



TABLE OF CONTENTS

HERAKLITH® BRAND INTRODUCTION	4
■ Introducing the brand	4
■ Brand history	4
■ Premium quality and attention to detail	4
■ Expertise and experience like no other	4
HERAKLITH® BRAND INTRODUCTION	5
■ Our history	5
OUR BRAND VALUES	6
■ Heraklith® - The synonym for natural building and living	6
■ Environmental impact and responsibility	6
CERTIFICATE, RECOGNITION, AWARDS	7
■ Awarded	7
WOOD WOOL INTRODUCTION	8
■ What is Wood Wool and how its made?	8
■ Product Attributes	8
PRODUCT PROPERTIES	9
■ Fire resistance	9
■ Noise absorption	9
■ Thermal Insulation	9
■ Aesthetics	10
■ Durability	10
■ Surfaces	11
■ Sizes	11
■ Colors	11
■ Edges	11
■ Our Product range	12
■ Heraklith® Wood Wool panels	13
■ Tektalan panels - Heraklith® Wood Wool top and mineral wool core	13
■ Heratekta panels - made of a Heraklith® Wood Wool top and an EPS core	13
APPLICATIONS - TECHNICAL ROOMS	14
■ Technical Rooms	14
■ Extreme climate insulation	14
APPLICATIONS - MULTIFUNCTIONAL CEILINGS	15
■ Basement ceilings	15
■ Garages and underground car parks	15

APPLICATIONS - ACOUSTICS & AESTHETIC	16
■ Public halls and theatres	16
■ Office spaces	17
■ Educational facilities	17
■ Swimming pools	18
■ Restaurants	18
■ Agricultural buildings	19
CASE STUDIES	20
■ Amsterdam metro Line	20
■ Puskás Ferenc Stadium - Budapest, Hungary	21
■ Riyadh's luxury metro system	22
■ Glacier railways Kitzsteinhorn, Austria	23
■ Modern apartment complex	24
■ De Adelaar in Hoogeveen	25
■ Private underground car park	26
■ IKEA Obchodní Centrum Černý Most	27
■ Outstanding acoustics at the Atlas Theatre in Emmen	28
■ AFAS Experience Center	29
■ Quiet open spaces in Holoubkov	30
■ Da Vinci College in Roosendaal	31
■ Kindergarten and Elementary School	32
■ TODI Diving Centre, Beringen	33
■ Sports swimming pool in Győr, Hungary	34
■ Heraklith® Agro Wood Wool panels: ideal for pig farms	35
■ Pigsty in Bachmanning, Austria	36
■ Ta-Kumi Japanese Gastro-Bar Restaurant	37
■ Lock, Stock & Barrel in Dubai	38
PRODUCTS	39
■ Heraklith A2	40
■ Heratekta C2 031	40
■ Tektalan A2 037/2	41



HERAKLITH® BRAND INTRODUCTION

INTRODUCING THE BRAND

Heraklith® insulation is a natural material that combines excellent sound and thermal performance with fire resistance in a long-lasting, environmentally responsible product. It provides an all-in-one, no-compromise solution for your insulating requirements. Made from Wood Wool, a sustainable and renewable resource, Heraklith® panels are durable and lightweight while also delivering excellent acoustic and thermal qualities. They have outstanding environmental credentials and fire safety performance. Heraklith®'s name is synonymous with high-quality, high-performance Wood Wool panels.

Our company's name comes from combining the words Hercules and lithos - Greek for stone. We chose the name to represent the durability and strength of stone. This mirrors the principles in ancient Greece regarding architectural creativity and stone-strength durability. We believe that our products should be functional and beautiful to look at.

BRAND HISTORY

Heraklith® is an excellent alternative for a long-lasting, environmentally

friendly building material. Heraklith®'s Wood Wool products are made of a renewable resource that is ecologically responsible and durable.

Our products adhere to more stringent energy-saving and environmental requirements and require little upkeep during service life. With our vast range of services, we are here to help architects and installers get the fast and dependable assistance they need before, during, and after installation.

Our products are superior to the competition due to the business's long heritage and the learning we obtained over time. We provide a comprehensive selection of Heraklith® Wood Wool products at a reasonable price for our clients.

After all, Heraklith® has been improving Wood Wool since 1908.

PREMIUM QUALITY AND ATTENTION TO DETAIL

Our company has been in business for over 100 years, and we are passionate about our brand. We love working with clients who share our values and look for the best possible solution to their construction challenges. We are proud of the premium quality products and services

we have delivered for over a century. We understand that construction challenges vary from client to client, which is why we offer personalized service and attention to detail. Our goal is always to find the ideal solution for each customer's specific needs. We believe that our experience, knowledge, and dedication sets us apart from the competition.

EXPERTISE AND EXPERIENCE LIKE NO OTHER

Heraklith® Wood Wool products have been renowned for their quality and efficacy worldwide for over a century. Our premium and eco-friendly product have won numerous awards for our sustainability efforts. We remain dedicated to providing high-quality products while preserving our natural resources. Our accessories and products are thoroughly tested and certified by independent testing and internationally recognized accreditation. We are committed to offering safe, sustainable, and quality products that our customers can trust.



HERAKLITH® BRAND INTRODUCTION

OUR HISTORY

Founded in Austria in 1908, Heraklith® is a leading producer of Wood Wool panels. The company's mission is to bring back what history taught people about basic house construction materials: they are plentiful, easy to come by, affordable, highly versatile, and simply beautiful. In 2006, Heraklith® began producing the

first A2 non-combustible fire-rated Wood Wool panels, becoming part of the Knauf Group. It was the start of a thrilling journey that has led to innovative discovery and development, which is still ongoing today.

Knauf Insulation is one of the world's most innovative and well-known insulation brands. We are dedicated to assisting our clients in meeting the

rising need for energy efficiency and sustainability in homes, non-residential structures, and industrial applications. We firmly commit to research and development with our millennial heritage and Knauf Insulation's significant backing. We aim to create value for our customers, shareholders, and employees in everything we do.



OUR BRAND VALUES

HERAKLITH® - THE SYNONYM FOR NATURAL BUILDING AND LIVING

Heraklith® is committed to sustainable practices, from responsible sourcing to reducing environmental impacts. We believe that harmony is key to meeting the challenges of a changing environment while still accommodating the demands of modern life. For example, our Heraklith® panels are made using renewable resources like wood and water, making them highly sustainable with a low carbon footprint. Additionally, they enable buildings to have insulation healthily and organically. By working towards harmony between our company values and the planet's needs, we hope to impact the world around us positively.

We only use the finest grade of certified wood from local forests, which is essentially responsible for our product's excellent quality. Our product line is an ecological cycle since we recycle all leftover raw materials into Heraklith® panels. Excess raw materials are used to create new panels, meaning that no waste is produced in the manufacturing process.

The main ecological advantage of our panels is their use as insulation, by keeping buildings insulated for many years without losing any technical properties. With these features, Heraklith® panels are an excellent choice for sustainable building projects.

Wood wool products effectively resist heat loss and dampen sound, making them excellent for various applications and offering an exceptional balance between function and beauty. Our products are mainly used as insulation in underground garages, parking decks, basements, and technical rooms. In addition, our panels can be used effectively to plaster substrates inside walls or for façade panels in timber construction.

ENVIRONMENTAL IMPACT AND RESPONSIBILITY

As a leading provider of sustainable wood products, we are committed to operating in an environmentally responsible manner. Our environmental credentials are verified by our membership in the Blue Angel program, which grants the world's oldest eco-label to products and

services. We provide Environmental Product Declarations (EPDs) for our products in various applications. Each is based on a comprehensive Life Cycle Assessment (LCA) completed at one of our facilities.

This allows us to quantify the advantage of utilizing wood as raw material and the binder to correctly assess the environmental effect of the product. Life Cycle Assessment (LCA) considers the impact on people and the planet during production and the impact of our products once they have been manufactured. This includes upstream and auxiliary processes, transportation, and energy use.

In addition, we are constantly exploring new ways to reduce our environmental impact, from using recycled materials in our products to investing in renewable energy sources. As a result, we are able to offer our customers sustainable wood products that are backed by some of the most rigorous environmental standards in the industry.



CERTIFICATE, RECOGNITION, AWARDS

AWARDED

We are proud to offer Wood Wool products that are certified by the Programme for the Endorsement of Forest Certification (PEFC) and recognized by the LEEDv4 Green Building Rating System. Our products also bear the Blue

Angel environmental protection label, one of the most important environmentally friendly products daily. The Blue Angel is a voluntary award scheme that promotes environmental protection and sustainability. It assesses products and services based on their life

cycle, from raw material extraction through production, use, and disposal. To be awarded the Blue Angel, a product must meet strict criteria for safety, health, and environmental protection. We are committed to offering products that meet the highest standards for quality and sustainability.





