



Ceiling, wall and façade systems

 **DERAKO**<sup>®</sup>  
A Hunter Douglas Company 



## Ceiling

Solid wood systems in various production lines.  
Grill and Linear Base-line, Pro-line, Exclusive-line,  
and Cloak Wood.

21



## Wall

Solid wooden linear and grill system.

31



## Façade

Solid wooden façade system.

39





# The power of wood

Wood is one of the most special natural resources. It has been a source of inspiration for architects and artists for thousands of years. Thanks to its shape and colour, power, flexibility and warmth, wood gives streets and interiors a natural, characteristic appearance. By incorporating elements of nature in a building, the contact between humans and nature is strengthened.

Wood is not only environmentally friendly and recyclable, it also stores CO<sub>2</sub>. It is renewable thanks to the growth of new trees. Wood has a very positive impact on human health. A green environment helps people experience less stress, move more, helps children develop in a healthier way and stimulates social contact. In the healthcare sector, wood even indirectly contributes to patients' recovery. But apart from all of the practical and sustainable characteristics, wood as a processed resource is simply very beautiful.

Swimming pool Kenwick Park







# Inspired by Nature<sup>TM</sup>

Inspired by nature and naturally inspiring...


Nature is at the basis of all DERA KO products. With these systems you do not only create an environmentally friendly and decoration of a building, it also takes **nature** closer to the people's living environment. By using solid wood you give a building a warm and inviting look. A look that naturally makes people feel pleasant, makes them socialise and develop new ideas.

During the design phase architects discover the strengths of the DERA KO systems. Because of the enormous freedom in design, the systems **naturally** give a lot of inspiration, and in the past have led to numerous new designs..... and that is what we stand for at DERA KO.



Inspired by Nature

 **DERA KO**<sup>®</sup>

A Hunter Douglas Company 

A photograph of a modern building facade. The facade is composed of numerous vertical wooden slats of varying heights, creating a rhythmic pattern. Large, white, three-dimensional letters spell out 'DERAKO' across the facade. To the right, a glass entrance is visible, reflecting the sky and the building's structure. The sky is clear blue with a few wispy clouds and a single white contrail.

DERAKO

At DERAKO each project deserves  
its own appeal

# DERAKO



As an industrial manufacturer and supplier, Derako Solid Wood Systems has been working with solid wood as a resource for more than 30 years. Years of experience in our own production environment have allowed us to innovate and develop practical systems for ceilings, walls, and facades.

At DERAKO, we always work project based and manage the entire process from design to production. Your design and idea are our starting point. We stand for a focus on solutions, service, quality, and reliability. From the orientation until the final installation, DERAKO offers you complete support. Our wood systems range from cost-effective to the most exclusive forms.

## Future orientated

For DERAKO Corporate Responsibility means doing business with respect for people, the environment and the surrounding area. We do this in cooperation with suppliers, wood and varnish experts, building related organisations and designers. By combining unique forces, new ideas and products are created whereby the realisation of durable building design is always central.







# We offer



**Wide range of products, for every budget and design**



**Products manufactured from wood with unique advantages; CO2-neutral, circular, healthy and authentic**



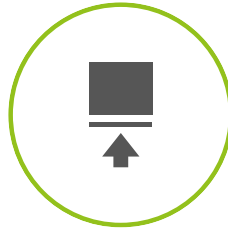
**Service, technical support and dependable advice. Full project support for many systems**



**Exclusive appearance and acoustic improvement**



**Warranty on support systems, wood, finish and fire retardancy**



**Innovative suspension system with easy installation and patented clips**



**Products and systems that are C2C Silver, FSC, and PEFC certified and contribute to BREEAM and LEED**



**Fire retardancy conforming to European Standard EN 13501-1 and EN 13964:2004**



**Solutions suited to the budget**

DERAKO systems are budget flexible without compromising the appearance of the product.

Through different product lines and by looking at wood in different price categories, the DERAKO systems can be made financially suitable for many different budgets.



