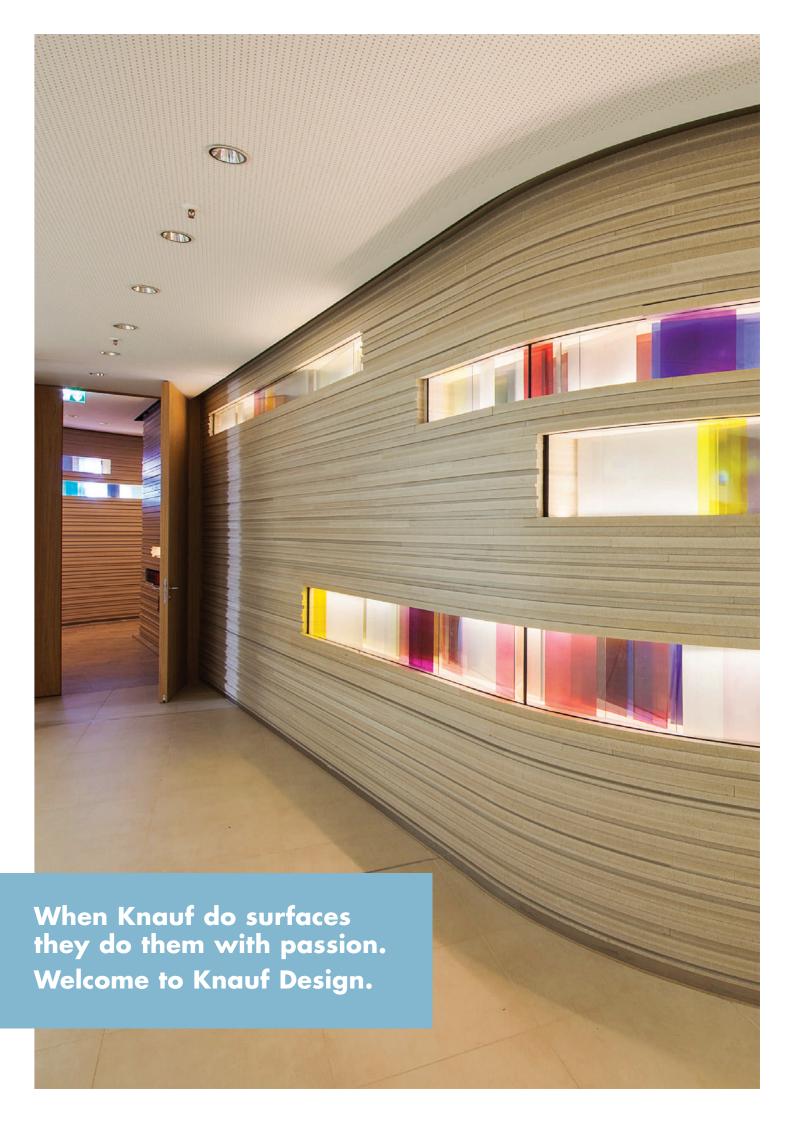


Knauf Designboard

The combination of creativity and fire safety





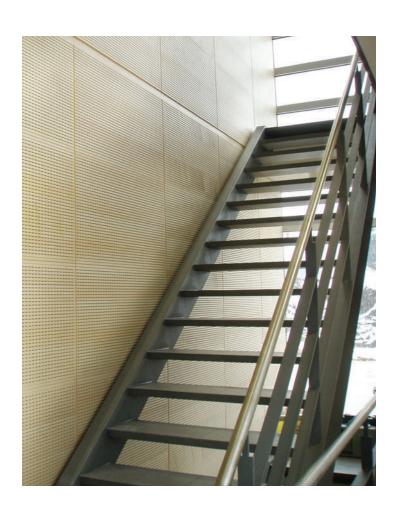


Knauf Design are renowned for pioneering creative ideas in the development of surface finishes for both our range collections and customised solutions, based on many years of expertise in the production of highly compressed and extremely durable gypsum fibre board. Ground-breaking products from Knauf Design deliver high performance partitions and ceilings, granting a freedom of design expression and impressing with their emphasis on functionality and safety.

Wherever requirements for high architectural design clash with technical specifications, Knauf Designboard from Knauf Design is the ideal choice. Sophisticated reference projects show the diversity of possibilities and inspire creative solutions.

The result is the creation of robust and extremely resilient panels, with a diverse range of specialist surfaces for incorporation within high-design orientated spaces. Combining the highest standards of fire safety and acoustic performance, they prove their worth wherever both consistency of the visual effect and the reliability of a system are demanded. This may include communal or high circulation areas of public buildings, areas dedicated to health and leisure, hotels or retail environments.

As a partner for designers, architects, contractors and end users, we offer the highest levels of compliance to standards, approvals and quality through the supply of dependable products and installation systems.



Contents

- Product overview
- Fire performance and acoustics
- **18** Fixing systems
- 20 Classification
- 22 Designed to perform
- **Design collection**
- 30 Case studies



The combination of creativity and fire safety.

Interior design products specifically created for fire safety are available within the Knauf Designboard range. The decisive features of this product line are not just in the certified board material, but also incorporate important factors such as a certified installation system and additional special properties such as acoustic performance and edge detail.

With Knauf Designboard a system has been created that offers you the possibility of an individual bespoke design whilst at the same time ensuring the highest levels of fire safety. Knauf Designboard consists of two product groups: raw and pre-finished panels. Both are state-of-the-art and are certified for their reaction to fire classification to EN 13501-1.