WOOD WOOL INTRODUCTION

WHAT IS WOOD WOOL AND HOW ITS MADE?

Wood wool is a versatile material with a wide range of applications in the construction industry. It is made from thin, slender shavings of wood that have been carefully selected and sourced. The wood shavings are compressed and bound together to create panels that meet the most stringent building regulations and standards. Manufacturing techniques are constantly being refined to ensure the highest quality

products. Heraklith® Wood Wool panels are used by the construction industry worldwide for a range of high-quality, high-performance applications. Wood wool panels have a number of advantages over other construction materials, including superior fire resistance, acoustic performance, and thermal insulation.

PRODUCT ATTRIBUTES

Heraklith® panels are popular for insulation projects requiring a sustainable and long-lasting solution.

Their light yet durable construction can withstand the rigors of daily usage, and they are easy and quick to install. Available in a range of surface textures, colors, and sizes, Heraklith® panels can be customized to meet the specific needs of any project. Additionally, their moisture and mold resistance make them ideal for use in various climatic conditions. With a proven track record of performance over many years, Heraklith® panels are a trusted choice for any insulation project.



PRODUCT PROPERTIES



FIRE RESISTANCE

In the event of a fire, the structural elements of a building must be protected from the intense heat. Heraklith® Wood Wool insulation panels are specifically designed to function as heat shields. They resist fire and don't melt or emit burning droplets when subjected to flames. In addition, they produce minimal smoke in the event of a fire. By using high-quality fire-resistant materials like Heraklith® Wood Wool insulation panels, you can ensure the safety of those who live in your building.

Heraklith® Wood Wool insulation panels exist in two versions:

- Wood Wool-only or
- Multilayer (homogeneous board), in which they are combined with other Knauf Insulation products such as rock mineral wool or an EPS foam board. The RMW composite board provides limited combustibility due to the non-combustible core (A2 class under EN 1365-2).



NOISE ABSORPTION

The porous nature of Heraklith® Wood Wool insulation boards provides excellent acoustic properties in itself. However, Heraklith® also offers additional acoustic insulation solutions, including Wood Wool panels with mineral wool core to provide extra sound absorption abilities. Noise protection is an essential element of any modern living or working environment. It is vital to have a quiet and peaceful living or working environment in today's world. With Heraklith®'s variety of noise insulation solutions, designers can easily create such an environment, regardless of the location. Whether above an underground garage or close to a technical room or source of loud noise, Heraklith® can reduce noise levels. It is making them ideal for applications where good acoustics are essential.



THERMAL INSULATION

Thermal insulation is an essential factor in the comfort and energy efficiency of a building. By keeping the heat in during the winter and out during the summer, insulation helps to maintain a comfortable indoor temperature year-round. Heraklith® offers various thermal insulation solutions, including multilayer panels that combine Wood Wool with rock mineral wool or EPS foam insulation. This combination creates an excellent thermal barrier, helping to keep your living or workspace comfortable while reducing energy use. Thermal insulation is a wise investment, providing savings on heating and cooling costs while reducing CO₂ emissions in the long run.



PRODUCT PROPERTIES

AESTHETICS

Car parks, technical rooms, offices, recreational centers, and numerous other spaces benefit from natural wood paneling thanks to its aesthetically appealing and excellent insulation qualities such as fire resistance, thermal insulation, and noise absorption. It's an attractive option for those

who want to add a natural touch to their living or working space. Combined with their fireproofing properties, they are ideal for use in public areas such as theaters, concert halls, and similar venues.

DURABILITY

Heraklith® Wood Wool insulation is a versatile and long-lasting option

for a variety of applications. Our Wood Wool products are made to high-quality EN 13168 guidelines, ensuring optimum impact resistance, protection, and durability. Your Wood Wool insulation will last for many years. Whether you're looking for a soundproofing solution or a way to improve your home's energy efficiency, Heraklith® Wood Wool insulation is the perfect solution.



PRODUCT PROPERTIES

SURFACES

Heraklith® Wood Wool insulation panels come in various wood-based textures, from rough to fine. The different textures create different looks, but they don't affect the product's functionality. Rough surfaces are commonly used in industrial settings, while finer ones are frequently seen in residential areas. The panels are made from wood fibers that are bound together with binders. The binders give the boards strength and durability, while the wood fibers provide thermal and acoustic insulation.

SIZES

Heraklith® Wood Wool insulation is available in many thicknesses and panel sizes, making it versatile for various applications.

The available thicknesses include:

- 15, 25, 35, and 50 mm for monolithic boards and
- 25 to 200 mm for multilayer boards.

The available panel dimensions are:

- 500 x 1000 mm
- 600 x 1000 mm
- 600 x 1200 mm

- 500 x 1250 mm
- 500 x 2000 mm
- 600 x 2000 mm

Depending on the location, thickness and dimension availability may differ. For a complete list of thicknesses and dimensions accessible in your region, fill out the contact form on our website or consult the Heraklith® website for your nation.

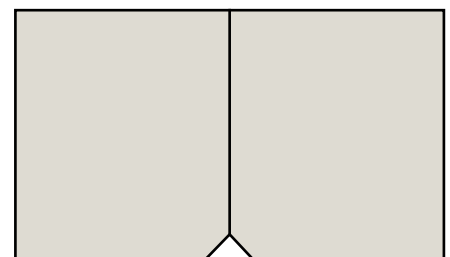
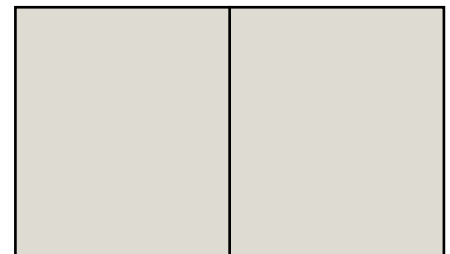
COLORS

Heraklith® Wood Wool insulation panels are a great way to insulate your home while also adding a touch of style. We use RAL colors, a common way to specify colors for paint, powder coating, and plastics. It allows you a wide variety of choices when selecting the right color for your Wood Wool panels. While natural and white are the standard pair, you can also choose from various colors. You can also paint your Wood Wool panels any color you choose, allowing you to match your home's style perfectly. Delivery times may differ according to the color you select, but you can be sure that you'll find the perfect color for your needs.



EDGES

Heraklith® Wood Wool insulation boards are a versatile and effective insulation material. Depending on the project's needs, they can be produced with straight or beveled edges. Beveled edges are especially advantageous when sharp corners are a concern in residential areas. You can use the boards to insulate walls, floors, and ceilings.





PRODUCT PROPERTIES

OUR PRODUCT RANGE

The Heraklith® product family offers three main types of panels - Heraklith®, Heratekta, and Tektalan. All panels are easy to install, come in various surface textures, colors, and sizes to fit any design need while offering excellent sound absorption properties.

The Heraklith® Wood Wool Panels are an excellent choice for most projects. They're made from natural wood and have the same color, texture, and feel like natural wood. Tektalan panels are made of a Heraklith® Wood Wool top and Mineral Wool core. An additional 'sandwiched' mineral wool core version is also available. Heratekta

panels are made of an Heraklith® Wood Wool top and an EPS core. All three panel types are fire resistant and have excellent thermal and sound insulation properties. As a system for fire performance certification, all our panels and fixing components go through a series of tests.



PRODUCT PROPERTIES

HERAKLITH® WOOD WOOL PANELS

Our original Wood Wool panels are a versatile and efficient choice for insulating large surfaces in residential and commercial applications. Made from a lightweight, rigid material that is easy to work with, these panels offer fast, efficient insulation without specialized training or complicated installation procedures. Plus, these panels can be painted any color you like, making it easy to find the right aesthetic for your space. Additionally, they are non-combustible (A2 fire safety class), impact-resistant, and designed to stand up well in humid conditions. You don't have to worry about damage or deterioration over time, making them a safe choice for homes and businesses alike. Heraklith® Wood Wool panels are a great choice to meet all your needs.

Ideal solution

With Heraklith® Wood Wool panels, you can achieve ideal sound absorption in various indoor environments, like residential, commercial, industrial, or entertainment spaces. These versatile panels

offer superior air diffusion and dust filtration in agricultural applications, with the added benefit of covering pitched roofs without compromising structural integrity. They can also be incorporated as a wall substrate when covered with plaster or final rendering. Using Heraklith® panels in indoor environments, you can create a harmonious space that is finely tuned acoustically and aesthetically for ultimate sound quality and comfort.

TEKTALAN PANELS - HERAKLITH® WOOD WOOL TOP AND MINERAL WOOL CORE

Tektalan panels offer all the benefits of Wood Wool panels, plus enhanced fire reaction, sound absorption, and thermal insulation. Tektalan panels are also available in sandwich form, with a mineral wool core encased between two Wood Wool panels. This saves installation time compared to working with separate products and additional fixing elements. Tektalan panels are an excellent choice for superior fire resistance, improved sound control, or enhanced thermal performance.

