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# **DOCUMENTATION PACKAGE FOR F. JUNCKERS INDUSTRIER A/S BREEAM**



## DOCUMENTATION PACKAGE FOR F. JUNCKERS INDUSTRIER A/S BREEAM

Version	<b>1.3</b>
Date	<b>27-07-2023</b>
Produced by	<b>Amanda Flysta</b>
Description	This report documents how Junckers' solid hardwood floors contribute to the sustainable building certification scheme, BREEAM International New Construction Version 6. On behalf of building material manufacturer Junckers Industrier A/S, Ramboll has composed this report and assembled the documentation for each relevant BREEAM criterion that BREEAM assessors need from Junckers to achieve the sustainable building certification. Please note that Junckers' documentation for the BREEAM sustainable building certification scheme contains confidential information and will therefore only be given to BREEAM assessors.
BREEAM	This report describes how Junckers' solid hardwood floors contribute to the following BREEAM certification: BREEAM International New Construction Technical Manual – SD250, 01/12/2021, Version 6.0.0



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Sara Føns Steffen – July 27<sup>th</sup>, 2023

## Content

<b>Content in the documentation folder</b>	<b>4</b>
<b>Introduction to BREEAM</b>	<b>5</b>
<b>Overview of criteria and documentation</b>	<b>8</b>
<b>BREEAM – MANAGEMENT</b>	<b>9</b>
Man 02 – Life cycle cost and service planning*	9
Man 03 – Responsible construction practices	11
Man 04 – Commissioning and handover	12
Hea 02 - Indoor Air Quality	13
Hea 05 – Acoustic performance	14
Mat 01 – Life cycle impacts	15
Mat 03 – Responsible sourcing of construction products	16
Mat 05 – Designing for durability and resilience	17
Mat 06 – Material efficiency*	18
Wst 01 – Construction waste management	19
Wst 06 – Functional adaptability	20

Issues marked with\* are criteria where Junckers does not contribute directly to the required documentation and therefore will not achieve credits, but still has an indirect impact on the criteria and is therefore included in this documentation package.

## CONTENT IN THE DOCUMENTATION FOLDER

This documentation package for Junckers describes the possible positive contribution to a sustainability certification according to the BREEAM International New Construction Version 6. This documentation package is not a sustainability certification or a BREEAM-certification of Junckers' products, but a collection of the required documents and information that must be used to document the material in connection with a certification.

Construction materials can be used in different ways and must meet different requirements. Thereby, this documentation package cannot be considered a certification for construction materials, but a collection of well-structured, easily accessible information about the products and their properties.

This transparency gives contractors, engineers, and architects the basis to choose the right products for their needs.



*Junckers' plank floors.*



*Junckers' 2-strip parquet floors.*

## INTRODUCTION TO BREEAM

BREEAM was launched in 1990 as the world's first environmental assessment method for new building designs. BREEAM is an abbreviation of:

**B**uilding  
**R**esearch  
**E**stablishment  
**E**nvironmental  
**A**ssessment  
**M**ethod



BREEAM is developed and delivered by the BRE Global, which is the NSO (National Scheme Operator) of BREEAM in the UK. BREEAM is an internationally recognised standard used in over 93 countries. Please find more info at [www.breeam.com](http://www.breeam.com)

The BREEAM certification includes 9 environmental sections and an additional category for innovation. Junckers' solid hardwood floors may contribute to **4 of the 9 categories**:

- 1. Management (Man)**
- 2. Health & Wellbeing (Hea)**
3. Energy (Ene)
4. Transport (Tra)
5. Water (Wat)
- 6. Materials (Mat)**
- 7. Waste (Wst)**
8. Land use and Ecology (LE)
9. Pollution (Pol)
- + 10. *Innovation (Inn) – Additional*

Junckers can contribute positively to the BREEAM certification of buildings. Together with Ramboll, Junckers has assembled thorough documentation, ready to use for BREEAM-assessors for the relevant BREEAM-credits.

