

# SPORTS FLOORS

for all indoor sports  
and sport facilities



**JUNCKERS**

Performing on Danish design

[JUNCKERSHARDWOOD.COM](http://JUNCKERSHARDWOOD.COM)



# PERFORMING ON DANISH DESIGN

## ABOUT JUNCKERS

Junckers is Europe's leading solid wood flooring manufacturer. The company has deep roots tracing back to its establishment in 1930 by founder, Flemming Juncker. A visionary and dedicated forester, Flemming Juncker possessed a profound sympathy and understanding for what is today referred to as the circular economy. He advocated a sustainable approach to wood flooring, aiming to utilize every part of the tree. This vision remains integral to Junckers today through its incorporated philosophy: **Join the Collab with Nature.**

When developing woodcare products, Junckers does so with a deep understanding of the requirements for both quality and environmental considerations. The company believes that lacquers, oils, and cleaning products play a crucial role in maintaining the beauty of wood products while extending their lifespan.

At the factory in Denmark, a dedicated team of experts meticulously monitors the daily production, providing unparalleled insights into the functionality of wood flooring and an understanding of the challenges that any project may present. The close connection to production enables Junckers to create solutions that meet the specific needs and requirements of customers within the sports, commercial, and residential segments.

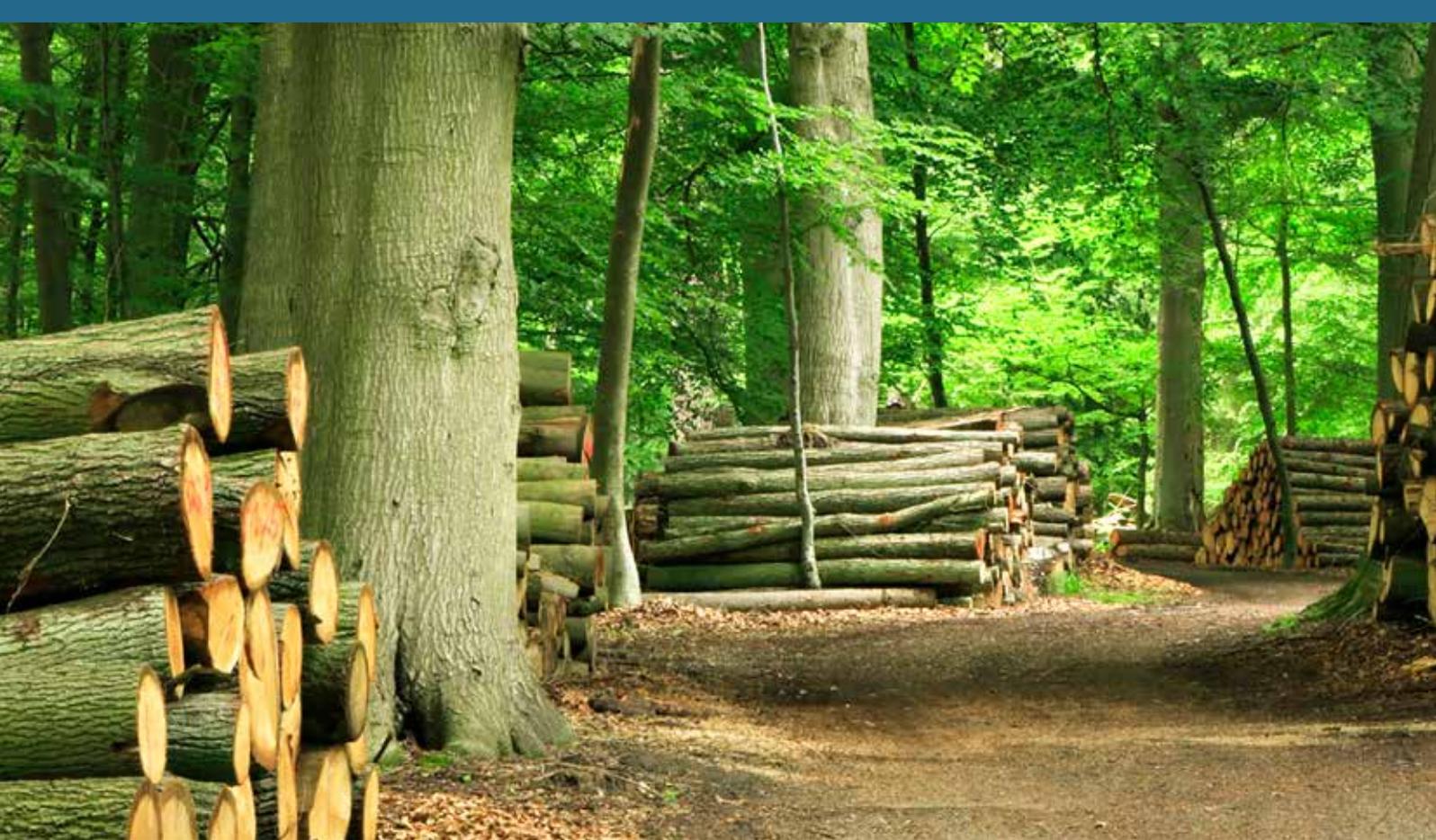
Successful projects require a reliable partner from start to finish. Junckers is committed to being a reliable and professional partner, working side-by-side with customers from project planning to execution and subsequent maintenance. Experience has shown that this approach is crucial to offering sustainable-minded solutions that last for decades – making the company a preferred choice for professionals working on project sales worldwide.

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With a global presence, facilitated through seven sales offices and an extensive network of dealers and agents, Junckers has branched out across the world. The company delivers their products to more than 45 countries worldwide.

Choose Junckers for products that meet the highest standards and join the company and its philosophy of **Join the Collab With Nature**



## CARING FOR THE CLIMATE IS CENTRAL TO OUR BUSINESS

Operating responsibly with a focus on the environment has been part of Junckers' DNA since 1930. Throughout the company's value chain, we are constantly striving to improve and add documentation that creates transparency and traceability.

At Junckers, we utilise every part of a tree log. By-products such as bark, sawdust and waste wood from production are converted into biomass and used in the public energy grid to produce electricity and heating. The use of biomass for energy production contributes to the reduction of greenhouse gases by minimising the need for coal, oil or gas as an energy source.

Like other manufacturers, Junckers uses energy to dry and process wood, but we do not use fuels derived from fossil sources.

The wood itself has the unique benefit of storing CO<sub>2</sub>, helping to reduce greenhouse gas emissions into the atmosphere, and unlike other building materials, wood is a renewable resource.

This, combined with the fact that solid hardwood flooring is a very long lasting and recyclable product, gives us the ideal conditions for creating climate responsible flooring solutions.

## CERTIFIED WOOD

We only use wood from forests managed in a sustainable and environmentally responsible way. Planting new trees as old ones are cut down is one of the characteristics of sustainable forestry.

To protect the climate, we strive to use wood harvested as close as possible to our factory. This is why our raw wood is mainly sourced from forest areas in Denmark, Sweden, Germany and Poland.

Junckers achieved Chain of Custody certification in 2006 and has since been able to offer PEFC certified products. In 2010, we also achieved certification under the FSC® scheme.



The mark of responsible forestry



Ask Junckers for FSC® certified products

## CE – DECLARATION OF PERFORMANCE

Junckers wooden floors are CE labelled, a guarantee of compliance with EU legal requirements for safety, health and the environment. The basis for CE labelling is a declaration of performance that shows exactly how the product meets specific legal requirements. This applies to e.g. fire resistance, emission, strength, friction, etc.





# SUSTAINABILITY, ENVIRONMENT & PRODUCT QUALITY

## ISO 14001 - ENVIRONMENTAL MANAGEMENT SYSTEM

Junckers is certified according to ISO 14001. ISO 14001 and therefore works purposefully to identify and reduce the company's environmental impact.

## ISO 50001 - ENERGY MANAGEMENT SYSTEM

Junckers is certified according to ISO 50001. ISO 50001 and therefore works purposefully to improve the company's energy management with the aim of reducing energy costs.

## PRODUCT-SPECIFIC EPDS

In our endeavour to create transparency throughout the product value chain and enable informed material choices, we have chosen to provide product-specific Environmental Product Declarations (EPDs).

Junckers' EPDs are developed in accordance with the European standard EN 15804 and are verified according to ISO 14025. Independent verification of the declarations is performed by a third party and the declarations are registered with EPD Denmark.

## INDOOR CLIMATE

Junckers has a wide range of wood flooring and woodcare products that carry the Danish Indoor Climate Label. The Indoor Climate Label is your guarantee that the products do not have odours or chemical substances that can adversely affect the air quality in the room.



## UN GLOBAL COMPACT

Junckers has been a member of the UN Global Compact since 2011, committing to support and respect principles and values in the areas of human rights, labour rights, environmental protection and anti-corruption.

## SCIENCE BASED TARGETS INITIATIVE (SBTI)

To support our ambition to set targets to reduce our organisation's direct and indirect contribution to greenhouse gas emissions, we have joined the Science Based Targets initiative.