Ideal solution for:

- Car parks and underground garages
- Basement ceilings
- Technical rooms

HERATEKTA PANELS - MADE OF A HERAKLITH® WOOD WOOL TOP AND AN EPS CORE

The Heratekta panel combines the features of the Heraklith® Wood Wool panel with the added benefit of enhanced thermal insulation. The EPS core of the panel has a low thermal conductivity, which helps reduce the panel's thickness. Installation is also made more accessible and faster, as no separate products or additional fixing elements are needed. The Heratekta panel is a versatile product that can be used in a variety of applications..

The ideal solution (depending on local fire regulations) for:

- Car parks and underground garages
- Basement ceilings
- Technical rooms



APPLICATIONS - TECHNICAL ROOMS

Heraklith® Wood Wool panels are a highly versatile solution for many different applications. These panels perform well even in harsh, high-temperature, and high-humidity environments. Made mainly of PEFC-certified wood, they are also highly sustainable, adhering to high sustainability criteria. Whether for insulation, soundproofing, or fire resistance in your project, Heraklith® Wood Wool panels are an ideal choice that will deliver excellent results with no compromises. With a long track record of proven performance and a wide range of sizes and thicknesses available, these panels are the go-to option for any project for a no-fuss solution to their design needs.

TECHNICAL ROOMS

Heraklith®'s Wood Wool panels are commonly used to insulate technical

spaces such as power stations due to their excellent insulating properties. The Tektalan product line is more efficient at absorbing noise, making it ideal for reducing generator noise pollution. Heraklith® Wood Wool panels are an excellent long-term insulation solution because of their A2 fire resistance, durability, and natural appearance. In addition, the panels are easy to install and require minimal maintenance, making them a cost-effective solution for any Insulation project.

EXTREME CLIMATE INSULATION

Tektalan panels are a versatile building material that can be used for a variety of applications. Thanks to their high-pressure tolerance, Tektalan panels can be concreted directly into the formwork. They can also be applied with concrete screws and then plastered and/or painted, depending

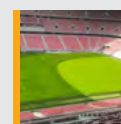
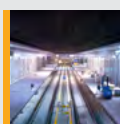
on the expected wear and tear in the rooms installed. Thanks to their thermal and anti-condensation properties, Heraklith® Wood Wool A2 panels give peace of mind with regard to fire resistance - due to their A2 fire rating. If you have an extreme climate insulation challenge, our engineers will help develop a solution.

High pressures

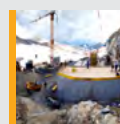
Heraklith® Wood Wool A2 panels are excellent for various applications, thanks to their thermal and anti-condensation properties. The panels can be concreted directly into the formwork and can withstand the high pressures of the concreting process.

They can also be applied with concrete screws and then plastered and/or painted, depending on the expected wear and tear in the rooms installed.

Technical rooms



Extreme climate insulation





APPLICATIONS

MULTIFUNCTIONAL CEILINGS

BASEMENT CEILINGS

Basements are often uninsulated, exposing a building's foundation to the outdoors. This can lead to substantial heat loss in the winter as heat rises and escapes through the ceiling. Up to 10% of a home's total energy loss may be due to heat loss through the basement. Heraklith® panels are an effective solution to this problem, as they help prevent heat loss and reduce noise. These panels also provide fire protection, making them an ideal home insulation solution. Heraklith® panels can significantly reduce a building's energy loss by insulating the basement ceiling and making it more comfortable and efficient.

GARAGES AND UNDERGROUND CAR PARKS

In the design and construction of parking garages, one of the most important considerations is

ensuring that the structure is properly insulated for both temperature and sound. A popular choice for architects and designers choosing insulation materials is Heraklith Wood Wool panels. Our panels offer several benefits, including ease of installation, a clean aesthetic appearance, superior acoustic and thermal performance, and fire protection for up to four hours (Tektalan A2). Given their many advantages, these panels are a great choice for use in parking garages and many other applications such as ceilings in both commercial and residential settings..

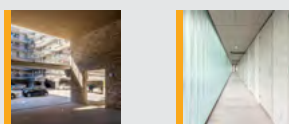
Mechanical impact resistance

Parking garages are difficult in construction environments. Exposure to weather, heavy traffic, and collisions with vehicles is challenging for any insulation material that can provide long-term durability and

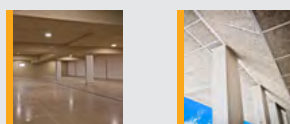
minimal maintenance requirements. Tektalan wood wool panels are highly suitable for parking garages. They are available in a wide range of colors and finishes to match any design aesthetic. They are resistant to mechanical impacts and physical damage from everyday use, and it's also easy to maintain them. Made from natural and sustainable materials, they're an eco-friendly choice for green building projects.

Fires in underground garages caused by burning vehicles generate immense heat. Tektalan wood wool panels can help protect concrete structural elements against that heat and safeguard their load-bearing capacity. After-fire repairs typically cost less since the structural components don't need replacement or repair. Tektalan also has excellent sound insulation properties for underground garages. It has a mineral wool core that absorbs sound and helps to deaden noise.

Basement ceilings



Garages & underground parks





APPLICATIONS - ACOUSTICS & AESTHETIC

PUBLIC HALLS AND THEATRES

Most people don't think about acoustics when choosing a place to see a movie or grab a bite to eat. But good acoustics are essential for any public space where people will be gathering. Whether it's a hall, restaurant, music venue, or theater, audiences need to be able to hear clearly without echoes or other unwanted sounds.

That's where Heraklith® Wood Wool panels come in. These panels have extraordinary sound-absorption properties, thanks to their open surface structure. That means they can easily

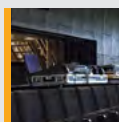
absorb echoes and unwanted sounds. But that's not all – they also provide good thermal protection and excellent fire resistance. In fact, they often exceed the legal requirements for public buildings. And because they're made of wood, they're also an environmentally-friendly choice. So if you're looking for a way to improve the acoustics in your public space, Heraklith® panels are an excellent solution.

Outstanding acoustics

Tektalan A2 panels from Heraklith® are an excellent choice for creating outstanding acoustics. These panels

have a Wood Wool top and mineral wool core, which provides superior sound absorption and fire resistance. In addition, Tektalan A2 panels can be factory-finished in almost any color, providing a pleasing finish that is also environmentally friendly. Tektalan A2 panels are frequently chosen for halls and theatres. So as for corridors, dressing rooms, basements, orchestra pits, catwalks, delivery areas, escape routes, and air shafts where environmental best practices are essential. These panels provide an aesthetically pleasing finish while also maintaining the impression of openness and space.

Case studies





APPLICATIONS - ACOUSTICS & AESTHETIC

OFFICE SPACES

In today's business world, the open-plan office has become a popular way of organizing staff. This type of office promotes a collaborative working style, with employees sharing the same space and working together on projects.

However, with many people sharing the same room, open-plan offices can be noisy. This can be a problem for employees who need to concentrate on their work or make phone calls. It can also lead to decreased productivity and employee health and wellbeing. Heraklith® has solutions to provide the acoustic performance essential for a relaxed open space. Lower noise levels are also better for productivity and employee health and wellbeing. By using Heraklith®

acoustic panels, businesses can create a more comfortable and productive workplace for their employees.

Significant noise reduction

Heraklith® Tektalan panels are an excellent choice for many commercial spaces because they help to dampen noise while also providing thermal insulation and fire protection.

Their high impact resistance and long-lasting durability make them ideal for areas that see a lot of foot traffic, such as corridors, meeting rooms, and canteens. And because they are available in various surface textures and colors, Heraklith® Wood Wool panels can be easily customized to match a company's brand and personality.

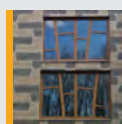
EDUCATIONAL FACILITIES

Heraklith® Wood Wool panels are ideal for insulating educational establishments due to their many advantages. These panels have excellent sound insulation and absorption properties, making them well suited for classrooms where noise levels can be high. Additionally, they are fire-resistant and impact-resistant, making them an excellent choice for areas with high traffic and a high risk of accidents. Moreover, these panels are sustainable and long-lasting. They can be used over many years with very little maintenance required. Finally, the wide selection of colors available and the ease and speed of installation make it simple to create an attractive environment in any educational setting.

Office spaces



Educational facilities





APPLICATIONS - ACOUSTICS & AESTHETIC

SWIMMING POOLS

Heraklith® Wood Wool panels have high sound absorption properties. They are designed to withstand the high humidity conditions of an indoor swimming pool environment. The timber materials are safe and fully retain their strength and shape while absorbing and releasing moisture.

Wood wool is an ideal solution for use in swimming pools. Noise levels can become intolerable as sound is reflected from the water surface. It gets amplified and reverberates around the swimming hall. By reducing the amount of noise that can bounce around the room, Heraklith® Wood Wool panels can create a more pleasant and relaxing pool environment for swimmers, staff, and nearby residents.