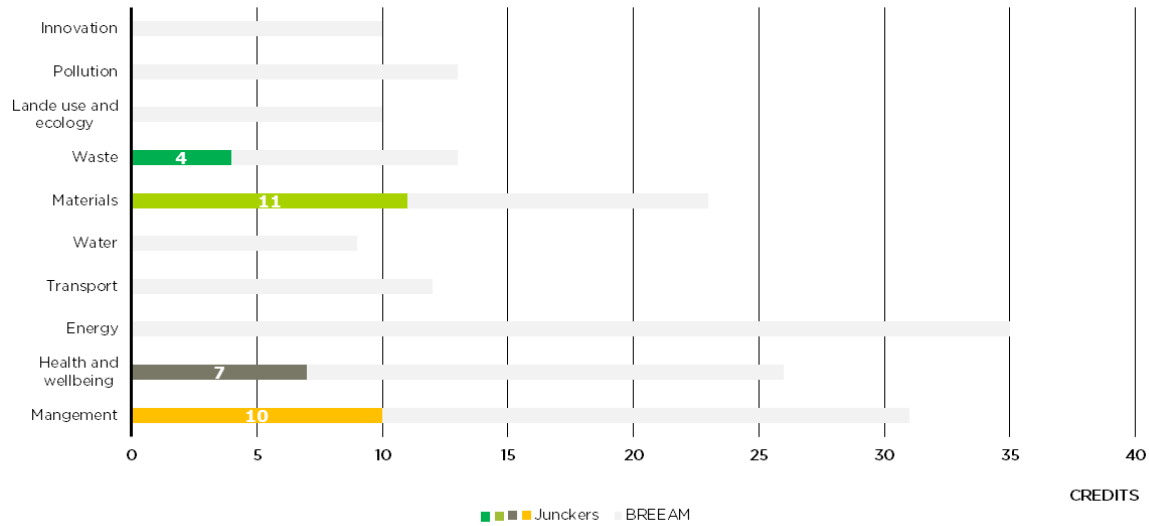
Below, please find a list of the BREEAM-credits, in the 4 categories for which Junckers' solid hardwood floor products may contribute to the achievement of credits in the BREEAM International New Construction scheme. The criteria where Junckers' flooring contribute are marked in the list on the following page. Be aware that some credits require product- as well as project-specific data. The possible credits listed are the total possible in the category, and the credits which Junckers' solid hardwood floors can contribute to for each building typology found in the BREEAM International New Construction scheme. It is important to notice that it is not Junckers' solid hardwood floors alone that ensure the credits in each issue, the credits only indicate where Junckers may influence the credits allocation.