SBTi focuses on close collaboration between companies and climate experts to ensure that member organisations' climate targets are aligned with what the latest climate science deems necessary to meet the goals of the Paris Agreement. The goal of the Paris Agreement is to limit global warming to below 2°C above pre-industrial revolution levels and preferably to 1.5°C.



FIBA EUROBASKET 2017

## JUNCKERS SOLID HARDWOOD SPORTS FLOORS

## ALWAYS WITH AREA-ELASTIC PROPERTIES

## PREFERRED BY ATHLETES

All Junckers' sports floors perform with unique area-elastic characteristics providing the ultimate freedom of movement, protection against injury and enables the athlete to perform to the best of their abilities.

Our sports floor solutions are tested and approved in accordance with the European standard EN 14904. The solutions fulfil the requirements of class A3 and A4.

The EN 14904 standard has worldwide recognition and specifies the requirements for safety and performance for a sports floor. The standard divides the sports floors

into 4 types:

1. Area-elastic floors: When a point force causes deflection over a relatively large area around the impact point (wood).
2. Point-elastic floors: When a point force causes deflection only at, or close to, the impact point (vinyl).
3. Combi-elastic floors: An area-elastic floor with a point-elastic top layer, a point force will cause both localized deflection and deflection over a wider area (wood/vinyl).
4. Mixed-elastic floors: Point-elastic floor combined with a synthetic material.

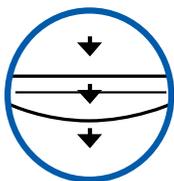
# FLOOR SAFETY AND PERFORMANCE

The standard relates to both safety and sports technical properties and the most important key factors are described below.



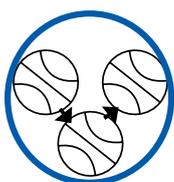
## SHOCK ABSORPTION

A shock absorbing floor minimises the risk of injuries. Testing measures the percentage of impact energy absorbed by the floor when landing a jump.



## VERTICAL DEFORMATION

The floor's ability to absorb shock depends on its ability to flex when exposed to a dynamic load. Test results display the floor's vertical deformation in mm when exposed to a dynamic impact equivalent to that of light jogging.



## BALL BOUNCE

A good ball bounce increases the ball control and the speed of the game. Test results display the rebound achieved by the floor as a percentage of the rebound measured on a concrete floor.



## FRICITION

Correct friction is important when ball players move rapidly on the floor, and the ideal friction rating is between 80 and 110. A friction value less than 80 makes the floor too smooth, and above 110 makes the floor too rough.



## ROLLING LOAD

The floor's ability to withstand rolling loads is important for example where trolleys and retractable seating are used. Test results display whether the floor can withstand a rolling load of 1,500 N (approx. 150 kgs).

## JUNCKERS OWN TEST PROGRAMME

In spite of the good intentions of the European standard, there are no demands concerning strength and durability of a sports floor. Therefore Junckers has chosen to integrate two additional internal tests for evidence of these properties.

## FATIGUE TEST

This test is conducted on all Junckers' class A4 floors. The floor is exposed to a series of controlled, dynamic point impacts of 3 kN (approx. 300 kgs) no less than 100,000 times, which efficiently simulates the equivalent of 25 years of normal use.

## POINT LOAD TESTING

The demands on the floor's ability to withstand point loads may be increased significantly when the sports floor is used for exhibitions, concerts and major sports events and where retractable seating is moved across the floor.

These demands are simply not considered by the EN Standard. Therefore, Junckers' sports floors undergo rigorous tests in order to ensure durable and versatile floors.

# CHOICE OF FLOOR BOARD

## UNCOMPROMISING QUALITY AND GOOD CRAFTSMANSHIP AS FOUNDATION

Junckers' wooden floors are made of 100 % solid hardwood. There are no intermediate layers of alternative materials in the floorboards that can come apart.

The floors have a full 7/8" [22] mm thickness of hardwood, and this makes them very strong and stable.

The floor boards are made from two rows of staves assembled by means of a carefully machined double dovetail joint. A solution which uses the timber efficiently without compromising the quality.

### EASY AND FAST TO INSTALL

To make it easy and fast to install the floor, Junckers' sports floor boards have uniform lengths of 12' (3700 mm)\* and cover approx. 5 SF (0.5 m²). All floor boards are tongue and groove jointed all around.

### READY TO USE WHEN INSTALLED

Junckers' floors are always supplied prefinished with urethane from the factory. This makes the floor ready to use right after installation.

## JUNCKERS SOLID HARDWOOD FLOORS ARE CREATED FOR GENERATIONS OF USE

A prefinished floor eliminates the risk of human error when sanding and finishing on site and avoids using urethane of unknown quality.

Floors sealed with urethane from the factory ensure high quality, and save on-site labour costs.

### SURFACE OUT OF THE ORDINARY

The urethane used for our floors is an extremely hard-wearing polyurethane, which is applied in several coats.

Junckers' own product development team has developed this urethane and it is produced in our own manufacturing facilities in Denmark.

### EXTREMELY STABLE AND DURABLE

We take far longer than normal over the drying process to ensure that the movements occurring naturally in wood are fully controlled and kept to a minimum. Therefore a Junckers sports floor is more stable when humidity levels change through the year.

Our beech and maple sports floors are dried using Junckers' unique press drying method. This process creates high strength and an indentation resistance of the floor board that will usually exceed that of similar boards dried using normal methods.

### LONG LIFE AND LOW COSTS OF MAINTENANCE

Our floors are easy to clean, maintain and are fully repairable.

On a daily basis the floor only requires sweeping or a machine cleaning using as little water as possible.

To protect and ensure long life of the floor we recommend occasionally a light sanding and re-sealing.

## RUNNING ACROSS A JUNCKERS SPORTS FLOOR 50-60 YEARS OLD IS NOT UNUSUAL

Double dovetail



Junckers 7/8" [22] mm thick, 5" [129] mm wide and 12' [3700] mm long hardwood floor board.

\* Also available in length of 1830 mm



# FLOOR BOARD RANGE

## BEECH SYLVASPORT

Width: 5" (129 mm)

Thickness: 7/8" (22 mm)

Beech is Junckers' hallmark floor. It is a floor board with a uniform structure, white to reddish heartwood and a red-brown grain pattern. A classic and very popular floor.

CHAMPION | CLASSIC



PREMIUM | HARMONY



CLUB | VARIATION



## BEECH SYLVAKET

Width: 5" (129 mm)

Thickness: 7/8" (22 mm)

A Beech floor board colored through its full thickness. Can be sanded without loss of color. Adds a warm golden glow.

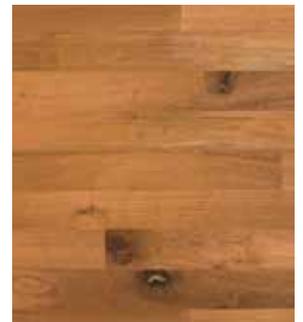
CHAMPION | CLASSIC



PREMIUM | HARMONY



CLUB | VARIATION



## ASH

Width: 5" (129 mm)

Thickness: 7/8" (22 mm)

A floor board with an elegant, light appearance combined with a characteristic dark grain pattern. Over time, the natural ageing gives Ash a warm and golden glow.

CHAMPION | CLASSIC



PREMIUM | HARMONY



CLUB | VARIATION



**CHAMPION:** Uniform look with very little color and structural graining variation.

**PREMIUM:** Natural look with a more natural range of color and structural graining variation.

**CLUB:** A rustic look with substantial color and graining variation.

# FLOOR BOARD RANGE

## DESIGN WITH COLORS

At Junckers, we believe that creativity and a distinctive look contribute to a comfortable atmosphere.

Warmer wood tones provide the ideal healing backdrop for wellness centres, yoga and pilates. More vibrant hues can offer the right amount of pizzazz for zumba and other exhilarating activities.

Combine a Junckers sports floor with color and create a unique expression.

Colored beech sports floors in Harmony grade, in both 6' and 12' lengths are available in combination with all Junckers' subfloor systems.

**WHITE BEECH**



**OYSTER GREY**



**TWILIGHT GREY**



**SYLVARED**



**DARK COCO**



**SMOOTH RUM**



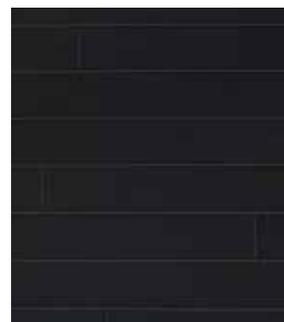
**SPICY PEPPER**



**TENDER OLIVE**



**BLACK OIL**



**RAW SUGAR**



**WILD HAZEL**



# FLOOR BOARD RANGE

## BEECH SYLVASQUASH CHAMPION

In fast games like squash and racquetball, a surface with a high degree of friction is essential. For this purpose we offer an unsealed floor board with a slightly roughened 40 grit surface.

This provides the high level of friction required by the sport, while still keeping risk of injury to an absolute minimum.

The squash floor board can also be supplied with one coat of urethane. This is by many preferred to ease the maintenance of the floor and it does not affect the friction properties.



## BEECH SYLVADANCE CHAMPION

Junckers SylvaDance sports floor creates optimal conditions in facilities where professional dance is performed.

