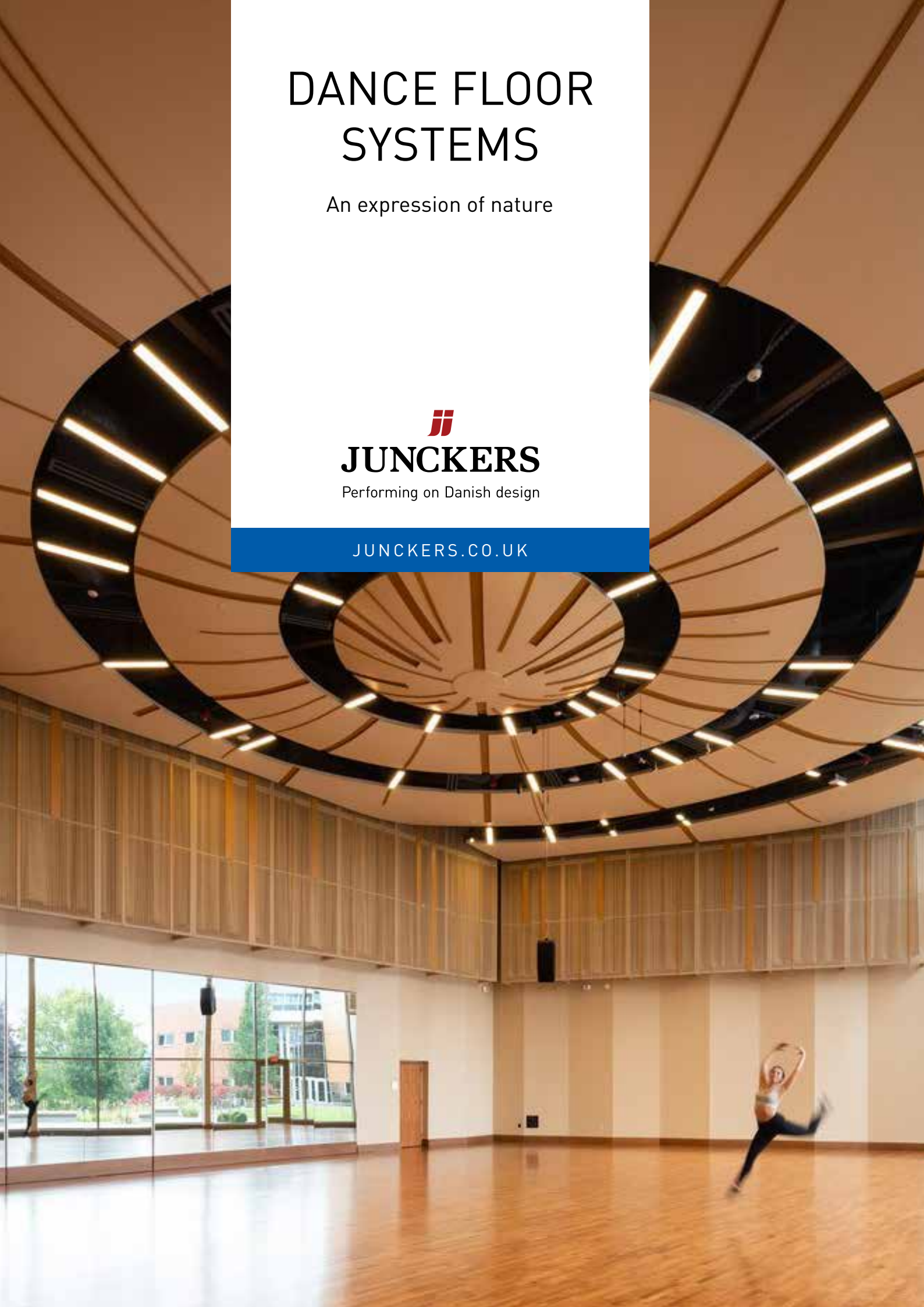


DANCE FLOOR SYSTEMS

An expression of nature


JUNCKERS
Performing on Danish design

JUNCKERS.CO.UK



PERFORMING ON DANISH DESIGN

ABOUT JUNCKERS

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

For many decades Junckers has provided systems to meet the wide ranging needs of dancers from all disciplines and levels of ability.