International New Construction v6										
	Criteria	Name	Residential	Office	Industrial	Retail	Education	Residential institution (long term stay)	Hotels & Residential institution (short term stay)	
MANAGEMENT	Man 01	Project brief and design	1-4	1-4	1-4	1-4	1-4	1-4	1-4	
	Man 02	Life cycle cost and service life planning*	1-4	1-4	1-4	1-4	1-4	1-4	1-4	
	Man 03	Responsible construction practices	1-6	1-6	1-6	1-6	1-6	1-6	1-6	
	Man 04	Commissioning and handover	1-4	1-4	1-4	1-4	1-4	1-4	1-4	
	Man 05	Aftercare	1-3	1-3	1-3	1-3	1-3	1-3	1-3	
HEALTH AND WELLBEING	Hea 01	Visual comfort	1-7	1-4	1-4	1-5	1-5	1-4	1-4	
	Hea 02	Indoor air quality	1-5	1-5	1-5	1-5	1-5	1-5	1-5	
	Hea 03	Safe containment in laboratories	-	1-2	1-2	1-2	1-2	-	-	
	Hea 04	Thermal comfort	1-3	1-3	1-3	1-3	1-3	1-3	1-3	
	Hea 05	Acoustic performance	1-4	1-2	1-2	1-2	1-2	1-4	1-2	
	Hea 06	Accessibility	1-3	1-2	1-2	1-2	1-2	1-2	1-2	
	Hea 07	Hazards	1	1	1	1	1	1	1	
	Hea 08	Private space	1	1	1	1	1	1	1	
	Hea 09	Water quality	1	1	1	1	1	1	1	
ENERGY	Ene 01	Reduction of energy use and carbon emissions	1-13	1-13	1-13	1-13	1-13	1-13	1-13	
	Ene 02a	Energy monitoring	1-2	1-2	1-2	1-2	1-2	1	1-2	
	Ene 02b	Energy monitoring	1-2	1-2	1-2	1-2	1-2	1-2	1-2	
	Ene 03	External lighting	1	1	1	1	1	1	1	
	Ene 04	Low carbon design	1-3	1-3	1-3	1-3	1-3	1-3	1-3	
	Ene 05	Energy efficient cold storage	1-3	1-3	1-3	1-3	1-3	1-3	1-3	
	Ene 06	Energy efficient transportsystems	1-3	1-3	1-3	1-3	1-3	1-3	1-3	
	Ene 07	Energy efficient laboratory systems	1	1-5	1-5	1-5	1-5	1	1	
	Ene 08	Energy efficient equipment	1-2	1-2	1-2	1-2	1-2	1-2	1-2	
	Ene 09	Drying space	-	-	-	-	-	1	-	
TRANSPORT	Tra 01	Public transport accessibility	1-5	1-4	1-4	1-6	1-6	1-4	1-4	
	Tra 02	Proximity to amenities	1	1	1	1	1	1	1	
	Tra 03a	Alternative modes of transport	1-2	1-2	1-2	1-2	1-2	1-2	1-2	
	Tra 03b	Alternative modes of transport	1-2	1-2	1-2	1-2	1-2	1-2	1-2	
	Tra 04	Maximum car parking capacity	1-2	1-2	1-2	1-2	1-2	1-2	1-2	
	Tra 05	Travel plan	1	1	1	1	1	1	1	
WATER	Wat 01	Water consumption	1-5	1-5	1-5	1-5	1-5	1-5	1-5	
	Wat 02	Water monitoring	1	1	1	1	1	1	1	
	Wat 03	Water leak detection and prevention	1-2	1-2	1-2	1-2	1-2	1-2	1-2	
	Wat 04	Water efficient equipment	1	1	1	1	1	1	1	
	Mat 01	Life cycle impacts	1-6	1-6	1-3	1-6	1-6	1-6	1-6	
	Mat 02	Hard landscaping and boundary protection	-	-	-	-	-	-	-	
MATERIALS	Mat 03	Responsible sourcing of construction products	1-4	1-4	1-4	1-4	1-4	1-4	1-4	
	Mat 04	Insulation	-	-	-	-	-	-	-	
	Mat 05	Designing for durability and resilience	1	1	1	1	1	1	1	
	Mat 06	Material efficiency*	1	1	1	1	1	1	1	
	WASTE	Wst 01	Construction waste management	1-3	1-3	1-3	1-3	1-3	1-3	1-3
		Wst 02	Recycled aggregates	1	1	1	1	1	1	1
Wst 03a		Operational waste	1	1	1	1	1	1	1	
Wst 03b		Operational waste	1	1	1	1	1	1	1	
Wst 04		Speculative finishes	1	1	1	1	1	1	1	
Wst 05		Adaptation to climate change	1	1	1	1	1	1	1	
LAND USE AND ECOLOGY	Wst 06	Functional adaptability	-	1	1	1	1	-	-	
	LE 01	Site selection	1-3	1-3	1-3	1-3	1-3	1-3	1-3	
	LE 02	Ecological value of site and protection of ecological features	1-2	1-2	1-2	1-2	1-2	1-2	1-2	
	LE 03	Minimising impacts on existing site ecology	-	-	-	-	-	-	-	
	LE 04	Enhancing site ecology	1-3	1-3	1-3	1-3	1-3	1-3	1-3	
POLLUTION	LE 05	Long term impact on biodiversity	1-2	1-2	1-2	1-2	1-2	1-2	1-2	
	Pol 01	Impact of refrigerants	1-4	1-4	1-4	1-4	1-4	1-4	1-4	
	Pol 02	Nox emissions	1-2	1-2	1-2	1-2	1-2	1-2	1-2	
	Pol 03	Surface water run-off	1-5	1-5	1-5	1-5	1-5	1-5	1-5	
	Pol 04	Reduction of night time light pollution	1	1	1	1	1	1	1	
INNOVATION	Pol 05	Reduction of noise pollution	1	1	1	1	1	1	1	
	Inn 01	Innovation	1-10	1-10	1-10	1-10	1-10	1-10	1-10	
Total possible credits Junckers can influence			<b>33</b>	<b>32</b>	<b>29</b>	<b>32</b>	<b>32</b>	<b>33</b>	<b>31</b>	

Issues marked with \* and with faded colour in the table listed above are criteria where Junckers does not contribute directly to the required documentation and therefore will not achieve credits, but still has an indirect impact on the criteria and is therefore included in this documentation package.

