## SPORTS FLOORS

for all indoor sports and sport facilities



mance

 $\mathbf{0}$ 

14

rance

.

JUNCKERS.COM

V NIKE.COM/BASKETBALL

# PERFORMING on danish design

# ABOUT JUNCKERS

Junckers is Europe's leading manufacturer of solid hardwood sports, dance and activity floor systems.

For many decades Junckers has provided systems to meet the wide ranging needs of local community and multi purpose halls, through to global landmark venues for Olympic, Commonwealth and professional sport.

Junckers is the only wood floor manufacturer to develop and manufacture its own range of lacquers and oil surface treatments. This means that Junckers Woodcare products are perfectly tailored for use with our floors, so there will be no concerns about "non-compatible" products reacting with one another. ALL JUNCKERS WOOD FLOORS AND WOODCARE PRODUCTS ARE PRODUCED IN DENMARK

DEVELOPMENT AND PRODUCTION ARE BASED ON SOLID TRADITIONS OF DANISH CRAFTMANSHIP Junckers quality and ease of use has made our Woodcare products amongst the most popular wood floor coating brands in the industry; asked for by name by both clients and contractors.

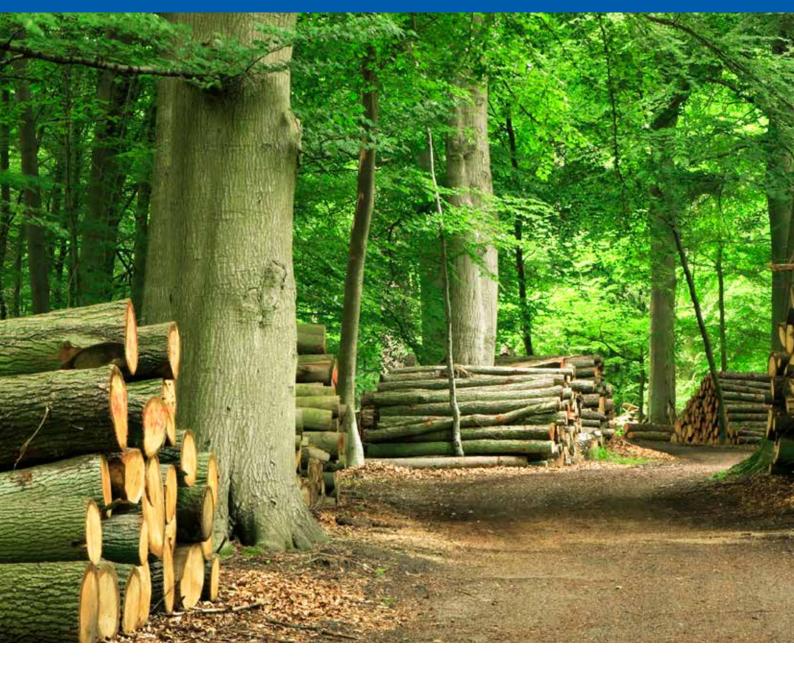
With Junckers as a professional partner, you are always ensured proper technical service before, during and after a project.

We provide the complete solution and our experience ensures the highest possible quality.

Junckers is represented in more than 30 countries through 7 subsidiaries and a network of distributors and agents. Exports account for two-thirds of the total sales and the products are sold in more than 45 countries worldwide.

# CONTENT

- 5 SUSTAINABILITY, ENVIRONMENT AND PRODUCT QUALITY
- 7 FLOOR SAFETY AND PERFORMANCE
- 9 CHOICE OF FLOOR BOARD
- **13** A SOLUTION FOR ALL SPORTS AND SPORT FACILITIES
- **15** OVERVIEW FLOOR SYSTEMS
- **17** FIXED FLOOR SYSTEMS
- **22** ACCESSORIES FIXED FLOORS
- 23 PORTABLE FLOOR SYSTEMS
- 25 ACCESSORIES PORTABLE FLOORS
- **26** 30 YEARS WITH UNDERFLOOR HEATING
- 27 CLEANING AND MAINTENANCE
- **30** LINEMARKING PAINT
- **32** JUNCKERS PROJECT SERVICE



Sustainability and environmental issues were hardly discussed, in the 1930's, when the young forester Flemming Juncker was looking for ways to use and preserve one of our most valuable assets; the forests. When he established the company under his own name he put his ideas into practice and we are still benefiting from this today.