Aesthetic appeal

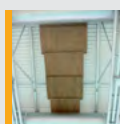
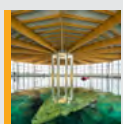
Heraklith® panels are a popular choice for pool areas because they can be delivered in a wide range of colors. The panels are made from Wood Wool and resin, and they are finished with a resistant coating. This makes them resistant to fading and discoloration, and they are also easy to clean. In addition, the panels are fire retardant and have excellent acoustic properties.

RESTAURANTS

Entertainment venues are often faced with the challenge of meeting high standards for performance and safety. To create a great experience for visitors, venues must ensure that everything from the floors to the walls

withstands heavy use and meets rigorous flame resistance requirements. For these reasons, many venues turn to Heraklith® Wood Wool panels when designing their interior spaces. The panels offer excellent acoustic properties and good insulation and sound absorption, but they also boast a wide array of beautiful finishes that will help make any venue stand out from the crowd. These versatile panels are highly durable, making them ideal for busy venues that need to withstand constant traffic and wear and tear. So whether you're looking for stunning wall coverings or durable flooring options, consider Heraklith® panels for your next entertainment venue project.

Swimming pools



Restaurants





APPLICATIONS - ACOUSTICS & AESTHETIC

AGRICULTURAL BUILDINGS

Maintaining healthy environments for farm animals is crucial for ensuring their wellbeing and productivity. A critical aspect of this is controlling the airflow in their enclosures. Heraklith® panels are an excellent solution for this, as they act as both an air filter and insulation.

The panels are made with optimized porosity that makes them permeable to air, meaning that fresh air can circulate while maintaining a steady temperature and humidity level. This helps prevent condensation and draughts, which can be harmful to farm animals.

In addition, the panels provide excellent acoustic insulation, helping to reduce noise pollution for both the animals and their handlers. As a result, Heraklith® Agro Panels are a superior option for creating healthy environments for farm animals.

Enhanced animal comfort

Animal comfort is essential for a variety of reasons. For one, it can help reduce stress levels that can affect animal growth and meat quality. It can also help keep veterinary costs down. The research program results, based on more than 90,000 animal health reports, show a considerable reduction in the consumption of medicines needed to keep pigs healthy on-premises where Heraklith® Agro Panels are installed.

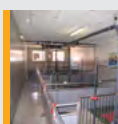
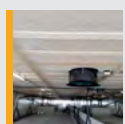
The research has been conducted over several years by the training and research center Raumberg-Gumpenstein, part of the Federal Ministry for Sustainability and Tourism of Austria. So, not only is animal comfort important for the animals themselves, but it can also positively impact our own lives.

Heraklith® helps improve animal welfare

Wood wool panels have been used for several decades to provide acoustic and thermal insulation in stables, chicken farms, and pigsties. The sound absorption properties of Wood Wool help reduce noise inside the premises and in the surrounding environment, which sometimes includes nearby residential areas. Wood wool panels also serve to filter dust in the fresh air system. In light of this, it is evident that Wood Wool panels can be effectively utilized in various industries to improve performance concerning sound absorption and filtration.

The study has shown that good ventilation is vital for the health and comfort of animals. It also has a positive effect on their growth rate. This information should be taken into account by those who design stables, animal houses, and other similar premises.

Case studies



AMSTERDAM METRO LINE

APPLICATION

Technical rooms

LOCATION

Amsterdam, Netherlands

BUILDING

Metro stations on the new Amsterdam North/South Metro line

CLIENT

Gemeente Amsterdam (Amsterdam Municipality)

ARCHITECT

The Heraklith® panels have been supplied by Van Wijngaarden + Co BV and mounted by Verwol.



CHALLENGE

The new Amsterdam North-South metro line (Noord/Zuidlijn) will halve current travel time between Buikslotermeerplein in the north and the South Station, cutting it to just 16 minutes.

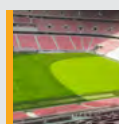
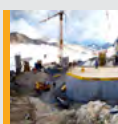
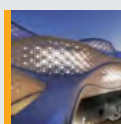
However, trains arriving and leaving the stations every four minutes during peak periods, cause a considerable amount of noise. Good sound insulation properties are therefore required to provide quieter metro stations and a more comfortable travel experience for passengers.

Products used:

Tektalan A2

Heraklith A2 Deco

Similar case studies:



SOLUTION

Heraklith® Tektalan A2 board and Heraklith® A2 Deco panel were chosen because they fully met the sound insulation requirements, at the same time as having an A2 reaction to fire classification.

The Tektalan A2 board is a two-layer mineral bonded Wood Wool board combined with rock mineral wool. It provides excellent fire resistance as well as high thermal and acoustic insulation performance.

The Heraklith® A2 Deco panel is a large mineral bonded Wood Wool board which can be applied to ceilings and walls. It combines excellent noise absorption qualities with an A2 reaction to fire classification. The panels are made of natural materials that work together to absorb sound. They are perfect for lining walls and ceilings, anywhere internally and externally where sound is echoed. Because of their attractive finish and wide range of possible colors they are often used in high-end public spaces, offices and homes.

PUSKÁS FERENC STADIUM - BUDAPEST, HUNGARY

APPLICATION

Sky box, Technical rooms, ceilings

LOCATION

Budapest, Hungary

BUILDING

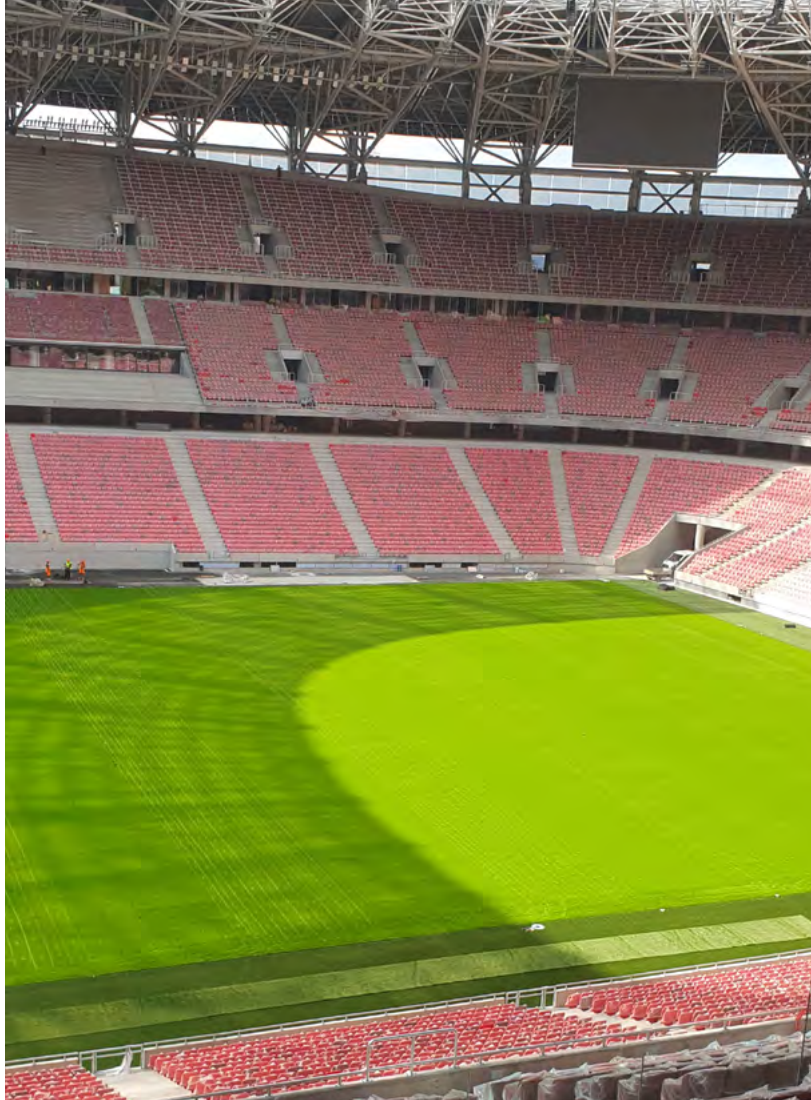
Puskás Ferenc Stadium

CLIENT

KKBK Nonprofit Zrt.

ARCHITECT

György Skardelli



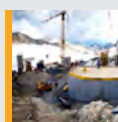
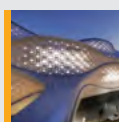
CHALLENGE

The building's acoustic architects wanted to reduce the reverberation by incorporating wood wool insulation to prevent the formation of disturbing echoes.

Products used:

Heraklith 50 mm

Similar case studies:



SOLUTION

Our Heraklith® product has excellent acoustic properties and is found in sky boxes and all corridor ceilings, technical rooms, and player lounges. Our Heraklith® 50 mm wood wool panels were painted black and were installed in quantities of tens of thousands of m².