Raw Panels

Knauf Designboard 210 and Gifamarine
A1 Reaction to fire classification to EN 13501-1

Performance Definition* Non-combustible

England & Wales Northern Ireland Republic of Ireland Scotland

Product Characteristics

- Gypsum fibre board at 1100 or 1500 kg/m³ density
- Calibrated
- Both versions of the board are IMO certified for shipbuilding

Pre-finished Panels

Knauf Designboard 230 A2-s1,d0 Reaction to fire classification to FN 13501-1

Performance Definition* Material of limited combustibility

England & Wales Northern Ireland

Republic of Ireland Non-combustible

Scotland

Product Characteristics

- Gypsum fibre board in 1100 or 1500 kg/m³ density certified as a composite
- Coated: laminated, veneered, varnished, printed, primed
- May be subsequently formatted and edged



Highly robust with impressive stability



Ideal for improving room acoustics



Varnish, surface structuring, coating or veneering, as desired

* References

England & Wales

The Building Regulations 2010, including 2013 amendments. Fire Safety Approved Document B Vol 1 Dwelling Houses

The Building Regulations 2010 is about in 2013 amendments. Fire Safety Approved Document B Vol 2 Building at least to the safety Approved Document B Vol 2 Building at least to the safety Approved Document B Vol 2 Building at least to the safety Approved Document B Vol 2 Building at least to the safety Approved Document B Vol 1 Dwelling Houses

The Building Regulations 2010, including 2013 amendments. Fire Safety Approved Document B Vol 2 Buildings other than

Dwelling Houses

Northern Ireland Scotland Republic of Ireland Building Regulations (Northern Ireland) 2012. Guidance Technical Booklet E Fire Safety
Technical Handbook 2017 Domestic – Fire. Technical Handbook 2017 Non Domestic - Fire
Building Regulations 2017 Technical Guidance Document Fire Safety Vol 2 Dwelling Houses

Knauf Designboard 210

		Density in kg/m³	
Designboard 210	unit	≥1100	≥1500
Standard formats	mm	3100 x 1260 2560 x 1260	2560 x 1260
Thickness	mm	12 / 16 / 18 / 21 / 23 / 25	12 / 18
Surface		raw, calibrated	
Building material classification		A1 according to EN 13501-1	



Knauf Designboard 210 Knauf Gifamarine

Knauf Gifamarine



Gifamarine	unit	Density in kg/m³ ≥1100	
Standard formats	mm	2560 x 1260	
Thickness	mm	12 / 18	
Surface		raw, calibrated	
Building material classification		non-combustible	
Proper use	non-combustible material according to SOLAS 74/88 Chap. Il-2 Rule 3.33, latest version, MSC.97 (73) 7.2.3 (2000 HSC-Code)		





Knauf Designboard 230 Laminate

		Density in kg/m³	
Designboard 230	unit	≥1100	≥1500
Design	Laminates	HPL	
Standard formats	mm	3030 x 1200	3030 x 1200
Thickness	mm	13.2 / 17.2 / 19.2 / 22.2 / 24.2 / 26.2	13.2 / 19.2
Surface		HPL (High Pressure Laminate) coated	
Building material classification		A2-s1,d0 according to EN 13501-1	







Knauf Designboard 230 Wood

		Density in kg/m³	
Designboard 230	unit	≥1100	≥1500
Finish	Wood	Real wood veneer	
Standard formats	mm	3030 x 1200 2560 x 1260	2560 x 1260
Thickness	mm	12.6 / 16.6 / 18.6 / 21.6 / 23.6 / 25.6	13.2 / 19.2
Surface		calibrated / veneered / finished	
Building material classification		A2-s1,d0 according to EN 13501-1	







Knauf Designboard 230 Creative

		Density in kg/m³	
Designboard 230	unit	≥1100	≥1500
Finish	Creative	Direct print	
Standard formats	mm	3100 x 1260 2560 x 1260	2560 x 1260
Thickness	mm	12 / 16 / 18 / 21 / 23 / 25	12 / 18
Surface		calibrated / primed / printed / finished	
Building material classification		A2-s1,d0 according to EN 13501-1	





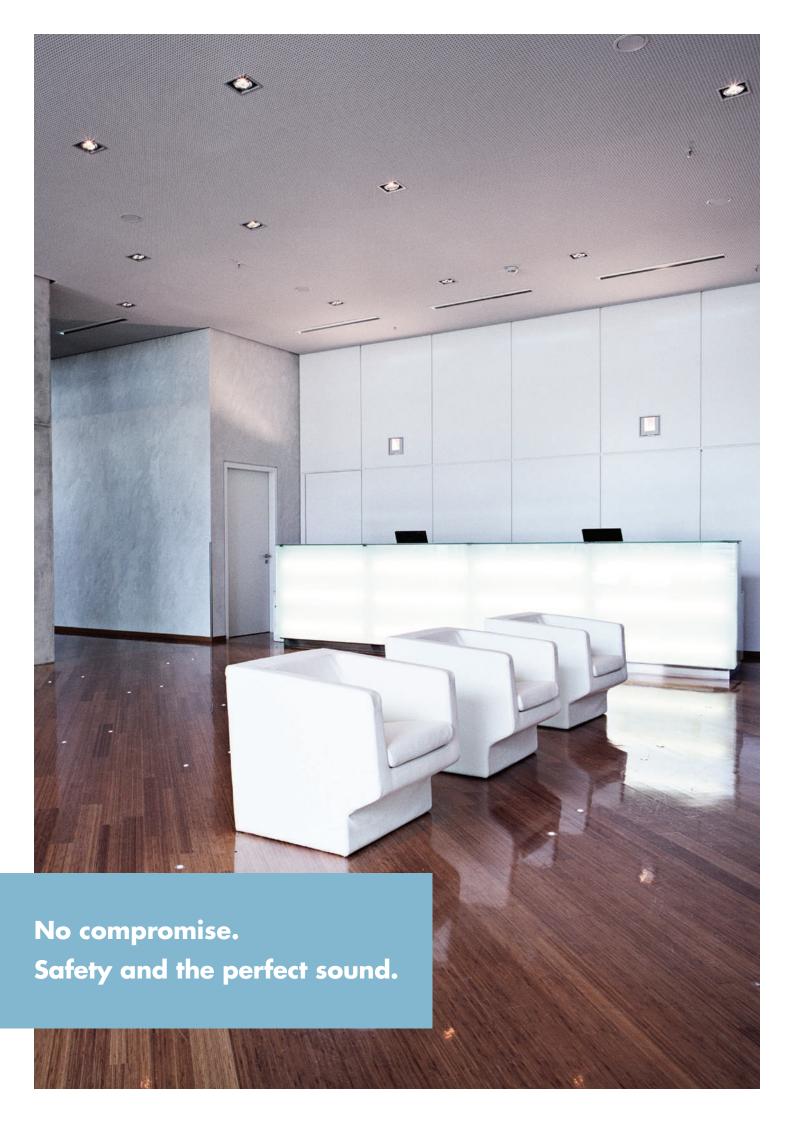


Knauf Designboard 230 Paint

		Density in kg/m³	
Designboard 230	unit	≥1100	≥1500
Finish	Paint	Painted	
Standard formats	mm	3100 x 1260 2560 x 1260	2560 x 1260
Thickness	mm	12 / 16 / 18 / 21 / 23 / 25	12 / 18
Surface		calibrated / primed / lacquered / finished	
Building material classification		A2-s1,d0 according to EN 13501-1	