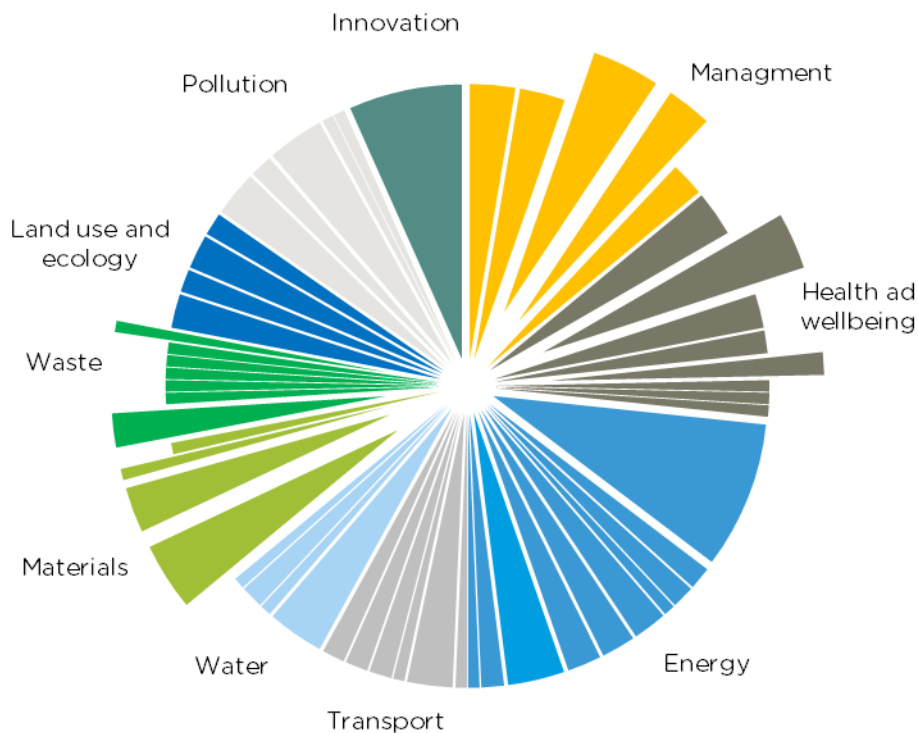
The figure below gives an insight on where the solid hardwood floors can be influential on the BREEAM categories in relation to offices.

### JUNCKERS' SOLID HARDWOOD FLOORS POSSIBLE IMPACT ON BREEAM INTERNATIONAL FOR OFFICES PER CATEGORY



The following figure gives a visual understanding of the influence on the different criteria (the size of the triangles), as well as which criteria Junckers can deliver documentation for, in relation to office buildings.

### JUNCKERS' SOLID HARDWOOD FLOORS POSSIBLE IMPACT ON BREEAM INTERNATIONAL FOR OFFICES



## OVERVIEW OF CRITERIA AND DOCUMENTATION

CRITERIA	ISSUE	DOCUMENTATION
	<b>Man 02</b> Life cycle cost and service life planning	Junckers does not contribute directly to this issue, but still has an indirect impact
	<b>Man 03</b> Responsible construction practices	<a href="#">PEFC™ certificate</a> <a href="#">FSC® certificate</a>
	<b>Man 04</b> Commissioning and handover	<a href="#">Product information datasheets, solid hardwood floors</a> <a href="#">Cleaning &amp; maintenance guide, solid hardwood floors</a> <a href="#">Product information datasheets, woodcare</a> <a href="#">Safety data sheets, wood care products</a> <a href="#">Installation instructions, commercial &amp; residential floors</a> <a href="#">Installation instructions, sport floors</a> <a href="#">Junckers floors, CE marking</a> <a href="#">Junckers, floors, UKCA marking</a>
	<b>Hea 02</b> Indoor air quality	<a href="#">Danish Indoor climate labels</a>
	<b>Hea 05</b> Acoustic performance	<a href="#">Acoustics in floor constructions, general information</a> <a href="#">Installation instructions, commercial &amp; residential floors</a> <a href="#">Installation instructions, sport floors</a>
	<b>Mat 01</b> Life cycle impacts	<a href="#">Junckers - Join the collab with nature</a> <a href="#">Junckers - Environmental product declarations</a>
	<b>Mat 03</b> Responsible sourcing of construction products	<a href="#">PEFC™ certificate</a> <a href="#">FSC® certificate</a> <a href="#">CSR - report</a> <a href="#">ISO 14001 - certificate</a> <a href="#">ISO 50001 - certificate</a>
	<b>Mat 05</b> Designing for durability and resilience	<a href="#">Product information datasheets, solid hardwood floors</a> <a href="#">Product information datasheets, woodcare</a> <a href="#">Cleaning &amp; maintenance guide, solid hardwood floors</a>
	<b>Mat 06</b> Material efficiency	Junckers does not contribute directly to this issue, but still has an indirect impact
	<b>Wst 01</b> Construction waste management	
	<b>Wst 06</b> Functional adaptability	<a href="#">Installation instructions, commercial &amp; residential floors</a> <a href="#">Woodcare for Wood Floors</a>