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'
WOODEN FLOORS
AND WOODCARE
PRODUCTS ARE
PRODUCED IN
DENMARK**

**DEVELOPMENT
AND PRODUCTION
ARE BASED ON
SOLID TRADITIONS
OF DANISH
CRAFTSMANSHIP**

Junckers' quality and ease of use has made our Woodcare products amongst the most popular wooden floor coating brands in the industry; asked for by name by both clients and contractors.

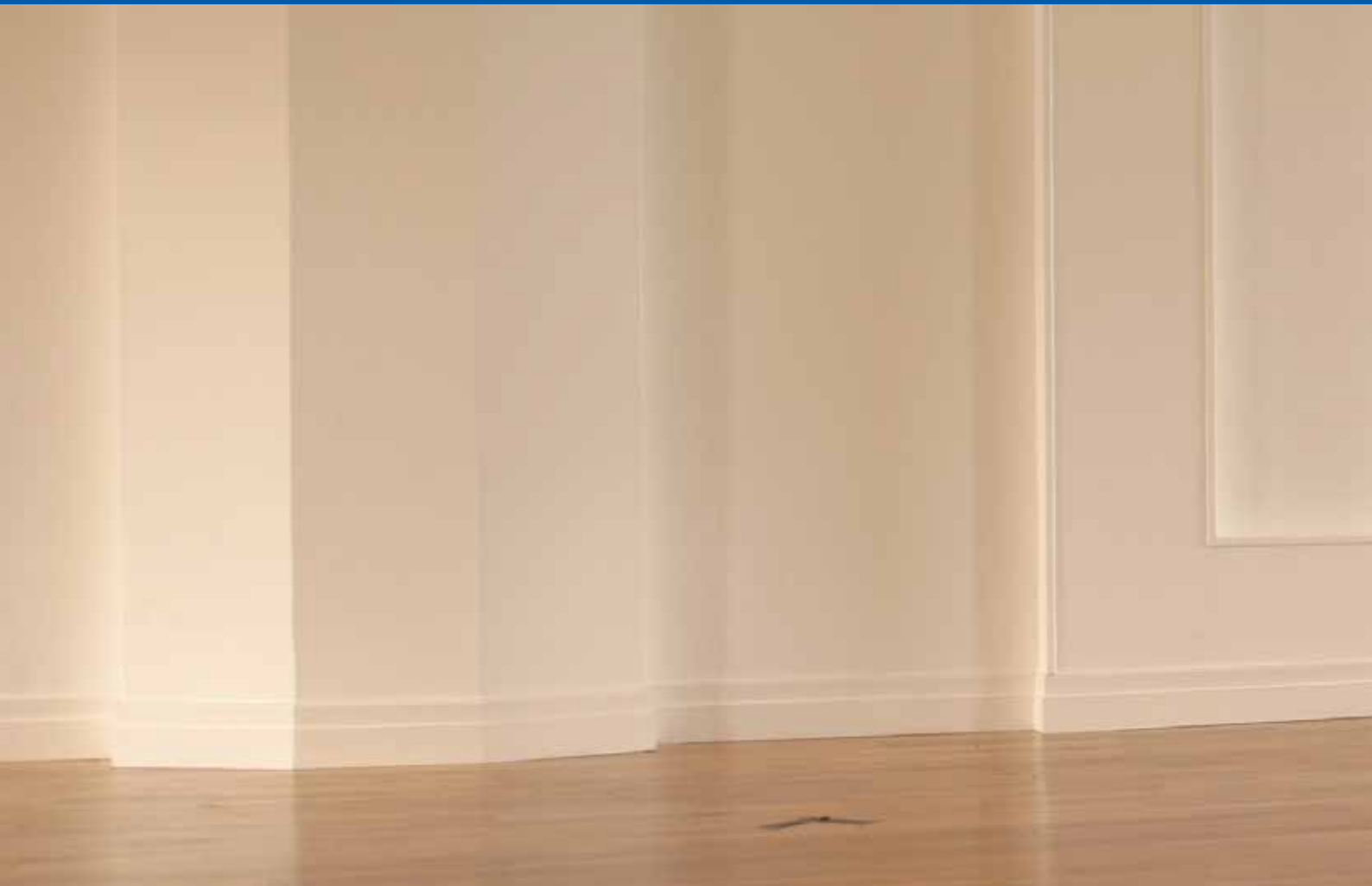
With Junckers as a professional partner, you are always ensured proper technical service before, during and after a project.