Fire performance and acoustics

Passive fire protection can save lives. This is the reason why it's vital for buildings such as hospitals, meeting areas or schools.

The approved drywall system from Knauf Design classified according to EN 13501-1 is compliant with all legal requirements and prevents the rapid spread of fire.

We never compromise on safety.

Acoustics also play an important role in room design.

Whether it's a church, sports hall or auditorium, every room requires its own unique sound concept.

For example, in a concert hall, our wall systems project the sound into the last corner of the room and thus ensure the perfect listening experience.

With excellent acoustic effectiveness Knauf Designboard 230 is the ideal choice as a classic broadband absorber.

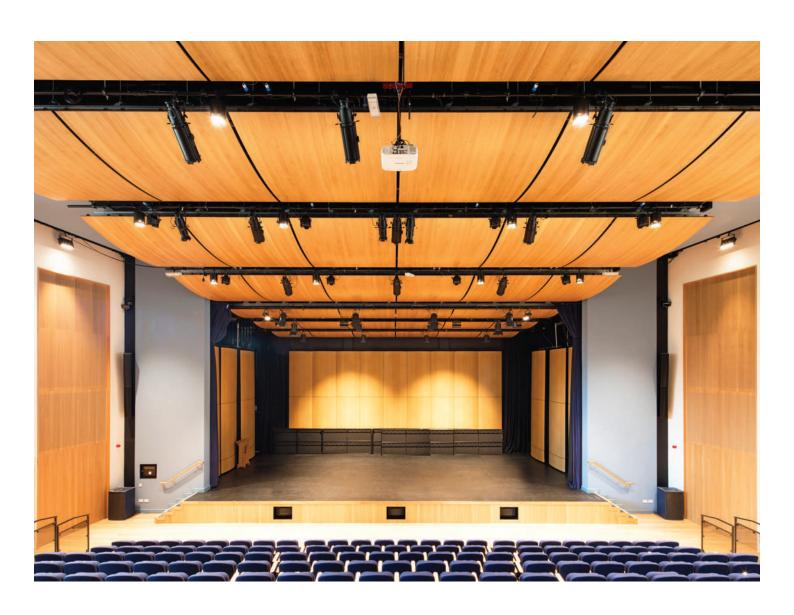
Designboard 210

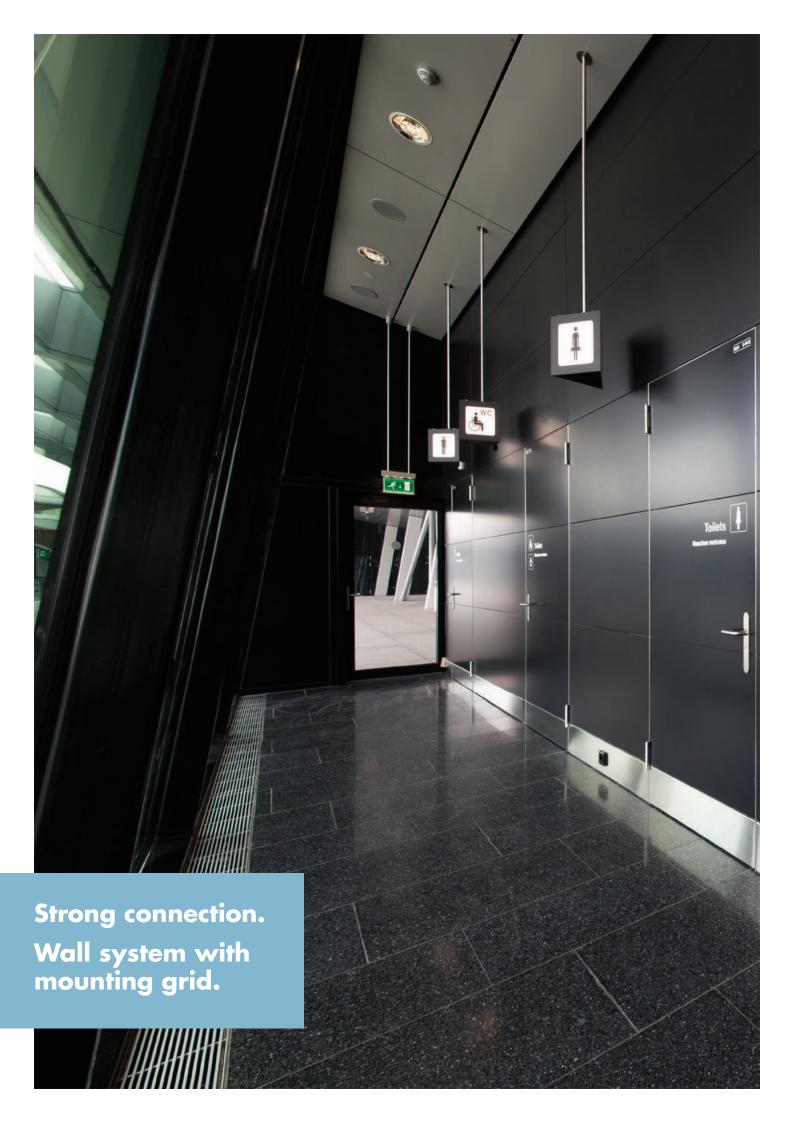


Designboard 230





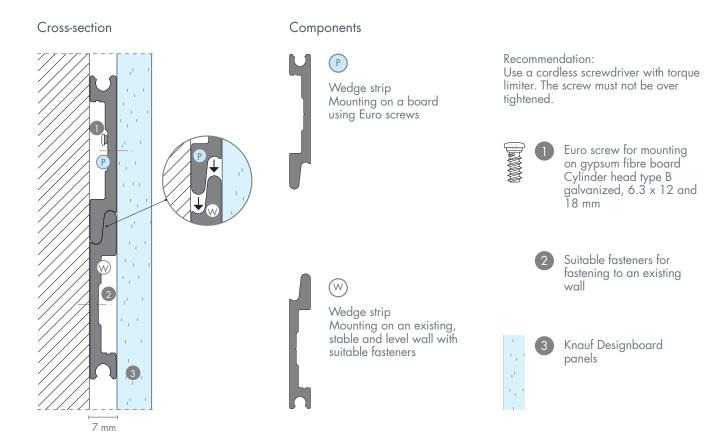




Perfect surfaces and inner quality are synonymous with Knauf Design. Our pledge as professionals is to provide smart systems facilitating easy installation and ensuring securely fastened decorative panels. The wedge fix system provides a high performance hidden fix installation solution for Knauf Designboard.

We deliver the panels as desired: laminated, veneered, lacquered or digitally printed, with slits or acoustic perforations as required.







Scope of classification.



Knauf Designboard 230 can be installed on-site with bespoke acoustic properties should they be required. Accordingly, the design and fire protection to A2-s1,d0 according to EN 13501-1 are not compromised. A range of different perforation and slit designs are possible.