## BREEAM – MANAGEMENT

### Man 02 – Life cycle cost and service planning\*

#### Aim

To deliver whole life value by encouraging the use of life cycle costing to improve design, specification, through-life maintenance, and operation, and through the dissemination of capital cost reporting to promote economic sustainability.



#### Documentation

Issues marked with \* are criteria where Junckers does not contribute directly to the required documentation, since the required documentation is aimed at the contractor, but Junckers still has an indirect impact through-out their concepts written below:

Junckers' wooden floors are made of 100% solid hardwood and thereby a robust material with a long-term product longevity. The floors are characterized by the ease of maintenance and cleaning. Daily cleaning is easily accomplished by sweeping or vacuuming and when necessary, the floor can be wiped with a well wrung out mop or cloth. For larger floors, a scrubber dryer can be used.

To ensure that the floor lasts for many years, it is recommended occasionally to refresh the surface by lightly sanding the surface and apply a new coat of lacquer or oil. Frequency depends on the wear and tear to which the floor is exposed. It is recommended to inspect the floor on a regular basis and ensure resealing before the surface treatment wears through to bare wood. Junckers offers own produced maintenance products, thereby providing a total solution.

[Product information datasheets, solid hardwood floors](#)

[Product information datasheets, woodcare](#)

[Cleaning & maintenance guide, solid hardwood floors](#)

Regarding the lifetime and maintenance of the floors, it is recommended to use the calculation method recognized within the given country of the certification, as long as it complies with ISO 15686-5:2008 as described in the BREEAM International manual.

A solid hardwood floor from Junckers has a great potential for recycling. The product can either be used in the production of new wood-based building materials or directly reused as flooring. Junckers does not yet have a collection scheme for the used floors, and thus it is up to the clients to decide if the floor should be reused or not. The ease of reuse depends on the installation method of the floor. Junckers operates with three different installation methods: a glue down system, a clip system, and a batten system. Clip floors and batten floors have a large potential for reuse as flooring, while a glued floor can be reused in an alternative wood-based building material, e.g., chipboards. Alternatively, the floor can be disposed through the local waste company.

[Installation instructions, commercial & residential floors](#)

[Installation instructions, sports floors](#)

#### Weighting

No credits given

As part of the total solution Junckers offers a care scheme including a 25-year lifetime warranty on the product, installation, and maintenance of the floor. The care scheme offers the client, specifier, and builder the opportunity of ensuring correct fitting of the floor, highest quality of the product and long-term maintenance to be carried out correctly by an "Approved Flooring Contractor". For more information, see the [Junckers 25 Years Warranty Scheme](#)

The price of Junckers' solid hardwood floors varies depending on the type of wood and surface treatment. Through Junckers' website the price of each solid hardwood floor can be requested.

## BREEAM – MANAGEMENT

### Man 03 – Responsible construction practices

#### Aim

To recognise and encourage construction sites which are managed in an environmentally and socially considerate, responsible, and accountable manner.



#### Documentation

The intention with this issue is to encourage that the construction sites are operated in an environmentally and socially considerate, responsible manner. To report, collect and monitor data on e.g., energy, water, and transport impacts and the total carbon dioxide emissions.

Junckers is CoC (Chain of Custody) certified and has since 2006 been entitled to sell products that are certified according to the PEFC™ scheme (SA-PEFC/COC-007649), and since 2010, according to the FSC® scheme (SA-COC-007649). As a result, Junckers provides documentation for the prerequisites related to this issue.

[PEFC™ certificate](#)

[FSC® certificate](#)

#### Weighting

1-6 credits

# BREEAM – MANAGEMENT

## Man 04 – Commissioning and handover

### Aim

To encourage a properly planned handover and commissioning process that reflects the needs of the building occupants.



### Requirements and Documentation

### Weighting

The intention with this issue is to improve actual building performance through proper commissioning and handover processes. Reduce operation and maintenance costs through robust and efficient maintenance schedules, increased lifetime, and well trained operational and maintenance staff. To provide easily accessible and understandable information relevant to non-facilities management teams or other building users.

