings installed over a working place improve the light reflection for better comfort for the end-user.





Cradle to Cradle Certified®

The Cradle to Cradle Certified® product programme has been developed to meet growing customer demand for sustainable products, with C2C certification already becoming a requirement for building projects in the United States and Europe. It adds value to a project and helps protect and sustain our environment for future generations by keeping resources in the economy for longer. Cradle to Cradle Certified® products are recognised in LEED® and WELL Building Standard credits.





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.

This isn't just about happiness — even if happier workers are better workers. It's about wellbeing in the workplace. Wellbeing boosts productivity. It improves performance, reduces stress and contributes to a work-life balance that brings out the best in people. And one of the ways we can promote wellbeing in the workplace is through design.

By considering aesthetics, light, shade and zoning, intelligent design can transform even the most uniform open-plan office into a vibrant, dynamic space that balances contemporary architecture and statement design with visual, and acoustic comfort that measurably enhances wellbeing and happiness, productivity and performance.

Even beyond these considerations, the principles we use in enabling great office design can create more functionally effective spaces for working. Spaces for close collaboration and quiet concentration; spaces that keep conversations private, or open the floor to discussion and debate — and spaces that aid focus while inspiring workers and visitors alike. This is our task, our responsibility and our opportunity, together, to create workspaces that work better.



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.

Schools, colleges and universities are complex ecosystems, and the buildings that house them need to take this into account. They encompass everything from focussed classrooms, quiet study areas to sweeping auditoria and lecture theatres, sound studios and common rooms. Each space has its own requirements and intricacies — but all need to optimise the learning experience.

So, what does this take? It takes careful consideration of architectural zoning, and how each space works individually and as part of the ecosystem. It takes a balance of acoustic performance and visual comfort — where tutors can be heard clearly at the back of the class, and where students can concentrate on their work.

Above all, however, it takes an awareness, sensitivity and commitment to creating a safe, healthy and peaceful environment for education to thrive, and a dedication to creating spaces as inspiring as the teaching within them.





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 environmen — and the experience it creates.

Whether it's a supermarket or convenience store, shopping mall or showroom, food court or fashion boutique, the design of a retail space is integral to the shopper experience — and we should treat this experience like any other we'd desire to have. It should be comfortable and easily navigable, but it should also surprise, excite, entertain and entice.

The materials, technologies and techniques we use to create our retail environments are vital for making this happen. Visually arresting design features; playful manipulation of light and shade, colour and shape; bright, open and airy room plans; intuitive pathways, and acoustically comfortable, unintimidating spaces to encourage customer interaction and streamline the sales process. All of these play their part in a positive shopper experience.

By blending functionality with flair, great design doesn't just breathe fresh life into brands in the real world — it shapes a retail experience that people will enjoy, share and remember.



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.

Sometimes, it's all about high-tempo sports or hitting the gym. Other times, it's dining out, heading away for a hotel stay, or simply taking in a film at the cinema. There's a huge variety of spaces in which we spend our free time, but all of them share one requirement for design and architecture: creating the right atmosphere to enhance quality of life.

This might take the form of maintaining the right acoustical balance to focus viewers on the movie. It might be flooding fitness studios with light while keeping an effective thermal performance and maximising humidity resistance. Or, it might be designing a hotel as part of a multi-use building in which statement design atria and lobbies give way to cosy, comfortable guest rooms.

For every architectural challenge in leisure and hospitality spaces, there's an idea to help you achieve it — a solution to make your work easier and more effective. Because, let's face it, everyone deserves a little relaxation.



HEALTHCARE



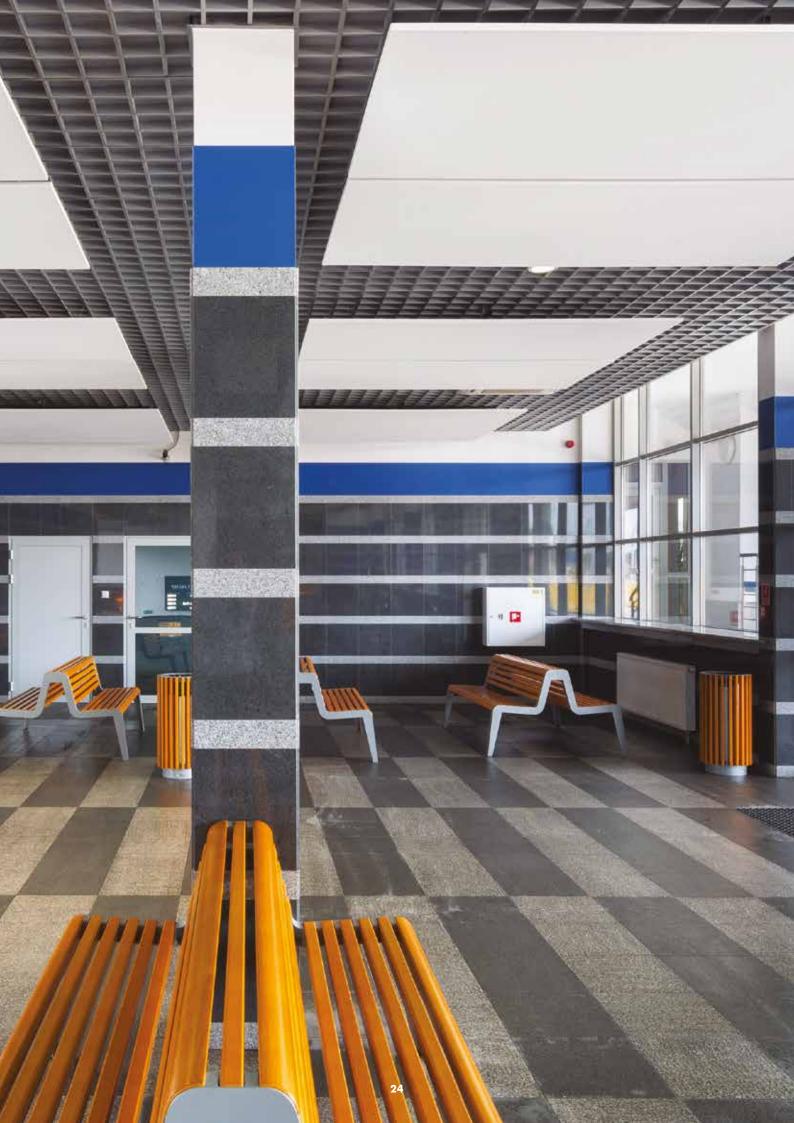
CREATING SPACES FOR HEALING

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.

The most vital element is, of course, creating a space that's conducive to healthcare — hygienically clean, performing at the anti-microbial level, using materials and technologies that enhance indoor air quality and minimise emissions, and safeguarding patients and caregivers alike through robust fire protection.

Going beyond this, it's our responsibility to design environments that actively aid the healing process. Given the proven importance of natural light to wellbeing, it's imperative that our healthcare spaces are bright and open, with high levels of light reflectance that makes the most of window space. Acoustically, too, these spaces need to absorb and attenuate noise, providing the peace, quiet and tranquillity for people to rest and recover

Ultimately, healthcare environments need to be perfectly attuned to their purpose, functionally and aesthetically. Clean and simple, bright and welcoming, calm and comfortable. Everything it takes for doctors to perform and patients to recover — and all the ingredients to create the perfect spaces for healing.



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.

From airport departure lounges to train station concourses, from the food court through to the platform, the architecture of transportation is a journey. Ceilings, walls and floors are travellers' companions; the first and last things they'll see in any location, the backdrops to meetings and partings — and a crucial part of people's journeys.

So, we should approach these buildings rationally and emotionally. They need to be functional, to guide travellers to gates, lounges and platforms. They need to be clean, maintainable and durable to cope with the footfall of millions every day. But they also need to be calming and welcoming; tranquil, peaceful places that encourage exploration.

To this end, we need to transform the dark tunnels and cavernous lobbies that once characterised transport hubs into bright, open and desirable spaces, concealing the noise and passage of crowds to make people feel comfortable. And all of this while using design to make an impression – to create spaces that move people, physically and emotionally.

OVERVIEW

DESIGN

MINERAL Baffle Element	30	MINERAL Wallcoustic Element	42
MINERAL Baffle Element Arc	32	MINERAL Wallcoustic Line	44
MINERAL Baffle Line L / N	34	FABRIC Wallcoustic Line	46
MINERAL Sonic Element	36	AMF THERMATEX® Alpha Colour	48
MINERAL Sonic Line Arc	38	Focus: AMF THERMATEX® VARIOLINE	50
MINERAL Sonic Line	40		

SMOOTH WHITE ACOUSTIC

ADAGIO Acoustic+	54	Armstrong PERLA OP 19mm	72
ADAGIO Alpha+	56	Armstrong PERLA OP 1.00	74
ADAGIO dB+	58	AMF THERMATEX® Acoustic	76
ADAGIO HD+ 19mm	60	AMF THERMATEX® Antaris	78
ADAGIO HD+ 30mm	62	AMF THERMATEX® Antaris C	80
ADAGIO HD+ 35mm	64	AMF THERMATEX® Thermofon	82
Armstrong PERLA	66	AMF TOPIQ® Prime	84
Armstrong PERLA dB	68	AMF TOPIQ® Efficient Pro	86
Armstrong PERLA OP 0.95	70		

HEALTHCARE & HYGIENE

Armstrong BIOGUARD Acoustic OP	90	AMF THERMATEX® Aquatec Hygena	100
Armstrong BIOGUARD Acoustic	92	AMF THERMATEX® Thermaclean	102
Armstrong BIOGUARD Plain 15mm	94	AMF TOPIQ® Prime Hygena	104
Armstrong SANIGUARD	96	AMF TOPIQ® Efficient Pro Hygena	106
AMF THERMATEX® Aquatec	98	Armstrong NEWTONE	108



CLASSIC PLAIN

PLAIN 112

CLASSIC SANDED

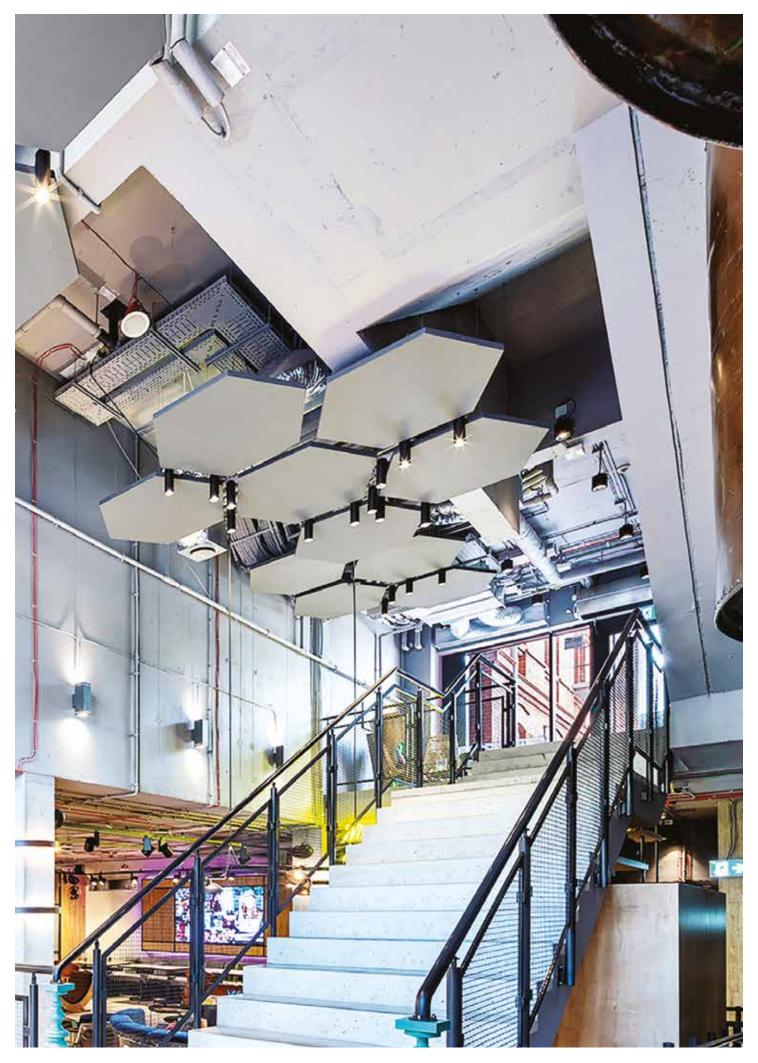
Armstrong SAHARA 116 AMF THERMATEX® Feinstratos 118

CLASSIC FISSURED/PERFORATED

AMF THERMATEX® Star 15mm 122 AMF THERMATEX® Feinfresko 124

FIRE PROTECTION

AMF THERMATEX® Uno 128



Design

IN A WORLD WHERE IMAGE IS EVERYTHING, OUR FLEXIBLE CEILING SOLUTIONS INSPIRE YOU TO CREATE STUNNING AESTHETICS AND INTIMATE SPACES.

An endless array of dramatic design possibilities with baffles, canopies, wall absorbers and accessories that can be easily installed and relocated without further modification. Exposed surfaces that absorb sound to enhance acoustics, while reflecting up to 87% of light to make brighter, energy efficient spaces. And seamless, monolithic floating ceilings that add colour, shape, depth, scale and rhythm to contemporary building design.







Vertical Baffle Systems

MINERAL Baffle Element (OPTIMA Baffle) Individual / Grouped



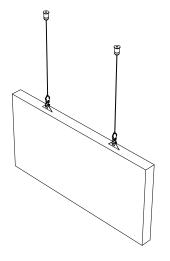
- MINERAL Baffle Element is a range of high performance acoustical baffles with a white laminate surface for a modern linear appearance.
- Good sound absorption: reduce noise levels, increase intelligibility and reduce reverberation time in a space
- Typically used to provide high levels of acoustic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

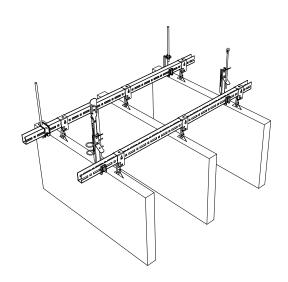


Vertical Baffle Systems MINERAL Baffle Element

Individual / Grouped

Thickness (mm)	<u>↓</u>	39									
Dimensions (mm) Additional dimensions available on request	()	1200 x 300 1200 x 400					× 300 × 400				
System		Hanging W U Profile gro T Grid grou	ouping option								
Weight	Kg		1200 x 300: 3.8 kg / pc 1800 x 300: 5.6 kg / pc 1200 x 400: 5.0 kg / pc 1800 x 400: 7.5 kg / pc								
Colour & design	A 200		Vario De s	sign Colours	5						
dologi a design											
	_	White	Granite	Steel	Green Marble	Сорр	er	Oak	Brass	Sandstone	Concrete
Sound absorption	**	EN ISO 354									
		α _w = 0.50(MH) (300mm) as per EN ISO 11654 - Class D									
		Frequency				125	250	500	1000	2000	4000
			0 x 300mm distances 300)mm		0.15	0.25	0.45	0.90	0.90	0.95
		NRC = 0.65	5 (300mm) as	per ASTM C	423						
Fire reaction	**	Euroclass A	2-s1,d0 as po	er EN 1350	1-1						
Humidity resistance	4,4	90%									
Indoor air quality		A+	E 1	GOLD PROPERTY OF THE PROPERTY							
Cleanability											
Sustainability		BIOSOLUBLE WOOL EC 1272/2008 Annex Q									





Options with this icon are available from our **Vario Design** range.