Knauf Designboard 230 features tested installation grid systems, the invisible Knauf wedge strip and the Knauf Designboard Fix system.



Knauf Designboard 230 can be cut, milled, drilled and slotted to the required formats by the installer. This facilitates important adjustments without impairing the fire performance to A2-s1,d0 according to EN 13501-1.



Knauf Designboard 230 can be edged after forming by the installer with the approved edging system from Knauf Design maintaining the fire classification.

All the described work steps may be carried out in the factory to fully take advantage of the capabilities of Knauf Design. If you have any questions regarding these possibilities we are available to assist you.



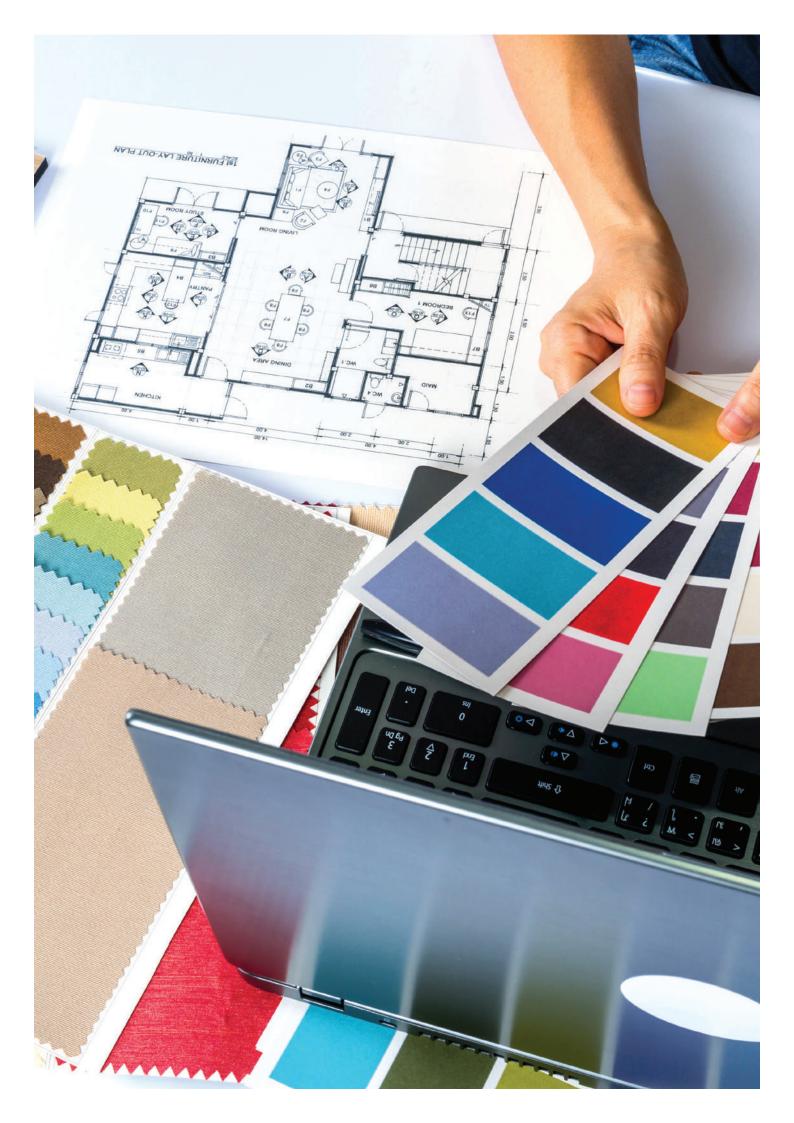
Designed to perform

Within a fraction of a second there is a clear perception of how functional, safe and aesthetic a space feels. An essential factor is the design of the walls and the wall coverings.

Knauf Designboard offers a wide ranging choice of surface coatings with gypsum fibre boards: real wood veneer, HPL, decor paper, digital printing or varnish, and on request, perforated or slit styling. By working with designers and contractors at the early stages of the design process, Knauf Design are able to provide tailor-made manufacturing of interior cladding systems for sophisticated construction projects.

For unusual designs and material choices, we will find the best material solutions, ensuring that design visions are enabled and not limited.