RIYADH'S LUXURY METRO SYSTEM

APPLICATION

Technical rooms

LOCATION

Riyadh, Saudi Arabia

BUILDING

Technical rooms at metro stations

CLIENT

Saudi Government



CHALLENGE

The \$22.5 billion project is a highly prestigious one. The luxurious metro stations have a distinctive internal and external design and both comfort and safety are top priorities.

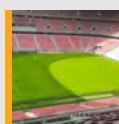
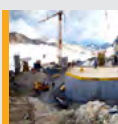
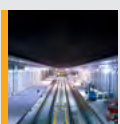
Many elevators, escalators and powerful air conditioning systems are therefore incorporated to enhance traveling comfort. But these require a high number of technical and power generation rooms, which need to be both silent and safe.

Products used:

Tektalan A2

Heraklith A2 Deco

Similar case studies:



SOLUTION

The solution was to use Heraklith® Wood Wool panels, Tektalan A2.

Heraklith® Tektalan A2 combines Wood Wool with a rock mineral wool insulation. These panels combine excellent fire-resistant properties with outstanding thermal and acoustic performance.

Tektalan A2 panels work as a heat shield, ensuring the integrity of the structure for a longer period in the event of a fire. They are also visually appealing and their high level of sound absorption ensures that there is minimal noise from the technical rooms going into the passengers' areas.

The Heraklith® Tektalan A2 panels have already been fitted on the stations that will be open for a limited metro service in 2019, and will eventually be used throughout the network.

GLACIER RAILWAYS KITZSTEINHORN, AUSTRIA

APPLICATION

Extreme climate insulation,
Technical rooms

LOCATION

Kitzsteinhorn, Austria

BUILDING

Gletscherjet 3 & 4 glacier

CLIENT

Empl-Bau GmbH, Gletscherbahnen
Kaprun AG/Kitzsteinhorn



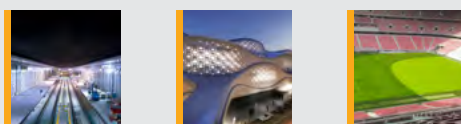
CHALLENGE

In 2014, Gletscherbahnen Kaprun AG broke ground on an ambitious 18-month project to add two new chair/gondola “glacier railways” at the alpine ski area Kitzsteinhorn in Austria. In addition to conquering the many construction challenges inherent to this frigid, storm-prone, high-altitude location, the contractor, Empl-Bau GmbH, needed to employ a fire-resistant insulating material that would prevent heat loss in the top- and mid-station buildings while minimizing condensation and frost on their interior surfaces, even when outside temperatures dropped as low as -20°C.

Products used:

Tektalan A2

Similar case studies:



SOLUTION

To meet the special insulation needs of this extreme-condition project, the contractor chose Tektalan A2-TK-D, a non-flammable multi-layer insulating material composed of Wood Wool and rock mineral wool layers separated by an aluminium-foil vapour barrier. The vapour barrier helps to prevent interior condensation wherever the insulation panels are installed in frigid environments, and the physical characteristics of the panels render them easy to install. At the top railway station, for example, the panels could be concreted directly into the ceiling formwork, because the special alignment of their rock wool mineral fibres allows them to withstand the high pressures of the concreting process. In other areas, they were applied with BTB concrete screws and then plastered and/or painted, depending on the expected wear-and-tear in the rooms where they were installed.

And in addition to their thermal and anti-condensation properties, the Tektalan A2-TK-D panels gave the contractor peace of mind with regard to fire resistance - due to their Euroclass A2 fire rating.

MODERN APARTMENT COMPLEX

APPLICATION

Basement ceilings

LOCATION

Utrecht, Netherlands

BUILDING

New, modern apartment complex

CLIENT

Mitros, Utrecht

ARCHITECT

Op ten Noort Blijdenstein, Utrecht



CHALLENGE

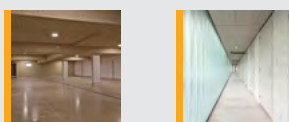
To provide highly effective levels of thermal insulation of the underside of the floors above the parking spaces, the underpass and the balconies. At the same time, good fire resistance was required as well as an attractive finish in keeping with the overall look and appeal of the building.

Products used:

Tektalan A2

Heratekta Wood Wool Panels

Similar case studies:



SOLUTION

The solution was to use Heraklith® Wood Wool panels. Heratekta Wood Wool combi panels were used to finish the underpass and balconies on the street side. Heraklith® Tektalan A2 combi panels with rock mineral wool were chosen to finish the concrete floors above the parking spaces.

With fire resistance of up to 180 minutes, Tektalan A2 Wood Wool combi panels offer excellent fire resistance properties. Furthermore, the open surface structure of the Heraklith® panels ensure excellent acoustic properties and because they are manufactured from natural and sustainable materials, they provide a particularly eco-friendly solution. All the panels were made from certified wood.

Heratekta is a thermal insulation board that combines Wood Wool with a grey EPS insulation board that has a tongue and groove connection that supports very easy and one-man installation.

The Wood Wool panels have been delivered in a variety of colours matching the building design.

DE ADELAAR IN HOOGEVEEN

APPLICATION

Garages and underground car parks,
Soffits, Basement ceilings

LOCATION

Hoogeveen, Netherlands

BUILDING

De Adelaar

CLIENT

Domesta



CHALLENGE

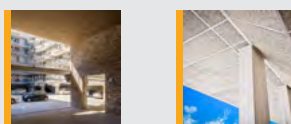
The challenge was to provide an equally aesthetically pleasing finish for the storage areas, high entrance underpass and parking spaces. It demanded a material that would reflect the character and style of the rest of the complex, at the same time as providing sound absorption and a high level of thermal insulation performance.

The complex owner, Domesta, also specified that the materials used must be sustainable, hard-wearing and long-lasting

Products used:

Heratekta Wood Wool Panels

Similar case studies:



SOLUTION

The solution was to use Heraklith® Wood Wool panels that had already been painted in the colors of the building at the factory. The high quality Wood Wool panels provide excellent sound absorption in the entrance underpass and parking spaces and fully complement the design and style of the complex. In addition to their primary features of acoustic and thermal insulation performance, durability and eco-friendliness, the Wood Wool boards were easy to install and significantly reduced construction time because their surfaces were pre-finished. They are also naturally attractive, moisture and mould resistant.

Where extra thermal performance was required, Heraklith® Heratekta multilayer panels with an EPS core were chosen. Heratekta panels are specially developed for walls and ceilings which require good thermal insulation performance. The panels are easy to mount thanks to their lightweight, 2-point mounting and alternating lapjoints.

PRIVATE UNDERGROUND CAR PARK

APPLICATION

Garages and underground car parks

LOCATION

Neuburg an der Donau, Germany

BUILDING

Semi-detached houses.
4 x 136 m² living space,
300 m² garage area



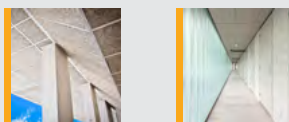
CHALLENGE

Typical of such exclusive homes are two semi-detached houses, built with their own underground garage with parking spaces for eight vehicles. From the outside, the homes look relatively ordinary. But step inside and it is immediately apparent that they are designed for more discerning residents. The generously proportioned rooms feature state of the art services, marble floors and very high levels of comfort. The 300 m² underground garage with its eight parking spaces is also an unusual feature, allowing residents to enjoy direct access to their homes without stepping outside.

Products used:

Tektalan A2-Lumax

Similar case studies:



SOLUTION

All criteria and specifications for the garage were met by installing Tektalan A2- Lumax panels that are robust, non-combustible Wood Wool panels with a rock mineral wool insulation core. They not only offer first-class fire protection, but also provide effective insulation against heat loss and sound. LED lamps are integrated directly into the Wood Wool multilayer board, making any additional lighting unnecessary.

They are specifically designed for optimal illumination of underground garages and the state-of-the-art LED technology ensures a maximum service life. The presence-sensitive lights deliver up to 1,580 lm of light and can be set to color temperatures of 3,000 k (warm white) or 4,000 k (neutral white) during installation.

The panels provide an extremely high-quality impression, in perfect harmony with the very high-specification materials used elsewhere in the houses.