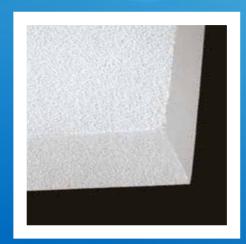
Products may vary from country to country. Please contact your local sales representative.

For further information and legal notice, please visit our website.



Vertical Baffle Systems

MINERAL Baffle Element Arc (OPTIMA Baffle Curves) Individual / Grouped

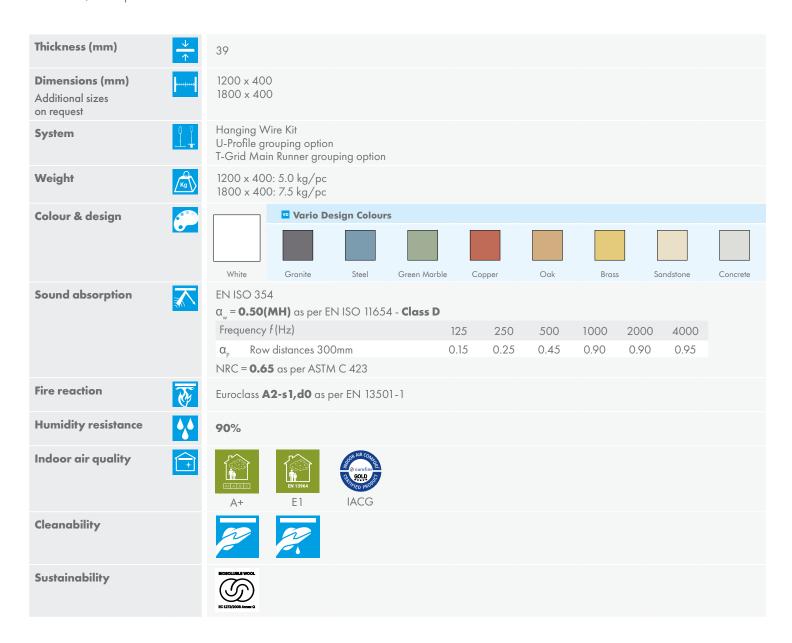


- With MINERAL Baffle Element Arc you can create exciting interiors without compromising acoustic performance, even with modern exposed soffit ceilings
- Modern curved appearance
- Reduce noise levels, increase speech intelligibility and reduce reverberation time in the space
- Install individually or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

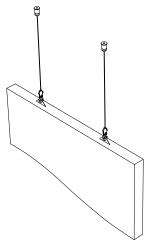


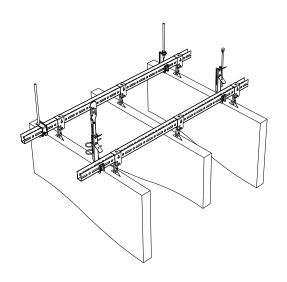
MINERAL Baffle Element Arc

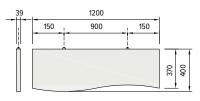
Individual / Grouped



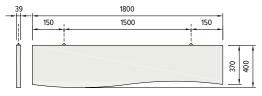








Module 1200 x 400 mm



Module 1800 x 400 mm

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Vertical Baffle Systems

MINERAL Baffle Line L/N (THERMATEX® Baffle)

Individual / Grouped (only MINERAL Baffle Line L)

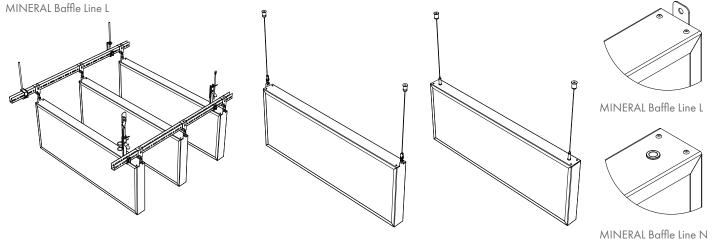


- MINERAL Baffle Line L and Line N features an aluminium frame and white laminate surface for a modern linear appearance. MINERAL Baffle Line L and Line N are also available in a variety of colours or customised graphic prints on request
- Good sound absorption: reduce noise levels, increase intelligibility 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)

Thickness (mm)	<u>↓</u>	50										
Dimensions (mm) Additional sizes on request	~~ ~~	1200 x 300 1200 x 400					00 x 300 00 x 400					
System		MINERAL 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									
Weight	Kg		1200 x 300: 3.2 kg/pc 1800 x 300: 4.7 kg/pc 1200 x 400: 4.1 kg/pc 1800 x 400: 6.0 kg/pc									
Colour & design		White	vario De: Granite	sign Colour		э Сс	ppper	Oak	Bras	s Sc	undstone	Concrete
Sound absorption		Frequency Baffles 120 α_p Row	MH) (300mm))mm	ISO 11654 -	Class (125 0.35	250 0.40	500 0.55	1000	2000	4000	
Fire reaction	**	Euroclass A	. 2-s1,d0 as p	er EN 1350	1-1							
Light reflectance	7	88%										
Humidity resistance	4,4	90%										
Cleanability			P									
Sustainability		BIOSOLUBLE WOOL EC 1272/2008 Annax Q										
MINIERAL Baffle Line L											. (



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Floating Canopy Systems

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

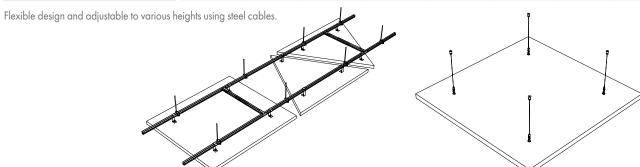


- MINERAL Sonic Element is a frameless and jointless ceiling raft. It also benefits from
- The monolithic ceiling raft design offers excellent sound absorption properties and when installed gives the appearance of a free floating ceiling cloud

Floating Canopy Systems MINERAL Sonic Element

Individual / Grouped

Thickness (mm)	<u>↓</u>	40								
Dimensions (mm) Additional sizes and shapes on request	······»	Trapezoid Hexagon Left Parallelogram Right Parallelogram Square Square Rectangle Rectangle	1180 × 870 1363 × 1180 1180 × 1180 1180 × 1180 800 × 800 1180 × 1180 1180 × 580 1780 × 880	(Rectangle Rectangle Circle Circle Circle Convex Concave Friangle	2380 Ø800 Ø120 Ø160 1170 >	0			
System		Individual: Wire Ha Grouped: U-Profile	inger							
Weight	K g \	6.0 kg/m^2								
Colour & design		White Granit	rio Design Colours	Green Marble	Copper	Oak	Brass	Sar	ndstone	Concrete
Sound absorption		EN ISO 354 Frequency f (Hz) Equivalent Absorpti Square: 1180 x 118 Rectangle: 1780 x Rectangle: 2380 x Circle: Ø1200mm	Omm / Suspension 1180mm / Suspens 1180mm / Suspens	n height 190mm sion height 190m sion height 190m	125 0.40 m 0.80 im 0.80 0.40	250 1.20 2.10 2.70 1.00	500 2.20 3.10 4.20 1.70	1000 2.40 3.30 4.40 1.80	2000 2.40 3.50 4.50 2.00	4000 2.30 3.40 4.30 1.90
Fire reaction	**	Euroclass A2-s1,d	0 as per EN 13501	-1	*Value	s shown are	the average (of the 3 one	third octave	band values
Light reflectance	7	Up to 88 %								
Humidity resistance	4,4	90%								
Indoor air quality		A E1	AND COLUMN COLUM							
Cleanability		P								
Sustainability		BIOGOLIJELE WOOL CE 127/2008 Anne Q								



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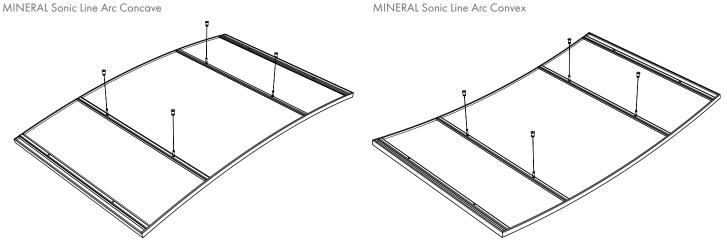




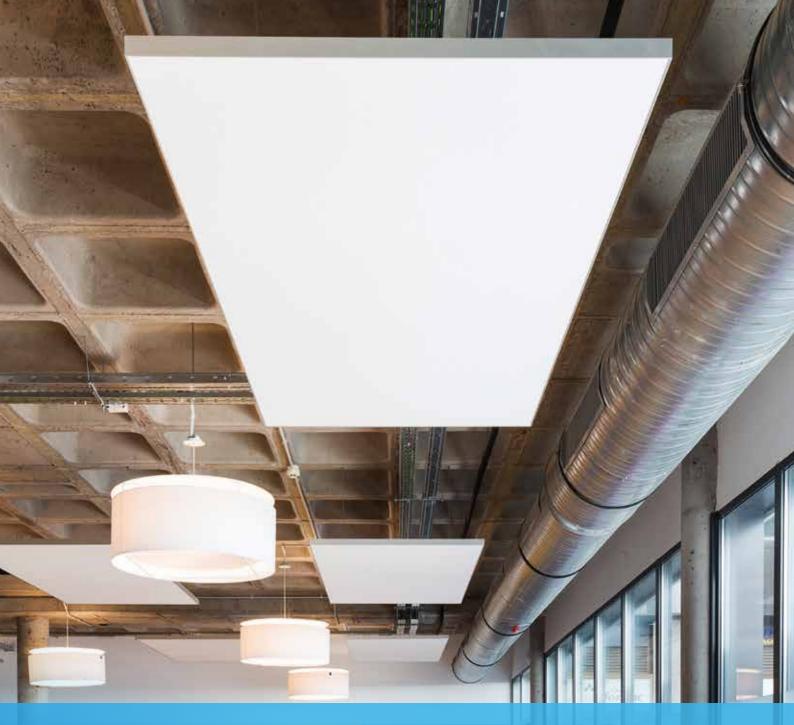
- Create unique, elegant designs with an array of MINERAL Sonic Line Arc concave and convex canopies
- Play with custom colours to create exciting contrasting effects
- MINERAL Sonic Line Arc allows you express your creativity and accentuate an area using new spacial effects







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



Floating Canopy Systems

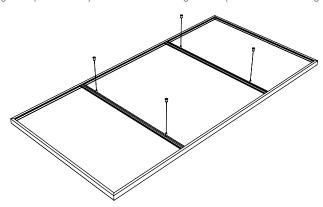
MINERAL Sonic Line
(THERMATEX® Sonic Modern)
Individual



- 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.

Thickness (mm)	43					
Dimensions (mm)	1200 × 600 1200 × 1200 1800 × 1200 2400 × 1200					
System	Wire Hanger					
Weight	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					
Colour & design	Frame: Anodised Aluminium, White, Colours					
	White Granite Steel Green Marble	Copper	Oak	Brass	Sandstone	Concrete
	Motif: Custom Graphic Print					
Sound absorption						
	Frequency f (Hz) Equivalent Absorption Area Aobj*	125 2	500	1000	2000	4000
	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
_		*\	Values shown are the	average of the 3	one third octav	ve band values
Fire reaction	Euroclass A2-s1,d0 as per EN 13501-1					
Light reflectance	Up to 88 %					
Humidity resistance	90%					
Cleanability						
Sustainability	BIOGOLURIA WOOL EC12722000 Acesse Q					

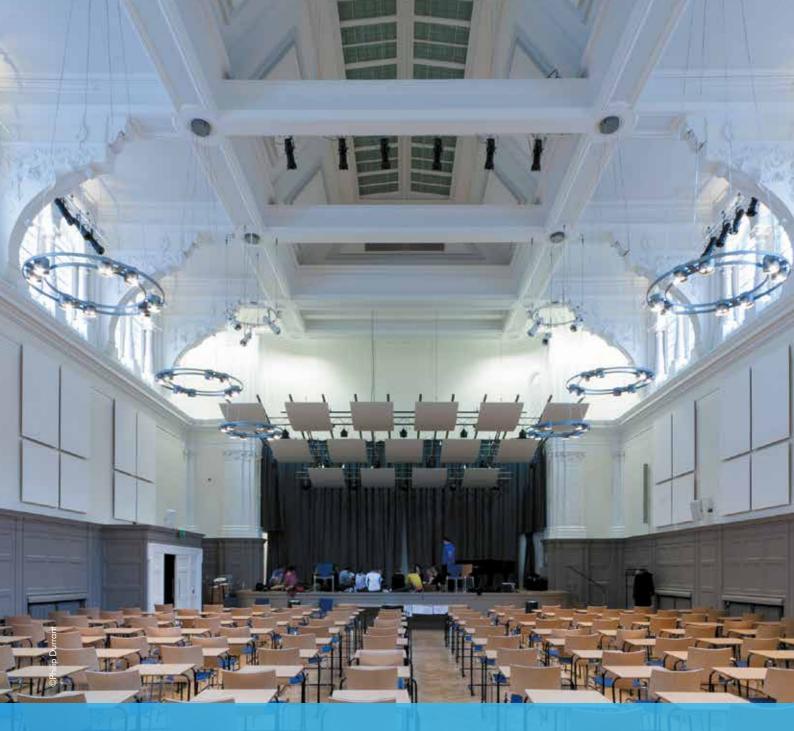
Ceiling rafts are delivered in one piece making them quick and easy to install. Flexible design and adjustable to various heights using steel cables.



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Wall Systems

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



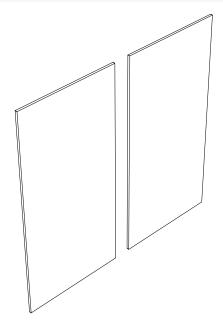
- MINERAL Wallcoustic Element is a frameless and jointless wall abosorber. It also benefits from a fully colour coated face and reverse laminate fleece
- The monolithic wall absorber offers excellent sound absorption properties and endless design possibilities for ambitious architects, who seek to raise 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

Thickness (mm)	40
Dimensions (mm) Additional sizes on request	Square 1180 x 1180 Square 800 x 800 Rectangle 1180 x 580 Rectangle 1780 x 880 Rectangle 1780 x 1180
System	Spiral anchor Wall brackets
Weight	6.0 kg/m ²
Colour & design	White Granite Steel Green Marble Copper Oak Brass Sandstone Concrete
Sound absorption	EN ISO 354 Frequency f (Hz) Equivalent Absorption Area Aobj* Square: 1180 x 1180mm 0.40 1.20 1.90 1.90 1.90 1.90 1.80 Rectangle: 1780 x 1180mm 0.50 1.70 2.70 2.80 2.80 2.60 *Values shown are the average of the 3 one third octave band values
Fire reaction	Euroclass A2-s1,d0 as per EN 13501-1
Light reflectance	Up to 88 %
Humidity resistance	90%
Cleanability	
Sustainability	MICHIGUARUM WOOL OCITIZATION ANNO Q



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Wall Systems

MINERAL Wallcoustic Line (THERMATEX® Line Modern) Individual



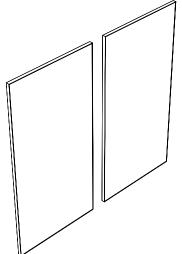
- MINERAL Wallcoustic Line is a pre-assembled aluminium framed wall absorber with a standard white, laminate surface finish. It can also be ordered in a variety of colours or customised printed motifs on request
- Customise and enhance the visual appearance and acoustic ambience in any space
- The wall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