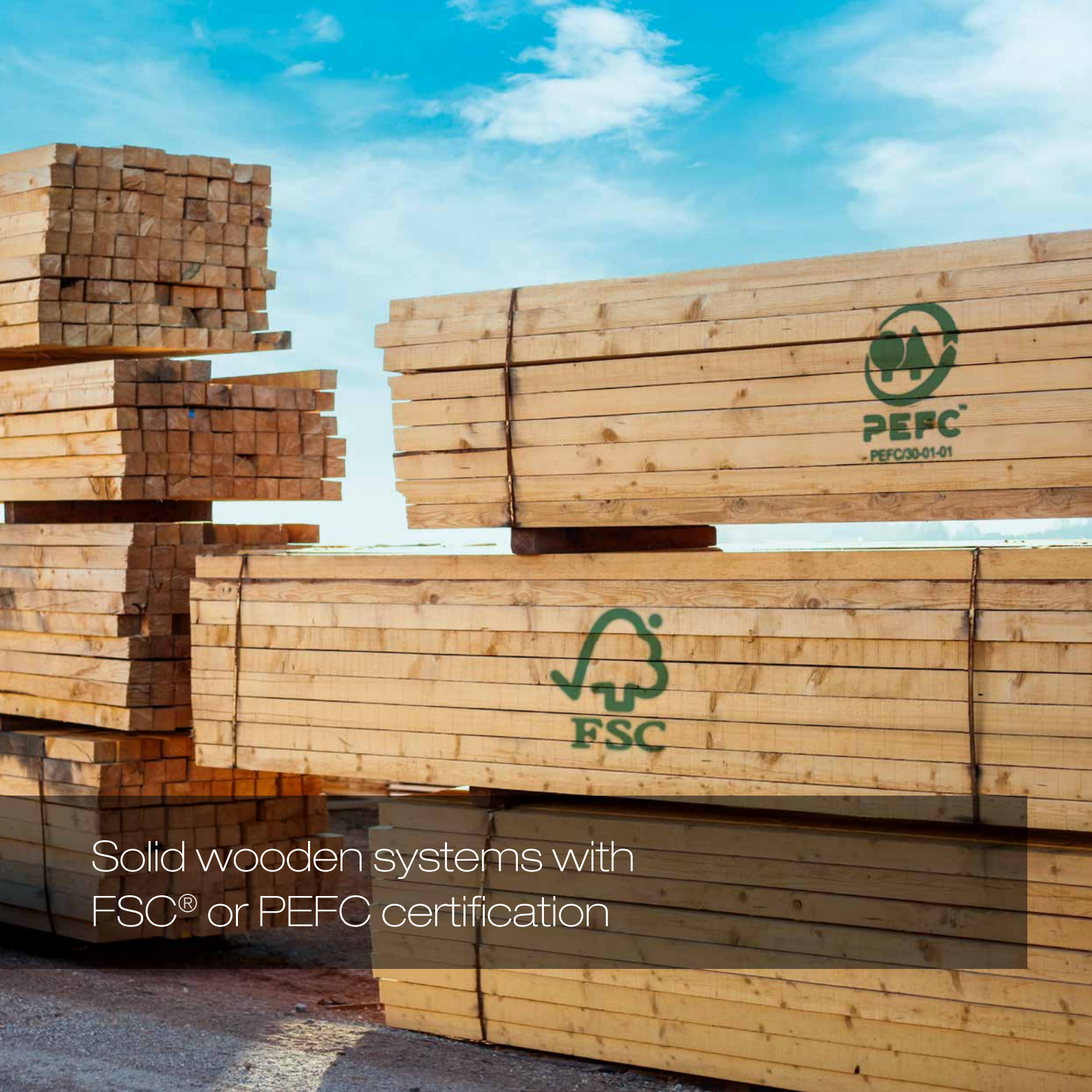
# Project based working method



At DERA KO we work project based. From resource to client-specific end product. Your design and idea are our starting point. Through years of experience in the use of solid wood systems, both nationally and internationally, we developed our expertise. Through technical knowledge combined with a variation of wood types, DERA KO is able to offer dependable advice and solutions. We manage the entire process, from design to production, but also offer guidance and advise during installation.

## Applications

Many beautiful buildings all over the world have been built using the DERA KO solid wood systems. Often for prestigious projects, but also in regular utility construction. The added value and strength of wood is of particular value in public buildings. Examples include: universities and schools, swimming pools, theatres, shopping centres, office buildings, parking garages, and hospitals. Moreover, wood combines perfectly with other materials, such as concrete, glass and metal. On the DERA KO website, you will find a selection of projects that may offer you the inspiration you're looking for.



Solid wooden systems with  
FSC® or PEFC certification



# Responsible product

Building with solid wood is very ecologically responsible. The material has a minimal impact on the environment and is fully biodegradable and renewable. Wood is virtually 100% CO<sub>2</sub> neutral and has a permanent, positive impact on the health of humans, the environment and the surroundings. All Derako systems are fully removable. At the end of the lifespan, the components are separated. The mono-components and natural raw materials that remain can be reused in the circular economy. But DERA KO does more ...

## FSC® and PEFC

In addition to investment in the field of materials and production processes, DERA KO also invests in various certificates and ecological labels. This way we meet the criteria set by the government on sustainable purchasing. DERA KO is FSC® and PEFC certified and delivers systems on request, and where possible, with these durable certified types of wood. The DERA KO consultants will be delighted to inform you about all the options.

## Cradle to Cradle®

DERA KO designs, builds, and works according to the Cradle to Cradle® principle. Each material must be fully reusable, without losing value. We have had our processes certified. This also involves continually working on improvements within five quality categories. These improvements are in the areas of material health, reuse of materials, renewable energy, and carbon management, water management, and social justice. There are five certification levels. Derako is Cradle to Cradle Silver certified.

DERA KO wants to be sure that all products have a lasting positive influence on human health and the environment. A lot of thought is given to the system- and finishing materials. For example the DERA KO varnish finish is environmentally friendly and the DERA KO solid wooden system is low emission (A+ certified). Also, in production DERA KO is using more and more renewable energy sources, and attention is paid to the responsible management of raw material resources.



A close-up photograph of a stack of cut logs. The logs are stacked diagonally from the bottom left towards the top right. The bark is dark, rough, and textured, with some greenish-grey lichen or moss growing on it. The cut ends of the logs show the light-colored wood with distinct growth rings. The background is a soft-focus forest with vertical tree trunks and dappled sunlight filtering through the leaves, creating a bokeh effect of light and dark spots.