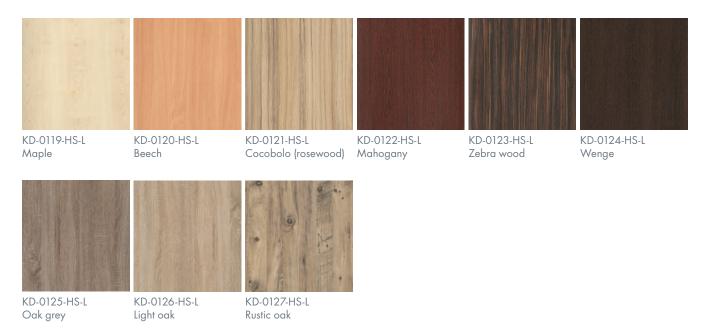


Knauf Designboard 230 Laminate - Solid colours



Laminates solid colour is optionally available with PE = pearl, M = matt or HG = high-gloss surface structure ($xx \approx PE$, M or HG)

Knauf Designboard 230 Laminate - Wood



Design collection

Knauf Designboard 230 Laminate - Metal

Knauf Designboard 230 Laminate - Stone















Stainless steel

KD-0117-BF-L Matt aluminium

KD-0118-BF-L Silver alloy

KD-0128-ST-L Sandstone

KD-0129-ST-L

KD-0148-ST-L Dark sandstone

Laminate metal is provided with BF = buttler finish surface structure Laminate stone is provided with ST = stone surface structure

Knauf Designboard 230 Wood



KD-0040-00-W Antique oak



KD-0041-00-W Smoked dark oak



KD-0042-00-W American walnut



KD-0043-00-W Select walnut



KD-0044-00-W Antique walnut



KD-0045-00-W Select maple



KD-0046-00-W Canadian maple



KD-0047-00-W Flowery Canadian maple



KD-0048-00-W Core beech



KD-0049-00-W Select beech



KD-0050-00-W Slippery elm



KD-0051-00-W Red elm

Knauf Designboard 230 Wood - continued



KD-0052-00-W Heart ash



KD-0053-00-SW Sawn ash



KD-0054-00-W Black Cherry



KD-0055-00-W American cherry



KD-0056-00-W Select larch



KD-0057-00-W Brushed larch



KD-0058-00-W Antique larch



KD-0059-00-W Sucupira



KD-0060-00-W Mahogany



KD-0061-00-W Teak



KD-0062-00-W Bamboo

Knauf Designboard 230 Creative



KD-0001-00-C Limestone



KD-0002-00-C Pure concrete



KD-0002-01-C Pure concrete



KD-0003-00-C Stone wall



KD-0004-00-C Brick red



KD-0005-00-C Spruce



KD-0006-00-C Single loft



KD-0020-00-C Chesterfield



KD-0021-00-C Mesh



KD-0024-00-C Natural sandstone



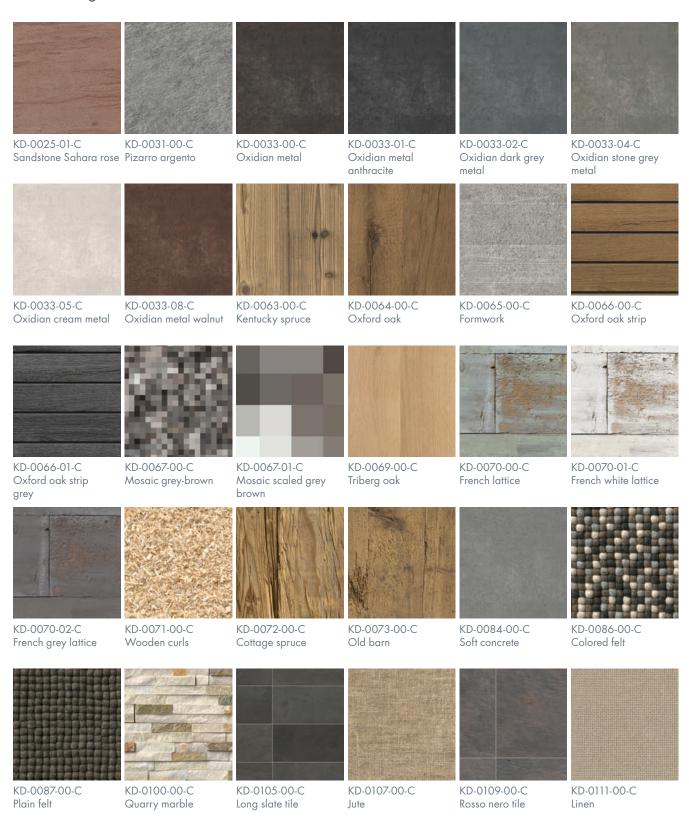
KD-0024-01-C Black Forest sandstone



KD-0025-00-C Sahara sandstone

Design collection

Knauf Designboard 230 Creative - continued



Knauf Designboard 230 Creative - continued



Knauf Designboard 230 Paint



Project data

Project:

Architect:

Product:

Approx. 3,500 m² gypsum fibre board with real wood veneer (ceiling and wall cladding) in Oregon oak

Requirement:

Design:

Installer:



Daring designs outside. Practical functionality inside.

Bold designs live through their stylish continuation on the interior. With Knauf Designboard 230 Wood, walls and ceilings exceed their original functional purpose to become characteristically functional design elements in the construction of Swedbank in Lithuania, a landmark object for the Baltic republic.

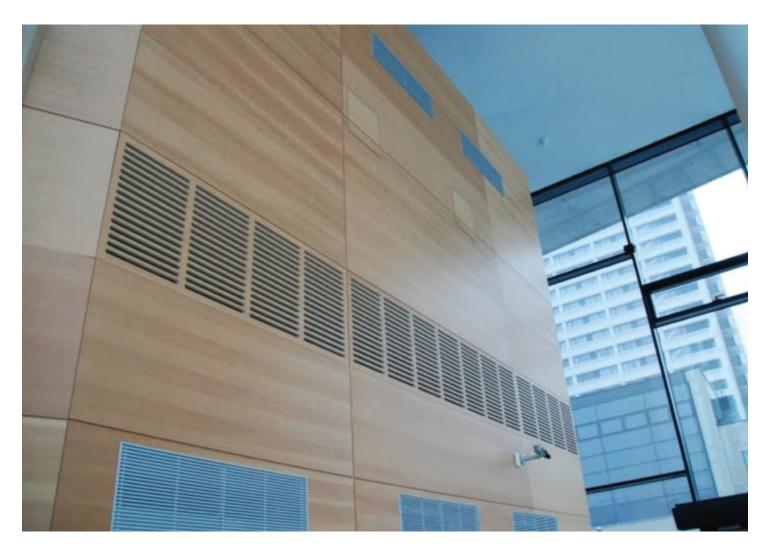
Here it was not just a matter of meeting multifunctional requirements that had been defined by the planner in advance, for example: maintenance of escape routes, integration of ventilation elements and attention to the latest EU standards, but which also meet the highest expectations of surface design.