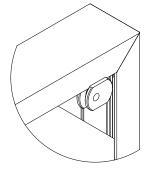


Wall Systems MINERAL Wallcoustic Line

Individual

Thickness (mm)	<u>↓</u>	43							
Dimensions (mm) Additional sizes on request	()	1200 x 600 1200 x 1200 1800 x 1200 2400 x 1200							
System		Eccentric bracket							
Weight	K g V	9.4 kg/m²							
Colour & design		Frame: Anodised Aluminium, White, Vario Design Colours White Granite Steel Motif: Custom Graphic Print		Copper		Dak	Brass	Sandstone	Concrete
Sound absorption		Frequency f (Hz) Equivalent Absorption Area Aobj* Rectangle: 1200 x 600mm Square: 1200 x 1200mm Rectangle: 1800 x 1200mm Rectangle: 2400 x 1200mm		125 0.20 0.50 0.60 1.10	250 0.60 1.10 1.90 2.20	500 1.00 1.60 2.50 3.10	1000 0.90 1.50 2.40 3.10	2000 0.80 1.50 2.20 3.00	4000 0.90 1.50 2.40 3.10
Fire reaction	**	Euroclass A2-s1,d0 as per EN 1350	1-1				J		
Light reflectance	₹	Up to 88 %							
Humidity resistance	44	90%							
Cleanability		P							
Sustainability		BIOGROLABLE WOOL C: 1272/2008 Arens G							





Detail: Eccentric bracket

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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

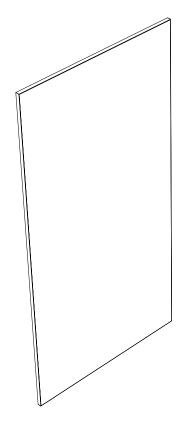


Wall Systems FABRIC Wallcoustic Line

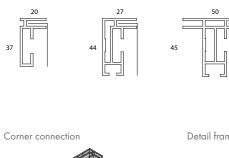
Individual

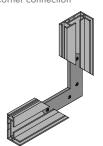
Thickness (mm)	20	27		50			
Dimensions (mm)	600 x 600 1 200 x 600	1200 x 1200 1800 x 1200 2400 x 1200 2400 x 2400		1200 1200 1800 240	0 x 600 0 x 600 0 x 1200 0 x 1200 0 x 1200 0 x 2400		
System	Wall bracket						
Weight	3.0 - 6.0 kg/m²						
Colour & design	Frame: anodised aluminium, wh FABRIC Wallcoustic Line 20: FABRIC Wallcoustic Line 27: FABRIC Wallcoustic Line 50:	fabric, white or Custom (fabric, white or Custom (Graphic Print				
Sound absorption	EN ISO 354						
_	Frequency f (Hz) Equivalent Absorption Area Aobj	* 125	250	500	1000	2000	4000
	1200 x 1200mm (50mm thickne			1.90 n are the c	1.90	1.80 he 3 one thir	1.60
Humidity resistance	90%				3.		
Cleanability	P						

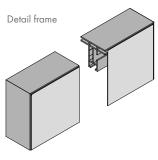
FABRIC Wallcoustic Line



Profile cross-sections







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AMF THERMATEX® Alpha Colour



- AMF THERMATEX® Alpha Colour provides a modern appearance and is the optimal
 solution for spaces that require outstanding sound absorption. In addition to cream,
 black and silver, the acoustic range is also available in granite, steel, green marble,
 copper, oak, brass, sandstone and concrete Vario Design colours
- Excellent sound absorption (0.95 α_w)
- Ideal for offices, restaurants, cinemas, classrooms and learning applications





AMF THERMATEX® ALPHA COLOUR



EXPERIENCE MORE POSSIBILITIES





AMF THERMATEX® Varioline

With AMF THERMATEX® Varioline, the individual design possibilities are almost limitless.

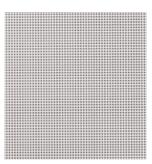
Whichever architectural look and feel you have in mind, you can choose from a selection of mineral tiles with wood, concrete or metal pattern surfaces to achieve the desired visual aesthetic.

Individual motif designs are also available to help customise and enhance the ambience of any space.

Choose from any of the following solutions - AMF THERMATEX® Varioline Motif, Varioline Metal, Varioline Wood, Varioline Symetra and Varioline Colour to meet the acoustic, aesthetic and fire performance needs of your project.



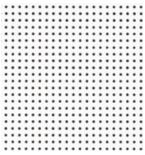
Varioline Motif



Varioline Metal



Varioline Wood



Varioline Symetra

Smooth White Acoustic



THE SMOOTH WHITE ACOUSTIC RANGE HAS THE WIDEST CHOICE OF EDGES, MODULES AND ACOUSTIC OPTIONS.

Designed to provide flexibility and complete noise control for every space – whether it's high sound absorption, high sound attenuation or a balance of both. Thanks to the smooth white surface, these aesthetically pleasing ceilings also offer high levels of light reflectance and energy saving benefits.







- ADAGIO Acoustic⁺ not only offers a smooth and durable surface with a brighter white colour and high light reflectance, it also offers a balance of both sound absorption and sound attenuation as well as being Cradle to Cradle Certified[®] Bronze.
- Good sound absorption and high sound attenuation: 0.65 α_w and 39 dB.
- Excellent Light Reflectance: 90%.
- ISO 4, Indoor Air Quality Gold and Cradle to Cradle Certified[®] Bronze.
- ADAGIO Acoustic[†]: ideal for meeting rooms or waiting areas.
 ADAGIO Acoustic[†] Planks: ideal for both open areas and corridors.



ADAGIO ACOUSTIC⁺

		Board	Tegular 24/90	Tegular 15/90	Vector â	SL2	SL2 / Tegular 15/90	Finesse
Edge details		A	â	â	# 5 F	118	ell ingolar loy 70	Î
		24	∞ 24		7.5 Î	18	Î	24
		,,			24 -17.5			2
Thickness (mm)	<u>↓</u>	19	19	19	19	19	19	19
Dimensions (mm)		600 x 600 625 x 625 675 x 675 1200 x 300 1200 x 600 1250 X 625 1500 x 600 1800 x 600	600 x 600 625 x 625 675 x 675 1200 x 300 1200 x 600 1250 X 625 1500 x 600 1800 x 600	600 x 600 625 x 625 675 x 675 1200 x 300 1200 x 600 1250 x 625 1350 x 300 1350 x 600 1500 x 600 1800 x 600	600 x 600 625 x 625		1500 x 300 1800 x 300	600 x 600 625 x 625 1200 x 600 1250 x 625
System		Exposed demounta	ble - System C	Exposed demountable - System C Exposed - Bandraster, demountable - System 1.3 Exposed - Corridor, demountable - System F.3	Semi-concealed files, demountable - System C	Semi-concealed planks, de Semi-concealed planks - Bo System 1.2 Semi-concealed - Corridor,	andraster, demountable -	Concealed, demountable - System A.2 / A.3
Weight	K g \	5.0 kg/m ²						
Colour	P	White						
Sound absorption		EN ISO 354 α = 0.65 α		11654 - Class C				
		Frequency			125	250 500		000 4000
		$\alpha_{\rm P}$ NRC = 0.7 (0 as per ASTM	1 C 423	0.40	0.40 0.6	0 0.85 0	.95 1.00
Sound attenuation		EN ISO 108 D _{n,f,w} = 39 c	848-2 IB as per EN I	SO 717-1		CAC = 39 dB as p	er ASTM E 413-10)
Sound reduction	単	EN ISO 10° R _w = 22 dB	140-2 as per EN IS	0 717-1				
Fire reaction	**	Euroclass A	2-s1, d0 as p	per EN 13501-1				
Light reflectance	7	90%						
Thermal conductivity		λ = 0.060	W/mk as pe	r EN 12667				
Air permeability	7/1/7	PM1 (≤ 30	m³/hm²) as	per DIN 18177				
Humidity resistance	4,4	95% RH						
Clean room	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	ISO 4 as p	er EN ISO 146	544-1				
Indoor air quality		A+	EN 13964	Securification of the proof of				
Cleanability		P	P					
Sustainability		EN ISO 14021	EN ISO 14025	BCSCOLUBILE WOOL EC 1277/2008 Armer Q	E M1> 2 2	www.blauer-engel.de/	CENTIND cradle to cradle soonex	io de la companya de



ADAGIO ALPHA⁺

Edge details	- Board	Tegular 24/90		Tegular 15/90		
	î	Û 24 -				
	24	1 -2		15		
Thickness (mm)	20	20		20		
Dimensions (mm)	600 x 600 625 x 625 675 x 675 1200 x 300 1200 x 600 1250 X 625 1500 x 600 1800 x 600	600 x 600 625 x 625 675 x 675 1200 x 300 1200 x 600 1250 X 625 1500 x 600 1800 x 600		600 x 600 625 x 625 675 x 675 1200 x 300 1200 x 600	135 135 150	60 x 625 0 x 300 0 x 600 0 x 600 0 x 600
System	Exposed demountable - System (0		Exposed demo Exposed - Bar System I.3 Exposed - Cor System F.3	ndraster, de	mountable -
Weight	3.4 kg/m²					
Colour	White					
Sound absorption						
_	α _w = 1.00 as per EN ISO 11654		0.50			4000
	Frequency f (Hz)	125 0.55	250 0.80	500 10001.00 0.95	2000	1.00
	$\alpha_{\rm p}$ NRC = 0.95 as per ASTM C 423		0.00	1.00 0.73	1.00	1.00
Sound attenuation	EN ISO 10848-2 D _{n,f,w} = 25 dB as per EN ISO 717	7-1	CAC = 26 d	B as per ASTM E	413-10	
Fire reaction	Euroclass A2-s1, d0 as per EN	13501-1				
Light reflectance	90%					
Thermal conductivity	λ = 0.040 W/mk as per EN 12	2667				
Air permeability	PM1 (≤ 30 m³/hm²) as per DI	N 18177				
Humidity resistance	95% RH					
Clean room	ISO 4 as per EN ISO 14644-1					
Indoor air quality	EN 13964	e curofina 90.02 EED PROFES				
Cleanability						
Sustainability	EN ISO 14025 EN ISO 14025	LUBRIA WOOL JOSEPH M 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	www.blauer-er	ngel.de/uz132	CERTIFIED cradle cradle bronzs	



ADAGIO dB⁺



- Excellent sound attenuation: 41 dB (24mm) / 43 dB (30mm)
- Excellent light reflectance (90%)
- ISO 4, Indoor Air Quality Gold and Cradle to Cradle Certified® Bronze
- Ideal for individual / private offices.

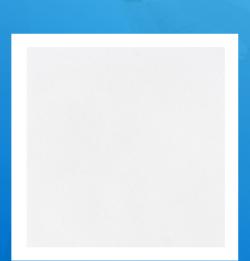


ADAGIO dB⁺

Edge details	Board	Tegular 24/90)		Tegula	r 15/90		
Thickness (mm)	24, 30	24			24	' -		
Dimensions (mm)	600 x 600 625 x 625 1200 x 600 1250 x 625	600 x 600 625 x 625 1200 x 600 1250 x 625						
System	Exposed demountable - System C				Expose	d - Bandras		n C table - System I.3 ole - System F.3
Weight	8.6 kg/m² (24mm) 10.6 kg/m² (30mm)							
Colour	White							
Sound absorption	EN ISO 354 $\alpha_{w} = 0.65$ as per EN ISO 11654	1 - Class C						
	Frequency f (Hz) α_p 24mm α_p 30mm NRC = 0.70 as per ASTM C 42	3	0.40 0.35	250 0.45 0.40	500 0.60 0.65	0.80 0.85	2000 0.95 0.90	0.95 0.95
Sound attenuation	EN ISO 10848-2 D _{n,f,w} = 41 dB (24mm) D _{n,f,w} = 43 dB (30mm) as per EN		C	CAC = 43 c	IB (24mr	n) as per A	ASTM E 413	3-10
Sound reduction	EN ISO 10140-2 R _w = 24 dB (24mm) as per EN I	SO 717-1	R	_ = 25 dB	(30mm)	as per EN	I ISO 717-	.1
Fire reaction	Euroclass A2-s1, d0 as per EN	13501-1						
Light reflectance	90%							
Thermal conductivity	λ = 0.040 W/mk as per EN 1	2667						
Air permeability	PM1 (≤ 30 m³/hm²) as per D	IN 18177						
Humidity resistance	95% RH							
Clean room	ISO 4 as per EN ISO 14644-1							
Indoor air quality	A+ E1	& curofis & curofis & Curofis & Curofis & Curofis & Crep profit & Crep p						
Cleanability								
Sustainability	ENISO 14021 42-44%	ALUBLE WOOL 25 M1 222009 AnnexQ	MIGHT	www.blauer-e	engel.de/uz1		CERTIFIED CERTIF	



ADAGIO HD⁺ 19mm



- ADAGIO HD⁺ 19mm not only offers a smooth and durable surface with a brighter
 white colour for high light reflectance, but is also Cradle to Cradle Certified[®] Bronze.
 It provides Class A sound absorption for acoustic comfort with good levels of sound
 attenuation to improve the privacy between adjacent spaces.
- Excellent sound absorption (0.90 α_w) with good sound attenuation (34 dB).
- For additional acoustical options, please refer to ADAGIO HD⁺ 30mm and ADAGIO HD⁺ 35mm.
- Excellent Light Reflectance: 90%.
- ISO 4, Indoor Air Quality Gold and Cradle to Cradle Certified® Bronze.
- Ideal for individual / private offices.



ADAGIO HD⁺ 19mm

Edge details	Board	Tegular 24/90	Tegular 15/90	SL2	Finesse
_	î		Î		
Thickness (mm)	19	19	1 _ 15 _	19	19
Dimensions (mm)	600 x 600	600 x 600	600 x 600	1350 x 300	600 x 600
Dimensions (mm)	625 x 625 675 x 675 1200 x 300 1200 x 600 1250 x 625 1500 x 600 1800 x 600	625 x 625 675 x 675 1200 x 300 1200 x 600 1250 x 625 1500 x 600 1800 x 600	625 x 625 675 x 675 1200 x 300 1200 x 600 1250 x 625 1350 x 300 1350 x 600 1500 x 600	1350 x 600 1500 x 300 1800 x 300 2000 x 300	625 x 625 1200 x 600 1250 x 625
System	Exposed demountable - Sy	rstem C	Exposed demountable - System C Exposed - Bandraster, demountable - System 1.3 Exposed - Corridor, demountable - System F.3	Semi-concealed planks, demountable - System I.3 Semi-concealed planks - Bandraster, demountable - System I.2 Semi-concealed - Corridor, demountable - System F.2	Concealed, demountable - System A.2 / A.3
Weight	5.2 kg/m²				
Colour	White				
Sound absorption	EN ISO 354 $\alpha_{w} = 0.90$ as po	er EN ISO 11654 -	Class A		
	Frequency $f(H)$ α_p NRC = 0.85 as	z) s per ASTM C 423			1000 2000 4000 0.90 1.00 1.00
Sound attenuation	EN ISO 10848 D _{n,f,w} = 34 dB o	-2 is per EN ISO 717-	1	CAC = 35 dB as per A	STM E 413-10
Sound reduction	EN ISO 10140- R _w = 17 dB as	-2 per EN ISO 717-1			
Fire reaction	Euroclass A2-s	1, d0 as per EN 1	3501-1		
Light reflectance	90%				
Thermal conductivity	λ = 0.060 W/	mk as per EN 126	567		
Air permeability	PM1 (≤ 30 m³	3/ hm²) as per DIN	l 181 <i>77</i>		
Humidity resistance	95% RH				
Clean room	ISO 4 as per E	N ISO 14644-1			
Indoor air quality	+ CARES	EN 13964	roting. N.P. F.		
Cleanability					
Sustainability	% % ENISO 14021 48%	EN ISO 14025	M Annex G	www.blauer-engel.de/uz132	CENTRID oracile to cradje storoz



ADAGIO HD⁺ 30mm



- ADAGIO HD⁺ 30mm not only offers a smooth and durable surface with a brighter
 white colour for high light reflectance, but is also Cradle to Cradle Certified[®] Bronze.
 It provides Class A sound absorption for acoustic comfort with excellent levels of
 sound attenuation to improve the privacy between adjacent spaces.
- Excellent sound absorption (0.90 α_w) with excellent sound attenuation (40 dB).
- For additional acoustical options, please refer to ADAGIO HD⁺ 19mm and ADAGIO HD⁺ 35mm.
- Excellent Light Reflectance: 90%.
- ISO 4, Indoor Air Quality Gold and Cradle to Cradle Certified® Bronze.
- Ideal for individual / private offices.