The DERA KO consultants will be delighted to inform you about the possibilities



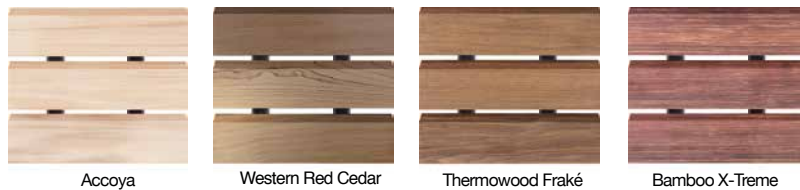
# Types of wood

For the DERA KO systems, there is a broad range of wood types available. Varying from very light wood tones to dark and warm colours. Every wood type has its own unique natural properties.

The application and environment can influence the type of wood to be used. Depending on the request, the right type of wood can be selected in consultation with DERA KO consultants.



Ceiling & Wall



Façade



The finish partly determines the sustainability and appearance



# Finish

The wooden slats can have a planed, fine-sawn or rough-sawn surface finish. Depending on the request, the right type of finish can be selected in consultation with the DERA KO consultants.

## Fire retardant treatment

Fire retardance is an important element for any wood application. To be able to comply with fire safety regulations, DERA KO systems are treated, if necessary, so that they are fire retardant. This is done by means of the vacuum and pressure method, whereby the wood is impregnated with a fire retardant substance.

With these treatments DERA KO makes sure that the slats and panels, used as a coating/finishing material meet the European standard EN 13501-1. The treatment process is performed according to KOMO guidelines and is periodically inspected by the SKH so that the required CE marking can be employed.

## Fire stability

The DERA KO grill ceiling system has been assessed for fire stability in accordance with the Belgian standard NBN 713-020 whereby it has been officially established that the system meets the fire stability requirement of 30 minutes.



## Coating

The DERA KO systems are always given a high-quality lacquer finish that protects the wood. This non-film-forming finish prevents damage to the wood caused by moisture, dust and dirt. The finish penetrates deep into the wood, but the natural properties and structures are preserved. The lacquer system build-up is tailored to the application. In addition to the standard transparent finish, a large range of colours are available. Our machines can produce every desired colour.

Would you like to do something special with colours? Multiple tones in a ceiling, striking colours or expressive contrasts with the neutral wood? Ask our advisors about the possibilities and create your own style and unique appearance. ►





# Colour Wash Varnishes

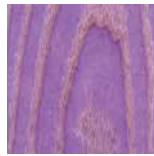
## SOHO



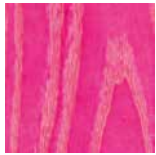
Blue



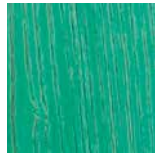
Old yellow



Purple



Pink



Mint



Red



Green



Yellow

## Metallic Wood



Chrome



Gold



Zinc



Copper



Alu Blue

## Lively colours and metal reflections

Create a unique ambience with the Colour Wash varnishes SOHO and Metallic Wood. Normally the varnishes are applied to American ash wooden slats and they are suitable for application within the DERA KO ceiling and wall systems.

For an even more vivid result the Colour Wash slats on a ceiling or wall can be interspersed with plainly varnished or multicoloured slats.



The Traveller Pavilion



# Ceiling



The DERA KO ceiling system is available in two main systems. In the Linear system, the wooden parts are incorporated level with the system. The Grill system gives you ceiling extra depth effect.

The product range for the ceiling systems is organised into eight convenient product lines. From cost-effective to the most exclusive forms. This allows for unprecedented possibilities in the implementation of your ceiling design.

## Design Ceiling

A wide range of wood types, system types, sizes and finishes creates a range of options for the appearance of the ceiling, the system has, partly because of the acoustic non-woven tissue in the joints, a good acoustic value and is therefore widely used in public buildings. DERA KO consultants will be delighted to advise you about special applications and technical details.

## The Product Lines

With our product lines, you have a wide selection of possibilities. From cost-effective solutions to the most exclusive forms.

All product lines have their own specific characteristics. One thing is at the centre however; they all use the special natural resource that is wood, with its unique characteristics.

### Base-line™ Linear and Grill



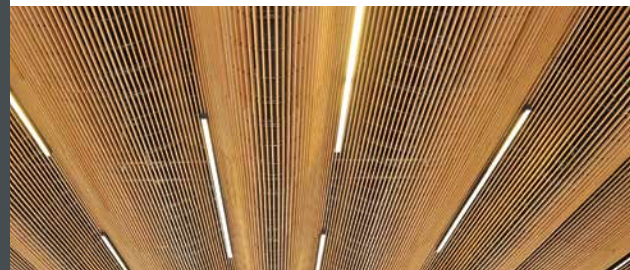
- Cost-efficient standard system solutions
- Fixed dimensions
- Solid wood; limited selection of wood types
- Affordable and easy to produce
- Also suitable for small projects
- Optional project support available



### Pro-line™ Linear and Grill



- Tailored solutions
- Wide range of systems, dimensions, and finishes
- Solid wood; > 20 wood types
- Interior, exterior and curved application
- Custom work, engineering and project support