The surface of the floor has friction properties which guarantee a reinforced grip and thus reduces the risk of injury. This provides the dancer optimal security.

These properties are achieved by sanding the floor then sealing it with two coats of a 2-component urethane.





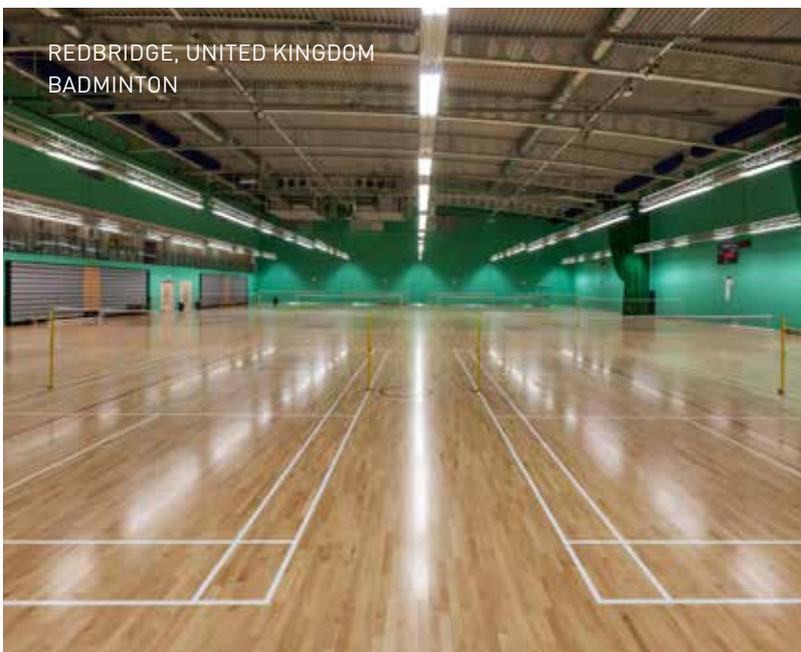
THE REGAL, UNITED KINGDOM  
BASKETBALL



GREAT NORTHERN, DENMARK  
YOGA



BALATONBOGLÁR, HUNGARY  
HANDBALL



REDBRIDGE, UNITED KINGDOM  
BADMINTON



SCENE 44, FRANCE  
DANCE AND DRAMA

# A SOLUTION FOR ALL SPORTS AND SPORT FACILITIES

Junckers has a wide range of portable and permanent floor solutions. The systems always include our 7/8" solid hardwood top surface.

## PERMANENT FLOOR SOLUTIONS

In this range we have floating and sleeper based floor solutions with a choice of sub-construction that meets most construction heights and performance requirements.

Total construction height of our floors ranges from 1 1/4" to 9 1/2". We have solutions for flat and uneven sub-floors.

Junckers' floors are designed to be installed in all types of facilities.

*Our floors have been installed in community and school halls, sports centres and large arenas used for international competition such as Commonwealth, Invictus and Olympic Games.*

The flexibility of construction heights also makes our solutions ideal for renovation projects.

## PORTABLE FLOOR SOLUTIONS

This range consists of prefabricated lightweight panels, fast to assemble and dismantle.

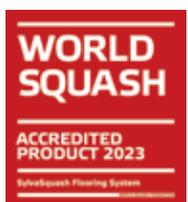
In our portable floor range, you find solutions suitable:

- For long or short time use
- For international tournaments, which require special line-markings
- Over turf surfaces
- Over ice rinks
- Over existing soft or hard floors
- For concerts or fairs

## NAME THE SPORT AND JUNCKERS HAS THE SOLUTION



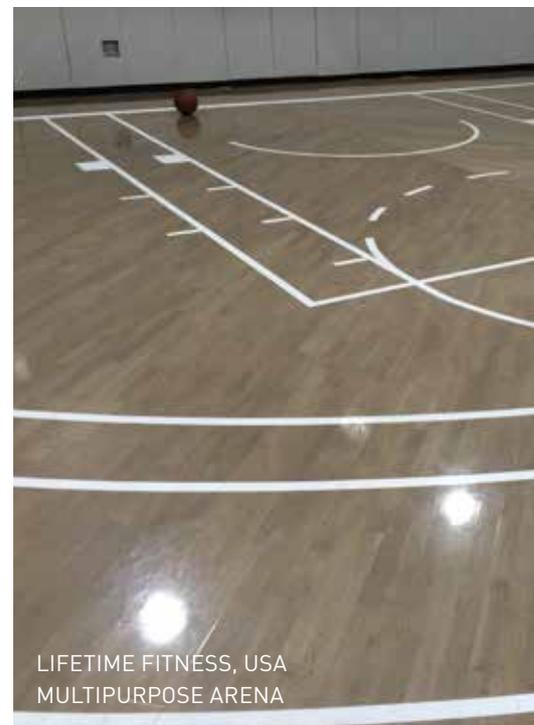
International  
Handball  
Federation



*Junckers' sports floor solutions - certified by FIBA, WHF, BWF & IHF*



GAMMEL HELLERUP GYMNASIUM, DENMARK  
MULTIPURPOSE ARENA



LIFETIME FITNESS, USA  
MULTIPURPOSE ARENA



THE BOXING CLUB, USA  
FITNESS



CRYSTAL PALACE, ENGLAND  
MULTIPURPOSE ARENA

# CHOOSE THE RIGHT FLOOR SYSTEM

## PERMANENT FLOOR SYSTEMS

TOTAL FLOOR SYSTEM THICKNESS	REQUIRED SUBFLOOR	SUB-CONSTRUCTION	SYSTEM	CLASS ACCORDING TO EN 14904	FIBA approval level
Minimum 4 3/4" (120mm) Maximum 9 5/8" (242mm)	Flat/irregular	Duobat 120+	Two layer sleeper system	A4	1
2 3/8" - 8 1/4" (62-209 mm)	Flat/irregular	Unobat 62+ with J-Lock cradle or adjustable wedge and supporting blocks included	Single layer sleeper system	A4	1
2" (50 mm)	Flat	Unobat 50	Single layer sleeper system	A4	1
1 3/4" (45 mm)	Flat	Unobat 45	Single layer sleeper system	A4	1
2 1/8" (52 mm), 2 5/8" (67 mm), 3 1/8" (79 mm)	Flat	BluBAT 52, 67, 79	Single layer sleeper system	A3	2*
1 1/4" (32 mm)	Flat	Clip, 3/8" (10 mm) foam	Floating system	A3	-
1 1/2" (37 mm)	Flat	Clip, 19/32" (15 mm) foam	Floating system	A3	2
3/4"	Flat	Studio Floor	Performance sport foam / steel clips	-	-

\*Blubat 52

## PORTABLE FLOOR SYSTEMS

CONSTRUCTION HEIGHT	REQUIRED SUBFLOOR	PRODUCT	SYSTEM	CLASS ACCORDING TO EN 14904	FIBA approval level
1 3/4" (44 mm)	Flat, dry, structurally sound	Pro Complete 44	Single layer sleeper system	A4	1
1 7/8" (49 mm) / 1 3/8" (34 mm) over turf	Flat	Arena Master	Floating system	A3	2
1 1/4" (32 mm)	Flat	A3 Portable	Performance sport foam / metal brackets	A3	-

# DUOBAT 120+

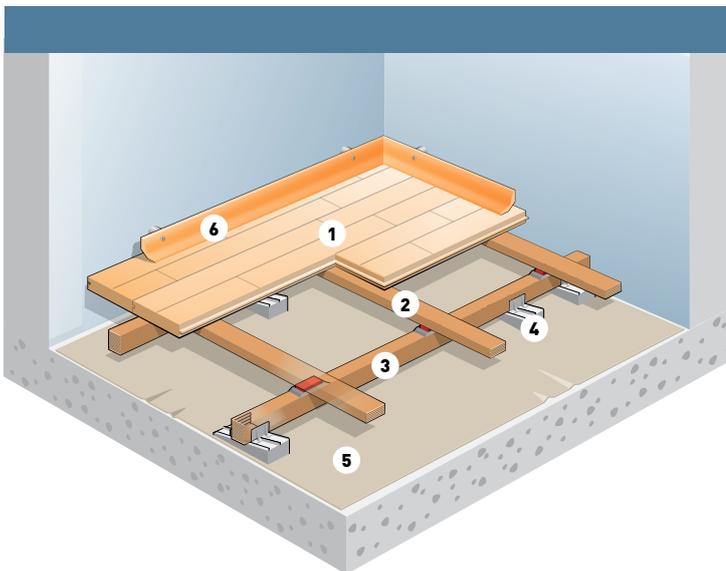


Junckers patented adjustable and locking DuoWedge cradle.



Junckers support bases to increase floor height of the Unobat 62+ and Duobat 120+ system.

## SYSTEM COMPONENTS



1. 7/8" (22 mm) x 5" (129 mm) x 12' (3700 mm) solid hardwood
2. Upper sleepers: 1" (25.5 mm) x 2 3/8" (60 mm) x 11' 9" (3600 mm) with rubber shock pad
3. Lower sleepers: 1 1/2" (39 mm) x 1 1/2" (40 mm) x 11' (3364 mm) with J-Lock cradle
4. Junckers DuoWedge
5. Polythene moisture barrier
6. Beech Sport Wall Base

The Duobat 120+ System provides the ultimate in high performance and safety, along with virtually unlimited leveling flexibility to accommodate all types of irregular subfloors.