ADAGIO HD⁺ 30mm

Edge details		Board	Tegular 24/90	Tegular 15/90	SL2		Finesse	e A		
		Î					<u>=</u>		+4	
	<u></u>	24		15	18		'	24	<u></u>	
Thickness (mm)	<u>↓</u>	30	30	30	30		30			
Dimensions (mm)	(>	600 x 600 625 x 625 675 x 675 1200 x 600 1250 x 625	600 x 600 625 x 625 675 x 675 1200 x 600 1250 x 625	600 x 600 625 x 625 675 x 675 1200 x 600 1250 x 625 1350 x 300 1350 x 600	1350 x 300 1350 x 600 1500 x 300 1800 x 300 2000 x 300		62 <i>5</i> 1200) x 600 5 x 625) x 600) x 625		
System		Exposed demountable - Sy	rstem C	Exposed demountable - System C Exposed - Bandraster, demountable - System 1.3 Exposed - Corridor, demountable - System F.3	Semi-concealed - Co	nks - Bandraster,	Conceale	ed, demountab	le - System A.2	/ A.3
Weight	K g N	8.2 kg/m ²								
Colour		White								
Sound absorption		EN ISO 354 $q = 0.90$ as po	er EN ISO 11654 -	Class A						
		Frequency f (H			125 250	500	1000	2000	4000	
		$\alpha_{\rm p}$ NRC = 0.85 as	per ASTM C 423	(0.45 0.70	0.80	0.95	1.00	1.00	
Sound attenuation		EN ISO 10848 D _{n,f,w} = 40 dB o	-2 is per EN ISO 717-	-1	CAC = 4	l 1 dB as per A	ASTM E 41	3-10		
Sound reduction	华	EN ISO 10140- R _w = 22 dB as p	-2 per EN ISO 717-1							
Fire reaction	**	Euroclass A2-s	1, d0 as per EN 1	3501-1						
Light reflectance	7	90%								
Thermal conductivity		λ = 0.060 W /	mk as per EN 120	667						
Air permeability	7777	PM1 (≤ 30 m ³	3/hm²) as per DIN	N 181 <i>77</i>						
Humidity resistance	4,4	95% RH								
Clean room	\ 	ISO 4 as per E	N ISO 14644-1							
Indoor air quality	+	A+	EN 13964	Proof of the control						
Cleanability										
Sustainability		ENISO 14021	EN ISO 14025 RC1172200	MA Armeca		er-engel.de/uz132	CERTIFI cradle to c	cradle		



ADAGIO HD⁺ 35mm



- ADAGIO HD⁺ 35mm not only offers a smooth and durable surface with a brighter
 white colour for high light reflectance, but is also Cradle to Cradle Certified[®] Bronze.
 It provides Class A sound absorption for acoustic comfort with excellent levels of
 sound attenuation to improve the privacy between adjacent spaces.
- Excellent sound absorption (0.90 α_w) with excellent sound attenuation (43 dB).
- For additional acoustical options, please refer to ADAGIO HD⁺ 19mm and ADAGIO HD⁺ 30mm.
- Excellent Light Reflectance: 90%.
- ISO 4, Indoor Air Quality Gold and Cradle to Cradle Certified® Bronze.
- Ideal for individual / private offices.



ADAGIO HD⁺ 35mm

Edge details	Board	Tegular 24/90	Tegular 1	5/90		SL2				
		<u></u>	© 15			2 18				
Thickness (mm)	35	35	35			35				
Dimensions (mm)	600 x 600 625 x 625 1200 x 600 1250 x 625	625 x 625 625 x 625 1200 x 600 1200 x 600 1250 x 625 1250 x 625			1350 x 300 1350 x 600 1500 x 300 1800 x 300 2000 x 300					
System	Exposed demount	table - System C	Exposed - demountal	emountable Bandraster, ble - System Corridor, de 3	1.3	Semi-conc demountal	ealed plant ealed plant ble - System ealed - Con 2	ks - Bandro n I.2	ister,	tem I.3
Weight	9.5 kg/m²									
Colour	White									
Sound absorption	EN ISO 354	er EN ISO 11654 -	Class A							
	Frequency f (H			125	250	500	1000	2000	4000	
	$\alpha_{\rm p}$ NRC = 0.90 at	s per ASTM C 423		0.40	0.65	0.85	1.00	1.00	1.00	
Sound attenuation	EN ISO 10848		-1		CAC = 4	4 dB as pe	r ASTM E 4	413-10		
Sound reduction	EN ISO 10140									
Fire reaction	W .	s 1, d0 as per EN 1	13501-1							
Light reflectance	90%									
Thermal conductivity	λ = 0.060 W /	′mk as per EN 120	667							
Air permeability	PM1 (≤ 30 m	³/ hm²) as per DIN	N 18177							
Humidity resistance	95% RH									
Clean room 🕎	ISO 4 as per E	N ISO 14644-1								
Indoor air quality	A+	EN 13964	urofina E							
Cleanability		P.								
Sustainability	ENISO 14021 52%	EN ISO 14025 BC:1272/20		M1) 3 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	www.blauer	engel.de/uz1	cradle	TIHED Stocradle		



ARMSTRONG PERLA

- Armstrong PERLA is a C2C Bronze certified range with a smooth laminated finish providing balanced acoustic performance of both sound absorption and sound attenuation
- Good sound absorption (0.65(H) α_w) and sound attenuation (36 dB)
- Excellent light reflectance (88%)
- ISO 5
- Ideal for office and learning applications





ARMSTRONG PERLA

Edge details	Board	Tegular 24		Tegular 15/90		
Additional edge details	Ŷ	î Î		Î		
on request		∞ 1 24 1 24 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 15		
Thickness (mm)	17	17		17		
Dimensions (mm)	600 x 600	600 x 600		600 x 600		
Additional sizes on request						
System	Exposed demountable - System C					
Weight	4.6 kg / m²					
Colour	White					
Sound absorption						
	$\alpha_{w} = 0.65(H)$ as per EN ISO 116 Frequency $f(Hz)$		25 250	500 1000	2000	4000
	α _p		40 0.45	0.60 0.80	0.90	0.90
	NRC = 0.70 as per ASTM C 423					
Sound attenuation	EN ISO 10848-2 D _{n.f.w} = 36 dB as per EN ISO 717	7-1	CAC = 37 c	dB as per ASTM E	413-10	
Sound reduction	EN ISO 10140-2 R _w = 18 dB as per EN ISO 717-1					
Fire reaction	Euroclass A2-s1, d0 as per EN	13501-1	RUS KM1 ((G1, V1, D1, T1)	as per 123	-FZ
Light reflectance	88%					
Thermal conductivity	λ = 0.060 W/mk as per EN 12	667				
Air permeability	PM1 (≤ 30 m³/hm²) as per DII	N 18177				
Humidity resistance	95% RH					
Clean room	ISO 5 as per EN ISO 14644-1					
Indoor air quality	□ EN 13964	roofing The CG				
Cleanability						
Sustainability	EN ISO 14025 EN ISO 14025 EL 12772	JOHN WOOL JAMES ON CARRY ON COLORS ON CARRY	www.blauer-e	engel.de/uz132	CERTIFIED Cradle to cradle skowze	



ARMSTRONG PERLA dB

- Armstrong PERLA dB is a C2C Bronze certified range with a smooth laminated finish providing enhanced sound attenuation performance for improving the privacy between adjacent spaces
- Good sound absorption (0.60(H) α_w)
- Excellent light reflectance (88%)
- ISO 5
- Ideal for individual offices





ARMSTRONG PERLA dB

_	_									
Edge details	Board	Tegular 24		Tegular 15/90						
Additional edge details on request	Û	<u></u>		∞ 15 15						
Thickness (mm)	19	19		19						
Dimensions (mm)	600 x 600	600 x 600		600 x 600						
Additional sizes on request										
System	Exposed demountable - System C	Exposed demountable - System C								
Weight	8.1 kg / m ²	8.1 kg / m²								
Colour	White	White								
Sound absorption	EN ISO 354 α _w = 0.60(H) as per EN ISO 116	54 Class C								
	Frequency f (Hz)	12.	5 250	500 1000	2000	4000				
	α_p NRC = 0.65 as per ASTM C 423	0.4	0 0.40	0.55 0.75	0.85	0.95				
Sound attenuation	EN ISO 10848-2 D _{n,f,w} = 41 dB as per EN ISO 717	EN ISO 10848-2 D _{n,f,w} = 41 dB as per EN ISO <i>7</i> 17-1 CAC = 42 dB as per ASTM E 413-10								
Sound reduction	EN ISO 10140-2 R _w = 21 dB as per EN ISO 717-1									
Fire reaction	Euroclass A2-s1, d0 as per EN	Euroclass A2-s1, d0 as per EN 13501-1 RU			RUS KM1 (G1, V1, D1, T1) as per 123-FZ					
Light reflectance	88%	88%								
Thermal conductivity	λ = 0.075 W/mk as per EN 12	λ = 0.075 W/mk as per EN 12667								
Air permeability	PM1 (≤ 30 m³/hm²) as per DII	PM1 (≤ 30 m³/hm²) as per DIN 18177								
Humidity resistance	95% RH	95% RH								
Clean room	ISO 5 as per EN ISO 14644-1	ISO 5 as per EN ISO 14644-1								
Indoor air quality	Min	urofing 2000 DUPON								
Cleanability										
Sustainability	2% ENISO 14021 ENISO 14025 ENISO 14025	JOHN WOOL JOHN WOOL JUNE 50 IN C (400 JUNE 50 IN	www.blauer-e	ngel.de/uz132	CERTIFED Cradle SPONZE					



ARMSTRONG PERLA OP 0.95

- Armstrong PERLA OP 0.95 is a Cradle to Cradle Certified[®] Bronze range with a smooth laminated finish and excellent Class A sound absorption, making it ideal for open plan areas
- Excellent sound absorption (0.95 α_w)
- PERLA OP 19mm planks are available, see separate datasheet
- Good light reflectance (85%)
- ISO 5
- Ideal for open spaces (call centres, libraries, cafeterias, etc.)





ARMSTRONG PERLA OP 0.95

Edge details	Board	Togular 24		Togular	15 /00			
Additional edge details	â	Board Tegular 24		îegulai	Tegular 15/90			
on request	24	<u></u> <u>24</u>		∞ 15	-			
Thickness (mm)	15	15		15				
Dimensions (mm)	600 x 600 675 x 675	600 x 600 675 x 675		600 x 675 x				
Additional sizes on request	1200 x 600	1200 x 600		1200 x				
System	Exposed demountable - System C							
Weight	2.4 - 2.6 kg/m²							
Colour	White	White						
Sound absorption								
	$\alpha_{\rm w}$ = 0.95 as per EN ISO 11654 Frequency f (Hz)	- Class A	125 25	50 500	1000	2000	4000	
	α _p Board, Tegul	ar		80 0.95	0.90	1.00	1.00	
	NRC = 0.90 as per ASTM C 423							
Sound attenuation	EN ISO 10848-2 D _{n.f.w} = 25 dB as per EN ISO 717-1 CAC = 25 dB as per ASTM E 413-10							
Sound reduction	EN ISO 10140-2 R _w = 12 dB as per EN ISO 717-1							
Fire reaction	Euroclass A2-s1, d0 as per EN 13501-1 RUS KM1 (G1, V1, D1, T1) as per 123-FZ Class A as per ASTM E 84					3-FZ		
Light reflectance	85%							
Thermal conductivity	λ = 0.040 W/mk as per EN 12	2667						
Humidity resistance	95% RH							
Clean room	ISO 5 as per EN ISO 14644-1							
Indoor air quality	This This	AIR COLLEGE SOLD SOLD SED FROM						
Cleanability								
Sustainability	ENISO 14021 44 - 66%	CENTRE COM Armed C	adle					



ARMSTRONG PERLA OP 19mm

- Armstrong PERLA OP 19mm Planks provide a smooth white laminated finish, and with excellent Class A sound absorption and good sound attenuation, they are the ideal solution for both open plan and corridor applications
- Excellent sound absorption (0.90 $\alpha_{\rm w}$) and good sound attenuation (34 dB)
- Good light reflectance (85%)
- ISO 5
- Ideal for open spaces (call centres, libraries, cafeterias, etc.) as well as corridors





ARMSTRONG PERLA OP 19mm

Edge details		Board		SL2				
Additional edge details on request		24		2 18				
Thickness (mm)	<u>↓</u>	19		19				
Dimensions (mm) Additional sizes on request	()	1500 x 600 1800 x 600		1500 x 300 1800 x 300				
System		Exposed demountable - System C Exposed - Bandraster, demountable - System I.3 Exposed - Corridor, demountable - System F.3		Semi-conceale Semi-conceale	ed planks -	Bandraste	r, demount	able - System I.2
Weight	Kg	$5.2 \text{ kg} / \text{m}^2$						
Colour		White						
Sound absorption		EN ISO 354 $\alpha_{w} = 0.90$ as per EN ISO 11654 - Class A	10		500	1000	0000	4000
		Frequency $f(Hz)$ α_p	0.4		500 0.80	0.90	2000	1.00
		NRC = 0.85 as per ASTM C 423	0.4	0.70	0.00	0.70	1.00	1.00
Sound attenuation		EN ISO 10848-2 D _{n,f,w} = 34 dB as per EN ISO 717-1		CAC = 35	dB as pe	er ASTM E	413-10	
Fire reaction	**	Euroclass A2-s1, d0 as per EN 13501-1		RUS KM 1	(G1, V1	, D1, T1)	as per 120	3-FZ
Light reflectance		85%						
Thermal conductivity		λ = 0.060 W/mk as per EN 12667						
Air permeability	7/1/7	PM1 (≤ 30 m³/hm²) as per DIN 18177						
Humidity resistance	4,4	95% RH						
Clean room	***	ISO 5 as per EN ISO 14644-1						
Indoor air quality	+	A+ E1 IACG						
Cleanability								
Sustainability		8000 14021 EN ISO 14025 EC 1272/2008 Armer O	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	www.blaue	r-engel.de/UZ		CERTIFIED Cradle to cradle	



ARMSTRONG PERLA OP 1.00

	_							
Edge details	Board	Tegular 24		Tegular 15	5/90			
Additional edge details on request	124	<u></u>		∞ 15 15				
Thickness (mm)	20	20		20				
Dimensions (mm) Additional sizes	600 x 600 675 x 675 1200 x 600	600 x 600 675 x 675 1200 x 600		600 x 60 675 x 67	75			
on request	0.0							
System	Exposed demountable - System (
Weight	3.1 kg / m ²							
Colour	White							
Sound absorption	EN ISO 354 α _ω = 1.00 as per EN ISO 11654	Class A						
	Frequency f (Hz)	125	250	500 1	000	2000	4000	
	$\alpha_{_{\mathrm{p}}}$	0.50				1.00	1.00	
	NRC = 0.95 as per ASTM C 423	3						
Sound attenuation	EN ISO 10848-2							
	D _{n,f,w} = 25 dB as per EN ISO 717	7-1	CAC = 25 c	B as per A	STM E 41	3-10		
Sound reduction	EN ISO 10140-2 R _w = 12 dB as per EN ISO 717-1							
Fire reaction	Euroclass A2-s1, d0 as per EN	13501-1	RUS KM1 (G1, V1, D	1, T1) as	per 123	-FZ	
Light reflectance	85%							
Thermal conductivity	λ = 0.040 W/mk as per EN 12	2667						
Humidity resistance	95% RH							
Clean room	ISO 4 as per EN ISO 14644-1							
Indoor air quality	Mh	AR COLUMN TO THE						
Cleanability		>						
Sustainability	EN ISO 14021 EN ISO 14025 EN ISO 14025	CGETTED COAD Annue Q						