#### JUNCKERS UTILISES 100% OF THE FORESTED TIMBER

Junckers is an energy-intensive industry using substantial volumes of energy for the drying and processing of wood. However residual wood (sawdust, wood chips, saw-cut log ends and other residual wood from the production) is supplied to a wood-fired power plant, which in return supplies electricity to Junckers and the Danish national electricity grid.

## JUNCKERS IS A CO2 POSITIVE COMPANY

As wood is considered to be a CO<sup>2</sup> neutral material, and because Junckers generates more energy than the business itself can consume, the surplus energy contained in the waste wood is used to produce "CO<sup>2</sup> Neutral" electricity, making Junckers a carbon positive company.

#### CERTIFIED TIMBER PEFC™ AND FSC®

At Junckers, we believe in sustainability and we support initiatives that improve environmental awareness. We hold a Chain of Custody PEFC<sup>™</sup> and FSC<sup>®</sup> certificate. A Chain of Custody certificate enables tracking of the wood from the finished floor back to the forest. PEFC<sup>™</sup> and FSC<sup>®</sup> are organisations that work globally to ensure legal and wellmanaged foresting to protect nature, wildlife, and people.





Ask Junckers for FSC® certified products



# SUSTAINABILITY, ENVIRONMENT & PRODUCT QUALITY

A declaration of performance forms the basis for the CE marking, which accurately shows how specific legal requirements are met. For example, this is applicable to fire resistance, degassing, strength, friction, etc.

CE

#### PRODUCT QUALITY

Junckers product quality management system forms the basis of the company's CE marking scheme, according to EN 14342: 2005 + A1: 2008, EN 14904: 2006 and EU Guidance Paper B and D for CE marking. The quality system complies with the ISO 9000 series, but is not monitored by a third party. The system includes employees, production, administrative processes and resources essential to meet the company's quality goals.

#### CE - DECLARATION OF PERFORMANCE

Junckers' floors are CE marked, which means that the floors must comply with certain EU standards in relation to safety, the environment and health.

#### ISO 14001 - ENVIRONMENTAL MANAGEMENT

Junckers is certified according to ISO 14001. Additionally, the environmental management system comprises areas such as working environment (OHSAS 18001), as well as energy safety in connection with electrical work (SKS).

## SUSTAINABLE CONSTRUCTION LEED, BREEAM AND DGNB

Junckers has identified ways in which we can contribute to three leading voluntary schemes for sustainable building. This includes areas such as economics, indoor climate and use of materials. This enables us to provide the appropriate information which auditors and assessors will often need for certification of different types of building projects.

#### **BRE GLOBAL GREEN GUIDE**

Junckers 22 mm solid hardwood flooring boards correspond to the BRE Global Green Guide online generic specification for hard floor finishes, Element number 821580002, which achieves a summary rating of A+ within commercial buildings.

#### INDOOR CLIMATE WE CARE ABOUT THE PLAYERS HEALTH

All Junckers lacquered and oiled wood floors, our water based lacquers and indoor oil products have received the Danish Indoor Climate labelling. A product with this labelling has undergone extensive degassing and odour tests. This ensures that there are no chemical substances in the floor which adversely affect the air quality in the room.





## 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. All Junckers systems are FIBA LEVEL 1 approved for Basketball.

The EN 14904 standard has worldwide recognition and specifies the requirements for safety and performance for a sport 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.

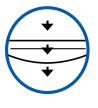
# FLOOR SAFETY AND PERFORMANCE

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.



#### FRICTION

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 22mm 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 FIT

To make it easy and fast to install the floor, Junckers sports floor boards have uniform lengths of 3700 mm\* and cover approx. 0.5 m<sup>2</sup>. All floor boards are tongue and groove jointed all round.

#### **READY TO USE WHEN FITTED**

Junckers floors are always supplied prefinished with lacquer 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 lacquering on site and avoids using lacquers of unknown quality.

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

## SURFACE OUT OF THE ORDINARY

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

Junckers own product development team has developed this lacquer 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 causes no challenges when humidity levels change through the year.