The top solid hardwood is fastened to a resilient subfloor system consisting of 2-layers of cross-laid engineered sleepers. The top sleeper has pre-attached pads that snap-lock into the lower sleeper's J-locks. This ensures a fast, accurate and secure connection between the upper and lower sleepers.

The lower sleeper rests in our patented DuoWedge cradle, making it easy to correct even the most complicated subfloors into flat, ideal playing surfaces.

Support blocks are available in a variety of thicknesses to easily increase the height of the floor system as needed.

## FACTS

Construction height	Minimum 4 3/4" (120 mm) Maximum 9 5/8" (242 mm)
Required subfloor	Flat or irregular
Performance	Area-elastic according to EN 14904 class A4
Hardwood type	Prefinished 7/8" (22 mm) solid hardwood
System construction	Double layer sleeper system
Junckers 25 years fatigue test	✓
Sanding and re-sealing	Yes to bare wood 8-10 times
Compatible with radiant heating	Yes

	Requirements EN 14904:A4	Test results
Shock absorption	≥ 55 < 75 %	63 %
Vertical deformation	≥ 2.3 < 5.0 mm	2.3 mm
Ball bounce	≥ 90 %	95%
Friction	≥ 80 ≤ 110	~ 85
Rolling Load	≥ 1500 N	3500 N <sup>1</sup>
Point load	None	6000 N ~ 600 kgs <sup>2</sup>

1) Junckers test with solid rubber wheels, width = 2" (50 mm), diameter=4" (100 mm).  
2) Junckers test with 4" x 4" (100x100 mm) point load.

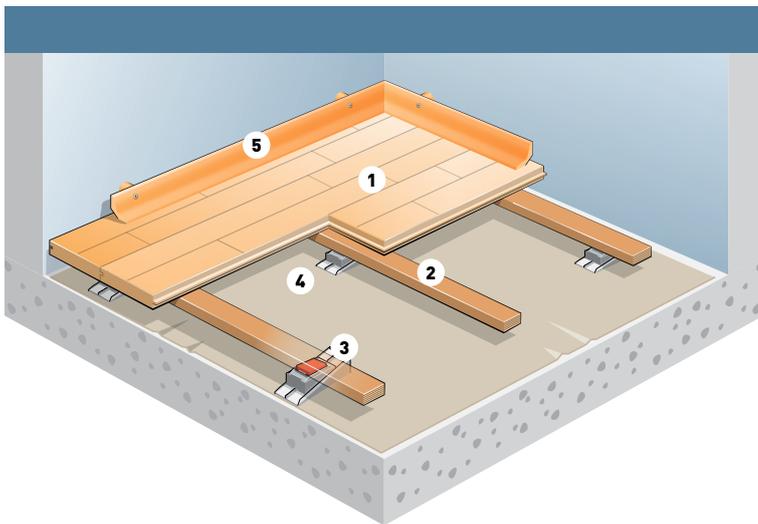
# UNOBAT 62+



Junckers patented adjustable and locking J-Lock Wedge and batten with pre-attached shock pad.



Junckers patented J-Lock cradle. For use on flat subfloors.



## SYSTEM COMPONENTS

1. 7/8" (22 mm) x 5" (129 mm) x 12' (3700 mm) solid hardwood
2. Unobat 62+ sleeper: 1" (25.5 mm) x 2 3/8" (60 mm) x 11' 9" (3600 mm) with shock pad
3. J-LockWedge
4. Polythene moisture barrier
5. Beech Sport Wall Base

The Unobat 62+ System provides excellent performance and safety, along with the ability to accommodate all types of irregular subfloors.

The top solid hardwood is fastened to a resilient subfloor system consisting of 12' long, ply-construction sleepers with pre-attached shock absorbing pads. The pre-attached pads snap-lock into either a J-lock cradle, or if the floor needs to be leveled, a J-Lock escalating wedge.

The J-Lock cradle serves as a durable stop block for flat subfloors. The J-Lock escalating wedge allows for the quick correction of uneven subfloors into flat, ideal playing surfaces.

Support blocks are available in a variety of thicknesses to easily increase the height of the floor system as needed.

## FACTS

Construction height using the J-Lock cradle for flat sub floors	2 3/8" (62 mm)
Construction height using the adjustable J-Lock wedge and supporting blocks	From 3 1/4" – 8 1/4" (82-209 mm)
Required subfloor	Flat or irregular
Performance	Area-elastic according to EN 14904 class A4
Hardwood type	Prefinished 7/8" (22 mm) solid hardwood
System construction	Single layer sleeper
Sleeper spacing	Either 13 1/4" (336 mm) or 16 3/16" (411 mm)
Junckers 25 years fatigue test	✓
Sanding and re-sealing	Yes to bare wood 8-10 times
Compatible with radiant heating	Yes

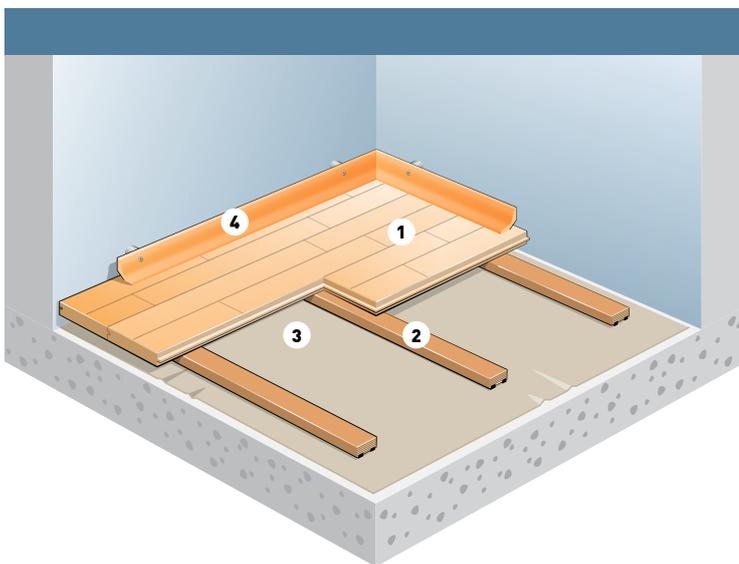
	Requirements EN 14904:A4	Batten distance c/c 411 mm	Batten distance c/c 336 mm
Shock absorption	≥ 55 < 75 %	67 %	65 %
Vertical deformation	≥ 2.3 < 5.0 mm	3.0 mm	2.6 mm
Ball bounce	≥ 90 %	93 %	94%
Friction	≥ 80 ≤ 110	~ 85	~ 85
Rolling Load	≥ 1500 N	3000 N <sup>1</sup>	3500 N <sup>1</sup>
Point load	None	5500 N ~ 550 kgs <sup>2</sup>	6000 N ~ 600 kgs <sup>2</sup>

1) Junckers test with solid rubber wheels, width = 2" (50 mm), diameter=4" (100 mm).  
 2) Junckers test with 4" x 4" (100x100 mm) point load.

# UNOBAT 50



Junckers Unobat 50 batten with two pre-attached shock absorbing foam strips.



## SYSTEM COMPONENTS

1. 7/8" (22 mm) x 5" (129 mm) x 12' (3700 mm) solid hardwood
2. Unobat 50 sleeper: 9/10" (28 mm) x 1,77" (45 mm) x 11' 9" (3600mm), rubber strips included
3. 0.2 mm SylvaThene moisture barrier
4. Beech Sport Wall Base

The Unobat 50 sports floor is a high performance, sleeper-based system, designed for use over flat subfloors.

The 7/8" (22mm) Solid Hardwood Planks are blind nailed into a resilient subfloor consisting of a ply-sleeper, with pre-attached shock absorbing foam strips.

The foam strips are inset into a specially designed "U" shaped channel, on the underside of the sleeper. This unique design creates a built in stop block, ensuring the long term performance and resilience of the system.

## FACTS

Construction height	2" (50 mm)
Required subfloor	Flat
Performance	Area-elastic according to EN 14904 class A4
Floorboard type	Prefinished 7/8" (22mm) solid hardwood
Subconstruction	Single layer sleeper
Junckers' 25 years fatigue test	✓
Sanding and re-sealing	Yes, to bare wood 8-10 times
Suitable for underfloor heating	Yes

	Requirements EN 14904:A4	Test results
Shock absorption	≥ 55 < 75 %	64 %
Vertical deformation	≥ 2.3 < 5.0 mm	2.9 mm
Ball bounce	≥ 90 %	96 %
Friction	≥ 80 ≤ 110	~ 85
Rolling Load	≥ 1500 N	3500 N <sup>1</sup>
Point load	None	6000 N ~ 600 kgs <sup>2</sup>

1) Junckers test with solid rubber wheels, width = 2" (50 mm), diameter=4" (100 mm).  
2) Junckers test with 4" x 4" (100x100 mm point load).