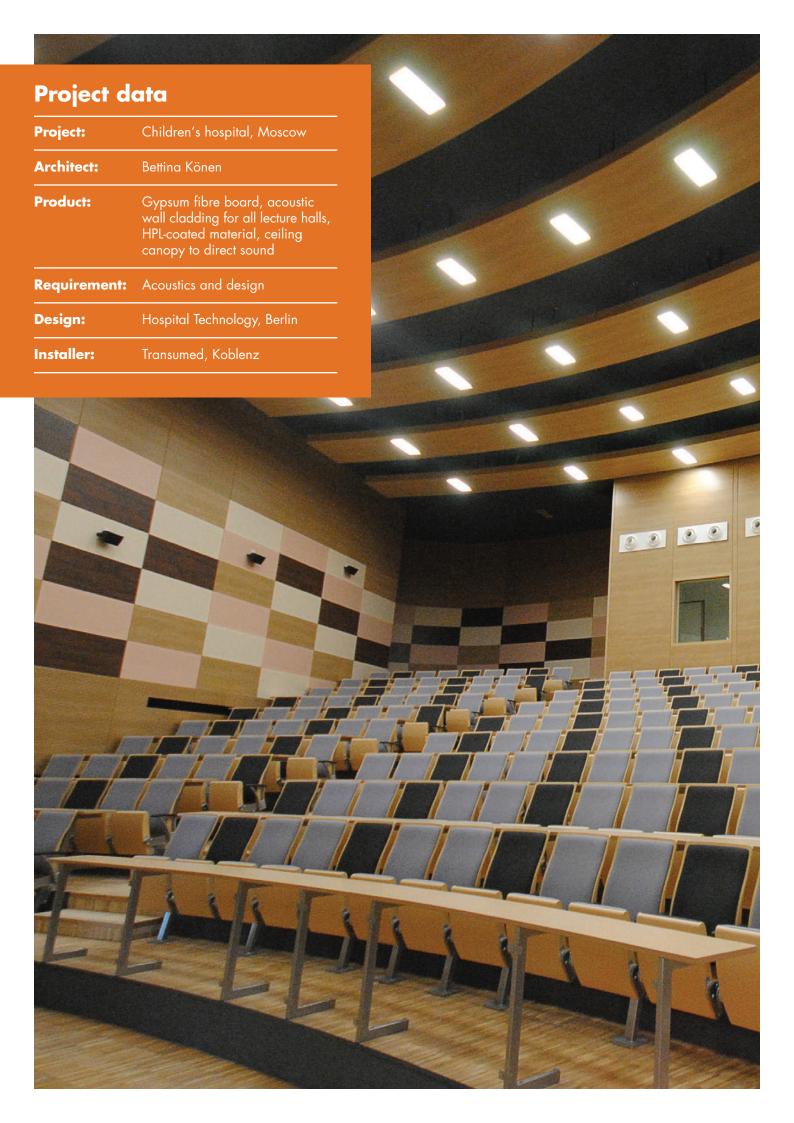
Knauf Designboard was exclusively veneered with the wood of Canadian Oregon Oak.

The result: Impressive interior to match the exterior.









Implemented with precision.

Russia's most modern children's clinic in Moscow had to be completed to coincide with the International Day of the Child, with no "ifs and buts".

The project required extreme precision in its timing. Therefore, the project partners erected the framework of the building so that the boards with their acoustic function and the ceiling canopy could be fitted without delay.

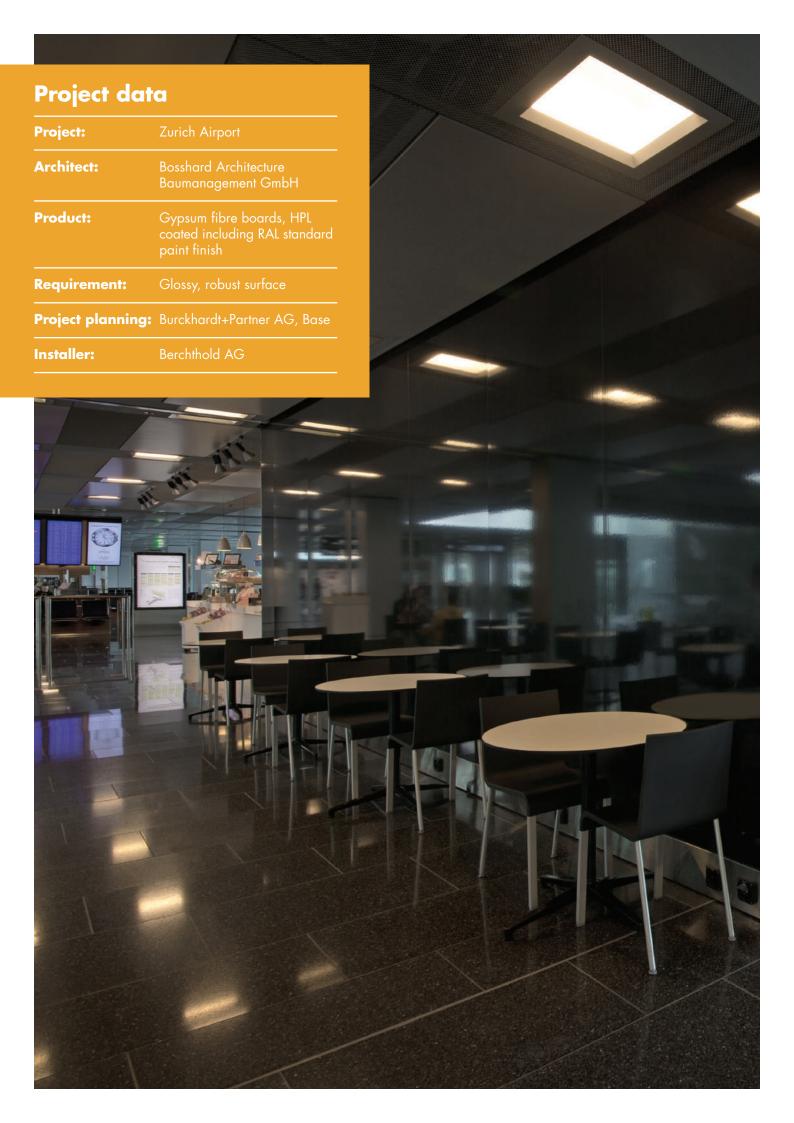
The result: Fully on schedule.