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.

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DANCE FLOOR COMFORT, SAFETY AND PERFORMANCE

WHAT DOES A JUNCKERS SYLVADANCE OR DANCE FLEX FLOOR OFFER THE DANCER?

Dancers have been performing on beautiful solid wooden floors for generations. It is proven to be one of the best materials for dance floors, not only because of its strength, longevity (over 60 years typical lifespan) and feel, but its aesthetics too, in the same way hardwood finishes are used to enhance so many of our interior spaces.

This long tradition means you have a floor that is tried and tested but Junckers SylvaDance solid beech and DanceFlex vinyl floor systems also use state of the art sprung floor technology to give dancers a complete floor system that perfectly suits their needs.

At Junckers we understand what dancers need from their performance space.

- When they interact with the floor, they want a surface that allows them to perform with maximum agility and expression.
- They need a comfortable floor, with the right slip resistance and one that avoids shock to their joints and tendons.
- A well-designed sprung dance floor system is a joy to dance on. It allows the dancer to achieve their full potential, they will not tire prematurely, and the risk of injury will be minimised

DO I NEED A SPRUNG, SEMI SPRUNG, NON SPRUNG FLOOR?

There is still an outdated belief that a modern sprung floor is like an old fashioned ballroom floor with metal leaf springs and a trampoline-like “bounce” when you land. Modern sprung floors are quite different. Junckers dance floors are shock absorbing but naturally damping so the floor compresses and recovers only when you need it to.



There are no formal industry wide definitions of “sprung” and “semi-sprung”, but some companies apply their own definitions. A “non sprung” floor will clearly be a hard floor with no shock absorption, and this will be unsuitable for any form of dance where the performer jumps and lands on the floor. Dancing on a hard, unyielding surface may cause tendon injuries, shin splints and joint problems.

In the absence of any dance-specific standards we suggest a “sprung” dance floor is best defined as one that complies with the shock absorption/force reduction tests under EN 14904, the European standard for multi-purpose sports floors.

Because of their lack of shock absorption and the increased risk of injuries we do not recommend vinyl floors laid to solid bases such as concrete or tiled floors.

For the dance studio owner and manager, a Junckers floor offers a surface that is very versatile, will attract a wide range of clients, is durable, scuff resistant, easy to clean and if damage should occur, is easy to repair and renovate.

Academic research* shows that some dancers injuries are related to how uniform the shock absorption of the floor is across its area. Large variations can mean more injuries. A floor that complies with EN 14904 will have a uniform response and so helps to minimise injuries. Junckers Clip System hardwood floors are particularly good in this respect.

Source:
*Hopper L S et al. *Dance floor mechanical properties and dancer injuries in a touring professional ballet company.* *J Sci Med Sport* (2013), <http://dx.doi.org/10.1016/j.jsams.2013.04.013>

Junckers designs floor systems by taking the best of what can be learned from many types of physical activity, including sport, dance and performing arts, so the client is delivered a floor that is closely matched to their needs.

Whilst many of the movements performed by dancers are unique to their art, dancers do not live in isolation in terms of what they need from the floor. Whether dancer or athlete, the mechanics of the human body are fundamentally the same, and there are many similarities between dancers and athletes in the ways their bodies

interact with the floor. This is recognised by Junckers because the company has a long history of designing floor systems for both sport and the performing arts.

Dance floor standards - some history...

In 2006 the American National Standards Institute (ANSI) discussed if they should have their own performance standards for dance floors. They decided the relevant parts of the German standard for sports floors, DIN 18032 already met dancers’ main requirements. Shortly after this EN14904 superseded DIN 18032, which is now little used, and today most dance floor systems will be evaluated using EN 14904.

Some aspects of testing to EN 14904 will clearly not apply to dance, for example ball bounce. But it is important to understand the standard is a general measure of performance, and this does not make it less useful. Whilst some of the finer points of dance performance may fall outside the scope of EN 14904 or DIN 18032, the same can be said for sports;- not all sports use a ball, and the ideal surface friction for one sport may not be the same as for another.