1-4 credits

By using Junckers' solid hardwood floors in the building, you get a fully documented product with thorough guidance for maintenance. To ensure the functionality of the floors, and no unexpected cost, it is recommended to sign up with Junckers care scheme, also mentioned under Man 02. When signing up to the care scheme a Junckers approved contractor will inspect the floor six months after the floor has been handed over. This is to ensure that the floor is being maintained correctly and thereby preventing premature wear.

[Product information datasheets, solid hardwood floors](#)  
[Cleaning & maintenance guide, solid hardwood floors](#)

In addition, Junckers provides the following information for individual maintenance products

[Product information datasheets, woodcare](#)  
[Safety data sheets, wood care products](#)

Technical support, as well as installation instructions, are available and Junckers will happily help deliver the required documentation.

[Installation instructions, commercial & residential floors](#)  
[Installation instructions, sport floors](#)

Furthermore, Junckers floors are CE- and UKCA-marked in accordance with the EN 13629 harmonised European product standard for Wood flooring – Solid individual and pre-assembled hardwood boards, or EN 13226 Wood flooring – Solid parquet elements with grooves and/or tongues.

[Junckers floors, CE marking](#)  
[Junckers, floors, UKCA marking](#)

# BREEAM – HEALTH AND WELLBEING

## Hea 02 - Indoor Air Quality

### Aim

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment, and finishes.



### Requirements and Documentation

The intention with this issue is to ensure healthy internal environments with good indoor air quality, reduce the potential for indoor air pollution from a variety of pollution sources and ensure a good indoor air quality for the building users.

Junckers strives to supply floors and wood care products without the use of chemicals that can affect the air quality in the occupied rooms. Wood is a natural product that basically provides a good indoor climate. It is simple to keep clean and dust free.

Junckers has a wide range of wooden floors and wood care products which are certified with the Danish Indoor Climate Label. According to Guidance Note 22, The Danish Indoor Climate label is a recognised scheme for emissions from construction products for BREEAM. To obtain the label, the products have undergone extensive testing for degassing and odour. This ensures that there are no chemical substances in the floor or products that can negatively affect the air quality in the room. These tests focus on VOC's and formaldehyde and is tested after 28±2 days in accordance with ISO 16000-9:2006. The products are in general tested against ISO 16000-28 and EN 16516:2017.

	Formaldehyde	TVOC	1A and 1B carcinogens
BREEAM	≤0.06 mg/m <sup>3</sup> (non-MDF) ≤0.08 mg/m <sup>3</sup> (MDF)	≤1.0 mg/m <sup>3</sup>	≤0.001 mg/m <sup>3</sup>
Danish Indoor Climate Labelling (oil treated)*	<0.005 mg/m <sup>3</sup>	<0.005 mg/m <sup>3</sup>	≤0.001 mg/m <sup>3</sup>
Danish Indoor Climate Labelling (lacquer treated)*	<0.005 mg/m <sup>3</sup>	0.21 mg/m <sup>3</sup>	≤0.001 mg/m <sup>3</sup>

\*All the Danish Indoor Climate Labelling measures are after 28 days.

[Danish Indoor climate labels](#)

### Weighting

Building type dependent  
1-5 credits

# BREEAM – HEALTH AND WELLBEING

## Hea 05 – Acoustic performance

### Aim

To ensure the building's acoustic performance, including sound insulation, meets the appropriate standards for its purpose.



### Requirements and Documentation

The intention with this issue is to ensure that the building meets appropriate acoustic performance and standards, including sound insulation, and to ensure good building acoustics for the occupants of the building. For this issue a set of prerequisites need to be obtained before any credits can be given and before the documentation provided by Junckers should be considered.

Junckers' solid hardwood floors can be installed by using either a glue down system, a clip system, or a batten system. Each installation method contributes to the step sound reduction, and as a result Junckers floor system can influence this issue.

- Glue down system 9 dB
- Clip system 5-19 dB
- Batten system 17-28 dB

In the individual floor system Specifier's- and Installation Instructions, there are specific information about the contribution to step sound reduction.

[Acoustics in floor constructions, general information](#)  
[Installation instructions, commercial & residential floors](#)  
[Installation instructions, sport floors](#)

### Weighting

Building type dependent

1-4 credits

## BREEAM – MATERIALS

### Mat 01 – Life cycle impacts

#### Aim

To recognise and encourage the use of robust and appropriate life cycle assessment tools and consequently the specification of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building.