IKEA OBCHODNÍ CENTRUM ČERNÝ MOST

APPLICATION

Garages and underground car parks

LOCATION

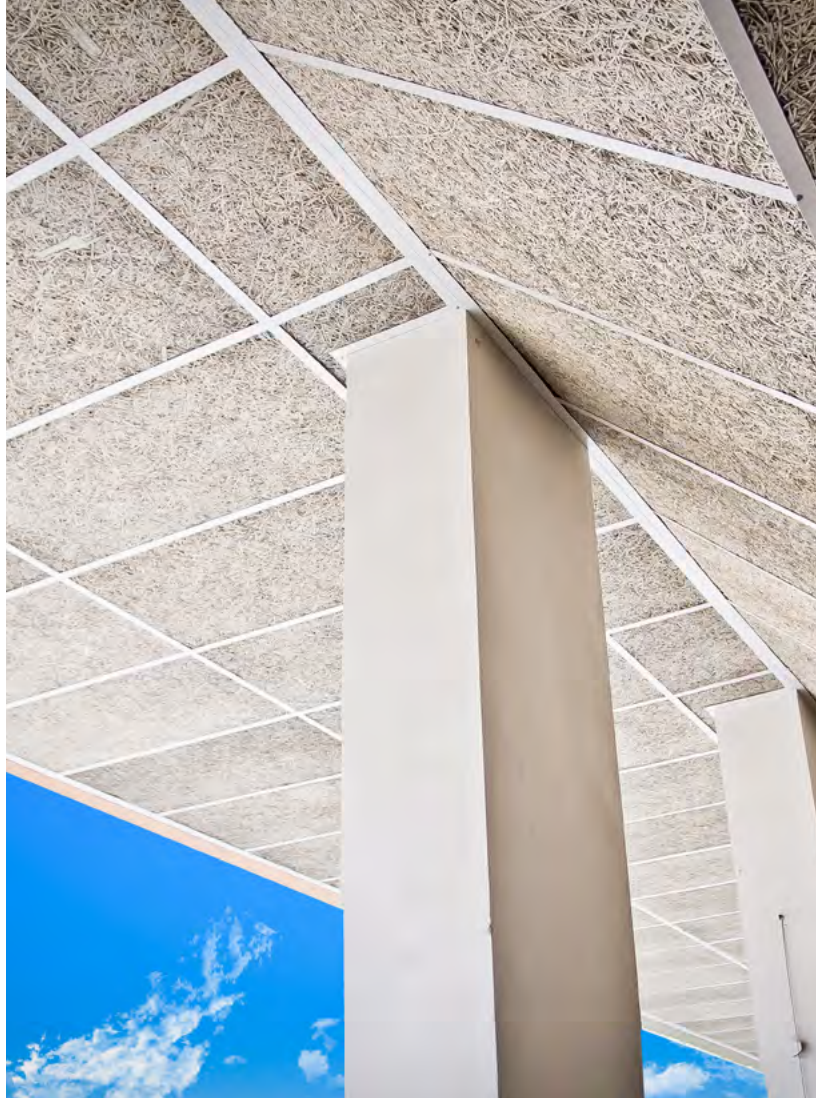
Praha, Czechia

BUILDING

IKEA - Obchodní Centrum Černý Most

CLIENT

N/A



CHALLENGE

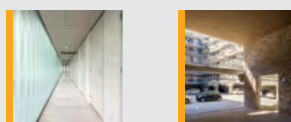
In 2013, the Černý Most shopping mall underwent a significant expansion, including the shopping area of the furniture producer IKEA. In addition to the work done above ground, the expansion involved work in the underground garage, which needed to be insulated for both acoustics and fire resistance, especially in its ceiling.

At peak periods, the IKEA store may be visited by up to 10000 shoppers, and the garage has a capacity of 1400 cars; therefore, the insulation solution needed to work for a very large underground space.

Products used:

Heraklith C

Similar case studies:



SOLUTION

To meet the challenges of this project, the contractor chose Heraklith C insulation. When the outer surface of Heraklith C possesses is exposed to fire, it develops a carbonized layer that stops the advance of the fire front and protects the materials to which it is attached - which is why it is praised by firemen. Also, Heraklith® Wood Wool insulation boards do not melt or produce burning droplets when exposed to fire and are rated in the best class with regard to smoke development.

With regard to sound insulation, Heraklith C possesses excellent acoustical properties. And it is also easy to install and very attractive, creating a much warmer and natural look than that of ceiling concrete. This combination of fire resistance, acoustic performance, ease of installation, and attractive appearance make Heraklith® the perfect choice for insulating spaces such as underground garages.

OUTSTANDING ACOUSTICS AT THE ATLAS THEATRE IN EMMEN

APPLICATION

Public halls and theatres

LOCATION

Emmen, Netherlands

BUILDING

New regional theatre

CLIENT

Emmen Municipality, Van den Berg Group, Dura Vermeer



CHALLENGE

The Atlas Theatre in Emmen combines the very best of modern architecture and technology. It was designed specifically to give the impression of openness and space, at the same time as being a showcase for environmental best practices. This was particularly important as the theatre also serves as the entrance to the recently re-located Emmen zoo. The challenge was to ensure that the acoustics in the grand foyer hall, with its 20 meter high ceiling, and other critical areas in the building were sufficiently insulated to avoid echoes and other unwanted sound.

Products used:

Heratekta Wood Wool Panels

Similar case studies:



SOLUTION

Heraklith® offers a wide variety of insulation solutions to help create outstanding acoustics. In this case Tektalan A2 was chosen as the perfect solution as the panels combine Wood Wool multilayer board with rock mineral wool for high absorption of sound and noise. Tektalan panels were used in the foyer area for the outer walls of the stage halls, while Tektalan A2 and Heraklith A2 panels were chosen for areas such as the corridors to the dressing rooms, entrance to the small stage room, and the basement with the orchestra pit.

The open surface structure of Heraklith® Wood Wool insulation provides outstanding sound absorption properties. Furthermore, Tektalan and Heraklith® panels offer high levels of fire protection.

AFAS EXPERIENCE CENTER

APPLICATION

Public halls and theatres

LOCATION

Leusden, Utrecht, Netherlands

BUILDING

AFAS Experience Center

CLIENT

AFAS Software; Steef van der Veldt, Just Architects; Dura Vermeer; Muller Afbouwgroep



CHALLENGE

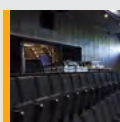
The challenge for the architects and builders was to provide materials which not only met or exceeded the high-performance standards required but were also created with a commitment to environmental responsibility and sustainability. The materials used also needed to accommodate the curved and rounded shapes of the design and needed to be long-lasting. For the theatre, the challenge was to avoid resonance and to ensure that everything sounded as intended.

Products used:

Heraklith Wood Wool Panels

Heraklith A2 Finishing Panels

Similar case studies:



SOLUTION

Heraklith® Wood Wool Panels were chosen to provide the perfect solution for both the theatre and some of the surrounding areas. The natural wood look fully compliments the luxurious look and feel of the prestigious complex.

Recognizing that Heraklith® Wood Wool panels are among the best for noise absorption, they are specifying them for a growing number of both new and retrofit projects. The open surface structure of the durable and lightweight panels provides exceptional acoustic performance, Heraklith® Wood Wool panels are available in pre-finished surfaces and a range of custom colors, allowing small teams to insulate large areas quickly and easily with minimal effort.

The Heratekta Wood Wool panel is provided with a tongue and groove connection which allows quick and extra flat installation.

QUIET OPEN SPACES IN HOLOUBKOV

APPLICATION

Public halls and theatres

LOCATION

Leusden, Utrecht, Netherlands

BUILDING

AFAS Experience Center

CLIENT

AFAS Software; Steef van der Veldt,
Just Architects; Dura Vermeer; Muller
Afbouwgroep



CHALLENGE

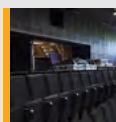
The challenge was to create an open-plan office space which would promote creative thinking and encourage teamwork but provide enough space and the right acoustics to avoid disturbance to colleagues from telephone conversations and ringing phones.

The atmosphere of the location - an industrial steel building - and TGS focus on mechanical engineering also demanded a material that would reflect the character of the company which works mainly with raw materials in their natural state.

Products used:

Heraklith C

Similar case studies:



SOLUTION

The solution was to use Heraklith® Wood Wool insulation as this natural cladding met all the requirements. It is a natural product that combines fire resistance with superior acoustic and thermal performance. Its availability in a variety of surface textures, colors, and sizes allowed for an entirely customized design with high impact resistance and long-lasting durability, even in a challenging industrial environment.

Heraklith® panels were used for insulating the three boxes containing facilities and a conference room that are inserted into the 330 m² office space on the first floor, helping to create small recesses in the open space. Noise and reverberation from elsewhere in the building are effectively suppressed by the open structure of the wood fibres in the Heraklith® panels. These panels were also used for the entrance hall, stairway, canteen facilities and multi-purpose leisure room. They provide an environment almost totally free from the clink of glasses and the sound of bouncing ping-pong balls.

DA VINCI COLLEGE IN ROOSENDAAL

APPLICATION

Educational facilities

LOCATION

Roosendaal, Netherlands

BUILDING

College campus

CLIENT

Our Secondary Education, Tilburg



CHALLENGE

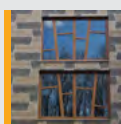
Acoustics are of the utmost importance in a school building. Pupils must be able to concentrate on their work without noise from other rooms.