AREA OR POINT ELASTIC FLOORS?

There are two main types of sprung floor; **Area Elastic**, and **Point Elastic**. **Junkers recommends Area Elastic** floors for dance. Unlike point elastic floors, area elastic systems, such as hardwood do not have a soft, spongy surface and so tend not to “grab” the dancer’s foot, which may cause tendon strains and similar injuries. See below



AREA ELASTIC FLOOR SYSTEM: *The floor surface deflects over a wider area*

POINT ELASTIC floors are typically foam-backed vinyl, where the floor deflects at the point where the dancer’s foot makes contact with the floor. Junkers does not recommend this type of floor for dance.



POINT ELASTIC floors deflect at the point of contact only.

Test Criteria	Category A3	Category A4
Shock Absorption	≥ 40 ≤55%	≥ 55 ≤75%
Vertical Deformation	≥ 1.8mm ≤ 3.5mm	≥ 2.3mm ≤ 5mm

Table 1. Performance Requirements Under EN 14904

THE SURFACE, AND SLIP RESISTANCE

Slip resistance is an important factor in the dancer's choice of floor finish. For ballet, choose either Junckers SylvaBallet Beech, with its high level of slip resistance, or Junckers DanceFlex, a homogeneous vinyl surface, combined with a sprung undercarriage. These floors offer the optimum balance between grip and slide. For most other dance disciplines, and especially where a variety of dance will take place, the smooth lacquered hardwood surface provided by SylvaDance is a popular choice.

A vinyl surface offers only one level of slip resistance which cannot be changed during the floor's life. A Junckers hardwood floor is a little different as it can be re-lacquered. This is a normal part of the hardwood floor's maintenance cycle and is key to its longevity, but it also offers the opportunity to change the surface friction by using different lacquers, or to sand the floor to a less smooth finish if a very high level of grip is needed.

JUNCKERS SYLVADANCE AND SYLVABALLET FLOORS ARE GUARANTEED FOR USE WITH UNDERFLOOR HEATING

Junckers wooden floors have been recognised for around 30 years as being so stable that they can be guaranteed for use with under floor heating. Contact Junckers Technical department for advice.

Note Junckers does not recommend vinyl surfaces for use with underfloor heating.





JUNCKERS SYLVADANCE AND SYLVABALLET DANCE FLOOR SYSTEMS: FLOORBOARD RANGE

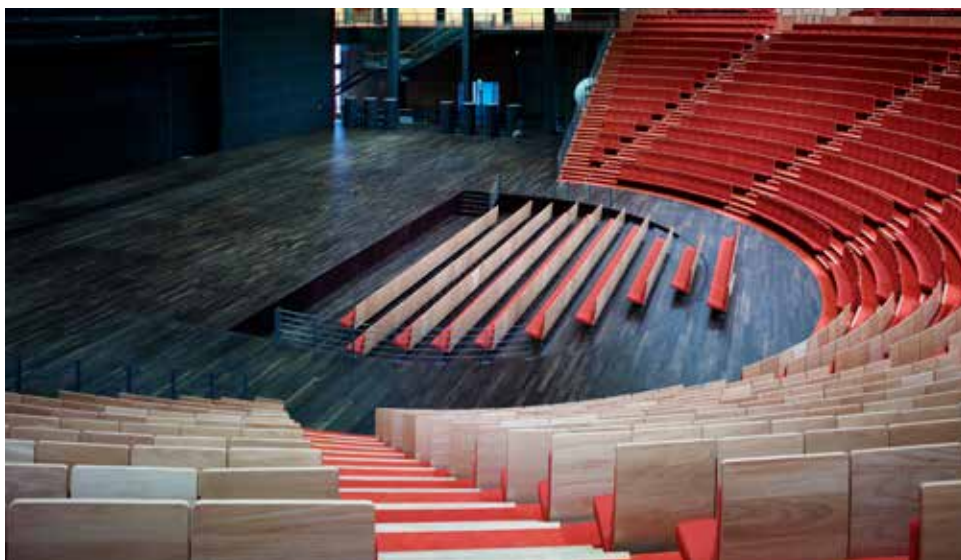
Junckers range of prefinished 22mm solid hardwood floorboards are the ideal surface for a wide spectrum of dance disciplines with optimum slip resistance, comfort, strength and durability. The floor's colour and grain patterns can inspire the creative aspects of dance. Natural wood colours and natural materials make a strong connection with people involved in performing arts, whilst coloured and stained finishes still retain the beauty of wood but offer vibrancy and flair, with a broad colour palette available to inspire creativity and expression.