#### Documentation

The intention with this assessment issue is to encourage and optimise the use of life cycle assessment (LCA), as well as to recognise construction materials with a low environmental impact over the building's full life cycle by considering e.g., embodied carbon, LCA tools, and Environmental Product Declarations (EPD).

In order to make the criteria compatible with different countries' LCA practices, the only mandatory environmental indicator is GWP, whereas the remaining environmental indicators, which can be included in an LCA, are optional.

In Junckers' wood flooring production, all harvested wood is used, and nothing goes to waste during the production. Surplus wood – sawdust, wood chips, and sawn of ends – is delivered to the local power plant close to the production site, where it is converted into electricity and heat for Junckers' own factory and the local energy grid. Junckers has a long history of zero wood waste and the production of energy from biomass. Since the 1940's where Junckers' first boiler was installed, by-products from the production have been transformed into energy.

Junckers uses energy to dry and process timber like other manufacturers, but do not use fuels extracted from fossil sources.

Junckers' solid hardwood floors have great recycling potential. As the product can either contribute to the production of other wood-based building materials or directly be reused as flooring in another context.

Moreover, Environmental Product Declarations (EPD's) have been conducted for most of Junckers' solid hardwood floors with their respective surface treatments. These EPD's indicate the environmental impact of the products in relation to the LCA phase A1-A3 as a minimum and can thereby contribute to the life cycle assessment of the building.

For this issue, Junckers provides the following documentation:

[Junckers - Join the collab with nature](#)


[Junckers – Environmental product declarations](#)

#### Weighting

Building type dependent  
(Up to 6 credits)

## BREEAM – MATERIALS

### Mat 03 – Responsible sourcing of construction products

<b>Aim</b>  To recognise and encourage the specification and procurement of responsibly sourced construction products.	
<b>Documentation</b>	<b>Weighting</b>
<p>The intention with this assessment issue is to encourage more responsible sourced construction products, including materials in accordance with a sustainable procurement plan and to focus on responsible key building materials to help reduce economic, social, and environmental impacts.</p> <p>As a prerequisite for this issue, all timber and timber-based products need to be legally harvested and traded timber. Junckers is CoC (Chain of Custody) certified and has since 2006 been entitled to sell products that are certified according to the PEFC™ scheme (SA-PEFC/COC-007649), and since 2010, according to the FSC® scheme (SA-COC-007649).</p> <p><a href="#">PEFC™ certificate</a> <a href="#">FSC® certificate</a></p> <p>Junckers is putting a lot of effort into making their business more efficient and are constantly improving every element of the manufacturing, sourcing, and transportation processes.</p> <p>In 2011, Junckers joined the UN Global Compact (UNGC) and committed to its ten principles to operate in ways that meet fundamental responsibilities in the areas of human rights, labour, environment, and anticorruption. This commitment to the UNGC helps driving and directing guidelines for Junckers' CSR initiatives.</p> <p><a href="#">CSR – report</a></p> <p>Moreover, Junckers is both certified according to ISO 14001 and ISO 50001. The ISO 14001 certification ensures an environmental management system, while the ISO 50001 certification includes requirements regarding determination, management and improvement of the energy use and energy efficiency.</p> <p><a href="#">ISO 14001 – certificate</a> <a href="#">ISO 50001 - certificate</a></p>	1-4 credits



## BREEAM – MATERIALS

### Mat 05 – Designing for durability and resilience

#### Aim

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising material optimisation.



#### Documentation

The intention with this assessment issue is to encourage more responsible use of the materials, by reducing replacements and improve the material optimisation.

The specification or design measures chosen should reflect the need to balance the additional specification of materials with the need to protect building elements to minimise their replacement, preventing excessive material use and promoting material optimisation.

Junckers' wooden floors are made of 100% solid hardwood and thereby a robust material with a long-term product longevity. The floors are characterized by the ease of maintenance and cleaning. To ensure that the floor lasts for many years, it is recommended occasionally to refresh the surface by lightly sanding the surface and apply a new coat of lacquer or oil. By following the given maintenance guidelines from Junckers, a long lifetime of the solid hardwood floors can be secured, and a minimum of replacements are necessary.