Double dovetail

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

Junckers 22 mm thick, 129 mm wide and 3700 mm long hardwood floor board. \* Also available in length of 1830 mm



# FLOOR BOARD RANGE

#### **BEECH SYLVASPORT**

Width: 129 mm Thickness: 22 mm

A floor board with a uniform structure, white to reddish heartwood and a red-brown grain pattern. A classic and very popular floor.

#### CHAMPION

#### PREMIUM

PREMIUM

#### CLUB



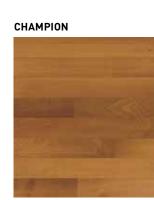
### BEECH SYLVAKET

Width: 129 mm Thickness: 22 mm

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

MAPLE Width: 129 mm Thickness: 22 mm

A floor board with a light colour and a very uniform grain pattern. A very elegant floor.





CLUB



#### CHAMPION



#### CLUB



**ASH** Width: 129 mm Thickness: 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.



PREMIUM



CLUB



CHAMPION: Uniform look with very little colour and structural graining variation. PREMIUM: Natural look with a more natural range of colour and structural graining variation. CLUB: A rustic look with substantial colour and graining variation.

# FLOOR BOARD RANGE

#### **BEECH SYLVASQUASH CHAMPION**

In fast games like squash and racket ball 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 lacquer. This is by many preferred to ease the maintenance of the floor and it does not affect the friction properties.



#### **DESIGN WITH COLOURS**

At Junckers, we believe that creativity and a distinctive look contribute to a comfortable atmosphere in smaller group exercise rooms.

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 colour and create a unique expression.

Coloured beech sports floors in Harmony grade and length 1830mm, are available in combination with all Junckers fixed floor systems.



SYLVARED



#### SPICY PEPPER



**RAW SUGAR** 



DARK COCO



#### **TENDER OLIVE**



#### WILD HAZEL



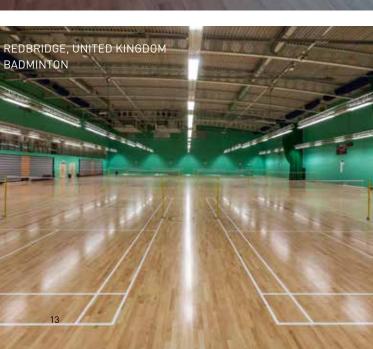
SMOOTH RUM

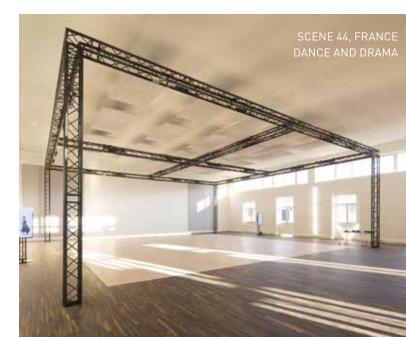












# A SOLUTION FOR ALL SPORTS AND SPORT FACILITIES

Junckers has a wide range of portable and fixed floor solutions. The systems always include our 22 mm solid hardwood 2-strip floorboard.

#### **FIXED FLOOR SOLUTIONS**

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

Total construction height of our floors ranges from 32 mm to 242 mm. 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 very suitable for any type of refurbishment.

#### PORTABLE FLOOR SOLUTIONS

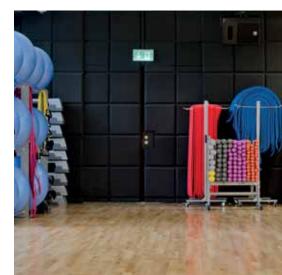
This range consists of prefabricated lightweight panels, fast to assemble and dismantle.

Junckers portable floors are particularly suitable for temporary use, e.g. International Basketball tournaments, over ice rinks or non-sporting events like concerts.