JUNCKERS SYLVABALLET OPTIMISED FOR BALLET

Junckers SylvaBallet is a 22mm thick solid beech floorboard with a surface tailored for ballet.

Combined with one of Junckers sprung undercarriage systems SylvaBallet offers a sprung floor with the safety and security that allows ballet dancers and others who need a slightly higher level of grip, to perform and train with confidence and to the best of their abilities.



FLOOR BOARD RANGE

BEECH SYLVADANCE

Width: 129 mm

Thickness: 22 mm

Surface: Silk matt and Ultra matt lacquer

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



CLUB



BEECH SYLVAKET

Width: 129 mm

Thickness: 22 mm

Surface: Silk matt and Ultra matt lacquer

A beech floor board coloured through its full thickness. Can be sanded without loss of colour.

Adds a warm golden glow.

CHAMPION



PREMIUM



CLUB



MAPLE

Width: 129 mm

Thickness: 22 mm

Surface: Silk matt and Ultra matt lacquer

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

A very elegant floor.

CHAMPION



CLUB



ASH

Width: 129 mm

Thickness: 22 mm

Surface: Silk matt and Ultra matt lacquer

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



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

DESIGN WITH COLOURS | BEECH HARMONY/PREMIUM

WHITE BEECH



Surface: Ultra matt lacquer

OYSTER GREY



Surface: Ultra matt lacquer

TWILIGHT GREY



Surface: Ultra matt lacquer

SYLVARED



Surface: Silk matt and Ultra matt lacquer

DARK COCO



Surface: Ultra matt lacquer

SMOOTH RUM



Surface: Ultra matt lacquer

WILD HAZEL



Surface: Ultra matt lacquer

SPICY PEPPER



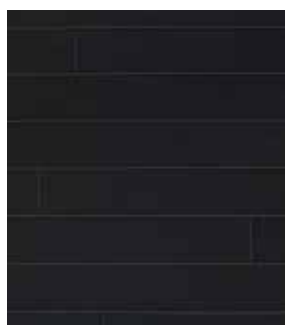
Surface: Ultra matt lacquer

TENDER OLIVE



Surface: Ultra matt lacquer

BLACK OIL



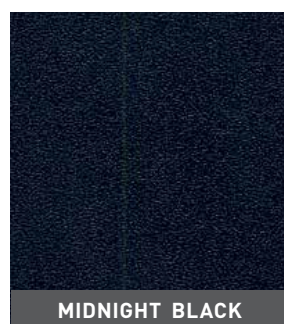
Surface: Ultra matt lacquer

RAW SUGAR



Surface: Ultra matt lacquer

VINYL SURFACE



MIDNIGHT BLACK

ADAPTABLE FLOOR SYSTEMS FOR MANY TYPES OF SUBFLOOR

Junckers SylvaDance and DanceFlex floor systems suit a wide variety of subfloor types and construction heights. Overlay floors and foam-backed battens are ideal for flat subfloors, and levelling systems for buildings where the subfloor is not flat, or an elevated floor height is needed to accommodate services contained in the floor void.

When used in multi-purpose halls or studios, the client benefits from the versatility of Junckers SylvaDance solid hardwood systems as these floors can accommodate retractable seating units, and floors are guaranteed for use with underfloor heating.

DANCE FLOOR SYSTEM SELECTOR TABLE

The table on next page shows the suitability of Junckers SylvaDance, SylvaBallet and DanceFlex floor systems for different dance disciplines. Note this is for guidance only as the requirements of dancers can vary according to individual preferences and ability. All systems comply with EN 14904 category A3 or A4 for Area Elastic Floors.