## Exclusive-line™ Linear and Grill



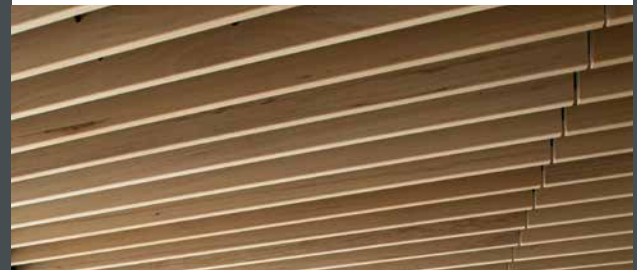
- Exclusive shapes and effects
- Varying dimensions in one system
- Solid wood; > 8 wood types
- Interior and exterior applications
- Custom work, engineering and project support



## Cloak Wood® Linear and Grill



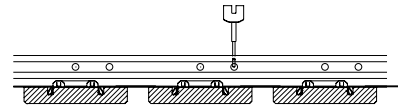
- Natural wood veneer
- Various dimensions
- Wide range of veneer appearances
- More design possibilities and larger sizes
- Cost-efficient alternative to luxurious wood types
- Custom work, engineering and project support



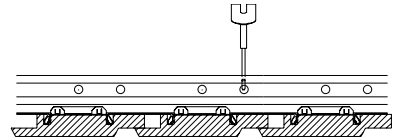
## Versions

The **LINEAR** ceiling system consists of high-quality solid wooden parts which are invisibly fastened to a specially designed support system of rails and clips according to a fixed template. The lengths of the wooden parts are by default a mix of sizes (900 mm and up). The length partly depends on the available wood. During installation, the wooden parts are easily and seamlessly linked via a milled out tongue and groove connection along the upper edge. For specific projects, we can supply Pro-line in equal lengths. Within the Linear system, there are three types to be distinguished, being Open Linear, Closed Linear, and Multi-Panel Linear. In Open and Multi-Panel Linear systems, the seams are manufactured with acoustic fibre fleece covering the seams. For the edge finish, DERA KO has developed a wall profile. A special clip and profile connection on the back of the wood allow for invisible installation. This results in an even appearance and creates smooth ceiling lines.

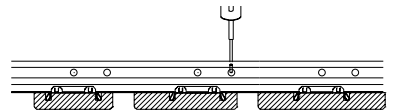
In the **GRILL** ceiling system, we produce all panel lengths based on the architectural design and in consultation. The panels consist of solid wooden parts which are attached to each other using aluminium dowels. You select the dimensions of the wood and the spacing. We produce the panel with the desired appearance. The connection between the panels is quickly realised via the half-lap dowel joint. This allows you to create a visually even surface and a smooth appearance. We guarantee stylish ceiling lines and efficient installation. The spacing on the end-side connection of the Grill panels must be 10 mm. The delivered panels, in their exact custom sizes, are suspended from DERA KO's black Cross-Lock system using specially designed dowel clips. The Grill ceiling system offers the designer a large degree of freedom.



