Solid Wood
Ceiling and Wall solutions

The Solid Wood Linear and Grill range combines the benefits of its natural aesthetics, flexibility and beauty. With wood in its most authentic form, you have freedom in design and the most remarkable ceilings and walls can be created.
Let your imagination run free to create the most remarkable solid wooden ceiling and wall solution, with the Linear and Grill systems from Hunter Douglas. Use wood in its most natural and authentic form to create a bespoke design.

Choose from a wide range of FSC or PEFC certified wood species, all with their own aesthetics and characteristics. Even curved or undulating patterns can be created with the easy to install suspension system.
System features

- A made-to-measure solution with full technical support for ultimate design freedom
- Produced according to project requirements to minimize installation time
- The innovative systems ensure quick and invisible mounting
- Choose for the customizable Linear or Grill system
- Sustainable; a 100% Co2 neutral building material
- The ultimate natural acoustic solution
- Budgetary flexibility due over 20 wood species within various price categories to choose from
- Integral guarantee for support systems, wood, finish and fire retardance
- Contribution to obtaining credits within BREEAM and LEED
- Certified:
  - GREENGUARD Gold
  - Cradel to Cradle
  - FSC
  - PEFC
At Hunter Douglas we strive to minimize the hassle that comes with a project. From the early conceptual stage, we cooperate with designers to make sure we do things right the first time. We do this by taking a full service approach to a project, to make sure the panels are a perfect fit and installation time and wastage is reduced to a minimum.

PROJECT VISION

A full ceiling and wall solution

Project: Congreso, Madrid, Spain
Product: Solid Wood Grill
Architect: Ana Jiménez Díaz-Valero
A perfect fit

The provided suspension system is designed to be rigid, easy to install and provides full access to the plenum when this is needed. Although we provide a modular system, our panels are fully made to measure to guarantee a perfect fit.

Flexibility

Ultimate flexibility and freedom can be achieved due to the large range of wood species and finishes. In order to match the design intent, the system allows you to fully determine the sizes of the panels, allowing you to create the perfect wall and ceiling solution.

- A solid wooden Grill or Linear system for walls and ceilings
- Full service from schematic design to after installation support
- Fully customizable, modular systems
- Ultimate design and cost flexibility
- Special design solutions on request
- Fire classification B-S1-d0 and B-S2,d0
Ceiling system

The Solid Wood Linear ceiling system consists of solid wooden panels, fixed onto a specially designed suspension system of carriers and clips. The prefixed clips assure the straight alignment. Three types of Linear solutions are available: Linear Open, Linear Closed and Linear Multi-panel.
The Solid Wood Linear wall system is developed to create a natural, made-to-measure wall solution. The aluminium SLR profile, together with the pre-assembled clips, guarantee easy installation in a horizontal or vertical direction.

- Take the ceiling to the wall
- Combine various panel widths on one system
- Quick installation with pre-assembled clips

The wooden panels are supplied in various or fixed lengths and are connected with a tongue and groove connection to create a seamless joint.

- Three demountable ceiling solutions; Linear Open, Multi-panel & Linear Closed
- Quick installation with pre-assembled suspension system
- Acoustic performance up to alpha $\alpha_w$ 0.50
- Curved and undulating shapes possible
- Panel widths from 63 mm up to 185 mm
- Combine various panel widths with the Multi-panel system
Linear Ceiling and Wall system

The Solid Wood Linear system consists of solid wooden panels, which are invisibly suspended according to a fixed pattern on a purpose-built innovative suspension system of carriers and clips. The Linear system consists of three basic designs: Linear Open, Linear Multi-Panel and Linear Closed.

LINEAR OPEN

The Linear Open system is an open joint system. The gap between the panels is covered with an acoustical non-woven tissue or Ultra Fiber for outside application. Standard 8 module sizes are available with dimensions between 63 and 150 mm. Other sizes are available upon request.

LINEAR MULTI-PANEL

The Linear Multi-Panel system is an open joint system. Various panel widths can be combined to create a dynamic look and feel.

LINEAR CLOSED

In the Linear Closed ceiling system, each solid wooden slat overlaps the next. This produces a solid wood appearance through-and-through.

Linear Curved Ceiling

The Solid Wood Linear Curved system can easily be installed in concave, convex or undulating curved patterns. The rail is pre-curved in the factory to the specified radius. In some cases it is also possible to create a wave pattern by curving the wood itself.
Dimensions

The Solid Wood Linear system can be supplied in the following sizes. Other sizes are available upon request. The panels are standard supplied in various lengths, depending on the wood specie, and are joined with a tongue and groove connection. This joint is reinforced with a steel fixation pint inserted in the back of the panel.

By choosing for the Linear Multi Panel system is possible to use different sizes of width, which revert back to a repeated pattern on one carrier module size.