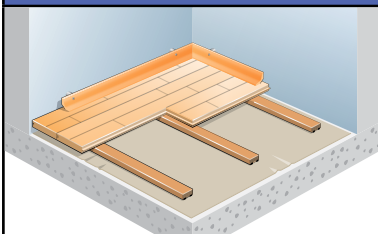
Junckers Floor System	Category according to EN 14904	Ballet	Contemporary/ Modern	Aerobics, Zumba, Jazz, Street	Multi purpose, Tap	Ballroom, Salsa	Remarks - Building Design	Remarks - Dance Performance
DanceFlex Vinyl Floor Systems								
2mm DanceFlex vinyl on UnoBat 45 Battens	A4	Green	Green	Green	Red	Red	For screed or other flat bases	Higher slip resistance particularly well suited to ballet but good for other disciplines where impact resistance required. Limited suitability for tap due to tendency of vinyl to scuff.
2mm DanceFlex vinyl on New Era UnoBat Levelling System	A4	Green	Green	Green	Red	Red	For uneven subfloors, new build and renovation. Height range between 62mm and 436mm	Higher slip resistance particularly well suited to ballet but good for other disciplines where impact resistance required. Limited suitability for tap due to tendency of vinyl to scuff.
SylvaDance Solid Hardwood Floor Systems								
UnoBat 45	A4	Use with SylvaBallet Beech	Green	Green	Green	Green	For screed or other flat bases. Low level batten system for superior performance	Good shock absorption characteristics. High level of performance. Good choice for multi purpose dance studios, and dance at all levels.
New Era UnoBat Levelling System	A4	Use with SylvaBallet Beech	Green	Green	Green	Green	For uneven subfloors, height range between 60mm and 434mm	Good shock absorption characteristics. High level of performance for a simple system. Good choice for multi purpose dance studios and dance at all levels
DuoBat 120+	A4	Use with SylvaBallet Beech	Green	Green	Green	Green	Double batten system with uniform response and high level of comfort and shock absorption.	Very uniform shock absorption levels across whole floor area. An exceptionally comfortable professional-standard impact-absorbing floor.
Clip System	A3	Use with SylvaBallet Beech	Green	Green	Green	Green	With 10mm thick ProFoam underlay provides a sprung floor only 32mm thick. Ideal for renovations and where floor height needs to be minimal	Very uniform shock absorption across floor area. Good choice for multi purpose dance studios and dance at all levels

Green - Suitable, Red - Unsuitable

SYLVADANCE AND SYLVABALLET SOLID HARDWOOD DANCE FLOOR SYSTEMS

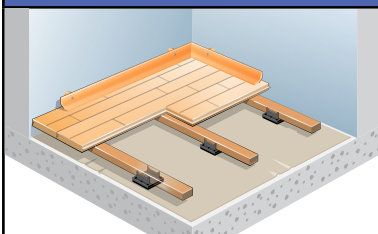
Junckers solid hardwood dance floor systems have a life span in excess of 60 years. Using Junckers 22mm solid hardwood SylvaDance and SylvaBallet floors and the right choice of undercarriage gives dancers a floor that best suits their needs whilst offering comfort and reduced risk of injuries and fatigue.

UNOBAT 45



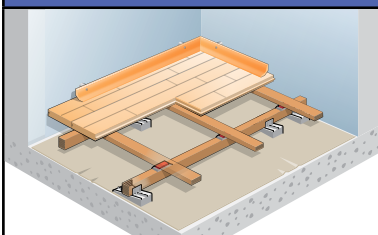
Junckers UnoBat 45 system is a dance floor with a high level of comfort and safety that belies its simplicity. The client's choice of Junckers 22mm solid prefinished hardwood floorboards are simply fixed direct to the battens. When laid to a screed or similar flat subfloor the total height of the system is only 45mm making it ideal for new build or refurbishment.

NEW ERA UNOBAT LEVELLING SYSTEM



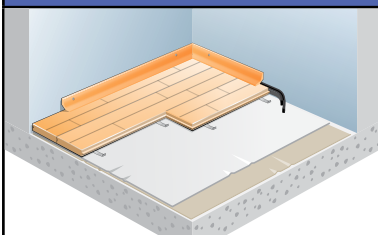
A versatile height-adjustable system with proven sprung floor comfort. Suitable for new build or refurbishment, New Era system floors can be laid to a concrete or other structural base, so avoiding the need for screeds, extended drying times or costly subfloor preparation work. New Era dance floors are available in different heights, ranging from 60mm to 434mm.