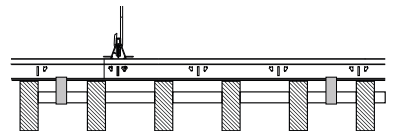
Open linear



Closed linear



Multi panel linear



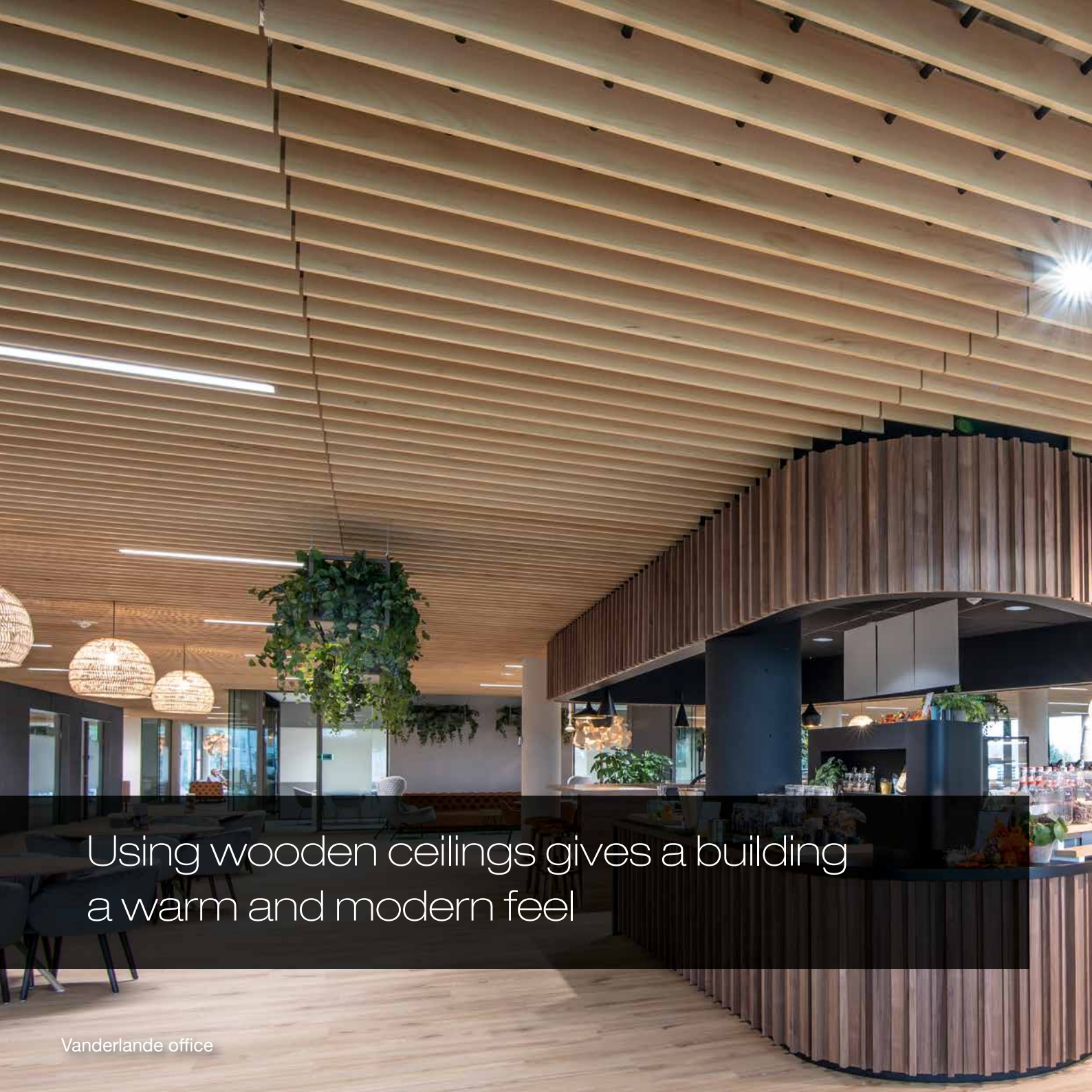
Grill system





Ceiling





Using wooden ceilings gives a building a warm and modern feel



## Sizes

For the **LINEAR** ceiling system, the wooden parts can be produced in dimensions varying from at least 63 mm to a maximum of 185 mm. The thickness is at least 15 mm. The Derako suspension system is available in nine template sizes. The joint size is determined based on the chosen template and the desired wood width. For the removeable suspension system, the minimum joint size is 12 mm. In the Multi-Panel system, the solid wood parts are produced in a variety of width measurements. During installation, the wood ends up in a repeating pattern on the structural ceiling.

For the **GRILL** ceiling systems, there is a huge degree of freedom to decide the dimensions of the slats and the spacing between the individual wood parts. The minimum measurements are 15 mm thick x 31 mm high. The minimum space between the wood is 20 mm, with a maximum height of 35 mm. If the solid wood parts are higher, the individual spacing must be at least 20 - 23 mm. The length of the composed panels varies between 590 mm and 3590 mm. This varies per wood type. The distance between the dowels is a consistent 300 mm. The dowel has a standard diameter of 12 mm. On request and for specific measurements, it is also possible to use a dowel with a 20 mm diameter.

## Construction and assembly

In terms of assembly, DERAko ceiling systems meet all the designers' and installers' requirements. The specially coated suspension systems are ideally suited to curved or arched shapes and the carriers are prefabricated and fixed in the desired radius. The carrier system must be suspended using fast hangers or nonius hangers. Fixtures can easily be fitted. These must at all times be fitted to the building structure.

For the linear suspension systems the clips are fixed to the carriers in the factory and DERAko supplies a special clamping tool for fixing the slats simply to the carriers. With the specially developed fixing method the wood is able to retain its natural qualities without detracting from the line structure of the ceiling. The supplied made to measure grill panels are fixed to the suspension system with dowel clips.

## Dismantling

DERAKO ceiling systems are available in both fixed and demountable versions. With the carrier system with carrier and clip, the slats in the linear system can be supplied 50% demountable. The carriers come alternately with the right number of fixed and demountable clips. The grill system with its half lap dowel connection can be completely dismantled. A demountable system makes it possible to carry out incidental repairs and maintenance activities to the technical installations above it. You will find all the information on dismantling in the DERAKO installation manual.

## Full support and delivery

At DERAKO, a project is always fully technically accompanied and developed, and we like to think along with design challenges and logistical issues. With a detailed installation plan, prefabricated systems and other technical information, the installer or builder can proceed efficiently and accurately.

When delivering DERAKO pay attention to the smallest details. That is why the linear system is normally delivered with fixation pins (for coupling the slats), carrier connectors, clamping and demounting tools, a spacer for carriers and a can of matching varnish. To protect them during transport and on the building site, all products are also carefully packed.

DERAKO consultants will be delighted to assist with the engineering and execution of your project.





Ceiling







Big Green Egg head office



# Wall



The DERA KO wall system is unique due to the many benefits it offers. It is available in two versions:

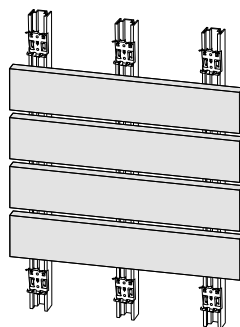
- Linear system
- Grill system

## Clear design

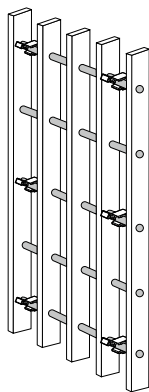
Making a complex design simple and clear. This is possible with the DERA KO solid wooden wall system. Creativity is the guideline. In addition to the durable and characteristic properties of the wood, the special sub frame is especially important. This offers several technical features and dimensional possibilities and is situated behind the slats. The system has good acoustic values and is therefore often used in public buildings. DERA KO consultants will be delighted to advise you about special applications and technical details.