The challenge was to provide acoustic protection to minimize noise from adjoining class and practice rooms, using long-lasting materials that offer good insulation and pleasing aesthetics that complement the futuristic look and feel of the school.

Products used:

Heraklith A2

Similar case studies:



SOLUTION

The solution was to use Heraklith® Wood Wool insulation panels which have strong sound absorption properties, at the same time as providing a high quality and attractive finish. It was also extremely important to provide a solution that provides high fire resistance, particularly in a school environment.

The open surface structure of the Heraklith® panels ensure outstanding acoustic properties and because they are manufactured from natural and sustainable materials, they provide a particularly eco-friendly solution. All the panels were made from certified wood. Heraklith® Wood Wool insulation is an outstanding solution for the insulation of school practice rooms. Their outstanding acoustic insulation ensures that pupils are able to concentrate on their studies without noise from other rooms.

The boards are available in a wide array of colors and finishes and are resistant to the physical damage that can result from day-to-day use.

KINDERGARTEN AND ELEMENTARY SCHOOL

APPLICATION

Exterior wall insulation,
Educational facilities

LOCATION

Fehérgyarmat, Hungary

BUILDING

Kölcsey Ferenc Kindergarten
and Elementary School

CLIENT

Sajó Design Bt



CHALLENGE

It is not unusual in Hungary to find schools with playful facades, in which different shades of bricks have been used to create imaginative and memorable patterns. Indeed, during the large-scale construction of institutional establishments at the turn of the 20th century, such designs were widely used. The challenge was to provide long-lasting materials that offer good insulation and pleasing, playful looking aesthetics that complement the very futuristic look and feel of the school.

Products used:

Heraklith A2

Heraklith A2 C

Similar case studies:



SOLUTION

The solution, developed with the support of engineers at Knauf Insulation Kft, was to create a ventilated façade of grey and white colored Heraklith® Wood Wool panels to produce a unique pattern, at the same time as providing excellent heat and sound insulation. The 25 mm thick fire-resistant panels were manufactured using white cement (Heraklith® A2 25 x 500 x 2000 mm) and grey cement (Heraklith® A2 C 25 x 500 x 2000 mm) and have higher a higher than usual density. The edged panels were planed and then treated with Sto Kft's Hydrogrund primer and painted with Sto Color Lotusan paint. The design has received considerable acclaim from a number of other well known and highly respected architects. Award winning Architect Ernő Kálmán says the building has a feeling of lightness that helps the eye take it in. "Its uniqueness is a sign of distinction for those who study within its walls," he says.

TODI DIVING CENTRE, BERINGEN

APPLICATION

Swimming pools

LOCATION

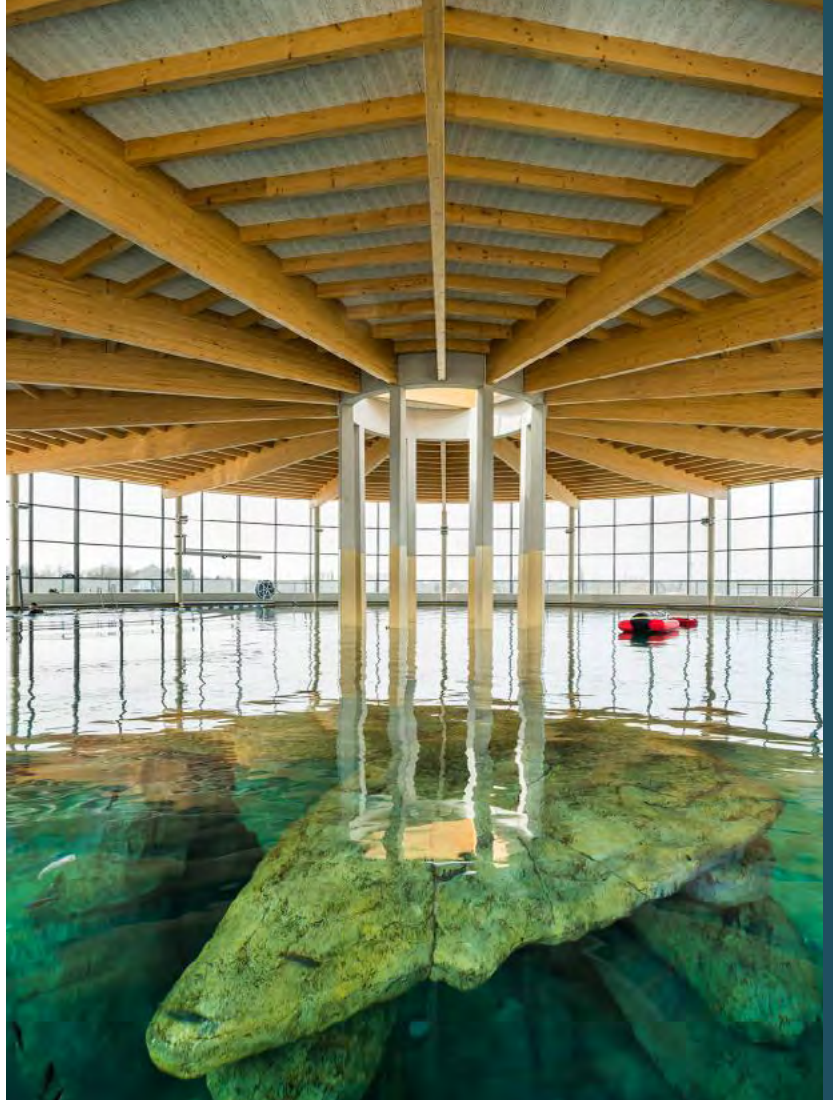
Beringen, Belgium

BUILDING

The TODI Diving Centre

CLIENT

be-MINE NV



CHALLENGE

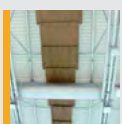
The impressive-looking diving center is housed within a futuristic building constructed mainly from concrete, tiles and glass. The diving pool itself reuses the water storage basin formerly serving the mining site. But combined with a large expanse of water which naturally reflects sound, it was necessary to improve the acoustics.

The challenge was to provide long-lasting materials that can withstand damp conditions whilst offering good sound absorption and pleasing aesthetics.

Products used:

Heraklith roof panels

Similar case studies:



SOLUTION

The solution was to install Heraklith® roof panels as an integral part of the magnificent wooden roof spanning the 36 meter diameter pool. Heraklith® roof panels provide excellent acoustic performance and are designed to withstand the extreme conditions of a high humidity, heated indoor pool environment. The timber materials are safe and fully retain their strength and shape whilst absorbing and releasing moisture. Heraklith® roof panels are also easy to fit into tight ceiling applications and offer high resistance to impact, ensuring optimal protection against physical damage.

Made from only PEFC-certified wood, the panels fully meet sustainability requirements

SPORTS SWIMMING POOL IN GYŐR, HUNGARY

APPLICATION

Garages and underground car parks

LOCATION

Győr, Hungary

BUILDING

Győr City Indoor Swimming Pool

CLIENT

Győr Municipality

ARCHITECT

Mr. Attila Bodrossy, Dimenzió Tervező Kft.



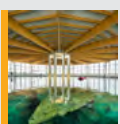
CHALLENGE

The challenge was to provide a long-lasting material that can withstand wet conditions whilst also offering good sound absorption and pleasing aesthetics. The Győr City Indoor Swimming Pool (Győr Városi Fedett Sportuszoda) is in a complex which accommodates large numbers of people who also come to use the gymnastics hall, concert halls, theaters, and studios. Without good sound absorption the sound levels would be unacceptable.

Products used:

Heraklith C

Similar case studies:



SOLUTION

They also provide color and aesthetic appeal to the pool area. Heraklith C boards were surface-treated with cherry colored glaze and were used in conjunction with Heraklith C boards painted yellow and suspended in a false ceiling support structure.

Wood wool insulation is naturally durable and can last for the life of the building in which it is used. The boards fit easily into a tight ceiling application, and the high resistance to impact of the Wood Wool surface ensures optimal protection against physical damage.

HERAKLITH® AGRO WOOD WOOL PANELS: IDEAL FOR PIG FARMS

APPLICATION

Agricultural buildings

LOCATION

Sárpilis, Tolna County, Hungary

BUILDING

Livestock housing, pig farm

CLIENT

Livestock housing, pig farm



CHALLENGE

The challenge at this pig farm was to complement a well-managed, functioning and efficient ventilation system with insulation and structural materials that would ensure a smooth flow of air. The ventilation system was designed to effectively draw fresh air into the buildings and remove stale air containing dust, harmful gases and water vapour. But draughts needed to be avoided and insulation installed to help control temperature.