Brilliantly solved.

Elegant shell with a robust core: The walls of the boutiques in Zurich Airport posed an interesting challenge for the Knauf Design surface experts.

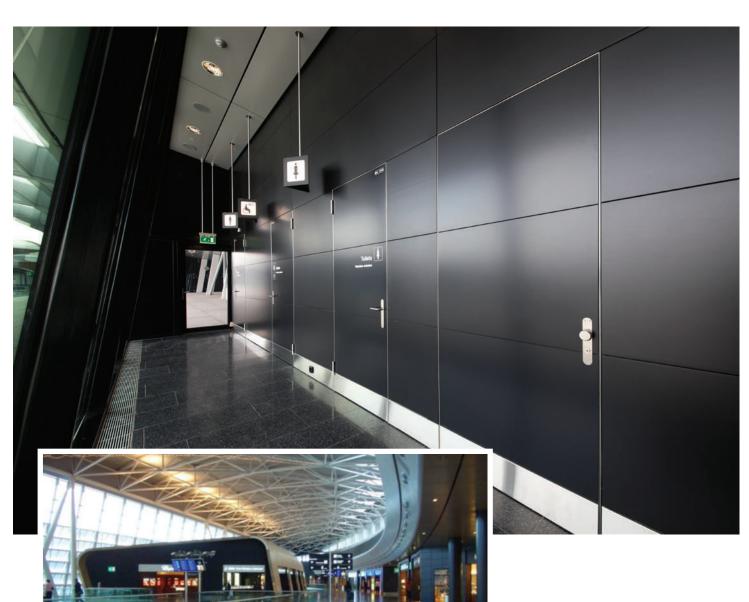
Some experimentation was required with several special coatings until the ultimate solution: an elegant shimmering outer skin, which was also compliant to the strict safety requirements.

The result: A sparkling finish.





Robust





Sometimes the art is not just hanging on the wall but is the wall itself.

The spectacular wave form of the Willkie Farr & Gallagher Building in Frankfurt causes an external sensation that continues on the interior.

Of course it fully complies with all building physics and non-combustibility specifications.

The desired visual effect was obtained by cutting Knauf Designboard 210 in waves and applying a RAL paint finish.

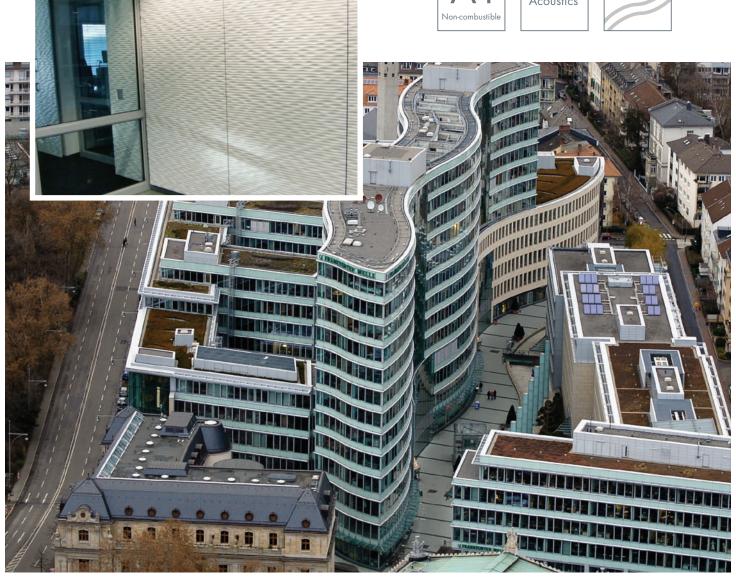
The result: Everything appears to be from a single cast!













Calm and tranquil. It all stacks up.

Places of calm are important, especially in hospitals. That was the intention with the new construction of the St. Elisabeth Hospital in Ravensburg, with its chapel as a place of calm and reflection at a central location. Its special feature in addition to its exceptional shape is the unusual wall material: stacked gypsum fibre boards.

The ground plan of the chapel depicts an elliptical shape and has been created in the form of a snail shell. After long deliberations on the choice of building materials they decided to use gypsum fibre boards from Knauf Design. However, not in the usual shape of a conventional drywall construction, but stacked.

Using a computer-based 3D model, the individual panels were precision machined to the millimetre using CNC engineering, and were stacked, glued and connected with pins according to drywall construction principles.