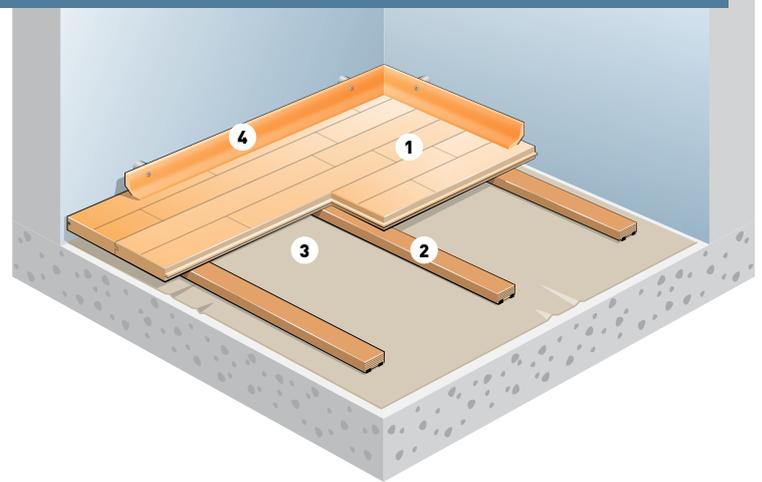
# UNOBAT 45



Junckers Unobat 45 batten with two pre-attached neoprene shock absorbing strips.

## SYSTEM COMPONENTS

1. 7/8" (22 mm) x 5" (129 mm) x 12'6" (3700) solid hardwood
2. Unobat 45 sleeper: 7/8" (23 mm) x 1 3/4" (45 mm) x 11' 9" (3600mm), rubber strips included
3. Polythene moisture barrier
4. Beech Sport Wall Base



The Unobat 45 System is a low profile, high performance sleeper based system. It is designed for use over flat subfloors.

The top solid hardwood is fastened to a resilient subfloor system consisting of 12' long, ply-construction sleepers with pre-attached neoprene shock absorbing strips.

The shock absorbing strips are inset into a "U" shaped channel on the underside of the sleeper. This design creates a built-in stop block, ensuring the long-term resilience of the system.

## FACTS

Total floor system tickness	1 3/4" (45 mm)
Required subfloor	Flat
Performance	Area-elastic according to EN 14904 class A4
Hardwood type	Prefinished 7/8" (22mm) solid hardwood
System construction	Single layer sleeper
Batten centre, c/c	Either 13 1/4" (336 mm) or 16 3/16" (411 mm)
Junckers 25 years fatigue test	✓
Sanding and re-sealing	Yes to bare wood 8-10 times
Compatible with radiant heating	Yes

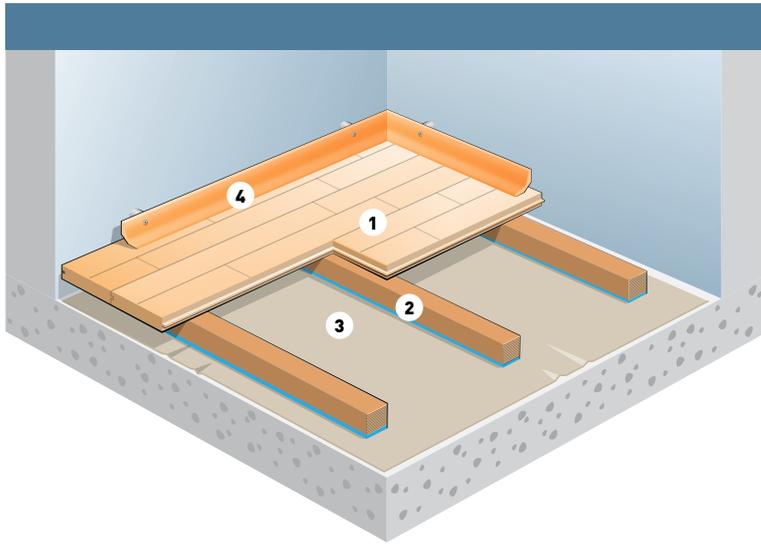
	Requirements EN 14904:A4	Batten distance c/c 411 mm	Batten distance c/c 336 mm
Shock absorption	≥ 55 < 75 %	60 %	60 %
Vertical deformation	≥ 2.3 < 5.0 mm	3.0 mm	2.5 mm
Ball bounce	≥ 90 %	95 %	95 %
Friction	≥ 80 ≤ 110	~ 85	~ 85
Rolling Load	≥ 1500 N	3000 N <sup>1</sup>	3500 N <sup>1</sup>
Point load	None	5500 N ~ 550 kgs <sup>2</sup>	6000 N ~ 600 kgs <sup>2</sup>

1) Junckers test with solid rubber wheels, width = 2" (50 mm), diameter=4" (100 mm).  
2) Junckers test with 4" x 4" (100x100 mm point load).



# BLUBAT 52-67-79

## SYSTEM COMPONENTS



1. 7/8" (22 mm) x 5" (129 mm) x 12' (3700 mm) solid hardwood
2. BluBAT sleeper system including sports foam
3. Polythene moisture barrier
4. Beech Sport Wall Base

The BluBat family of systems are floating, sleeper based systems that offer system thickness flexibility when matching existing slab recesses. BluBat Systems offer a good value price point and are designed for use over flat subfloors.

The top solid hardwood is fastened to a resilient subfloor system consisting of 8' long, ply-construction sleepers with a continuous layer of blue foam shock absorbing padding.

The available sleeper thickness are 1 1/8" (30mm), 1 3/4" (45mm) and 2 1/4" (57mm).

## FACTS

Construction height	Choice between 2 1/8" (52 mm), 2 5/8" (67 mm), 3 1/8" (79 mm)
Required subfloor	Flat
Performance	Area-elastic according to EN 14904 class A3
Hardwood type	Prefinished 7/8" (22mm) solid hardwood
System construction	Single layer sleeper system
Sleeper spacing	13 1/4" (336 mm) or 16 3/16" (411 mm)
Junckers 25 years fatigue test	✓
Sanding and re-sealing	Yes to bare wood 8-10 times
Compatible with radiant heating	Yes

	Requirements EN 14904:A3	Batten distance c/c 411 mm	Batten distance c/c 336 mm
Shock absorption	≥ 40 < 55 %	57 %	54 %
Vertical deformation	≥ 1.8 < 3.5 mm	2.1 mm	2.0 mm
Ball bounce	≥ 90 %	95 %	97 %
Friction	≥ 80 ≤ 110	~ 85	~ 85
Rolling Load	≥ 1500 N	3000 N <sup>1</sup>	3500 N <sup>1</sup>
Point load	None	5000 N ~ 500 kgs <sup>2</sup>	5500 N ~ 550 kgs <sup>2</sup>

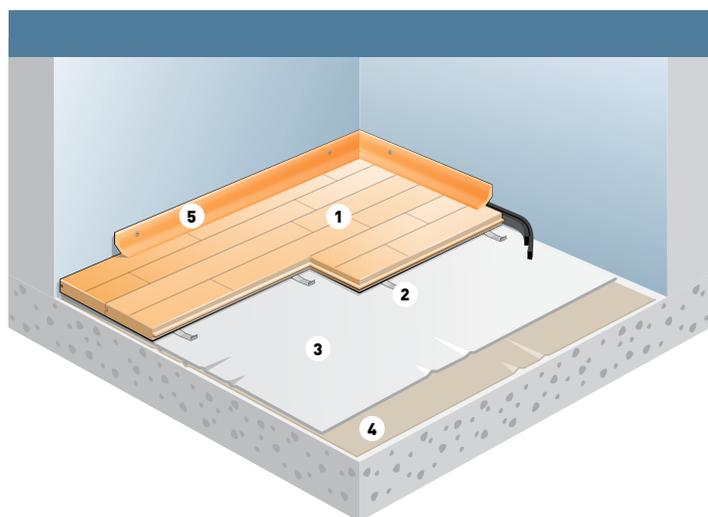
1) Junckers test with solid rubber wheels, width = 2" (50 mm), diameter=4" (100 mm).  
 2) Junckers test with 4" x 4" (100x100 mm point load.

# CLIP FLOORS



## SYSTEM COMPONENTS

1. 7/8" (22 mm) x 5" (129 mm) x 6' (1830 mm) or 12' (3700 mm) solid hardwood
2. Steel Clips
3. Junckers Performance Sports Foam
4. Polythene moisture barrier
5. Beech Sports Wall Base



The sports floor Clip System is a low profile, floating sports flooring system, designed for installations over all types of flat subfloors. This sports floor system is ideal for renovation projects, or when the finished floor height must be kept to an absolute minimum.

The 7/8" (22mm) solid hardwood floor boards are joined together with Junckers Steel Clips, which allow for unique independent floor board flexing. The floor floats over a performance foam underlay for maximum resilience.

Since there are no nails used in the Clip System, the floor system can be taken up and reinstalled elsewhere if ever needed.