[Product information datasheets, solid hardwood floors](#)

[Product information datasheets, woodcare](#)

[Cleaning & maintenance guide, solid hardwood floors](#)

#### Weighting

1 credit

## BREEAM – MATERIALS

### Mat 06 – Material efficiency\*

#### Aim

To recognise and encourage measures to optimise material efficiency in order to minimise the environmental impact of material use and waste without compromising on structural stability, durability or service life of the building.



#### Documentation

Issues marked with \* are criteria where Junckers does not contribute directly to the required documentation, but still has an indirect impact on the criteria, and therefore is included in this documentation package.

The intention with this issue is to encourage and minimise the environmental impact of material use and waste without compromising on structural stability, durability, and service life of the building.

Opportunities and measures have been identified in order to optimise material efficiency. However, Junckers cannot impact this issue directly, as it requires process related documentation. Thus, the choice of Junckers' solid hardwood floors would result in an indirect impact, as the choice of the specific manufacturer has impact on the structural stability, durability, and service life. Junckers' wooden floors are made of 100% solid hardwood and thereby a robust material with a long-term product longevity. The floors are characterized by the ease of maintenance and cleaning. To ensure that the floor lasts for many years, it is recommended occasionally to refresh the surface by lightly sanding the surface and apply a new coat of lacquer or oil.

[Cleaning & maintenance guide, solid hardwood floors](#)

A solid hardwood floor from Junckers has a great potential for recycling. The product can either be used in the production of new wood-based building materials or directly reused as flooring. Junckers does not yet have a collection scheme for the used floors, and thus it is up to the clients to decide if the floor should be reused or not. Alternatively, the floor can be disposed through the local waste company.

The choice of specific materials does thereby in general impact the structural stability, durability, and service of life, as e.g., the potential for reuse and recycling of the products varies depending on the given material.

#### Weighting

No credits given

# BREEAM – WASTE

## Wst 01 – Construction waste management

### Aim

To promote resource efficiency via effective and appropriate management of construction waste.



### Documentation

### Weighting

The intention with this issue is to focus on reducing construction and demolition waste related to on site construction and off-site manufacturing or fabrication and to promote resource efficiency through effective and appropriate management of construction waste. Points cannot be given exclusively via the use of Junckers products and documentation, but through an assessment of the entire building.

1-3 credits

A solid hardwood floor from Junckers has a great potential for recycling. The product can either be used in the production of new wood-based building materials or directly reused as flooring. Junckers does not yet have a collection scheme for the used floors, and thus it is up to the clients to decide if the floor should be reused or not. If the solid hardwood floors are neither sufficient for reuse or recycling, it can be disposed through the local waste management and potentially utilised for heating.

Junckers' solid hardwood floors are packed for the construction site in LDPE plastic and a protective layer of cardboard. The sizing of the packaging depends on the floor type but varies between 0.93-2.52 m<sup>2</sup>. For transportation to the construction site, the packages are stacked on battens made from discarded floorboards. Both the plastic, the cardboard, and the battens are handled at the local construction site and are uncomplicated to sort into separate waste groups to dispose through the local waste management.

All packaging waste can be recycled either on the construction site or sorted into the different key waste groups defined by BREEAM as packaging, timber, or plastic.

## BREEAM – WASTE

### Wst 06 – Functional adaptability

#### Aim

To recognise and encourage measures taken to accommodate future changes of use of the building over its lifespan.



#### Documentation

The intention with this issue is to encourage consideration and implementation of measures taken to accommodate future changes of use of the building and its systems over its lifespan.

Junckers' solid hardwood floors contribute to multifunctional design solutions and provide, to some extent, adaptability when rebuilding or redesigning, as disassembly, reuse and recycling is possible with Junckers' solid hardwood floors.

The ease of disassembly and thereby the adaptability depends on the installation method of the floor. The disassembly of the floor and reuse is easiest with the clip system, which allows the floor to be disassembled, moved, and reinstalled in another location of the building. For the batten system the disassembly requires a larger effort, since the boards are nailed to the battens. The glue down system usually needs mechanical disassembly. The potential of reuse and recycling and the potential of adaptability is thereby dependent on the installation method.

[Installation instructions, commercial & residential floors](#)

[Installation instructions, sports floors](#)

Regardless of the installation method, it is possible to sand the floor and refresh the surface with a new coat of oil or lacquer. Junckers offers a wide range of own produced lacquer and oil products, which makes the floor adaptable to aesthetic changes as well as functional changes.

[Woodcare for Wood Floors](#)

#### Weighting

1 credit

Non-residential only