### Installation

1. Install the hangers
2. Connect the linear carriers to the hangers
3. Position the slat well onto the carrier (A), before securing it with the supplied clamping tool (B)
4. Connect the panels with the fixation pin

### Demountability

By using the demountable clips, individual panels can be removed to get access to the plenum if needed. Advised is to use a maximum of 50% of the panels to be demountable.

### Table

<table>
<thead>
<tr>
<th>MODULE (mm)</th>
<th>PANEL WIDTH (mm)</th>
<th>THICKNESS (mm)</th>
<th>JOINT WIDTH (mm)</th>
<th>LINEAR OPEN / LINEAR MULTI-PANEL</th>
<th>LINEAR CLOSED</th>
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<tbody>
<tr>
<td>75</td>
<td>63*</td>
<td>15</td>
<td>12</td>
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<tr>
<td>82.5</td>
<td>67.5</td>
<td>15</td>
<td>15</td>
<td>x</td>
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<td>89</td>
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<td>15</td>
<td>19</td>
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<td>15</td>
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<tr>
<td>89</td>
<td>96*</td>
<td>16</td>
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<td>x</td>
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<tr>
<td>111</td>
<td>118</td>
<td>16</td>
<td>-</td>
<td>x</td>
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* * *
The Grill Ceiling System

The Solid Wood Grill system consists of solid wooden slats, connected with an aluminium or a flexible dowel. Create your own ceiling design by choosing the ideal slat dimension, gap and wood specie.

The connected slats form a grill element which can be mounted onto the secondary support profiles with dowel-clips and makes it easy to demount the grill element if access to the plenum is required.
Wall system

Use the advantage of the Solid Wood Grill system to continue the ceiling design into the wall. The special clip and made-to-measure panels make the installation of the grills easy and fast.

- Take the ceiling to the wall
- Design your slat size
- Quick and easy installation

Based on the design drawings, a full panel lay out is provided to make sure the panels are a perfect fit and minimize installation cost and adjustments at site.

- Made to measure wooden ceiling solution
- High acoustics up to $\alpha_w 0.90$
- Curved and undulating shapes possible
- Easily and individually demountable
- Wall solutions can easily be done with wall clips
- Possible to use interior and exterior

Above : Chirec LOT 23, Brussel, Belgium
Product : Solid Wood Grill
Architect: Assar Architects

Left : Docks, Brussel, Belgium
Product : Solid Wood Grill, European Pine
Architect: Art & Build Architects

Above : Crous Centrale, Lyon, France
Product : Solid Wood Grill, ceiling and wall system
Architect: Sylvain ROUBAUD
SOLID WOOD GRILL

In detail

SYSTEM POSSIBILITIES

Ceiling and Wall Grill system

The Solid Wood Grill system is a suspended ceiling system consisting of wooden slats connected to each other with an anodized black aluminum dowel for straight panels, or a flexible dowel for curved panels.

With a special dowel clip, the dowels are connected to the suspended profiles.

Ceiling or Wall application

The slats can be installed horizontally as a ceiling, or vertically against a wall. To ensure that the suspension remains unnoticed, the rails, dowels and clips are black.

Curved Grill Ceiling

With the flexible dowel, unique curved shapes can be created.
Dimensions

The preassembled grills are supplied as panels of 300-400 mm width, depending on the exact slat dimension and spacing. The maximum length is 3600 mm and the distance between the dowel is 300 mm. The panels are connected to each other with a male/female dowel intersection which conceals the joint. A gap of 10 mm is formed between one panel and the adjacent panel.

<table>
<thead>
<tr>
<th>PANEL TYPE</th>
<th>SLATS PER GRILL</th>
<th>JOINT WIDTH</th>
<th>SLAT WIDTH</th>
<th>SLAT HEIGHT</th>
<th>PANEL WIDTH</th>
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<td>5-55-20-35</td>
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<td>20</td>
<td>35</td>
<td>375</td>
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<td>4-70-20-55</td>
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<td>20</td>
<td>55</td>
<td>360</td>
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<td>8-25-20-55</td>
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<td>20</td>
<td>55</td>
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<td>3</td>
<td>150</td>
<td>20</td>
<td>120</td>
<td>510</td>
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</table>

Installation

The grill element is held together with aluminium dowels at every 300 mm. Between the grills a 10 mm gap is recommended.

1. Install the hangers

2. Connect the primary support profiles to the hangers and install the secondary support profiles

3. Fit grill panel to the secondary support profile by means of at least 2 dowel clips in opposite directions (A). Connect the panels making sure they fit tightly (B).