## NAME THE SPORT AND JUNCKERS HAS THE SOLUTION















Junckers sport floor solutions - certified by FIBA, WHF, BWF & IHF

ORANGE HEADQUARTER, POLAND FITNESS





## CHOOSE THE RIGHT FLOOR SYSTEM

FIXED FLOOR SYSTEMS	

CONSTRUCTION HEIGHT	REQUIRED SUBFLOOR	SUB-CONSTRUCTION	SYSTEM	CLASS ACCORDING TO EN 14904
120 - 242 mm	Flat/uneven	DuoBAT 120+	Two layer batten system	A4
62 mm	Flat	UnoBAT 62 With J-Lock cradle	Single layer batten system	Α4
82 - 209 mm	Flat/uneven	UnoBAT 62+ With adjustable wedge and supporting blocks included	Single layer batten system	Α4
45 mm	Flat	UnoBAT 45	Single layer batten system	Α4
52 mm, 67 mm or 79 mm	Flat	BluBAT 52, 67, 79	Single layer batten system	A3
32 mm	Flat	Clip	Floating system	A3

PORTABLE FLOOR SYSTEMS				
CONSTRUCTION HEIGHT	REQUIRED SUBFLOOR	PRODUCT	SYSTEM	CLASS ACCORDING TO EN 14904
32 mm	Flat	A3 Portable	Floating system	A3
44 mm	Flat	Pro Complete 44	Single layer batten system	Α4





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.** 22 x 129 x 3700 mm floorboards
- 2. Upper batten: 25.5 x 60 x 3600mm with pre-attached rubber shock pads
- 3. Lower batten: 39 x 40 x 3364 mm with pre-attached J-Lock cradle
- 4. Junckers DuoWedge
- 5. PE moisture barrier
- 6. Combi sports skirting

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

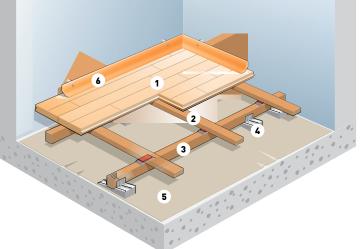
The 22 mm solid hardwood floor boards are fastened to a subfloor system consisting of 2-layers of cross-laid engineered battens. The top batten has pre-attached resilient rubber pads that snap-lock into the lower batten's J-locks. This ensures a fast, accurate and secure connection between the upper and lower battens.

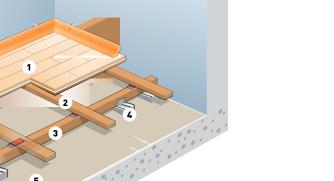
The lower batten rests in an adjustable and locking DuoWedge cradle, making it easy to correct even the most complicated subfloors into flat, ideal playing surfaces. Levelling the floor is carried out without use of nails and tools.

Support bases which fit the adjustable Duo Wedge cradle are available in a variety of thicknesses to easily increase the height of the floor system as needed.

FACTS		
Construction height	From 120 mm to 242 mm	
Required subfloor	Flat/uneven	
Performance	Area-elastic according to EN 14904 class A4	
Floorboard type	Prefinished 22 mm 2-strip solid hardwood	
Subconstruction	Two layer batten system	
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 %	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 kgs²





## **UNOBAT 62+**



1

2



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. 22 x 129 x 3700/1830 mm floorboards
- 2. Batten: 25.5 x 60 x 3600 mm with pre-attached shock pads
- 3. Adjustable J-LockWedge
- 4. PE moisture barrier
- 5. Combi sports skirting

The UnoBat 62+ System provides excellent performance and safety, along with the ability to accommodate all types of irregular subfloors. The 22mm solid hardwood floor boards are fastened to a subfloor system consisting of single layer engineered battens with preattached shock absorbing rubber pads.

The pre-attached rubber pads snap-lock into either a J-lock cradle or if the floor needs to be levelled, a J-Lock adjustable wedge. The J-Lock cradle serves as a durable stop block for flat subfloors.

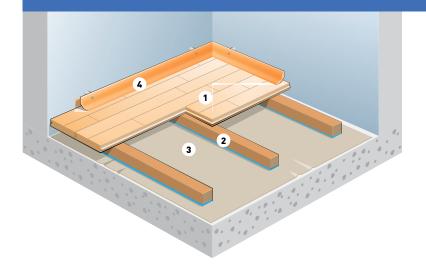
The J-Lock adjustable wedge allows for the quick correction of uneven subfloors into flat, ideal playing surfaces. Levelling the floor is conducted without use of nails and tools.