AMF THERMATEX® Acoustic

- The laminated finish of AMF THERMATEX® Acoustic creates a smooth, white appearance and provides good levels of sound absorption and excellent sound attenuation
- Good sound absorption (0.65 (H) α_w)
 Excellent sound attenuation (40 dB; SL2)
- High sound attenuation (38 dB; Board, Tegular 24, Tegular 15, Tegular 15/90)
- Excellent light reflectance (88%)
- Ideal for retail, offices and meeting rooms, installation rooms or production areas





AMF THERMATEX® ACOUSTIC

Edge details	Board	Tegular 24 â	Tegular 15	Tegular 15/90 û	SL2 û
Additional edge details on request	124	<u>∞</u> 24	<u></u>	<u></u>	24
Thickness (mm)	19	19	19	19	19
Dimensions (mm)	600 x 600 625 x 625	600 x 600 625 x 625	600 x 600	600 x 600	1200 x 300 1500 x 300
Additional sizes on request	1200 x 600				1800 x 300 2000 x 300 2500 x 300
System	Exposed demountable	- System C			Semi-concealed planks, demountable - System I.3 Semi-concealed planks - Bandraster, demountable - System I.2 Semi-concealed planks - Corridor, demountable - System F.2
Weight	5.0 - 8.6 kg / m ²				
Colour	White				
Sound absorption	EN ISO 354	ENLICO 11454 Cl			
•	Frequency $f(Hz)$	EN ISO 11654 - Clas s	125	250 500 100	00 2000 4000
	α, Ε	Board, Tegular 24, Tegu		0.45 0.60 0.8	
	NRC = 0.70 as per A	Tegular 15/90, SL2 ASTM C 423			
Sound attenuation	$D_{n,f,w} = 40 \text{ dB (SL2)} \text{ as}$	Tegular 24, Tegular 15, T per EN ISO 717-1 Tegular 24, Tegular 24/			E 413-10
Sound reduction	EN ISO 10140-2 R _w = 22 dB as per EN	NISO 717-1			
Fire reaction	Euroclass A2-s1, d0 Class A as per ASTM		RUS KM	I (G1, V1, D1, T1) as	per 123-FZ
Light reflectance	88%				
Thermal conductivity	λ = 0.060 W/mk o	s per EN 12667			
Humidity resistance	95% RH				
Clean room	ISO 3 as per EN ISC	14644-1			
Indoor air quality	A+ E1	SOUP COLORS PRODUCTION			
Cleanability	PR				
Sustainability	% EN ISO 14021 41-49%	cradle	nito ocrade		



AMF THERMATEX® Antaris

- AMF THERMATEX® Antaris is a white, laminated mineral tile and offers Class A sound absorption. AMF THERMATEX® Antaris provides fire protection and a hygienic ceiling solution
- Excellent sound absorption (0.90 α_w)
- High light reflectance (86%)
- ISO :
- Ideal for retail, offices and meeting rooms, installation rooms or production areas



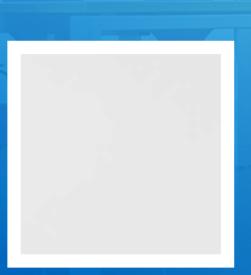
AMF THERMATEX® ANTARIS



Edge details Additional edge details on request	Board D	Tegular 24/90	Tegular Î	15/90				
Thickness (mm)	15	15	15					
Dimensions (mm) Additional sizes on request	600 x 600 675 x 675 1200 x 600	600 x 600 675 x 675 1200 x 600	600 x 675 x 1200 x	c 675				
System	Exposed demountable	- System C						
Weight	2.9 kg / m ²							
Colour	White							
Sound absorption	EN ISO 354 $\alpha_{w} = 0.90$ as per EN IS Frequency f (Hz) α_{p} NRC = 0.90 as per AS		125 0.50	250 0.80	500 0.85	1000	2000	4000
Sound attenuation	EN ISO 10848-2 D _{n,f,w} = 28 dB as per El	N ISO 717-1	CAC =	29 dB as	per ASTM	E 413-10		
Sound reduction	EN ISO 10140-2 R _w = 13 dB as per EN I	ISO 717-1						
Fire reaction	Euroclass A2-s1, d0 a Class A as per ASTM		RUS K	M1 (G1,	V1, D1, 1	'1) as per	123-FZ	
Light reflectance	86%							
Thermal conductivity	$\lambda = 0.040 \text{ W/mk}$ as	per EN 12667						
Humidity resistance	95% RH							
Clean room 🕎	ISO 5 as per EN ISO	14644-1						
Indoor air quality	A+ E1	a curofin Sp.D. IACG						
Cleanability	P P							
Sustainability	EN 150 14021 43%	BIOSOLUBILE WOOL EC 1272/2008 Armes Q	M1) 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	www.blauer	rengel.de/uz	132		



AMF THERMATEX® Antaris C



- AMF THERMATEX® Antaris C tiles are made from a new generation biosoluble mineral wool, clay and starch and offers excellent fire resistance. The smooth, white laminate finish provides good levels of sound absorption for acoustic comfort
- Good sound absorption (0.70 α_w)
- High light reflectance (86%)
- ISO 5
- Ideal for retail, offices and meeting rooms, installation rooms or production areas





AMF THERMATEX® ANTARIS C

Edge details	Board	Tegular 24			Tegulo	ar 15		
Additional edge details on request	Û				(i	5		
Thickness (mm)	13	13			13			
Dimensions (mm) Additional sizes on request	600 x 600 1200 x 600	600 x 600			600 :	x 600		
System	Exposed demountable - System C							
Weight	3.0 kg / m²							
Colour	White							
Sound absorption	EN ISO 354 $\alpha_{\rm w}$ = 0.70 as per EN ISO 11654 Frequency f (Hz)	- Class C	125	250	500	1000	2000	4000
	α _P NRC = 0.70 as per ASTM C 423	}	0.40	0.55	0.60	0.75	0.95	1.00
Sound attenuation	EN ISO 10848-2 D _{n,f,w} = 30 dB as per EN ISO 717	'- 1		CAC = 30	dB as per	r ASTM E	413-10	
Sound reduction	EN ISO 10140-2 R _w = 18 dB as per EN ISO <i>717-</i> 1							
Fire reaction	Euroclass A2-s1, d0 as per EN	13501-1		RUS KM1	(G1, V1	, D1, T1)	as per 123	3-FZ
Light reflectance	86%							
Thermal conductivity	λ = 0.060 W/mk as per EN 12	2667						
Humidity resistance	90% RH							
Clean room	ISO 5 as per EN ISO 14644-1							
Indoor air quality	And Bic En 13964	on Profits						
Cleanability	P							
Sustainability	BIOSOLUBILE WOOL EC 12772/2008 Annex O	1) So CLARGE SO	olauer-enge	I.de /uz132				



AMF THERMATEX® Thermofon

- AMF THERMATEX® Thermofon features a smooth, white laminated finish and modern design visual. It provides high sound absorption for enhanced acoustic comfort
- High sound absorption (0.80 (H) α_w)
- Excellent light reflectance (88%)
- ISO 4
- Ideal for offices, classrooms and learning applications





AMF THERMATEX® THERMOFON

Edge details	Board	Tegular 24/90			Tegulai	15/90	
Additional edge details on request	<u> </u>	© 24			© 15	-	
Thickness (mm)	15	15			15		
Dimensions (mm) Additional sizes on request	600 x 600 625 x 625 1200 x 600 1250 x 625	600 x 600 625 x 625 1200 x 600			600 x 625 x 1200 x	625	
System	Exposed demountable - System C						
Weight	2.9 kg / m ²						
Colour	White						
Sound absorption	EN ISO 354 α_w = 0.80 (H) as per EN ISO 11654 Frequency f (Hz) α_p NRC = 0.85 as per ASTM C 423	- Class B 125 0.55	250 0.75	500 0.75	1000	2000	4000
Sound attenuation	EN ISO 10848-2 D _{n,f,w} = 28 dB as per EN ISO 717-1	CA	C = 29 dB (as per AS	TM E 413-	10	
Sound reduction	EN ISO 10140-2 R _w = 13 dB as per EN ISO <i>7</i> 17-1						
Fire reaction	Euroclass A2-s1, d0 as per EN 1350 Class A as per ASTM E 84	01-1 RUS	6 KM1 (G 1	I, VI, D I	I, T1) as p	oer 123-FZ	
Light reflectance	88%						
Thermal conductivity	λ = 0.040 W/mk as per EN 12667	,					
Humidity resistance	95% RH						
Clean room 🕎	ISO 4 as per EN ISO 14644-1						
Indoor air quality	A+ E1 IACG						
Cleanability							
Sustainability	ENISO 14025 ENISO 14025 ENISO 14025 ENISO 14025	WWW	v.blauer-engel.d	le/uz132			



AMF TOPIQ® Prime



- $\bullet~$ AMF TOPIQ $^{\! \odot}$ Prime is a very light stone wool panel with a modern, smooth surface.
- Excellent sound absorption (0.95 $\alpha_{\rm w}$)
- Excellent light reflectance (88%)
- ISO 5
- Ideal for offices, retail, classrooms, learning applications and underground garages





AMF TOPIQ® PRIME

Edge details	Board	Tegular 24/90)		Tegul	ar 15/90		
Additional edge details on request	<u> </u>	Ĉ			∞ <u> </u>	15		
Thickness (mm)	15	15			15			
Dimensions (mm) Additional sizes on request	600 x 600 625 x 625 1200 x 600 1250 x 625	600 x 600 625 x 625 1200 x 600			625	x 600 x 625 x 600		
System	Exposed demountable - System C							
Weight	2.1 kg / m²							
Colour	White							
Sound absorption	EN ISO 354 $\alpha_{w} = 0.95$ as per EN ISO 11654	- Class A	10.5	0.50	500	1000	0000	4000
	Frequency f (Hz) α_p NRC = 0.90 as per ASTM C 423		0.50	250 0.85	500 0.95	0.90	1.00	1.00
Sound attenuation	EN ISO 10848-2 D _{n,f,w} = 24 dB as per EN ISO 717	- 1	(CAC = 24	dB as pe	r ASTM E 4	413-10	
Sound reduction	EN ISO 10140-2 R _w = 13 dB as per EN ISO 717-1							
Fire reaction	Euroclass A1 as per EN 13501-1 Class A as per ASTM E 84		F	RUS KM2	(G1, V2	2, D1, T1)	as per 123	3-FZ
Light reflectance	88%							
Humidity resistance	100% RH							
Clean room	ISO 5 as per EN ISO 14644-1							
Indoor air quality	Min	UR COLUMN						
Cleanability		***						
Sustainability	EC 1372/2008 Arres Q	N CC _{4eg} 2 N CC _{4eg} 2 N CC _{4eg} 2 N CC 2 N	auer-engel	l.de/uz132				



AMF TOPIQ® Efficient Pro



- Excellent sound absorption (1.00 α_w)
- Excellent light reflectance (88%)
- ISO 4
- Ideal for offices, classrooms, learning applications and underground garages





AMF TOPIQ® EFFICIENT PRO



Edge details	Board	Tegular 24/9	90		Tegulo	ar 15/90		
Additional edge details on request		<u></u>			<u></u>	15		
Thickness (mm)	20	20			20			
Dimensions (mm) Additional sizes on request	600 x 600 625 x 625 1200 x 600	600 x 600 625 x 625 1200 x 600			625	x 600 x 625 x 600		
System	Exposed demountable - System C							
Weight	2.8 kg / m²							
Colour	White							
Sound absorption	EN ISO 354 $\alpha_w = 1.00$ as per EN ISO 11654 - Frequency f (Hz) α_p NRC = 0.95 as per ASTM C 423		125 0.45	250 0.90	500	1000	2000	4000
Sound attenuation	EN ISO 10848-2 D _{n,f,w} = 25 dB as per EN ISO 717-	-1		CAC = 25	dB as per	· ASTM E 4	413-10	
Sound reduction	EN ISO 10140-2 R _w = 15 dB as per EN ISO 717-1							
Fire reaction	Euroclass A1 as per EN 13501-1			RUS KM2	(G1, V2	, D1, T1)	as per 12	3-FZ
Light reflectance	88%							
Humidity resistance	100% RH							
Clean room	ISO 4 as per EN ISO 14644-1							
Indoor air quality	A E1 IA	orefus E						
Cleanability								
Sustainability	BIOSOCURILE WOOL EN ISO 14021 EC 12772/2008 Arrows Q 333%	1) R	blauer-enge	I.de/uz132				

Healthcare & Hygiene







UNDER CONSTANT SCRUTINY
AND DEMANDING THE HIGHEST
LEVELS OF COMFORT AND
CLEANLINESS, HEALTHCARE
SETTINGS GO THROUGH
CONTINUAL CHANGES TO
ENSURE THE BEST POSSIBLE
ENVIRONMENT FOR
PATIENTS AND HEALTHCARE
PROFESSIONALS.

Reaching the essential criteria for individual risk zones, our easy-to-clean products deliver a strong acoustic performance, with impressive sound-absorbing and sound-blocking properties to help create privacy, as well as bring in daylight to reduce in-patient time.