Demountability

The Grill elements can be dismounted by removing the dowel clips to get access to the plenum.
Wood Species

An extensive range of wood species is available, ranging from deep warm colours including Western Red Cedar, Merbau or Mahogany to the light wood tones of Poplar, Pine and Ayous. Other types of wood possibilities can be looked at on request. Standard, the wood is finishes in a transparent lacquer. Optionally the wood can also be stained or colour washed.

Accoya
American White Oak
African Ayous
Siberian Larch
Yellow Poplar
European Pine
European Oak
American Ash
American Red Oak
Cherry
Oregon Pine
Cambara
Yellow pine
Merbau
Mahogany
Western Red Cedar
American Walnut

Bamboo

Due to great looks and characteristics, bamboo is perfectly fit to be used as material for our Linear and Grill ceilings. Besides that, bamboo is CO2 neutral wood specie which adds to the sustainability rating of your project.

Bamboo SP Natural
Bamboo SP Caramel
Touch of nature

Each piece of wood has its own structure and characteristics and can behave differently. When selecting solid wood for a project you will find natural and authentic touches like growth patterns, notches and colour variations. These effects are typical characteristics of a solid wooden ceiling and result in a naturally beautiful and lively surface.

The finest quality

At Hunter Douglas we only use the finest quality of wood available in the market. From raw timber to finished ceiling system, our production process is carried out with the latest computer controlled machinery and closest supervision to ensure a high quality product. Architects and contractors can count on our knowledge and expertise when choosing materials for their ceiling designs.

Ceilings as a sustainability standard

Wood is a natural product, very sustainable and lasts for decades. With our state of the art production facility, the production process has a minimal environmental impact. As wood naturally absorbs CO2, our wooden products are one of the most sustainable and environmentally friendly building materials.

The Solid Wooden ceiling and wall systems are more than a sustainable building material, but also bring nature closer to the living environment of the building user. With the application of solid wood, the building gets a warm and inviting atmosphere. An environment that naturally encourages people to feel pleasant, to socialise and create new ideas.

FSC, PEFC, LEED and Breeam certification

Hunter Douglas supports the use of FSC and PEFC certified wood, which also adds to your LEED or Breeam certification. Please contact us to see how we can comply to your local sustainability requirements.

C2C certification

During our product development and production process we work based on the Cradle to Cradle principle. This ensures a more sustainable way of (re)using a product.

- Cradle to Cradle Level Silver
- FSC and PEFC certification for forest reservation
- Adds points for LEED or BREEAM certificate
- Solid wood is a 100% Co2 neutral building material
Develop your custom made project solution

Although a range of standardized sizes and solutions are available, we are specialized in designing custom made solutions, such varying measurements, curved wood, CNC and fan panels. Create your own unique ceiling or wall. We would gladly work together with you to develop your custom made project solution.

Finishes

Besides the large range of available wood species, we can also match a colour based on a physical sample. In this way we can guarantee that our ceiling or wall matches the other elements in a space. This can be done by either using special stains, or by colouring the wood in RAL colours.

SOHO Colours

Blue DB-0058  Old Yellow DB-0061  Purple DB-0049
Green DB-0059  Pink DB-0060  Mint DB-0047
Red DB-0065  Yellow DB-0062

METALLIC WOOD

Chrome DB-0054  Gold DB-0056  Zinc DB-0055
Copper DB-0067  Alu Blue* DB-0062

*C All SOHO colours with Alu finish available

CNC cutting

Our state of the art production facility offers the possibility to use CNC cutting technologies. This allows you to design custom grill elements and create unique shapes.
Project: Life Science Incubator, Utrecht, The Netherlands
Product: Solid Wood Grill, Ayous, special corner panels
Architect: GiesbersWijnan & Mecanoo
Acoustics

Good acoustics are an important factor to the comfort and productivity of people in a building. Our ceiling and wall panels have been developed and tested to add to the aesthetical, but also the acoustical comfort.

The joint between the panels of the Linear system, allow the sound to go through the panels and get absorbed by the non-woven tissue. The grill panels are supplied with an acoustical fleece on the backside of the elements. Optionally, a Rockwool layer can be placed behind the ceiling. Please refer to the acoustic test results on these pages. The test details can be found next to the graphs.