Packing bases fitting the adjustable J-lock Wedge 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	62 mm
Construction height using the adjustable J-Lock wedge and supporting blocks	From 82 mm to 209 mm
Required subfloor	Flat/uneven
Performance	Area-elastic according to EN 14904 class A4
Floorboard type	Prefinished 22 mm 2-strip solid hardwood
Subconstruction	Single layer batten system
Batten Centre C/C	Choice between 336 mm or 411 mm
Junckers 25 years fatigue test	$\checkmark$
Sanding and re-sealing	Yes to bare wood 8-10 times
Suitable for underfloor 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 kgs²	6000 N ~ 600 kgs <sup>2</sup>





#### SYSTEM COMPONENTS

- **1.** 22 x 129 x 3700/1830 mm floor boards
- 2. Batten: 30/45/57 x 45 x 2400 mm, foam included
- 3. PE moisture barrier
- 4. Combi sports skirting

The BluBat family is a batten based system that offers a range of floor heights when matching existing slab recesses. BluBat battens offer a good value price point and are designed for use over flat subfloors.

The 22mm solid hardwood floor boards are fastened to a resilient subfloor system consisting of single layer engineered battens fitted with a continuous layer of blue shock absorbing foam.

The available batten thicknesses are 30 mm, 45 mm and 57 mm.

	FACTS
Construction height	Choice between 52 mm, 67 mm, 79 mm
Required subfloor	Flat
Performance	Area-elastic according to EN 14904 class A3
Floorboard type	Prefinished 22 mm 2-strip solid hardwood
Subconstruction	Single layer batten system
Batten centre c/c	Choice between 336 or 411 mm
Junckers 25 years fatigue test	$\checkmark$
Sanding and re-sealing	Yes to bare wood 8-10 times
Suitable for Underfloor Heating	Yes

	Requirements EN 14904:A3	Batten distance c/c 411 mm	Batten distance c/c 336 mm
Shock absorption	≥ 40 < 55 %	55 %	53 %
Vertical deformation	≥ 1.8 < 3.5 mm	1.9 mm	1.8 mm
Ball bounce	≥ 90 %	100 %	98%
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 kgs²

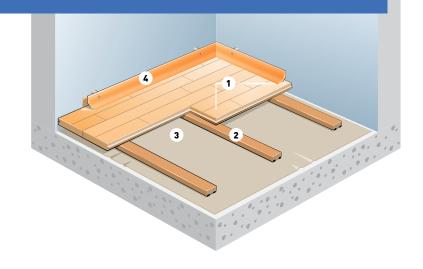




Junckers UnoBat 45 batten with two preattached neoprene shock absorbing strips.

#### SYSTEM COMPONENTS

- 1. 22 x 129 x 3700/1830 mm floor boards
- 2. Batten: 23 x 50 x 3600 mm, rubber strips included
- **3.** PE moisture barrier
- 4. Combi sports skirting



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

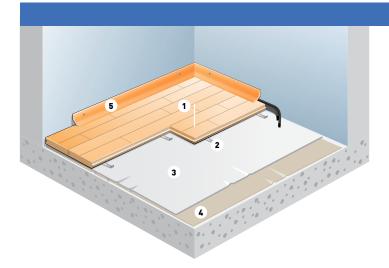
The 22mm solid hardwood floor boards are fastened to a resilient subfloor system consisting of single layer engineered battens with pre-attached neoprene shock absorbing strips.

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

FACTS		
Construction height	45 mm	
Required subfloor	Flat	
Performance	Area-elastic according to EN 14904 class A4	
Floorboard type	Prefinished 22 mm 2-strip solid hardwood	
Subconstruction	Single layer batten system	
Batten centre, c/c	Choice between 336 mm or 411 mm	
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	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 kgs²	6000 N ~ 600 kgs²

# CLIP FLOORS



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

The 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 10mm 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
Construction height	32 mm
Required subfloor	Flat
Performance	Area-elastic according to EN 14904 class A3
Floorboard type	Prefinished 22 mm 2-strip solid hardwood
Subconstruction	Floating floor system
Underlay	10 mm SportsFoam
Junckers 25 years fatigue test	$\checkmark$
Sanding and re-sealing	Yes, to bare wood 8-10 times
Suitable for underfloor heating	Yes

		<b>T</b>	
	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 kgs²	

1) Junckers test with solid rubber wheels: width 50 mm, diameter 100 mm. 2) Junckers test with 100x100 mm point load.