## FACTS

Total floor system thickness	1 1/4" (32 mm) / 1 1/2" (37 mm)
Required subfloor	Flat
Performance	Area-elastic according to EN 14904 class A3
Hardwood type	Prefinished 7/8" (22mm) solid hardwood
System construction	Floating floor system
Underlayment	3/8" (10 mm) / 19/32" (15 mm) SportsFoam
Junckers 25 years fatigue test	✓
Sanding and re-sealing	Yes, to bare wood 8-10 times
Compatible with radiant heating	Yes

	Requirements EN 14904:A3	Test results*
Shock absorption	≥ 40 < 55 %	46 %
Vertical deformation	≥ 1.8 < 3.5 mm	2.4 mm
Ball bounce	≥ 90 %	98 %
Friction	≥ 80 ≤ 110	~ 85
Rolling Load	≥ 1500 N	2500 N <sup>1</sup>
Point load	None	4000 N ~ 400 kgs <sup>2</sup>

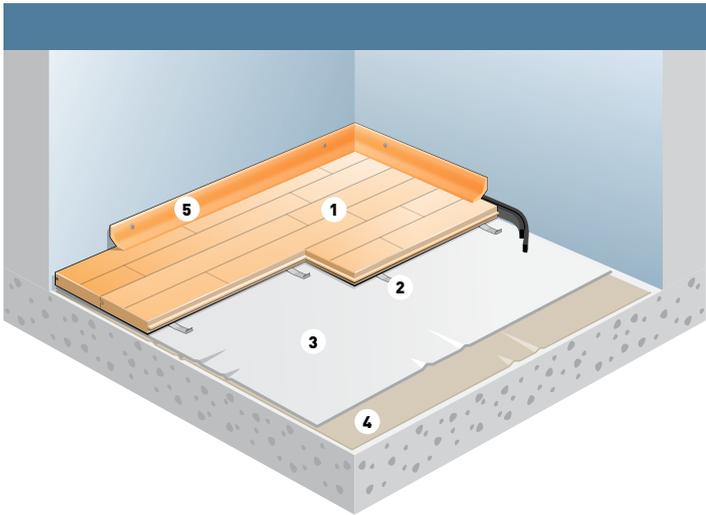
\*10 mm foam

- 1) Junckers test with solid rubber wheels, width = 2" (50 mm), diameter=4" (100 mm).
- 2) Junckers test with 4" x 4" (100x100 mm point load).

# STUDIO FLOORS



## SYSTEM COMPONENTS



1. 9/16" (14 mm) x 5" (129 mm) x 6' (1830 mm)
2. Steel Clips
3. Junckers Performance Sports Foam
4. Polythene moisture barrier
5. Beech Sports Wall Base

The Studio Floor System is the absolute lowest profile, floating solid hardwood sports flooring system available. It has been specifically developed for non-game lined applications, and provides DIN and EN safety and performance levels.

The top solid hardwood is joined together with Junckers Steel Clips, which allow for unique independent plank flexing, then floats over a 3/16" (5mm) performance foam underlayment for maximum resilience.

This system is ideal for renovation projects, or when the finished floor height must be kept to an absolute minimum. Most Studio Floor projects are completely installed and ready for use in just a day or two, with minimal disruption to ongoing business.

## FACTS

Total floor system thickness	3/4"
Required subfloor	5 mm Performance Sports Foam
Performance	DIN and EN tested safety and performance
Hardwood type	Prefinished 9/16" (14mm) solid hardwood
System construction	Performance sport foam / steel clips
Sanding and re-sealing	Yes, to bare wood 4 times
Compatible with radiant heating	Yes

## Test results

Shock absorption	40 %
Vertical deformation	1.8 mm
Ball bounce	99 %
Friction	> 0.4
Rolling Load	1500 N <sup>1</sup>

1) Junckers test with solid rubber wheels, width = 2" (50 mm), diameter=4" (100 mm).  
2) Junckers test with 4" x 4" (100x100 mm point load).



ESPACE VERT DU LITTORAL

GRAND BASSOUES

**BYers**

ARIANE

100% DOMAINE

PERSPECTIVE[S]

iteos FEKKERO



TISSOT

FIBA

百岁山  
Ganten

MARKKINEN  
23

LITTLE  
1  
stepIT

13

# ACCESSORIES - PERMANENT FLOORS

ENSURE THE PERFECT FINISH AND FUNCTIONALITY OF YOUR SPORTS FLOOR



## SPORT SKIRTING

Junckers Combi Sport Skirting can be installed with or without ventilation of the sub floor.

The skirting can be installed either way up, to provide maximum height or maximum cover.

Use steel fittings up against the wall when ventilation of the subfloor is needed and omit the steel fittings where ventilation is not required.

Dimension: Height 2" x 1 12" (48 mm x width 38 mm).



## BUSHINGS AND SUCTION CUPS

To ensure optimum flexibility of the sports floor, Junckers offers a range of bushings allowing fast and efficient changes of court layout from e.g. handball to badminton or volleyball.

Junckers' bushings are available in 3 different dimensions: Inner/outer diameter: 75/95 mm, 106/126 mm, 150/170 mm.

Junckers' suction cups make removal of the bushing lid easy.



## JUNCKERS' PNEUMATIC NAILER AND J-NAILS

Make sure the floor is installed correctly. Junckers' pneumatic nailer and special J-nails ensure easy and fast installation of batten floors.



## SYLVATHENE MOISTURE BARRIER

To ensure a safe and fast installation Junckers offers an extra wide PE-membrane. The PE-membrane has a width of 4 metres, and on the membrane is shown a marking line, which clearly indicates where the overlap has to be. It is manufactured in a recyclable material in consideration of the environment.



## SPORTS FOAM

Provide the ideal level of shock absorption and resilience with Junckers' performance Sports Foam.

Choose between 3/8" and 5/8" sports foam depending on system type and/or required performance.



## SPACERS

Ensure that the sports floor is installed correctly, with the right 10 board measurement. We have a range of spacers matching any indoor climate.

# PRO COMPLETE 44



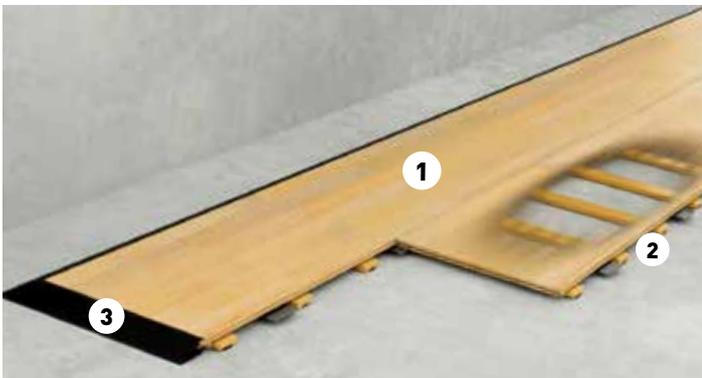
A transition ramp forms a strong edge to the floor perimeter.

## INTERNATIONAL REFERENCES

*FIBA International performance level*

- Olympic games 2024, Paris 2 courts
- FIBA Worldcup basket 2023, 5 courts in 3 countries
- FIBA Eurobasket 2022, 5 courts in 4 countries

## SYSTEM COMPONENTS



1. Floor panels:
  - 1/1 panel: 7/8" x 20<sup>3/8</sup>" x 6'
  - 1/2 panel: 7/8" x 20<sup>3/8</sup>" x 3'
2. Pre-attached sleepers:
  - 3/4" x 2 3/4" engineered birch sleepers mounted with polyurethane foam.
3. Black painted transition ramp

The Pro Complete 44 Portable Sports Floor system consists of 7/8" (22 mm) solid hardwood strips. The hardwood strips are preassembled into light weight, hand carried panels.

Pre-attached birch sleepers with polyurethane foam are on the underside of each floor panel. The solid hardwood together with the sleepers have been tested to provide correct shock absorption and resilience.

The floor panels are easily assembled and locked together with pre-mounted metal brackets on each panel.

Lengthwise, all panels have a tongue and groove connection. The ends of the panels are joined using slip tongues.

A supporting and protecting transition ramp forms a strong edge of the floor perimeter.