**SOLID WOOD LINEAR PANELS**
- 92 mm width
- 15 mm thickness
- 19 mm gap
- Wood specie: Pine
- Soundtex 0,2 mm

**SOLID WOOD LINEAR**

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<th>Frequency Hz</th>
<th>125</th>
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<th>500</th>
<th>1000</th>
<th>2000</th>
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<td>0.59</td>
<td>0.35</td>
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**SOLID WOOD LINEAR (with Rockwool)** $\alpha_w : 0.50$ - NRC: 0.70

<table>
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<th>Frequency Hz</th>
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<tr>
<td>1/1 Octave</td>
<td>0.57</td>
<td>0.83</td>
<td>0.76</td>
<td>0.65</td>
<td>0.47</td>
<td>0.33</td>
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Left: Grimmwelt Museum, Kassel, Germany
Product: Solid Wood Linear Multi Panel, American White Oak
Architect: Kada Wittfelt Architekten
SOLID WOOD GRILL PANELS

- 25 mm gap
- 55 mm height
- 15 mm width
- Wood specie: Pine
- Test method: ISO 354:1985/
  Amd.1:1997 (EN 20354:1993),
  ISO 11654:1997, ASTM-C423-90a

SOLID WOOD GRILL (with Rockwool) $a_w : 0.50 - NRC: 0.70$

<table>
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<tr>
<th>FREQUENCY HZ</th>
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<td>0.76</td>
<td>0.65</td>
<td>0.47</td>
<td>0.33</td>
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</table>

Project: NAC, Houthalen-Helchteren, Belgium
Architect: Holistic 50|5
Product: Solid Wood Grill 6-40-20-55

Left: Monmouthshire school, United Kingdom
Product: Solid wood Grill
Architect: Buttress, Fuller, Alsop, Williams
GENERAL

EXTERIOR CEILING, SWIMMING POOL AND SPORT CEILING

Exterior ceilings, swimming pools and sport ceilings are non demountable in the linear system, but it is possible to provide access areas. Special lacquer protects the wood surface against extreme humidity. Linear Wood is also impact resistant and therefore very popular in sport centres.

SURFACE TREATMENT

Solid Wood can be finished with transparent lacquer or stained to practically any desired colour. The wooden panels can be completely varnished to protect from the influences of humidity and moisture. Standard panels can withstand a relative humidity of up to 70%.

OPTICAL CHARACTERISTICS

Wooden panels can change appearance when exposed to ultraviolet rays.

FIRE RETARDANT TREATMENT

To comply to the local fire regulations, the wooden panels can be treated with a vacuum impregnation process with a fire retardant substance. Afterwards, the panels are dried and achieve the B-s2,d0 classification (according to EN 13501-1). It’s also possible to run the system in the B-s1,d0 classification.

FIRE STABILITY

The 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. Please contact your local Hunter Douglas representative for more information regarding fire behaviour.

INSTALLATION

When handling Hunter Douglas products always use (cotton) gloves to protect the product from finger prints and other damage. Cut outs for lighting fixtures and other appliances should be made before the Hunter Douglas products are installed. All amenities (gas pipes, electricity cables etc.) must always be secured to the building structure. The relative humidity should be no more than 65% and the building should be water tight. The panels can not be stored direct on the concrete floor. An acclimatisation period is necessary.
MAINTENANCE, OPERATION

The Hunter douglas products are virtually maintenance free, because of the use of high quality materials and tested varnishes. Should cleaning be necessary, then we advise the use of a damp lintless and non-abrasive cloth and if necessary a simple non-abrasive (pH=7) detergent. Exposing the product to aggressive cleaning solutions can damage it. Always try the cleaning solution first on a non visible part.

Repairs: The removable sections allow access into the plenum for maintenance.

EXTERIOR USE

Exterior building applications need to contend with severe conditions like wind, rain, snow, dirt, vandalism and UV light. Our special wood treatment and our windproof systems ensure durability in applications like canopies, shopping centres and railway/underground stations.

Above : Pier-K, Nieuw Vennip, The Netherlands
Architect: Ector Hoogstad Architecten
Product: Solid Wood Linear, closed system exterior
Hunter Douglas is a global player within the field of modern architecture. We understand the challenges between form and function better than anyone, and enrich the market with inspiring solutions that strengthen the aesthetic appeal of buildings and their functionality in terms of indoor climate, energy use and acoustics.

We develop clever and aesthetically appealing solutions in collaboration with architects and designers to control heat, light, sound and energy. We are also inspired by real-world challenges and ideas as well as developments in technology and materials. All our products are thought out in great detail to make a difference to both architects and end users.

Hunter Douglas adopts the cradle to cradle (C2C) product philosophy to the design of products that fit the circular paradigm. Our products are designed for longevity, using materially healthy technical nutrients that can be reused at end of life as a high-quality source for something new. Cradle to Cradle Certified™ is a certification mark licensed by the Cradle to Cradle Products Innovation Institute.
Architectural services

We support our business partners with a wide range of technical consulting and support services for architects and installers. We assist architects and developers with recommendations for materials, shapes and dimensions and colours and finishes. We also help create design proposals, visualisations and mounted drawings. Our services to installers range from providing detailed installation drawings and instructions to training installers and advice during installation.

More information

Would you like to know more about Hunter Douglas’ services?

Contact our Sales Office:
+31 (0)10 - 486 99 11 (The Netherlands)

Visit our website:
www.hunterdouglasarchitectural.eu

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