## Versions

The **LINEAR** wall system consists of solid wooden slats on a specially developed sub-frame. This construction consists of an anodised aluminium SLR profile and comes with cutouts for fastening a patented stainless steel clip, which are project specific. The slats are supplied in various lengths, but upon request, fixed lengths are also possible. The ends of the slats are connected to each other by a milled top tongue and groove connection. The linear wall system offers the designer a high degree of freedom. Different sizes and types of wood can be combined together.



The **GRILL** wall system consists of solid wooden slats that are secured to each other with aluminium or flexible plastic dowel clips. These assembled slats form the grill panel, which can be produced in various lengths. This is determined by the structural conditions and ultimately decided by mutual agreement. The grill panels are inserted into each other using a half-lap wooden dowel joint, creating a visually uninterrupted surface. The connecting joints on the short sides of these grill panels must be 10 mm.

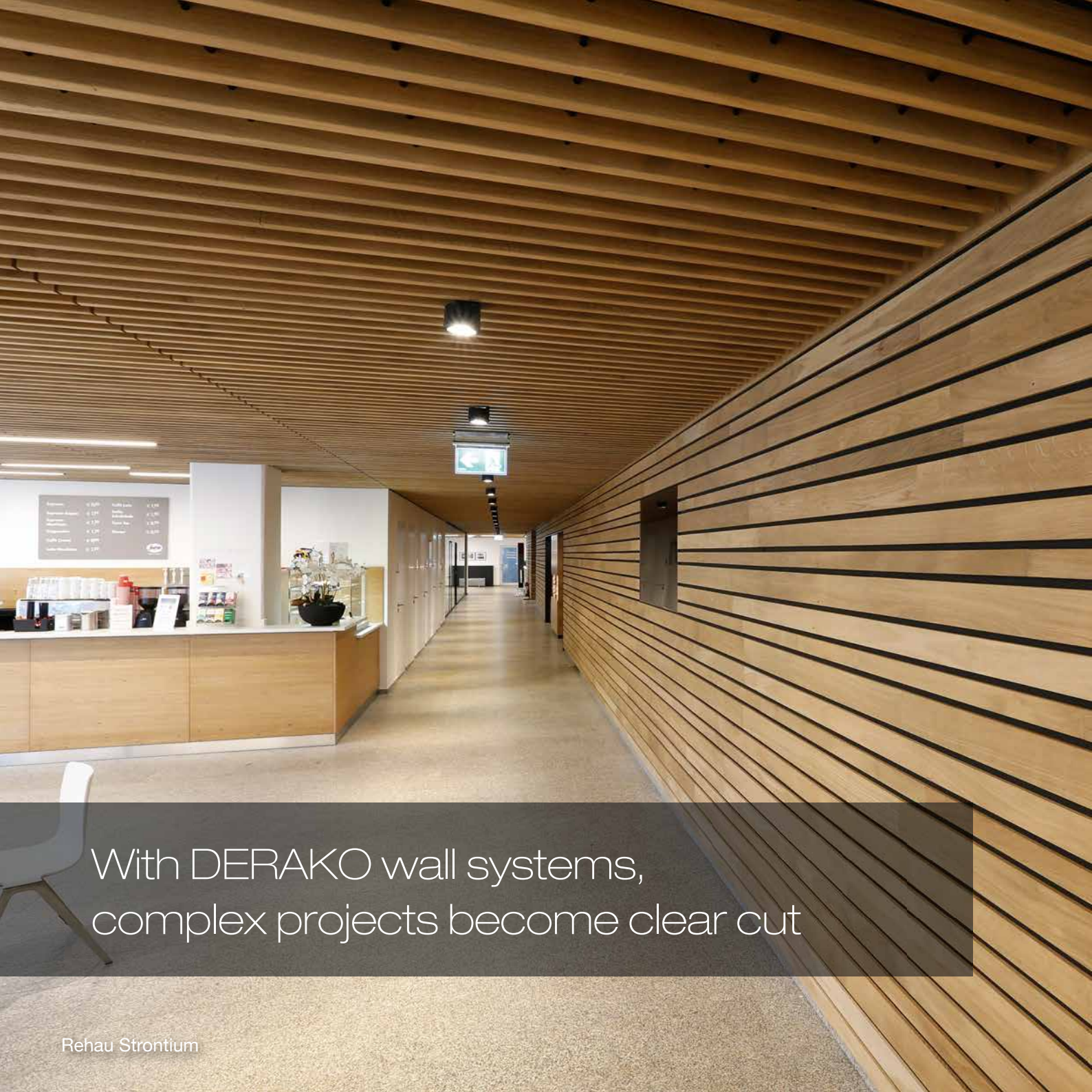






Wall

Tennet



With DERA KO wall systems,  
complex projects become clear cut



## Measurements

For the totally demountable **LINEAR** wall system, the slats can be produced with a minimum of 63 mm up to a maximum of 140 mm wide. The minimum joint size is then 12 mm. For a wall system, fixed version, the maximum width of the slat can be 185 mm and the minimum slat thickness is 15 mm. Due to the ingenious mounting structure, the dimensions are entirely free to plan and different slat and joint sizes can be used in one system. This system is very suitable for complex designs and combining different types of wood and sizes.