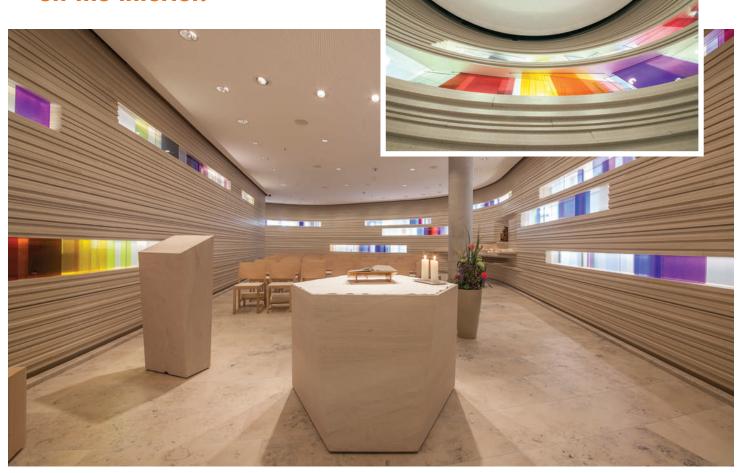


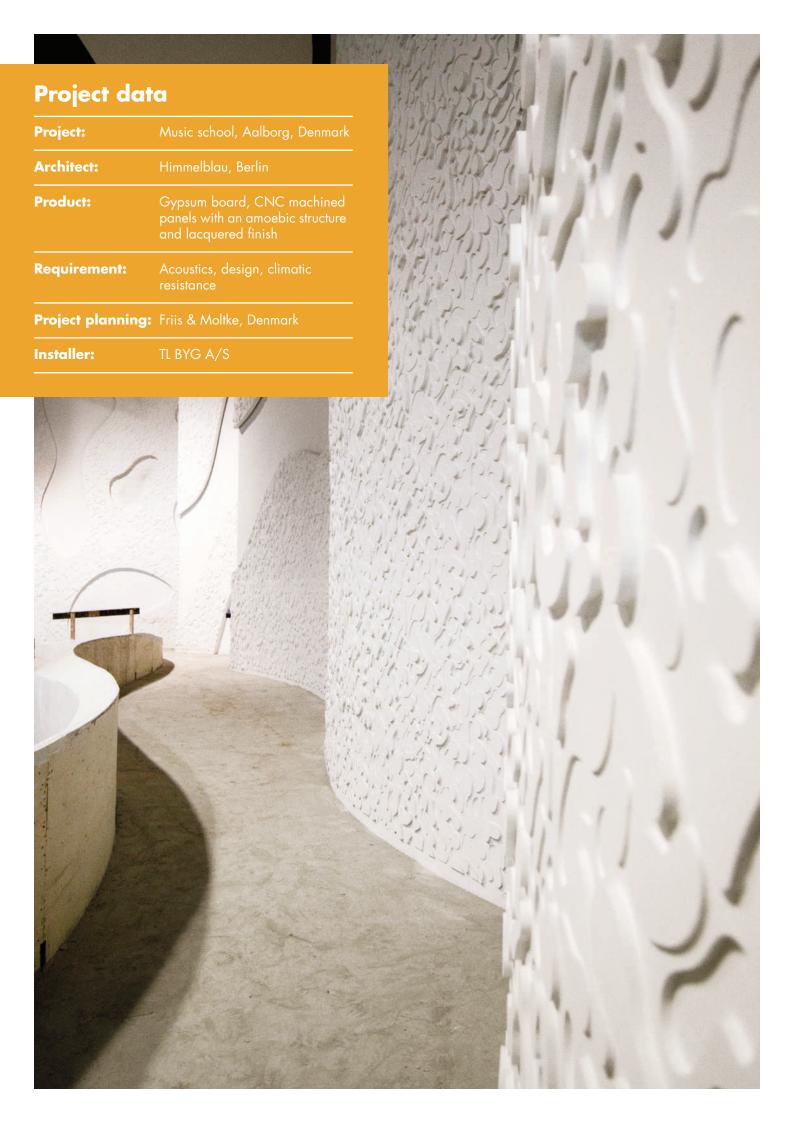




The result:

A design that excites on the exterior, but is calm on the interior.





Music by the sea - a beautiful challenge for walls.

Creating perfect harmony between the highest aspirations in aesthetic terms and demanding acoustic requirements was the wall design challenge at the music conservatory in Aalborg, Denmark.

The solution: An "amoeba structure" designed by acoustic experts. To implement this, Knauf Design developed 169 different CNC surface machining programs for over 3000 boards, which were also visually fascinating thanks to their organic structure and a seamless assembly.

To ensure that the humid climate did not have a negative impact on the material, the panels were tested successfully over a six week period in the climatic chamber at Knauf.

The result: Perfect harmony of form and function.













It is not just about the space. But also the atmosphere.

The redevelopment of London Heathrow Airport Terminal 2 was designed with the needs of the anticipated annual 20 million individual passengers in mind.

The striking interior design called for intricate timber surfaces incorporating window reveals, curved surfaces and acoustic perforation.

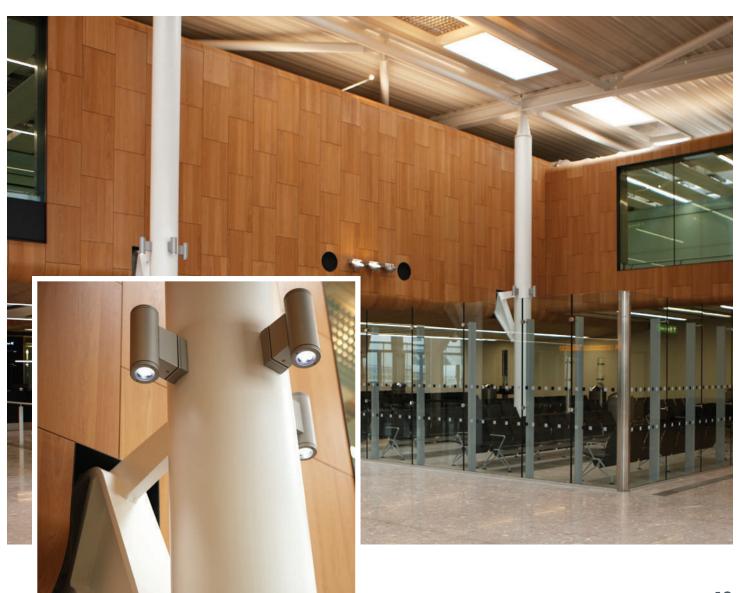
This brief also came with stringent performance criteria. Unlike traditional timber finishes, Knauf Designboard 230 Wood was able to offer a high performance solution with a non-combustible core providing fire safety, exceptional acoustic performance, impact resistance and dimensional stability.

The result: A high-performance finish true to the interior design vision.













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