ARMSTRONG BIOGUARD ACOUSTIC OP



- Armstrong BIOGUARD ACOUSTIC OP is suitable for demanding healthcare
 applications requiring Class A sound absorption and stringent cleaning methods:
 dry steam and damp cloth using standard detergents. It does not contribute to the
 growth of MRSA
- Excellent sound absorption (0.95 α_w)
- Good light reflectance (85%)
- ISO 3
- Ideal for healthcare environments with severe risk of infection





ARMSTRONG BIOGUARD ACOUSTIC OP

Edge details		Board			Tegular 24	1		Tegulo	ır 15/90		
Additional edge details on request		24						<u></u>	15		
Thickness (mm)	<u>↓</u>	20			20			20			
Dimensions (mm) Additional sizes on request	()	600 x 600 1200 x 600			600 x 60 1200 x 60				x 600 x 600		
System		Exposed der	mountable - Sy	ystem C							
Weight	Kg	$3.3 \text{ kg}/\text{m}^2$									
Colour		White									
Sound absorption		Frequency f	s per EN ISO (Hz)		Class A	125 0.55	250 0.85	500 0.95	1000	2000	4000 1.00
Sound attenuation		EN ISO 108	as per ASTM 348-2 B as per EN IS		I		CAC = 25	dB as pe	er ASTM E	413-10	
Fire reaction	**		2-s1, d0 as p per ASTM E 8		3501-1		RUS KM1	(G1, V1	, D1, T1)	as per 123	3-FZ
Light reflectance	7	85%									
Thermal conductivity		λ = 0.040 \	N/mk as per	r EN 126	67						
Humidity resistance	4,4	95% RH									
Clean room	***	ISO 3 as pe	er EN ISO 146	544-1							
Indoor air quality		A+	EN 13964	SALAN OF THE PROPERTY OF THE P	RODU						
Cleanability				Sept.			**+	O.	3		
Sustainability		% 1 EN ISO 14021	EN ISO 14025	BICSCLUBILI EC 1272/2006	9						



ARMSTRONG BIOGUARD ACOUSTIC



- Armstrong BIOGUARD ACOUSTIC combines excellent cleanability, resistance to disinfectants and sound absorption. Along with its antimicrobial performance, it is an ideal solution for healthcare environments
- Good sound absorption (0.60(H) α_w) and sound attenuation (36 dB)
- Good light reflectance (85%)
- ISO 4
- Ideal for healthcare environments with average or severe risk of infection





ARMSTRONG BIOGUARD ACOUSTIC

Edge details		Board			Togular 24			T I	15		
Additional edge details	-	Boara			Tegular 24 Î			Tegulo	ar io Î		
on request		24			<u>∞</u> 24			8	15		
Thickness (mm)	<u>↓</u>	17			17			17			
Dimensions (mm)	 	600 x 600 1200 x 600			600 x 600 1200 x 600				x 600 x 600		
Additional sizes on request											
System		Exposed der	mountable - Sy	ystem C							
Weight	Kg	$4.5 \text{ kg} / \text{m}^2$									
Colour		White									
Sound absorption		EN ISO 354	l) as per EN IS	SO 11654	- Class C						
		Frequency f		00 11004	- Cluss C	125	250	500	1000	2000	4000
		$\alpha_{_{\rm P}}$				0.35	0.40	0.50	0.70	0.85	0.90
		NRC = 0.60	as per ASTM	C 423							
Sound attenuation		EN ISO 108		20 717 1			CAC 03	. In	A CTA A F	410, 10	
		D _{n,f,w} = 36 d l	B as per EN IS	50 /1/-1			CAC = 37	ab as pe	er ASIM E	413-10	
Sound reduction	*	EN ISO 1014 R _w = 18 dB 6	40-2 as per EN ISO	717-1							
Fire reaction	**	Euroclass A2	2-s1, d0 as pe	er EN 135	01-1		RUS KM1	(G1, V1	, D1, T1)	as per 120	3-FZ
Light reflectance	7	85%									
Thermal conductivity		λ = 0.060 V	V/mk as per	EN 1266	7						
Humidity resistance	4,4	95% RH									
Clean room	W	ISO 4 as pe	r EN ISO 146	44-1							
Indoor air quality		A+	EN 13964	GOLD PR	de la companya de la						
Cleanability				Section 1			**+			7	
Sustainability		% S EN ISO 14021	EN ISO 14025	BC 1272/2008 And	ool.						



ARMSTRONG BIOGUARD PLAIN 15mm



- Armstrong BIOGUARD PLAIN combines excellent cleanability and resistance to disinfectants. Along with its antimicrobial performance, it is an ideal solution for healthcare environments
- Good sound attenuation (35 dB)
- Excellent light reflectance (87%)
- ISO 5
- Ideal for healthcare environments with average or severe risk of infection





ARMSTRONG BIOGUARD PLAIN 15mm

Edge details	Board	Tegular 24			Tegula	- 15		
Additional edge details	â	Î			ieguid	ĵ		
on request	24	∞ 24			<u></u>	5		
Thickness (mm)	15	15			15			
Dimensions (mm) Additional sizes on request	600 x 600 1200 x 600	600 x 600 1200 x 600				x 600 x 600		
System	Exposed demountable - System C							
Weight	3.5 - 3.6 kg / m²							
Colour	White							
Sound absorption	EN ISO 354 α _w = 0.20(L) as per EN ISO 1165	54 - Class E						
	Frequency f (Hz)		125	250	500	1000	2000	4000
	α_{p} NRC = 0.20 as per ASTM C 423		0.40	0.25	0.15	0.15	0.20	0.30
Sound attenuation	EN ISO 10848-2 D _{n.f.w} = 35 dB as per EN ISO 717-	-1		CAC = 35	dB as pe	r ASTM E	413-10	
Sound reduction	EN ISO 10140-2 R _w = 19 dB as per EN ISO 717-1							
Fire reaction	Euroclass A2-s1, d0 as per EN 13	3501-1		RUS KM1	(G1, V1	D1, T1)	as per 123	3-FZ
Light reflectance	87 %							
Thermal conductivity	λ = 0.060 W/mk as per EN 126	567						
Humidity resistance	95% RH							
Clean room	ISO 5 as per EN ISO 14644-1							
Indoor air quality	A-A-B-C EN 13964	Profits						
Cleanability			+					
Sustainability	BNISO 14021 31 - 42%							



ARMSTRONG SANIGUARD

- Armstrong SANIGUARD fulfils all hygienic requirements for healthcare applications and does not contribute to the growth of MRSA. It offers a smooth laminated finish and Class A sound absorption
- Excellent sound absorption (0.95 α_w)
- Good light reflectance (85%)
- ISO 5
- Ideal for healthcare environments with average risk of infection





ARMSTRONG SANIGUARD

e 1 - 1 - 2	D 1	T 04			т 1	15 /00		
Edge details Additional edge details	Board fi	Tegular 24 Î				ar 15/90 Î		
on request	124	∞ 1/24			80	15		
all	<u> 24 </u>							
Thickness (mm)	15	15			15			
Dimensions (mm)	600 x 600 1200 x 600	600 x 600			600	x 600		
Additional sizes on request	1200 X 000							
System	Exposed demountable - System (С						
Weight	2.5 kg / m ²							
Colour	White							
Sound absorption	EN ISO 354							
en e	$\alpha_{w} = 0.95$ as per EN ISO 11654	- Class A						
	Frequency f (Hz)		125 0.50	250 0.80	500 0.95	1000 0.85	2000	1.00
	$\alpha_{\rm p}$ NRC = 0.90 as per ASTM C 423	3	0.50	0.80	0.93	0.65	0.93	1.00
Sound attenuation	EN ISO 10848-2							
2011	D _{n,f,w} = 25 dB as per EN ISO 717	7-1		CAC = 25	dB as pe	er ASTM E	413-10	
Fire reaction	Euroclass A2-s1, d0 as per EN	13501-1		RUS KM1	(G1, V1	, D1, T1)	as per 120	B-FZ
Light reflectance	85%							
Thermal conductivity	λ = 0.040 W/mk as per EN 13	2667						
Humidity resistance	95% RH							
Clean room	ISO 5 as per EN ISO 14644-1							
Indoor air quality	A-ABC EN 13964	CONTROL OF THE PROPERTY OF THE						
Cleanability	No.							
Sustainability	ENISO 14021 EN ISO 14025 EC127	ALUBLE WOOL 22000 Armer Q						



AMF THERMATEX® Aquatec



- AMF THERMATEX® Aquatec is the optimal solution for high humidity areas of up to 100% RH. It offers excellent sound absorption, and is suitable for high pressure water cleaning. Its high-quality design makes it the ideal solution for hygiene and healthcare environments
- Excellent sound absorption (0.90 α_w)
- Excellent light reflectance (88%)
- ISO 3
- Ideal for healthcare environments, laboratories, treatment rooms, locker rooms or shower areas





AMF THERMATEX® AQUATEC

Edge details	Board	Tegular 24/90	Tegular 15/90	Finesse Û						
Additional edge details on request	24	<u>∞</u> 24	∞ 15 15	24	0	-				
Thickness (mm)	19	19	19	19						
Dimensions (mm)	600 x 600 625 x 625	600 x 600	600 x 600	600 x 6						
Additional sizes on request	023 x 023	625 x 625 625 x 625 625 x 625 625 x 625								
System	Exposed dem	Exposed demountable - System C Concealed, demountable - System A.2 / A.3								
Weight	5.2 kg / m ²									
Colour	White									
Sound absorption	EN ISO 354 $\alpha = 0.90$ as	per EN ISO 116	54 - Class A							
	Frequency f			125	250	500	1000	2000	4000	
	$\alpha_{_{P}}$			0.60	0.70	0.85	0.90	1.00	1.00	
	NRC = 0.90	as per ASTM C	423							
Sound attenuation	EN ISO 1084 D _{n,f,w} = 29 dE	48-2 3 as per EN ISO	717-1	CAC	= 29 dB	as per AS	TM E 413-	10		
Sound reduction	EN ISO 1014 R _w = 16 dB c	10-2 s per EN ISO 713	7-1							
Fire reaction	Euroclass A2 Class A as p	-s1, d0 as per E er ASTM E 84	N 13501-1	RUS	KM1 (G	1, V1, D1	, T1) as p	er 123-FZ		
Light reflectance	88%									
Thermal conductivity	λ = 0.060 V	//mk as per EN	1 12667							
Air permeability	PM1 (≤ 30 n	n³/hm²) as per D	IN 181 <i>77</i>							
Humidity resistance	100% RH									
Clean room	ISO 3 as per	EN ISO 14644-	-1							
Indoor air quality	MADE:	EN 13964	ACG							
Cleanability										
Sustainability	EN ISO 14021	EN ISO 14025 EC127	CALUBLE WOOL 72727008 APPORT Q WWW.bla	uer-engel.de/	uz132					



AMF THERMATEX® Aquatec Hygena

- AMF THERMATEX® Aquatec Hygena is the ideal solution for high humidity areas of up to 100% RH. It offers excellent sound absorption, and its washable, high quality design makes it the ideal solution for hygiene and healthcare environments.
 The surface is washable and anti-microbial (resistant to the growth of germs, bacteria and fungi)
- Excellent sound absorption (0.90 α_w)
- Excellent light reflectance (88%)
- ISO 3
- Ideal for healthcare environments, laboratories, treatment rooms, intensive care units, locker rooms or shower areas



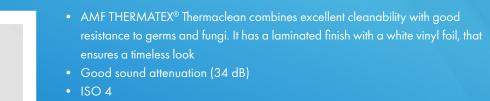


AMF THERMATEX® AQUATEC HYGENA

Edge details		Board						
Additional edge details on request		<u><u><u> </u></u></u>						
Thickness (mm)	<u>↓</u>	19						
Dimensions (mm)	< >	600 x 600 625 x 625						
Additional sizes on request		023 x 023						
System		Exposed demountable - System C						
Weight	Kg	5.2 kg / m ²						
Colour		White						
Sound absorption		EN ISO 354 α _w = 0.90 as per EN ISO 11654 - Class A						
		Frequency f (Hz)	125	250	500	1000	2000	4000
		$\alpha_{_{p}}$	0.60	0.70	0.85	0.90	1.00	1.00
		NRC = 0.90 as per ASTM C 423						
Sound attenuation		EN ISO 10848-2 D _{n,f,w} = 29 dB as per EN ISO <i>7</i> 17-1		CAC = 29	dB as pe	er ASTM E	413-10	
Sound reduction	半	EN ISO 10140-2 R _w = 16 dB as per EN ISO 717-1						
Fire reaction	**	Euroclass A2-s1, d0 as per EN 13501-1 Class A as per ASTM E 84		RUS KM1	(G1, V 1	, D1, T1)	as per 12:	3-FZ
Light reflectance	7	88%						
Thermal conductivity		$\lambda = 0.060 \text{ W/mk}$ as per EN 12667						
Air permeability		PM1 (≤ 30 m³/hm²) as per DIN 18177						
Humidity resistance	4,4	100% RH						
Clean room	***	ISO 3 as per EN ISO 14644-1						
Indoor air quality	<u>+</u>	A+ E1 IACG						
Cleanability								
Sustainability		80000LUBLE WOOL FIN 150 1402t 60 E277/2008 Arress G						



AMF THERMATEX® Thermaclean



Ideal for healthcare environments, laboratories, treatment rooms, intensive care units





AMF THERMATEX® THERMACLEAN

Edge details		Board							
Additional edge details		ĵ							
on request		24							
Thickness (mm)	<u>↓</u>	15							
Dimensions (mm)	k	600 × 600							
Additional sizes on request		625 x 625							
System		Exposed demountable - Syste	m C						
Weight	Kg	$3.6 \text{ kg} / \text{m}^2$							
Colour		White							
Sound absorption		EN ISO 354	11454						
		α_{w} = 0.10 (L) as per EN ISO Frequency f (Hz)	11034	125	250	500	1000	2000	4000
		$\alpha_{_{\mathrm{P}}}$		0.35	0.20	0.10	0.10	0.10	0.10
		NRC = 0.15 as per ASTM C 2	123						
Sound attenuation		EN ISO 10848-2 D _{n,f,w} = 34 dB as per EN ISO	717-1	CAC =	36 dB as	per ASTA	1 E 413-10)	
Sound reduction	*	EN ISO 10140-2 R _w = 19 dB as per EN ISO 71	7-1						
Fire reaction	**	Euroclass A2-s3, d0 as per E	EN 13501-1	RUS K	M1 (G1,	V1, D1,	[1) as per	123-FZ	
Light reflectance	7	81%							
Thermal conductivity		λ = 0.060 W/mk as per EN	l 12667						
Air permeability	11/17	PM1 (≤ 30 m³/hm²) as per D	DIN 18177						
Humidity resistance	44	95% RH							
Clean room	W	ISO 4 as per EN ISO 14644	-1						
Indoor air quality		A+ E1							
Cleanability									
Sustainability		EN 150 14021 80 1272/2008 Arries G							



AMF TOPIQ® Prime Hygena



- AMF TOPIQ® Prime Hygena is a very light stone wool panel with a modern, smooth surface. The surface is washable and anti-microbial (resistant to the growth of germs, bacteria and fungi)
- Excellent sound absorption (0.95 α_w)
- Excellent light reflectance (88%)
- ISO 5
- Ideal for healthcare facilities in general, kitchens, food industries, laboratories, etc.





AMF TOPIQ® PRIME HYGENA

Edge details	Board	Tegular 24/9	0		Tegular 1	5/90		
Additional edge details on request	124	<u>∞</u> 24			© 15			
Thickness (mm)	15	15			15			
Dimensions (mm) Additional sizes on request	600 x 600 625 x 625 1250 x 625	625 x 625 625 x 625						
System	Exposed demountable - System C							
Weight	2.1 kg/m²							
Colour	White							
Sound absorption	EN ISO 354 α_w = 0.95 as per EN ISO 11654 - Frequency f (Hz) α_p NRC = 0.90 as per ASTM C 423		125 0.50	250 0.85	500 0.95	1000	2000	4000
Sound attenuation	EN ISO 10848-2 D _{n,f,w} = 24 dB as per EN ISO 717-			CAC = 24	dB as per	· ASTM E 4	413-10	
Sound reduction	EN ISO 10140-2 R _w = 13 dB as per EN ISO 717-1							
Fire reaction	Euroclass A1 as per EN 13501-1 Class A as per ASTM E 84			RUS KM2	2 (G1, V2	, D1, T1)	as per 120	3-FZ
Light reflectance	88%							
Humidity resistance	100% RH							
Clean room 🕎	ISO 5 as per EN ISO 14644-1							
Indoor air quality	EN 13964 A E1							
Cleanability			3					
Sustainability	EN ISO 14021 EC 1372/2009 Armer Q							



AMF TOPIQ® Efficient Pro Hygena

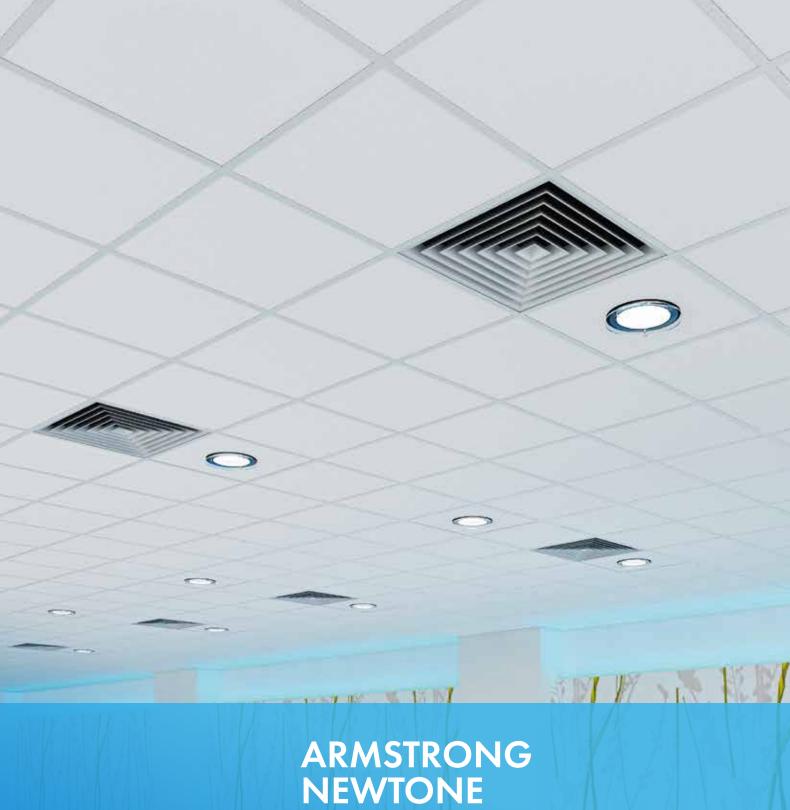
- AMF TOPIQ® Efficient Pro Hygena is a very light stone wool panel with a modern, smooth surface. The surface is washable and anti-microbial (resistant to the growth of germs, bacteria and fungi)
- Excellent sound absorption (1.00 α_w)
- Excellent light reflectance (88%)
- ISO 4
- Ideal for healthcare facilities in general, kitchens, food industries, laboratories, etc.