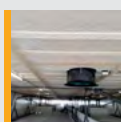
Products used:

Heraklith Agro Wood Wool panels

MPN Plus 037

Mineral Plus 039

Similar case studies:



SOLUTION

The answer was to use Heraklith® Agro Wood Wool panels. The porous structure of the panels makes them act as air deflectors. As a result, the airflow is slowed down and becomes evenly distributed. It also prevents draughts and harmful concentrations of fast flowing air.

The energy efficiency and thermal insulation of the panels is excellent and so no further protection was required between the rafters of the roof structure.

And thanks to the excellent acoustic insulation properties of the Heraklith® Agro Wood Wool Panels, the noise from animals and agricultural machinery has been significantly reduced. Because the panels are classified according to MSZ EN 13501-1 as A2 (non-combustible), they also help provide fire protection.

PIGSTY IN BACHMANNING, AUSTRIA

APPLICATION

Agricultural buildings

LOCATION

Bachmanning, Austria

BUILDING

Pigsty

CLIENT

Voraberger KG, Mr Herbert Voraberger



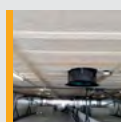
CHALLENGE

In 2013, the management of a pigsty in Bachmanning, Austria modified their facilities to improve the conditions of their environments and the health of the pigs that are housed in them. When preparing for the modifications, the planners and designers took special consideration of the air flow and ventilation in the sty - which are critical to the raising of stabled farm animals of any kind. They also focused on the durability of the modifications and their ability of to perform well under a wide variety of environmental conditions.

Products used:

Heraklith Agro

Similar case studies:



SOLUTION

At the pigsty in Bachmanning, Austria, these challenges were addressed using 25-mm thick Heraklith Agro boards with 100mm WDF in the ceiling construction. Heraklith Agro boards contain pores that render them permeable to air and are designed to help to control airflow in agricultural environments. This air permeability helps to ensure that airflows are distributed evenly over the entire ceiling and that the pigsty is properly ventilated at a wide range of air consumption rates.

The Agro boards are easy to install, provide good sound absorption, and exhibit almost no visible condensation in normal operation. And their ability to withstand impact without significant damage and to hold up under a wide range of environmental conditions helps them to maintain performance year-round and in a wide variety of conditions. Thanks partly to the use of Heraklith Agro boards in the sty ceiling, the farm management has witnessed an 80% reduction in the consumption of medicines required to keep the pigs healthy (relative to sties with conventional ceilings) - which translates into increased productivity at lower cost.

TA-KUMI JAPANESE GASTRO-BAR RESTAURANT

APPLICATION

Restaurants

LOCATION

Marbella Málaga, Spain

BUILDING

Ta-Kumi Japanese Gastro-Bar Restaurant

CLIENT

Paco Lago Interioriza, Malaga



CHALLENGE

The challenge for Top chefs Toshio Tsutsui and Álvaro Arbeloa was how to create this ambiance for their Ta-Kumi restaurant in the heart of fashionable Marbella, home to celebrity-studded nightclubs and some of the world's most luxurious boutiques. The literal translation of Takumi is "artisan" or "master" and so the interior design needed to reflect the same distinction and originality as the fusion cuisine they offer. The construction materials and furnishings needed to look authentic, but also had an important role in providing the excellent acoustics for a comfortable dining atmosphere.

Products used:

Heraklith Ceiling Panels

Similar case studies:



SOLUTION

The solution was to use Heraklith® Wood Wool ceiling panels which offer strong sound absorption and thermal insulation, at the same time as providing excellent fire resistance and a high quality and attractive finish. The open surface structure of the Heraklith® panels ensure outstanding acoustic properties and because they are manufactured from natural and sustainable materials, they provide a particularly eco-friendly solution. The panels fully complement the ultra-modern and atmospheric lighting that is one of the design features of Ta-Kumi and were delivered ready-painted for easy installation. Heraklith® wood insulation is an outstanding all-in-one solution for the insulation of restaurant ceilings and was chosen by the team behind the project, design studio Paco Lago. They describe themselves as a group who like to use cutting edge technology and materials that appeal to people's emotions. "We seek functionality, usability, and efficacy to produce a memorable experience. We thrive on solving problems, adding value and getting involved with our clients."

LOCK, STOCK & BARREL IN DUBAI

APPLICATION

Restaurants

LOCATION

Dubai , United Arab Emirates

BUILDING

Rixos Premium, Jumeirah Beach Resort

CLIENT

Solutions Leisure



CHALLENGE

The challenge was to provide long-lasting materials with pleasing aesthetics that would complement the futuristic look and feel of the venue. They also need to combine good acoustics with good insulation.

Products used:

Heraklith A2

Similar case studies:



SOLUTION

The solution was to use Heraklith® Wood Wool insulation panels which provide a high quality and attractive finish at the same time as having good sound absorption and insulation properties. It was also extremely important to provide a solution that provides an A2 fire classification and high fire resistance properties in such an entertainment venue. The open surface structure of the Heraklith® panels ensure excellent acoustic properties and because they are manufactured from natural and sustainable materials, they provide a particularly eco-friendly solution. All the panels were made from certified wood. It is this combination of features that make Heraklith® Wood Wool insulation an outstanding choice for the insulation of bars and restaurants. The boards are available in a wide array of colours and finishes and are resistant to the physical damage that can result from day-to-day use.

HERAKLITH A2

THERMAL CONDUCTIVITY

WW - 0,090 W/m.K

FIRE CLASSIFICATION

A2-s1, d0, according to EN13501-1

MECHANICAL PROPERTY

$\sigma_m \geq 200$ kPa; $\sigma_m \geq 150$ kPa



Amsterdam Metro Line



Atlas Theatre in Emmen



Underground car park



Apartment complex

- High resistance to fire - A2-s1, d0 - increasing the fire safety of buildings
- Excellent heat accumulation
- Very good acoustic properties
- Low vapour resistance
- Excellent construction-biological properties
- Resistant to microorganisms and rodents
- Chemically neutral - no reaction with the surrounding materials
- Easy cutting to the requested size and shape
- Very high resistance to mechanical stresses

PRODUCT DESCRIPTION

One-layer, non-combustible wood wool board with white mineral binder. Thermal insulation of lofts, one- and multilayer partition walls, permanent formwork for eliminating thermal bridges, flooring constructions, sound insulation constructions, ventilated facades (with renders and coverings), fire protection of building constructions. It provides an impact resistant surface and a perfect base for renders thanks to the wood wool layer with mineral binder.

HERATEKTA C2 031

THERMAL CONDUCTIVITY

EPS 0,031 / WW - 0,090 W/m.K

FIRE CLASSIFICATION

E, according to EN13501-1

MECHANICAL PROPERTY

$\sigma_m \geq 50$ kPa

- Excellent thermal insulation
- It can be used as a permanent formwork
- Low vapour resistance
- Very good construction-biological properties
- Easy cutting to the requested size and shape
- High resistance to mechanical stresses



Amsterdam Metro Line



Atlas Theatre in Emmen



Underground car park



Apartment complex

PRODUCT DESCRIPTION

Two-layer composite board with a core of gray EPS, and one-sided wood wool facing with mineral binder according to EN 13168. It provides an impact resistant surface and a perfect base for renders thanks to the solid wood wool layer with mineral binder. Thermal insulation of facades, slabs, and garages, permanent form work for eliminating thermal bridges, insulation of slabs cooled from beneath.

It provides an impact resistant surface and a perfect base for renders thanks to the solid wood wool layer with mineral binder.

TEKTALAN A2 037/2

THERMAL CONDUCTIVITY

MW 0,037 / WW - 0,090 W/m·K

FIRE CLASSIFICATION

A2-s1, d0, according to EN13501-1

MECHANICAL PROPERTY

$\sigma_m \geq 30$ kPa



Amsterdam Metro Line



Atlas Theatre in Emmen



Underground car park



Apartment complex

- High resistance to fire - A2 - increasing the fire safety of buildings
- Excellent heat accumulation
- Very good acoustic properties
- Low vapour resistance
- Excellent construction-biological properties
- Resistant to microorganisms and rodents
- Chemically neutral - no reaction with the surrounding materials
- Easy cutting to the requested size and shape
- Very high resistance to mechanical stresses

PRODUCT DESCRIPTION

Non combustible composite board made from mineral wool core and one-sided Wood Wool facing with mineral binder, according to EN 13168. Due to the natural raw materials there could be unavoidable shade differences in the Wood Wool top layer. The boards can be delivered with painted surface (in RAL colours) on request. The edges of boards are beveled, optionally can be ship-lapped or both.



PLEASE CONTACT US!

Heraklith® Hungary
Knauf Insulation Kft.

2058 Hungary
Budaörs, Gyár u. 2.
Pf. 115.

+ 36 23 889 844
info@heraklith.com

Heraklith®

Heraklith wood wool insulation is a natural product that combines fire resistance with superior acoustic and thermal performance in a durable and eco-friendly product which provides an all-in-one, no-compromise solution for your insulation needs.

PART OF **KNAUFINSULATION**