With the **GRILL** wall systems, there is a great degree of freedom to decide the dimensions of the slats and the spacing between the individual slats. The minimum slat measurements are 15 mm thick x 31 mm high. The minimum space between the slats is 17 mm, with a maximum height of 35 mm. If the slats are higher, the individual spacing must be at least 20 - 23 mm. Depending on the wood type and availability of the resource, a Grill panel can be a maximum of 3300 mm in length. The distance between the dowels is a consistent 300 mm. The dowel has a standard diameter of 12 mm. On request and for specific slat measurements, it is also possible to use a dowel with a 20 mm diameter.

## Construction and assembly

In terms of the assembly, DERA KO wall systems meet all the requirements of designers and installers.

For the linear wall system, the lightweight aluminium SLR profiles are easy to align and the assembly time on site is greatly reduced. In complex projects, the profiles can also be marked to indicate the correct position in the work. This means a clear and prompt assembly procedure can be followed at the construction site. The stainless steel clips are already attached to the profiles in the production phase, which reduces the installation time and ensures a secure fit. The profiles need to be fixed to a solid background. The slats are fitted by pressing them manually onto the clips, leaving them permanently secured in the groove of the slat.

The supplied made to measure grill panels are fixed to the rear wall by means of a special wall clip.

## Dismantling

DERAKO wall systems are fully demountable. Because of the ingenious mounting structure of aluminium SLR profile and stainless steel clips, all the linear wall system slats can be removed. The grill system with its half lap dowel connection can also be completely dismantled. Using a demountable wall system means that incidental repairs and maintenance work can be carried out and slats can be easily replaced in the event of damage. You will find all the information on dismantling in the DERAKO installation manual.

## Full support and delivery

At DERAKO, a project is always fully technically accompanied and developed, and we like to think along with design challenges and logistical issues. With a detailed installation plan, prefabricated systems and other technical information, the installer or builder can proceed efficiently and accurately.

When delivering DERAKO pay attention to the smallest details. Therefore the linear systems are normally delivered with assembly gloves, fixation pins (for coupling the slats), a spacer for carriers and a can of matching varnish. To protect them during transport and on the building site, all products are also carefully packed.

DERAKO consultants will be delighted to assist with the engineering and execution of your project.







BALKON

RABOBANKZAAL BALKON

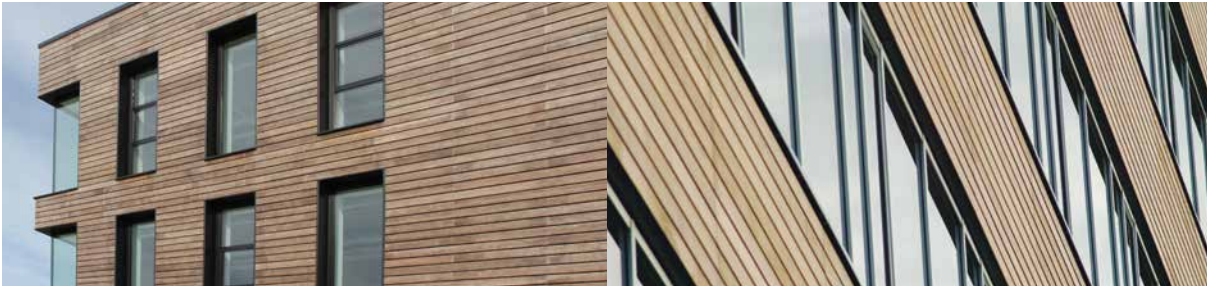
Wall



Prinses Maxima Centrum



# Façade



Sustainable façade cladding with unique character. Using wood as cladding gives a building a warm and modern feel. The DERA KO solid wooden façade system is an innovative, optimally ventilated open façade system that can be fitted rapidly because of the ingenious mounting structure. It can be used horizontally or vertically and can be fitted with a rainscreen membrane to protect the façade or to achieve the desired colour.

## Mounting material

The whole fastening is then located at the back of the wooden panels. This keeps the appearance intact for a long time because there are no screws or nails in the slats. This prevents corrosion marks and damage to the wood. The façade system's parts are recyclable or monitored retrievable. You are free to design your façade with a large choice of different types of wood, measurements, finishes and profile directions. DERA KO consultants will be delighted to advise you about applications and technical details.

## Measurements

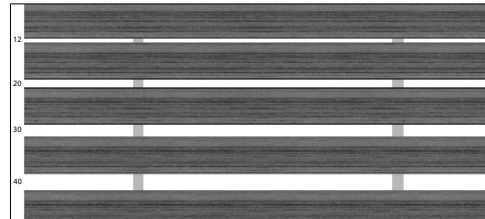
The slats in the facade system can be manufactured in dimensions varying from 70 to 90 mm width, with a thickness of 18 mm. The minimum joint width between two slats is 7 mm. The exact dimensions depend on the chosen profile direction and will be technically assessed for each project. The slat length is determined per application, this is always dependent on the design, material choice, and availability. For the connection between two slats on the same row, a distance of 7 mm should be observed to counteract the capillary effect of precipitation.