AMF TOPIQ® EFFICIENT PRO HYGENA

Edge details		Board			Tegulo	ar 24/90			Tegu	lar 15/90				
Additional edge details on request		24			© 24				<u>∞</u>	15				
Thickness (mm)	<u>↓</u>	20			20			20						
Dimensions (mm) Additional sizes on request	«··· ···»	600 x 600 1200 x 600			600 x 625 x				600 x 600 625 x 625					
System		Exposed den	nountable - Sy	ystem C										
Weight	Kg	$2.8 \mathrm{kg} / \mathrm{m}^2$												
Colour		White												
Sound absorption		EN ISO 354 $\alpha_{w} = 1.00$ as Frequency f	s per EN ISO	11654 - (Class A		10.5	050	500	1000	0000	4000		
		$\alpha_{_{P}}$	as per ASTM	1 C 423			125	250 0.90	1.00	0.95	1.00	1.00		
Sound attenuation		EN ISO 108 D _{n,f,w} = 25 di	48-2 B as per EN IS	SO 717-1				CAC = 25	dB as per	- ASTM E 4	413-10			
Sound reduction	华	EN ISO 1014 R _w = 15 dB c	40-2 as per EN ISO	717-1										
Fire reaction	**	Euroclass A1	l as per EN 13	3501-1				RUS KM2	(G1, V2	, D1, T1)	as per 120	3-FZ		
Light reflectance	7	88%												
Humidity resistance	4,4	100% RH												
Clean room	\ \ \ \ \ \ \ \ \ \ \ \ \ \	ISO 4 as pe	r EN ISO 146	544-1										
Indoor air quality		A A	E 1											
Cleanability			R.)							
Sustainability		% \$\frac{1}{2}\$ EN ISO 14021	BIOSOLUBLE WOOL EC 1277/2008 Annex Q											



- Armstrong NEWTONE is a hydrated calcium silicate ceiling tile offering 100% RH performance and is suitable for use in areas subject to extremes of humidity and temperature
- High sound attenuation (37 dB)
- Ideal for spas and water parks





ARMSTRONG NEWTONE



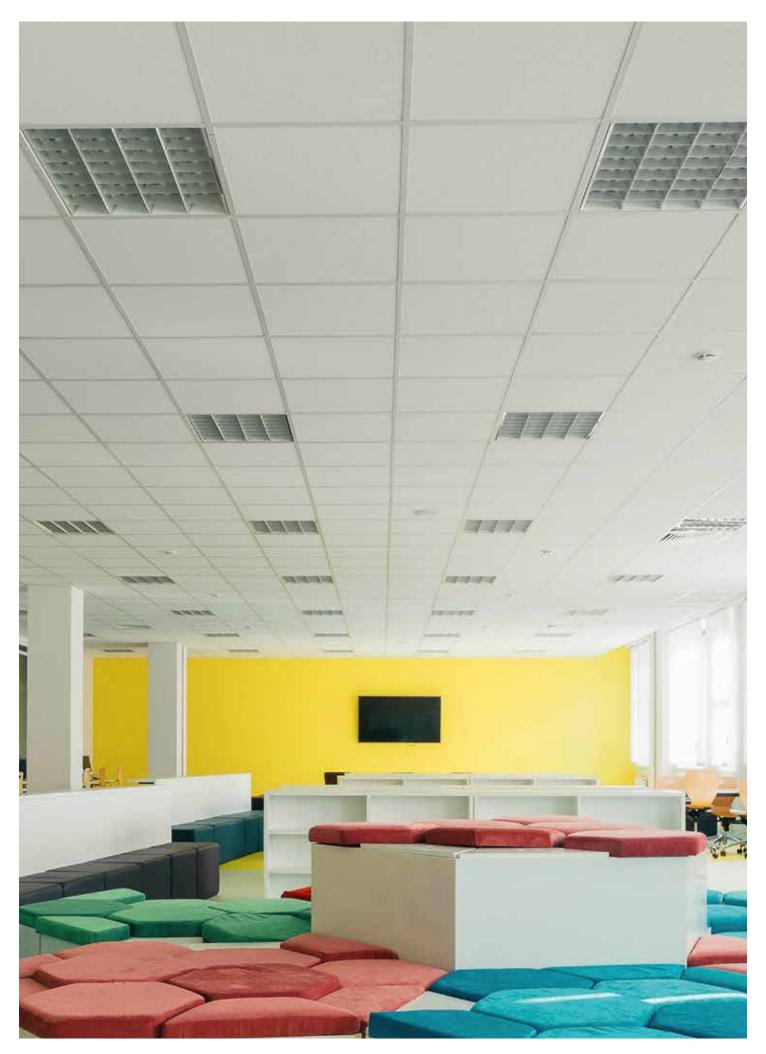
In all environments where humidity conditions could regularly reach and/or exceed 90% RH we recommend the use of 24mm corrosive resistant grid and associated accessories.

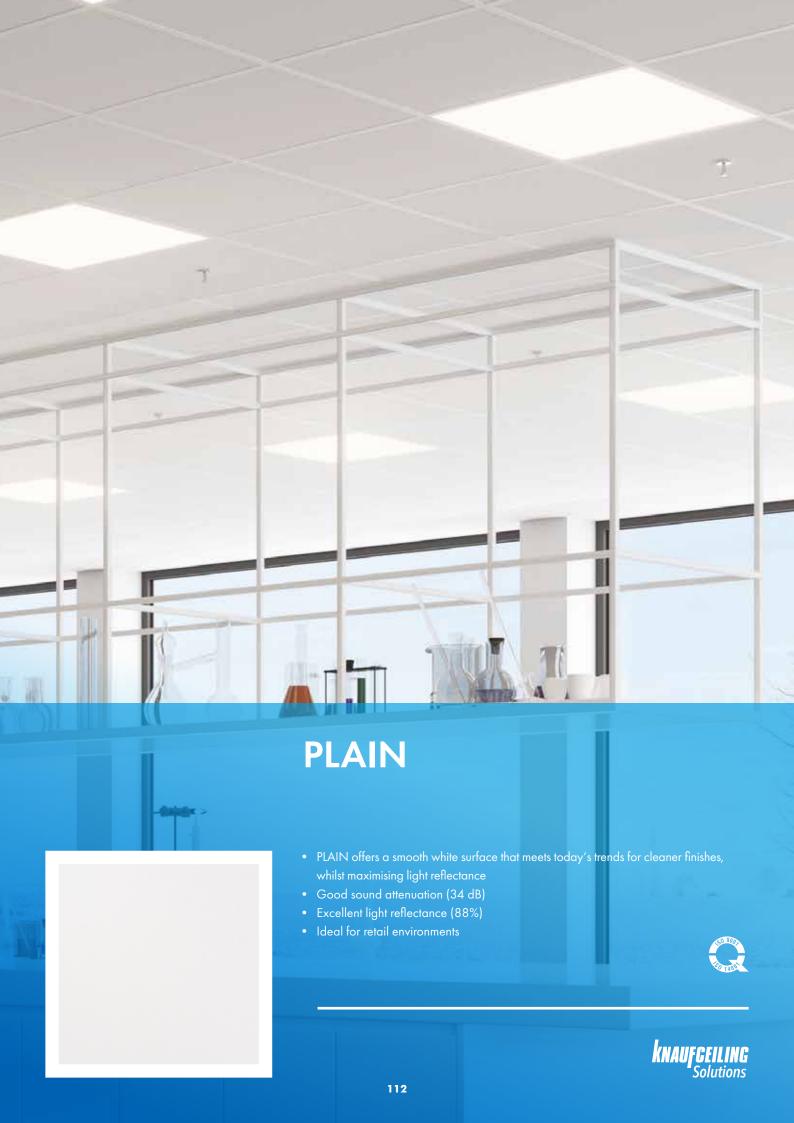
Classic Plain

OUR CLASSIC MINERAL RANGE IS AVAILABLE IN PLAIN WHITE, OFFERING MORE REFLECTED DAYLIGHT AND HIGH LEVELS OF SOUND ATTENUATION FOR EXCELLENT ROOM TO ROOM PRIVACY.



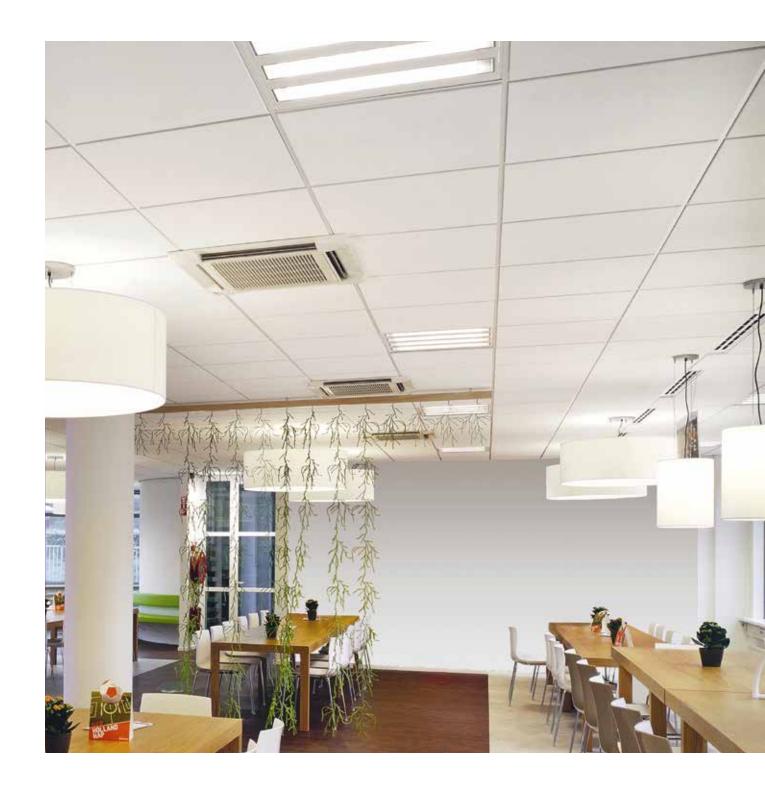






PLAIN

Edge details	Board	Tegular 24			Tegula	ır 15		
Additional edge details on request	<u> </u>	Û 24 24			(oo / 1	5		
Thickness (mm)	15	15			15			
Dimensions (mm) Additional sizes on request	600 x 600 1200 x 600	600 x 600 1200 x 600				x 600 x 600		
System	Exposed demountable - System C							
Weight	3.6 - 3.8 kg / m²							
Colour	White							
Sound absorption	EN ISO 354 $\alpha_w = 0.20(L)$ as per EN ISO 1165 Frequency f (Hz) α_p NRC = 0.20 as per ASTM C 423	54 - Class E	125 0.30	250 0.25	500 0.15	1000	2000	4000
Sound attenuation	EN ISO 10848-2 D _{n,f,w} = 34 dB as per EN ISO 717-	-1		CAC = 35	dB as pe	r ASTM E	413-10	
Fire reaction	Euroclass A2-s1, d0 as per EN 1 Class A as per ASTM E 84	3501-1		RUS KM1	(G1, V1,	, D1, T1)	as per 123	3-FZ
Light reflectance	88%							
Thermal conductivity	λ = 0.060 W/mK as per EN 12	667						
Humidity resistance	95% RH							
Clean room	ISO 4 as per EN ISO 14644-1							
Indoor air quality	A+ E1 IAC	PRODUCT PRODUCT						
Cleanability								
Sustainability	ENISO 14021 EC 127226	ව						



Classic Sanded

WITH A FINELY TEXTURED SURFACE, THE SANDED CLASSIC MINERAL CEILING SOLUTION PROVIDES A PERFECT BALANCE OF LIGHT REFLECTANCE AND ACOUSTIC PERFORMANCE TO ENHANCE COMFORT.