DUOBAT 120+



The ultimate dance floor. DuoBat 120+ floors have a double layer of battens, rubber shock pads and built-in levelling wedges for uneven subfloors. The innovative design provides a floor with a very predictable and uniform response, making it a popular choice with professional dancers across many disciplines

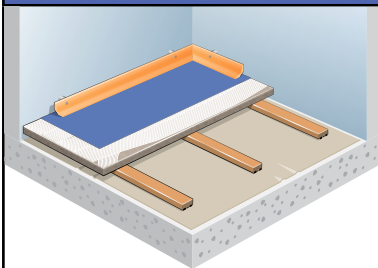
CLIP SYSTEM



The ideal system for refurbishments where an overlay area elastic sprung floor with a very uniform response is required but where height must be kept to a minimum. Laid to a screed or similar flat base, at only 32mm thick the Junckers Clip system dance floor packs high performance into a relatively thin floor covering.

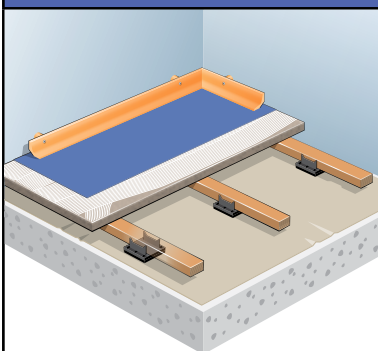
DANCEFLEX VINYL FLOOR SYSTEMS

2MM DANCEFLEX VINYL ON UNOBAT 45 SYSTEM



Junckers UnoBat 45 system with a 2mm DanceFlex vinyl surface is a floor with a high level of comfort, safety and shock absorption that belies its simplicity. A Junckers load bearing timber deck is fitted to the battens and the DanceFlex surface bonded to it. Laid to a screed or similar flat subfloor the total height of the system is only 47mm making it suitable for new build or refurbishment.

2MM DANCEFLEX VINYL ON NEW ERA UNOBAT LEVELLING SYSTEM



A versatile height-adjustable system with Category A4 area elastic comfort. After the battens and cradles have been laid and levelled the Junckers load bearing timber deck is fixed to the battens and the vinyl surface bonded to it. Suitable for new build and refurbishment, New Era system floors can be laid to a concrete or similar bases, avoiding the need for screeds, extended drying times or costly subfloor preparation. New Era dance floors are available in different heights, ranging from 62mm to 436mm.

Junckers DanceFlex vinyl dance floor systems are ideal for ballet and other disciplines, combining optimum slip resistance with all the safety aspects of an area elastic sprung floor. Junckers' range includes two area elastic sprung floor options: one for flat subfloors such as screed, and a levelling system for uneven subfloors. With both systems the timber deck is bonded to the battens with an elastic adhesive that ensures the floor will not squeak or creak.

CLEANING AND MAINTENANCE

GET A FLOOR WITH LOW COSTS OF MAINTENANCE -
And a 60 year life span

Junckers SylvaDance and SylvaBallet solid hardwood floors are supplied prefinished with several coats of a long-lasting and very hardwearing lacquer. Maintenance of the floor can therefore be kept to a minimum. Maintaining a Junckers dance floor is easy. Junckers lacquer is very scuff resistant and black shoe marks can be removed easily. Stubborn scuff marks can usually be removed with Junckers SylvaDissolver. Sweeping, damp mopping or using a cleaning machine with Junckers SylvaCleaner is more than enough to keep the floor in good shape on a daily basis.

For more specialised cleaning such as periodic degreasing to maintain friction levels we offer Junckers SylvaNeutralizer, which is quick and easy to use.

Junckers manufactures its own range of lacquers and surface treatments. Junckers HP Commercial lacquer achieves the slip resistance requirements for European standard EN 14904 and is fully compatible with the lacquer used on Junckers prefinished floorboards. This means that only a light screening of the floor is needed before applying Junckers 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 can be done between eight and ten times, but if maintenance of the floor is done on a regular basis, sanding down to bare wood is seldom necessary.

MAINTAINING DANCEFLEX VINYL FLOORS

In common with Junckers hardwood floors DanceFlex floors require only simple daily cleaning by vacuuming, then damp mopping or machine cleaning with Junckers SylvaCleaner. Occasional use of SylvaNeutralizer will keep the surface grease-free and stubborn scuffs can also be removed with SylvaDissolver. DanceFlex floors do not require a dressing or other surface treatment under normal use.