	Width (W)	Thickness (T)
Minimum	70 mm	18 mm
Maximum	90 mm *	18 mm



The DERA KO façade system can be applied horizontally or vertically. When using the horizontal façade system the wooden slats have a standardised Rhombus profile so that proper drainage can be guaranteed. The horizontally implemented system can, if so desired, be fitted straight onto the surface of the building structure. DERA KO supplies a shallow façade package for this. By using the vertically façade, one must keep in mind when mounting the DERA KO fixing system that this requires an extra facility on the building construction background to ensure proper drainage.

The UV-stability of a possible rainscreen membrane to be used can be of influence on the maximum slat joint width. If a rainscreen membrane is not used then there is no question of a maximum joint width.





Façade

Sustainable façade cladding with  
a unique appearance

MOSO Head office



## Construction

The DERA KO fixing system consisting of anodised aluminium profiles, including stainless steel clips, is supplied project specifically and pre-fabricated. They are easy to align and, with the specially supplied gloves, snapping the slats on can be started immediately. This greatly reduces assembly time at the building site. In complex projects, the profiles can also be marked to indicate the correct position in the work. Because the stainless steel clip is permanently locked into the groove on the back of the slat, no nails and screws are required, which eliminates the possibility of damage and corrosion stripes. The stainless steel clip is made out of AISI 301 stainless steel. For a strong corrosive environment there is a steel clip available that can be given an extra coating. Also, the standard black aluminium profile can be anodised in different colours.







Façade



Gas station Texaco





## Wind and weather-resistant

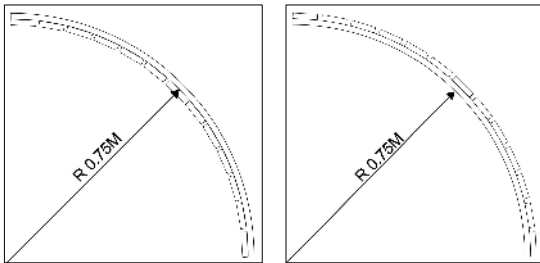
The entire construction is resistant to extreme weather conditions. Fixing solid wooden slats to the clips has been extensively tested and has a high breakout force. Depending on the chosen type of wood chosen, the site with reference to the wind, terrain category, and the height of the building, the reciprocal distance for the DERA KO fixing system (maximum 600mm) can be determined. On the basis of this data, the required fixation strength and the fixation method of the profiles on a sufficiently rigid basis are determined.

## Rainscreen membrane application

Behind the DERA KO façade system, a rainscreen membrane can be applied to protect the façade or to achieve the desired colour. The UV stability of the rainscreen membrane to be used, also determines the maximum allowable joint width. A rainscreen membrane between each of the slats is not used in the façade system.

## Curved façade system

It is also possible to use the façade system in a curved form. The DERAÑO fixing system is then shaped with a radius from 0,75 m and can be placed internally or externally. When determining the radius one should take the size of the slats into account. The smaller the radius the smaller the potentially applicable wood size.



Intern

Extern







The DERA KO façade system provides  
an integral guarantee





## Assembly

The DERA KO fixing system is easy to align and the assembly time of the façade cladding on the building site is greatly reduced. In complex projects, the profiles can also be marked to indicate the correct position in the work. This means a clear and prompt assembly procedure can be followed at the construction site.

The assembly of the slats is done by using stainless steel clips that fix permanently into the groove at the back of the slat. No nails or screws are needed that could cause possible damage and corrosion. This not only produces a better finish, but it also saves a substantial amount of time and money during assembly.

## Dismantling

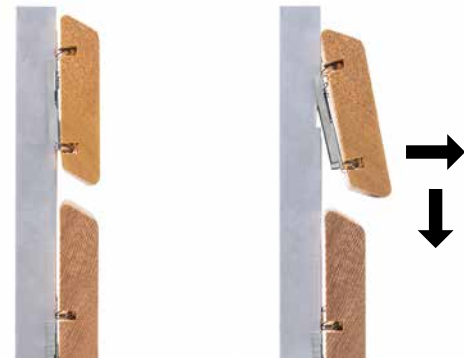
Although the stainless steel clips are permanently secured in the assembly in the groove on the rear of the slat, the clips can in fact be removed from the profile. This produces a 100% demountable system and specific slats can be removed for possible maintenance work on the underlying façade or wall. You will find all the information on dismantling in the DERA KO installation manual.

## Full support and delivery

At DERA KO, a project is always fully technically accompanied and developed, and we like to think along with design challenges and logistical issues. With a detailed installation plan, prefabricated systems and other technical information, the installer or builder can proceed efficiently and accurately.

When delivering DERA KO pay attention to the smallest details. Therefore the façade system is normally delivered with assembly gloves, and a can of matching varnish. To protect them during transport and on the building site, all products are also carefully packed.

DERA KO consultants will be delighted to assist with the engineering and execution of your project.





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# More information and inspiration

You will find more information and inspiration on the DERA KO website. On the website, you can request a product sample or quotation directly. Our advisors are happy to brainstorm together with you.

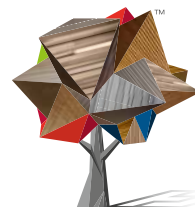




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