#### SYSTEM COMPONENTS

- 1. 22 x 129 x 3700/1830 mm floorboards
- 2. Steel Clips
- **3.** Junckers SportsFoam
- 4. PE moisture barrier
- 5. Combi sports skirting

# ACCESSORIES - FIXED 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 sub floor is needed and omit the steel fittings where ventilation is not required.



#### **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 NAIL GUN AND J-NAILS

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

Dimension: Height 48 mm x width 38 mm.



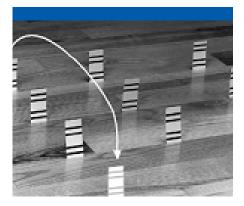
#### **MOISTURE BARRIER**

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.



#### SPORTSFOAM

Provide the ideal level of shock absorption and resilience with Junckers 10 mm performance SportsFoam. Used for Clip and A3 portable floors



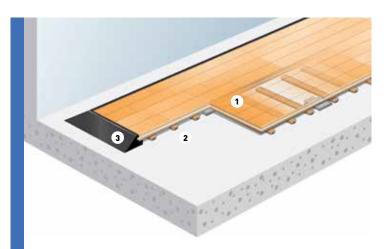
**SPACERS** 

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.



#### SYSTEM COMPONENTS

- 1. Floor panels:
- Full panel: 22 x 517 x 1800mm \_
- Half panel: 22 x 517 x 900mm \_
- 2. Prefixed battens
- 18 x 70 mm engineered birch battens \_
- 3. Black painted transition ramp

The Pro Complete 44 system comprises of 22 mm solid hardwood floor boards preassembled into light weight, easy to handle panels. Underneath each floor panel several prefixed birch battens are mounted together with a soft polyurethane foam to provide correct shock absorption and resilience.

The floor panels are 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.

FACTS		
Construction height	44 mm	
Required subfloor	Flat	
Performance	Area-elastic according to EN 14904 class A4	
Floorboard type	Prefinished 22 mm solid hardwood parquet	
Panel size	1/1 panel 0.93 m² - 1/2 panel 0.47 m²	
Panel weight	1/1 panel 18,5 kgs - 1/2 panel 9,4 kgs	
Subconstruction	Single layer batten system	
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 %	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 kgs²



2

1





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

#### SYSTEM COMPONENTS

- 1. Floor panels:
- 1/1 panel 22 x 513 x 1800 mm
- 1/1 panel 22 x 513 x 900 mm
- 2. Junckers SportsFoam
- 3. Supporting edge reducer

The Portable A3 System consists of 22 mm solid hardwood floor boards, preassembled into light weight, easy to handle panels. The floor is installed floating over a performance SportFoam underlay.

Each floor panel is easily locked securely into position with a factory fitted metal fixing plate. Lengthwise the panels have a tongue and groove connection and at ends the panels are joined using loose tongues.

Junckers 10 mm performance SportFoam underlay provides the ideal level of shock absorption and resilience.

FACTS		
Construction height	32 mm	
Required subfloor	Flat	
Performance	Area-elastic according to EN 14904 class A3	
Floorboard type	Prefinished 22mm 2-strip solid hardwood	
Panel size	1/1 panel 0.92 m² - 1/2 panel 0.46 m²	
Panel weight	1/1 panel 15 kgs - 1/2 panel 7.5 kgs	
Subconstruction	Floating floor system	
Underlay	10 mm SportsFoam	
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 %	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 kgs²