## FACTS

Construction height	1 3/4" (44 mm)
Required subfloor	Flat, dry, structurally sound - Self-supporting subfloor of concrete/lightweight concrete Existing hard area elastic floors
Performance	Area-elastic according to EN 14904 class A4
Hardwood type	Prefinished 7/8" (22 mm) solid hardwood
Panel size	Full panel 20 <sup>3/8</sup> " x 6' - Half panel 20 <sup>3/8</sup> " x 3'
Panel weight	Full panel 41 lbs. (18,5 kgs) - Half panel 20 lbs. (9,4 kgs)
Subconstruction	Single layer sleeper system
Junckers 25 years fatigue test	✓
Sanding and re-sealing	Yes, to bare wood 8-10 times
Compatible with radiant heating	Yes

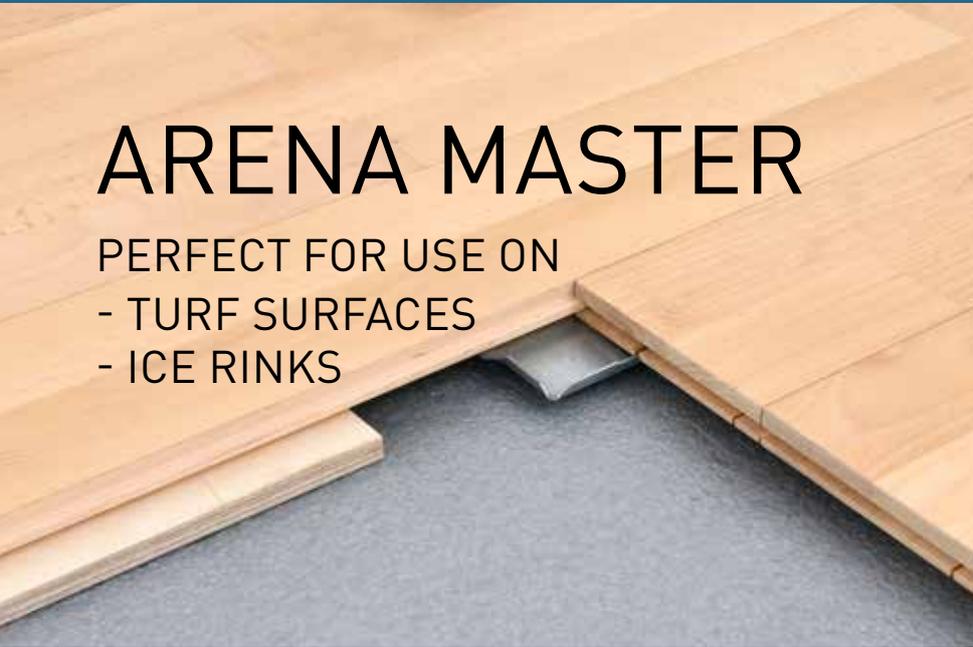
	Requirements EN 14904:A4	Test results
Shock absorption	≥ 55 < 75 %	60 %
Vertical deformation	≥ 2.3 < 5.0 mm	3.3 mm
Ball bounce	≥ 90 %	95 %
Friction	≥ 80 ≤ 110	~ 85
Rolling Load	≥ 1500 N	3000 N <sup>1</sup>
Point load	None	5000 N ~ 500 kgs <sup>2</sup>

1) Junckers test with solid rubber wheels, width = 2" (50 mm), diameter=4" (100 mm).  
2) Junckers test with 4" x 4" (100x100 mm point load).

# ARENA MASTER

PERFECT FOR USE ON

- TURF SURFACES
- ICE RINKS

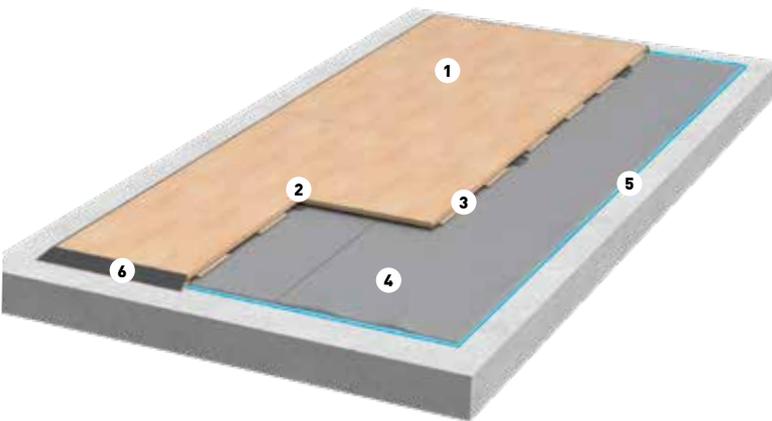


Each floor panel is easily locked into position by means of factory fitted metal brackets.



Lengthwise the panels have a tongue and groove connection and at ends the panels are joined using loose tongues.

## SYSTEM COMPONENTS



1. Junckers 7/8" (22 mm) solid hardwood panels.
  - Full size panel: 20" x 6', 10 SF
  - Half size panel: 20" x 3', 5 SF
2. Pre-attached Metal Brackets
3. Pre-attached Plywood / Aluminum
4. Junckers 5/8" Performance Sports Foam
5. Vapor barrier on concrete, 6 mil Poly
6. Transition ramp

The Arena Master Portable Sports Floor features a 7/8" (22 mm) solid hardwood, prefabricated into lightweight panels.

Each portable panel is easily locked in place with pre-attached metal brackets. The panels are joined on all four sides with a tongue and groove connection.

Each panel is constructed with pre-attached strips of 9-ply, 1/2" (12mm) thick birch plywood. The panels are further reinforced at each end with a 1/4" aluminum "L" piece. When assembling the system over a hard subfloor, the panels are installed over a 5/8" (15 mm) Performance Foam, which provides for ideal shock absorption and resilience.

Transition ramps at the perimeter, frame the floor and provide a strong, protective leading edge.

For fast and flexible installation, Junckers Center-Row Panels can be supplied, making a center start / two way installation possible.

The portable wooden floor Arena Master is designed for both short and long term use.

## FACTS

Construction height	1 7/8" (49 mm) / 1 3/8" (34 mm) over turf (without foam)
Required subfloor	Most flat, dry existing hard surfaces, including ice rinks Soft surfaces like rubber, synthetic, turf, and carpet
Performance	Area-elastic according to EN 14904 class A3
Floorboard type	Prefinished 7/8" (22mm) Solid Hardwood
Panel size	Full panel 20" x 6' - Half panel 20" x 3'
Panel weight	Full panel 44 lbs (19.7 kgs) - Half panel 22 lbs (9.9 kgs)
Subconstruction	Pre-attached birch plywood and aluminium angle
Underlay	5/8" (15 mm) Performance Sports Foam
Junckers' 25 years fatigue test	✓
Sanding and re-sealing	Yes, to bare wood 8-10 times
Suitable for underfloor heating	Yes

	Requirements EN 14904:A3	Test results
Shock absorption	≥ 40 < 55 %	50 %
Vertical deformation	≥ 1.8 < 3.5 mm	2.1 mm
Ball bounce	≥ 90 %	98 %
Friction	≥ 80 ≤ 110	~ 85
Rolling Load	≥ 1500 N	3000 N <sup>1</sup>
Point load	None	5000 N - 500 kgs <sup>2</sup>

1) Junckers test with solid rubber wheels, width = 2" (50 mm), diameter=4" (100 mm).  
2) Junckers test with 4" x 4" (100x100 mm point load).

# PORTABLE A3

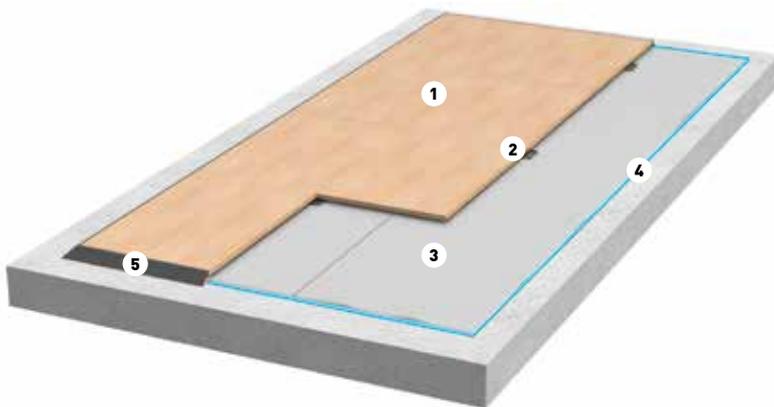


Each panel is easily locked securely into position with factory fitted metal fixing plates.



Lengthwise the panels have a tongue and groove connection and at ends the panels are joined using loose tongues.

## SYSTEM COMPONENTS



1. Junckers 7/8" Solid Hardwood Floor Panels
  - Full size panel: 20" (513mm) x 6' (1800mm)
  - Half size panel: 20" (513mm) x 3' (900mm)
2. Pre-attached Metal Brackets
3. Performance Sports Foam Underlayment
4. Vapor Barrier
5. Black Anodized Aluminum Ramp

Junckers Portable A3 Sports Floor system consists of solid hardwood planks preassembled into light weight, hand carried panels.

The panels are installed "floating" over the 3/8" (10mm) Performance Sport Foam underlayment.

Each panel is easily locked securely into position with a pre-mounted bracket on the underside of each panel.

Lengthwise, the panels are precision milled with a tongue and groove connection. The panel ends are joined using plastic splines.

An aluminium clad edge reducer forms a strong and supported leading edge for the perimeter of the sports floor.

## FACTS

Construction height	1 1/4" (32 mm)
Required subfloor	Flat
Performance	Area-elastic according to EN 14904 class A3
Hardwood type	Prefinished 7/8" (22 mm) solid hardwood
Panel size	Full panel 20" wide x 6" long (513 mm x 1800 mm) Half panel 20" wide x 3" long (513 mm x 900 mm)
Panel weight	Full panel 33 lbs (15 kgs) - Half panel 16,5 lbs (7.5 kgs)
Subconstruction	Performance sport foam / metal brackets
Underlay	3/8" (10 mm) Performance Sport Foam
Sanding and re-sealing	Yes, to bare wood 8-10 times
Compatible with radiant heating	Yes

	Requirements EN 14904:A3	Test results
Shock absorption	≥ 40 < 55 %	46 %
Vertical deformation	≥ 1.8 < 3.5 mm	2.0 mm
Ball bounce	≥ 90 %	99 %
Friction	≥ 80 ≤ 110	~ 85
Rolling Load	≥ 1500 N	2500 N <sup>1</sup>
Point load	None	4000 N ~ 400 kgs <sup>2</sup>

1) Junckers test with solid rubber wheels, width = 2" (50 mm), diameter=4" (100 mm).  
2) Junckers test with 4" x 4" (100x100 mm point load).