ARMSTRONG SAHARA



- Good sound absorption (0.60 α_w) and sound attenuation (34 dB)
- Good light reflectance (85%)
- Ideal for office and learning applications





ARMSTRONG SAHARA

Edge details		Board Tegular 24			Tegular 15	SL2					
Additional edge details on request				Ī	15	24 18					
Thickness (mm)	<u>↓</u>	15 15				15			19		
Dimensions (mm) Additional sizes on request	()	600 x 600 675 x 675 1200 x 600 1500 x 300 1800 x 300				600 x 600 675 x 675 1200 x 600 1200 x 300			1500 × 300 1800 × 300 2500 × 300		
System	11	Exposed demountable - System C Exposed - Bandraster, demountable - System I.3 Exposed - Corridor, demountable - System F.3						Semi-concealed planks, demountable - System I.3 Semi-concealed planks - Bandraster, demountable - System I.2 Semi-concealed - Corridor, demountable - System F.2			
Weight	Kg	3.7 - 5.0 kg /	′ m² (15 - 19	9mm)							
Colour		White									
Sound absorption	**	EN ISO 354 $\alpha_{\rm w}$ = 0.60 as per EN ISO 11654 - Class C									
		Frequency f (Hz)		125		500	1000	2000	4000		
		$\alpha_{_{P}}$	Boa SL2	rd, Tegular	0.45		0.55	0.65	0.65	0.60	
		NRC = 0.55		M C 423							
Sound attenuation		EN ISO 10848-2 D _{n,f,w} = 34 dB (15mm) as per EN ISO 717-1 CAC = 35 dB (15mm) as per ASTM E 413-10				D _{n,f,w} = 38 dB (19mm) as per EN ISO <i>7</i> 17-1 CAC = 39 dB (19mm) as per ASTM E 413-10					
Sound reduction	华	EN ISO 10140-2 R _w = 17 dB (15mm) as per EN ISO 717-1			R _w = 21 dB (19mm) as per EN ISO <i>7</i> 17-1						
Fire reaction	F	Euroclass A2-s1, d0 as per EN 13501-1				RUS KM1 (G1, V1, D1, T1) as per 123-FZ					
Light reflectance	7	85%									
Thermal conductivity		λ = 0.060 W/mk as per EN 12667									
Humidity resistance	4,4	95% RH									
Indoor air quality		MADIC A+	EN 13964	ACG							
Cleanability											
Sustainability		EN ISO 14021 37 - 43%	EPD EN ISO 14025	INCOCUMBLE WOOL EC: E772/2008 Annex Q							



AMF THERMATEX® Feinstratos

- AMF THERMATEX® Feinstratos creates an even, uniform ceiling appearance due to its finely textured surface
- Good sound attenuation (34 dB)
- Good light reflectance (85%)
- Ideal for retail, meeting rooms, installation rooms or production areas





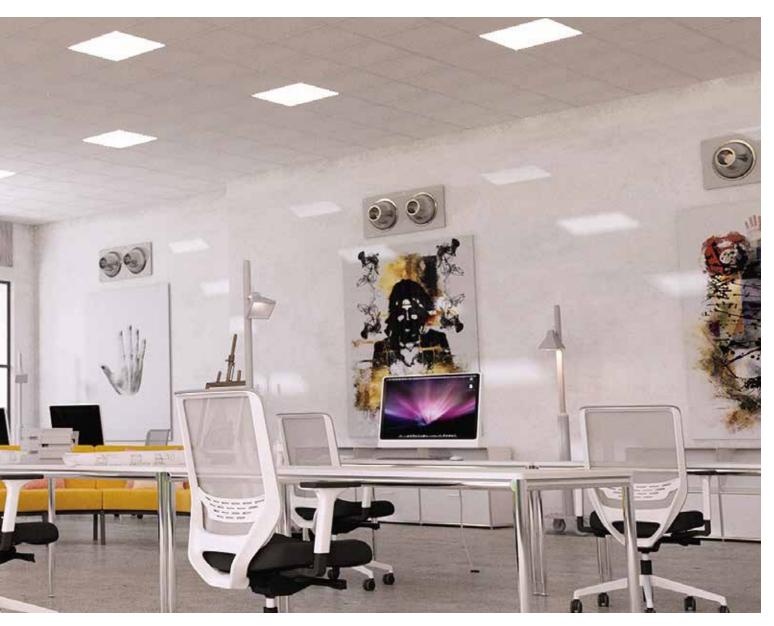
AMF THERMATEX® FEINSTRATOS

Edge details	Board	Tegular 24	Tegular 15	Finesse		SL2	K2C2	
Additional edge details	Î		Î	Ê		î	Î	
on request		∞ 24	15	24		24	28	
Thickness (mm)	15	15	15	19		19	15	
Dimensions (mm) Additional sizes on request	600 x 600 625 x 625 1200 x 600 1250 x 625 1800 x 300 2500 x 300	600 x 600 625 x 625 1200 x 600	600 x 600 625 x 625 1200 x 600	600 x 60	0	2000 x 312,5 2500 x 312,5	2000 x 312,5 2500 x 312,5	
System	Exposed - Ban	Exposed demountable - System C Exposed - Bandraster, demountable - System I.3 Exposed - Corridor, demountable - System F.3 System A.2			, demountable - / A.3	Semi-concealed planks, demountable - System I.3 Semi-concealed planks - Bandraster, demountable - System I.2 Semi-concealed planks - Corridor, demountable - System F.2	Semi-concealed planks, non-demo- untable - System I.3 Semi-concealed planks - Bandraster, non-demountable - System I.1 Semi-concealed planks - Corridor, non-demountable - System F.1	
Weight	3.8 - 5.0 kg /	′ m²						
Colour	White							
Sound absorption	EN ISO 354							
_	$\alpha_{w} = 0.20$ as Frequency $f(\alpha_{p})$	per EN ISO 116 Hz)	654 - Class E		125 250 0.35 0.20		2000 4000 0.20 0.20	
_		as per ASTM C	423					
Sound attenuation	D _{n,f,w} = 34 dB CAC = 35 dB	D _{n,f,w} = 34 dB (Board, Tegular 24, Tegular 15, K2C2) CAC = 35 dB (Board, Tegular 24, Tegular 15, K2C2) CAC = 38 dB (Finesse, SL2) as per EN ISO 71 CAC = 38 dB (Finesse, SL2) as per ASTM E 41					EN ISO 717-1 ASTM E 413-10	
Sound reduction		EN ISO 10140-2 R _w = 21 dB as per EN ISO <i>7</i> 17-1						
Fire reaction	Euroclass A2	Euroclass A2-s1, d0 as per EN 13501-1 RUS KM1 (G1, V1, D1, T1) as per 123-FZ						
Light reflectance	85%	85%						
Thermal conductivity	λ = 0.060 W	$\lambda = 0.060 \text{ W/mk}$ as per EN 12667						
Humidity resistance	95% RH	95% RH						
Indoor air quality	A+							
Cleanability	P	P						
Sustainability	87-43%	EN ISO 14025 EC 1277/	JUBILE WOOL 2008 Annex Q					

Classic Fissured/ Perforated

CHOOSE A FISSURED SURFACE FROM THE CLASSIC MINERAL RANGE TO ENJOY ITS UNIQUE COMBINATION OF SUPERIOR SOUND ABSORPTION AND SOUND ATTENUATION FOR IMPROVED INTELLIGIBILITY.









AMF THERMATEX® Star 15mm



- AMF THERMATEX® Star 15mm features fine, uneven perforations with a smooth surface finish, and meets the needs for a modern, elegant design visual
- Good sound absorption (0.60 α_w)
- Good sound attenuation (34 dB)
- Excellent light reflectance (88%)
- Ideal for retail, offices and meeting rooms, installation rooms or production areas





AMF THERMATEX® STAR 15mm

_	•										
Edge details	Board	Tegular 24	Tegular 15	K2	C2						
Additional edge details on request	<u> </u>	Û 24 24	Û 15	10	28						
Thickness (mm)	15	15	15	15							
Dimensions (mm) Additional sizes on request	600 x 600 625 x 625 1200 x 600 1250 x 625 2500 x 300	600 x 600 625 x 625 1200 x 600	600 x 600 625 x 625 1200 x 600		00 x 312,5						
System	Exposed - Band	Exposed demountable - System C Exposed - Bandraster, demountable - System I.3 Exposed - Corridor, demountable - System F.3				Semi-concealed planks, non-demountable - System I.3					
Weight	3.6 - 3.8 kg / ı	m ²									
Colour	White										
Sound absorption		er EN ISO 11654 -	- Class C	125	250	500	1000	2000	4000		
	α _p	۷.		0.45	0.50	0.55	0.70	0.65	0.50		
	NRC = 0.60 as	s per ASTM C 423									
Sound attenuation		EN ISO 10848-2 D _{n.f.w} = 34 dB as per EN ISO <i>7</i> 17-1			CAC = 35 dB as per ASTM E 413-10						
Sound reduction	EN ISO 10140 R _w = 21 dB as	EN ISO 10140-2 R _w = 21 dB as per EN ISO 717-1									
Fire reaction	Euroclass A2-s Class A as per	Euroclass A2-s1, d0 as per EN 13501-1 RUS KM1 (G1, V1, D1, T1) as per 123-FZ Class A as per ASTM E 84					3-FZ				
Light reflectance	88%										
Thermal conductivity	λ = 0.060 W /	'mk as per EN 126	667								
Humidity resistance	95% RH										
Indoor air quality	A+										
Cleanability											
Sustainability	EN ISO \$4021 37-48%	EN ISO 14025	BLE WOOL								



AMF THERMATEX® Feinfresko



- AMF THERMATEX® Feinfresko features an uneven textured finish and offers good sound absorption for better acoustic comfort
- Good sound absorption (0.60 (H) α_w)
- High sound attenuation (32 dB)
- Ideal for retail, offices and meeting rooms, installation rooms or production areas





AMF THERMATEX® FEINFRESKO

Edge details	Board	Tegular 24
Additional edge details on request	Î 	
Thickness (mm)	15	15
Dimensions (mm) Additional sizes on request	600 x 600 625 x 625 1200 x 600 1250 x 625	600 x 600 625 x 625
System	Exposed demountable - System C	
Weight	3.6 - 3.8 kg / m²	
Colour	White	
Sound absorption	EN ISO 354 $\alpha_{w} = 0.60$ (H) as per EN ISO 11654 - Class C	
	Frequency f (Hz)	125 250 500 1000 2000 4000
	α _p NRC = 0.60 as per ASTM C 423	0.45 0.40 0.50 0.70 0.80 0.75
Sound attenuation	EN ISO 10848-2 D _{n,t,w} = 32 dB as per EN ISO 717-1	CAC = 32 dB as per ASTM E 413-10
Sound reduction	EN ISO 10140-2 R _w = 21 dB as per EN ISO 717-1	
Fire reaction	Euroclass A2-s1, d0 as per EN 13501-1	RUS KM1 (G1, V1, D1, T1) as per 123-FZ
Light reflectance	83%	
	λ = 0.060 W/mk as per EN 12667	
Air permeability 7	PM1 (≤ 30 m³/hm²) as per DIN 18177	
Humidity resistance	90% RH	
Indoor air quality	A+ E1 IACG	
Cleanability		
Sustainability	EN ISO 14021 37-48%	





Fire Protection

FIRE PERFORMANCE IS AN IMPORTANT CONSIDERATION FOR EVERY CEILING SYSTEM - NO MATTER HOW SIMPLE OR COMPLEX.

Our ceiling tiles are engineered to meet the most stringent industry standards. Select from a broad range of looks and acoustic options to meet your design and fire reaction requirements.

EXPERIENCE MORE POSSIBILITIES



AMF THERMATEX® Uno

Uno El 30

System Uno is a corridor span solution that offers independent fire protection El 30 from above and below. If a fire occurs within the ceiling void, escape routes underneath remain free of smoke, flame and heat. Or if it occurs below the ceiling, the building structure and services in the ceiling void are protected. System Uno planks installed on a supporting perimeter construction can span up to 2.8m without suspension hangers, and are quick and easy to install.

The system offers good levels of sound absorption and is available in a variety of finishes.

KNAUFGEILINGSolutions



ARMSTRONG SUSPENSION SOLUTIONS "PRECISION MEETS PERFORMANCE"



Knauf Ceiling Solutions suspension systems include a full range of solution and detailing for all ceiling suspension requirements. A full range of accessories is also available.

GENERAL SOLUTIONS

A range of standard exposed grid suspensions systems including Prelude 15, Prelude 24, Prelude 24 Sixty² for longer spans, Prelude 35 and Bandraster.

PEAKFORM

Most profiles in the Prelude range of grids feature the innovative Peakform design which is taller and engineered to create stronger, more stable suspension systems. The Peakform shape makes Main Runners and Cross Tees quicker and easier to cut.

PRELUDE UNIVERSAL MAIN RUNNER

The Prelude Universal Main Runner supports the installation of either TL² or TL hook/butt cut Cross Tees or XL² stab/override Cross Tees from one simple inventory of Main Runners.

XL² CROSS TEES – "Click" installation

Prelude XL² Cross Tees feature an advanced stab system that locates with an audible click, ensuring a solid installation at all times.

TL² CROSS TEES – "Hook" installation

TL² is a highly engineered staked-on hook solution with a patented clip.

TL CROSS TEES – "Hook" installation

Prelude TL Cross Tees in 15mm width feature an advanced an integrally formed hook nose.

Products may vary from country to country. Please contact your local sales representative.

DESIGN SOLUTIONS



PERFECTLINE XL² is designed to create a crisp, clean look to provide an enhanced aesthetic. The channel profile finishes flush with the ceiling surface leaving a minimalist 3mm or 6mm reveal.

SPECIFIC SOLUTIONS



- Clean Room 24 is a unique co-extrusion of aluminium with a PVC gasket to create a better seal between tile and grid for clean room applications and "non-magnetic" environments.
- **Prelude 24 Corrosive Resistant** has a special paint finish and is designed for areas requiring enhanced corrosion resistance.
- **System Z** is a system providing an accessible semi-concealed appearance with ship-lap SL2 planks.
- **Seismic Rx**® is a specific installation method for Prelude 24 grid with XL² Cross Tees combined with specialist accessories.

CORRIDOR SOLUTIONS



 Multiple corridor options from freespaning semi-concealed grid for corridors with SL2 demountable planks.

AXIOM SOLUTIONS



• AXIOM Transitions, Profiles and accessories compliment the traditional range of perimeter angle trims. Create changes in level, perimeter lighting features or transition to a flush plasterboard perimeter.



DONN® "COMPETENT AND COMPATIBLE"



The proven DONN® DX technology with the patented gold clip has long been regarded as a guarantee for high quality ceiling grid substructures. A wide range of products guarantees consistent, flexible and certified system compatibility.

PRODUCT BENEFITS

- More stability, increased security, faster installation
- Three rib design for more rigidity
- Clear audible click-connection
- Compatible with all well-known acoustic ceiling tiles
- Create individual ceiling designs with alternative colour options for the capping: Black matt (LM), Metal 06 (D), Aluminium (A), Chrome (M), Gold (Q)., Additional RAL colours available on request.
- Wide range of system fire tests for all common soffit types according to the latest EN 1365-2 in conjunction with EN 1363-1



Products may vary from country to country. Please contact your local sales representative.



STABLE AND SECURE CEILING GRID STRUCTURE

The DX3® technology with its patented rib design gives DX main runner and long cross tee ceiling grid structures even more rigidity. The profiles are dimensionally more stable and have greater torsional strength. This results in an easier and therefore faster installation and gives a stable and secure ceiling grid structure.

PROVEN DONN® SYSTEM PORTFOLIO

DX Standard

Create shadow gaps and reveals to highlight the modularity in a ceiling, with the DX Fineline system. The system features a box profile with a central groove (6.5mm width) along the exposed profile that creates a shadow gap of varying visibility, dependent on the rooms lighting conditions.

Design & Aesthetic

An increasing number of ceiling constructions require special solutions, which cannot be achieved using conventional systems. These include, amongst others, wide span, heavy load, corridor and corrosion protected systems.

Function & Creativity

All DX standard systems are characterised by a combination of subtle appearance and high efficiency. The systems are available in 24 and 15mm profile widths (visible area).





AMF VENTATEC® "QUALITY AND FLEXIBILITY"



High material quality and precise technical detailing characterise the standard of the profiles. The high performance product design guarantees the stability, safety and flexibility of the construction. In combination with AMF THERMATEX®, the result is a perfect ceiling solution to meet the highest requirements.

PRODUCT BENEFITS

- Modular system Click (Joggled, Butt Cut)
- High stability due to stitching and ribbing
- Strong connection between main runners and cross tees as a result of the stainless steel end clips
- Easy to handle and simple to install
- Quick and easy removal of the cross tees
- Audible click confirms secure connection of Click-components
- Wide range of system fire tests for all common soffit types according to the latest EN 1365-2 in conjunction with EN 1363-1

Products may vary from country to country. Please contact your local sales representative.

KNAUFGEILINGSolutions

Individual and flexible ceiling grid structure

The AMF VENTATEC® ceiling suspension grid system offers maximum flexibility as a simple Click- construction, with high or low cross tees in both joggled and butt cut options. 24 or 15mm profile widths are available, the system can be individually adapted to many aesthetic and functional requirements.

Certified in fire protection

We help our customers with tested fire protection systems in the ceiling area. The product and system developments introduced in recent years have been tested against the latest standards and test criteria taking all aspects of the ceiling construction (such as integrated lighting) into account. The result is a comprehensive portfolio of current fire tests with the AMF VENTATEC® grid system in combination with AMF THERMATEX® ceiling tiles protecting all relevant soffit types.



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YOUR **CEILING**OUR **SOLUTIONS**

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