JUNCKERS' MAINTENANCE PRODUCTS CONTRIBUTE TO LONG LASTING DANCE FLOORS



SUSTAINABILITY, ENVIRONMENT AND PRODUCT QUALITY

JUNCKERS IS A CARBON NEUTRAL COMPANY

Junckers has an on-site power station that uses waste wood from floor production for fuel. It produces more power than the factory needs, and the surplus is supplied to the local grid. As wood is considered a CO₂-neutral material, and because Junckers generates more energy than the business itself can consume, Junckers is a CO₂-neutral company!

CERTIFIED TIMBER PEFC™ AND FSC®

At Junckers we believe in sustainability and support initiatives that improve environmental awareness. We hold Chain of Custody PEFC™ and FSC® certificates. A Chain of Custody certificate enables the wood to be tracked from the finished floor back to the forest.

PEFC™ and FSC® are organisations that manage forestry to protect nature, wildlife and people.



The mark of
responsible forestry



Ask Junckers for FSC®
certified products

EPD – ENVIRONMENTAL PRODUCT DECLARATION

We know from consultants, developers and architects how important it is to provide transparency and traceability in relation to materials. Therefore, in collaboration with Ramboll, Junckers has completed EPDs, which evaluate the environmental impact of our solid hardwood floors, and by this we can contribute to simplifying the work process in the selection of floors for a building to be sustainability certified.

The basis of a Junckers Environmental Product Declaration is a life cycle assessment, which focuses on environmental impacts from the following phases:

- A1: Extraction of raw materials
- A2: Transport of raw materials to factory
- A3: Production

The environmental impact of the floors is thus described from cradle to gate and documents CO₂ footprint, use of energy resources and waste flows.

Junckers' EPD's are developed in accordance with the European standard EN 15804 and have been verified in accordance with ISO 14025. Independent verification of the declarations and data have been conducted by COWI A/S and the declarations are registered at EPD Denmark.

INDOOR CLIMATE BECAUSE WE CARE ABOUT YOUR HEALTH

Junckers has a wide range of wooden floors and woodcare products certified under the Danish Indoor Climate Labelling scheme. A product with this accreditation 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.

The Danish Indoor Climate labelling scheme has recently gained recognition by the BREEAM environmental assessment scheme in the UK.



JUNCKERS SUPPORT TO THE SPECIFIER

Junckers UK network of specification managers and technical staff are able to supply NBS specifications for the installation of our flooring for your project. Junckers specifications are also available on NBS Plus, NBS Chorus and NBS BIM.

We also operate with RIBA to offer approved core curriculum CPDs. Junckers specification managers and technical staff present a choice of four CPDs, including CPD online:

1. Selecting and specifying the correct hardwood floor
2. Hardwood sports flooring
3. Installation of hardwood flooring
4. Selecting the correct maintenance schedule for hardwood flooring

Junckers technical staff are on hand before, during and after installation to offer telephone or face to face advice, design assistance and all technical information on Junckers products.

Please contact us on:
Tel: 01376 534 729
Email: tech@junckers.co.uk
Web: junckers.co.uk/contact/

FREE SAMPLES

Junckers samples allow you to get a better feel for the product or show your clients the different design options that are available to choose from. To help you do your job we made all our samples free to order for architects, contractors, developers and other professionals.

To order your samples contact us on:
Tel: 01376 534 737
Email: sales@junckers.co.uk
Web: junckers.co.uk/contact/



JUNCKERS 25 YEAR WARRANTY

WE PROVIDE SECURITY

As part of the total solution Junckers offers a unique care scheme including a 25 year lifetime warranty on the floor, its installation and maintenance.

The care scheme offers the client, specifier and builder the reassurance that the floor will be properly fitted, the highest quality products are used and the long term maintenance will be carried out by a Junckers Approved Contractor.

This ensures that the floor always performs at its best and that there are no unexpected costs for at least 25 years.

Junckers DanceFlex floor systems have a 10-year manufacturer's warranty.

For more information please contact one of our local sales managers.





JUNCKERS

Performing on Danish design