RHEINSTAR, GERMANY

# ACCESSORIES - PORTABLE FLOORS



## PROTECT THE PERIMETER OF THE FLOOR

Junckers' supporting and protecting transition ramp forms a strong edge for the perimeter of the floor.



## EASY TRANSPORTATION AND STORAGE

Junckers' custom designed storage carts make transportation and storage of the panels easy. One cart stores 40 panels.



## INSTALL TWICE AS FAST

For faster and more flexible installation ask for Junckers CenterRow Panels that makes two way installation possible.



# 30 YEARS WITH UNDERFLOOR HEATING

## JUNCKERS' SPORTS FLOORS ARE GUARANTEED FOR USE WITH UNDERFLOOR HEATING

A Junckers solid hardwood floor is the natural choice for the reassuring comfort of under floor heating.

Our wooden floors have for many years been recognised by clients, architects and the heating industry as the only type of solid hardwood floors on the market so stable that they can be guaranteed for use with under floor heating. This has been a fact for almost 30 years.

The unique stability is achieved by drying the timber in a very uniform way and manufacturing the floor boards with a precision that only allows machining deviations within very narrow tolerances.

# CLEANING AND MAINTENANCE

## GET A FLOOR WITH LOW COSTS OF MAINTENANCE

Junckers' sports floors are always supplied pre finished with several coats of a long lasting and very hardwearing polyurethane urethane. Maintenance of the floor can therefore be kept to a minimum.

### DAILY CLEANING IS EASY

Sweeping and wiping with a dampened cloth is more than enough to keep the floor in good shape on a daily basis.

For activities leaving more difficult stains, e.g. handball, we offer a range of maintenance products – such as resin remover, degreaser and mild soap products designed to leave no residue.

### WHEN RENOVATING, ONLY A LIGHT SCREENING IS NECESSARY

We have developed and produce our own sports urethane for re-sealing. The HP Sport Urethane is approved for sports use in accordance with the European standard EN 14904 and has a high ability to bond with the existing surface.

This means that only a light screening of the floor is needed before applying one coat of Junckers HP Sport.

Should years of very hard wear demand more comprehensive renovation, it is possible to sand the floor down to do a complete restoration. This is actually possible to do 8-10 times, but if maintenance of a sports floor is done on a regular basis, sanding down to bare wood is seldom necessary.

## JUNCKERS' MAINTENANCE PRODUCTS CONTRIBUTE TO LONG LASTING SPORTS FLOORS



# LINE MARKING PAINT

ONLY IMAGINATION SETS A LIMIT

A sports floor does not come alive until it has been given the color and excitement of the sports that are played on it. Painted sports lines help to achieve this, and the clubs own logo adds unique personal style to the floor and adds to the audiences experience.

For this purpose Junckers manufactures its own range of line marking paints. Junckers HP Sport Linemarking paint is tested and approved according to the European sport standard EN 14904. It is very hard-wearing and available in white, red, green, blue, yellow and black.

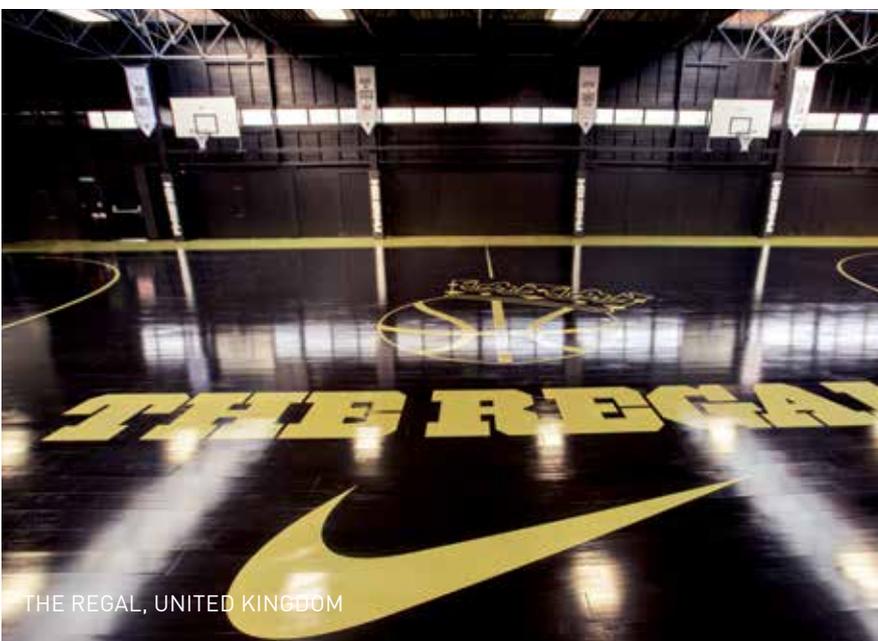
The colors can be mixed to create other color shades and for big events such as Worldcup basket 2023 and Euro basket 2017, Junckers has developed several colors to match exactly the color palette for this competition.



REAL MADRID, SPAIN



GREAT OAK HIGH SCHOOL, USA



THE REGAL, UNITED KINGDOM





# JUNCKERS PROJECT SERVICE

## WE PROVIDE SECURITY

We know how important it is to the success of a building project that delivery is on time and all quality standards are met. Accurate and reliable advice from the supplier is an important factor in connection with a large investment such as a solid hardwood floor.

With Junckers Project Service a person from our technical team is dedicated to your project and will provide advice and support before, during and after delivery of your order.

This gives a high level of security and confidence. It minimises the risk of mistakes in connection with the completion of the work and ensures that the project is handled with optimal cost and time efficiency.

For more information about Junckers Project service please contact one of our local sales managers.



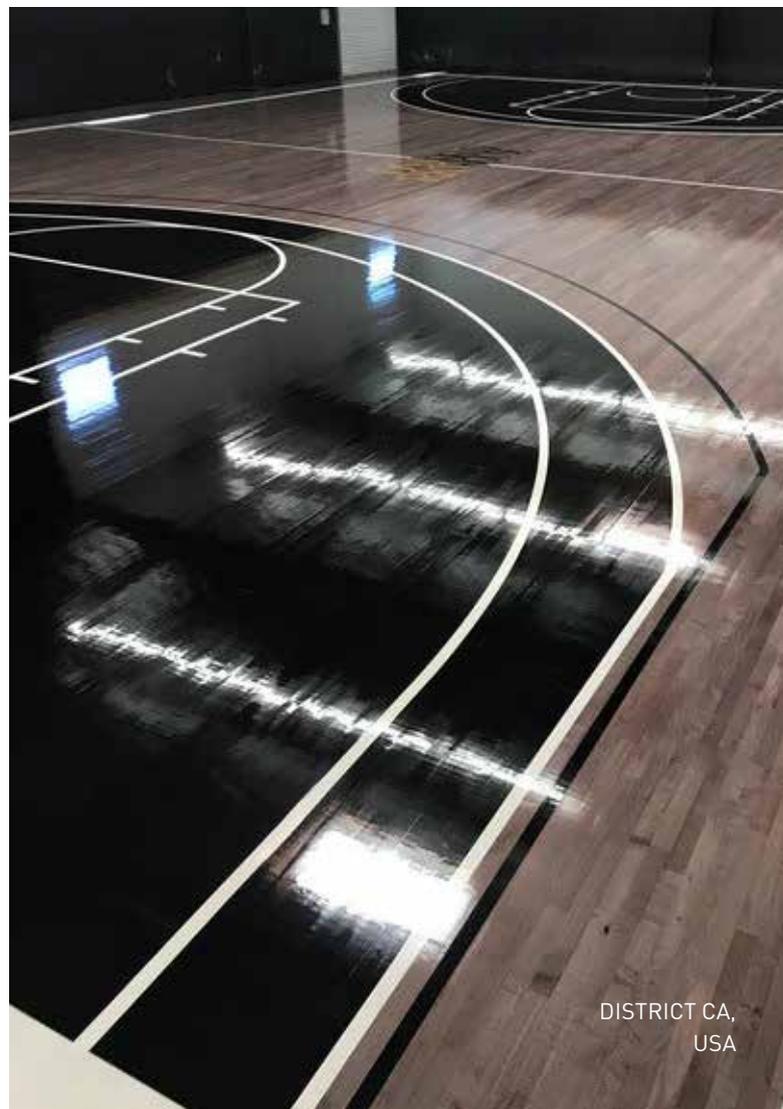
TSS ARENA FLOOR  
CANADA



SUNBELT CONFERENCE  
USA



CHE KUNG TEMPLE SPORTS CENTER  
HONG KONG



DISTRICT CA,  
USA



# JUNCKERS

Performing on Danish design

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