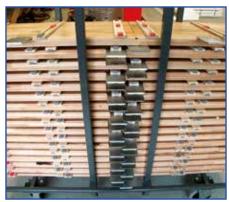


## ACCESSORIES - PORTABLE FLOORS



#### **INSTALL TWICE AS FAST**

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



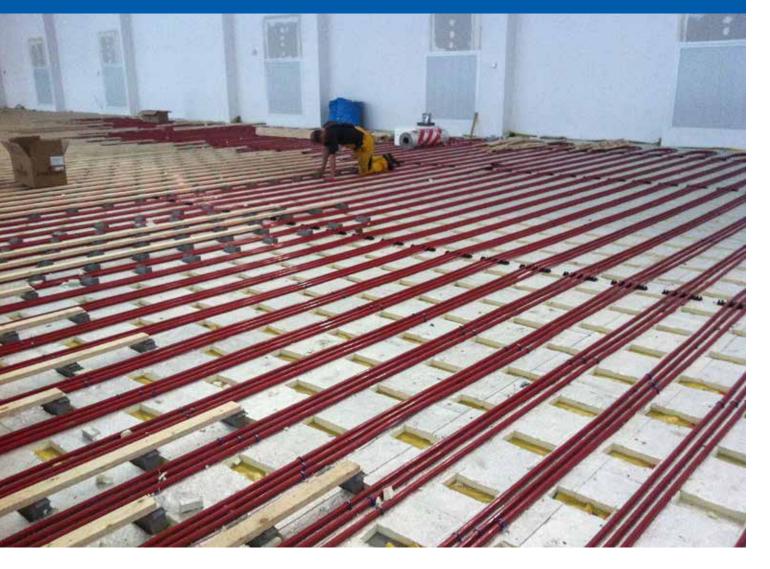
#### EASY TRANSPORTATION AND STORAGE

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



#### PROTECT THE PERIMETER OF THE FLOOR

Junckers supporting and protecting aluminium EdgeReducer forms a strong edge for the perimeter of the floor.



# 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 lacquer. Maintenance of the floor can therefore be kept to a minimum.

#### DAILY CLEANING IS EASY

Sweeping or using a cleaning machine with as little water as possible is more than enough to keep the floor in good shape on a daily basis.

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

Junckers maintenance products contribute to long lasting sport floors

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

We have developed and produce our own sports lacquer for re-sealing. The lacquer HP SPORT 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 Sports lacquer.

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.









(Internal)







# THE REGAL, UNITED RINGEDOM

## LINE MARKING PAINT ONLY IMAGINATION SETS A LIMIT

A sports floor does not come alive until it has been given the colour 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 SportsLine 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 colours can be mixed to create other colour shades and for big events such as Euro basket 2017, Junckers has developed several colours to match exactly the colour palette for this competition.





# JUNCKERS PROJECT SERVICE

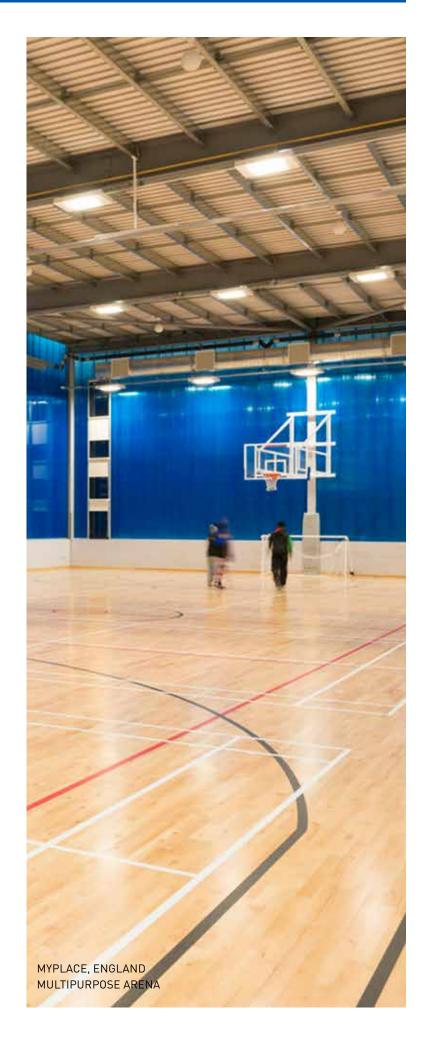
## WE PROVIDE SECURITY

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.



# **JJUNCKERS** Performing on Danish design

JUNCKERS INDUSTRIER A/S · Værftsvej 4 · DK-4600 Køge Tel. +45 70 80 30 00 · junckers.com