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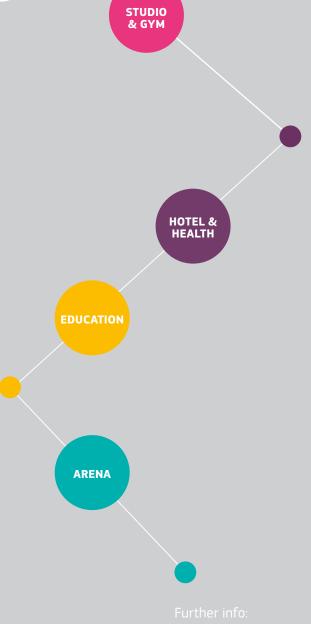
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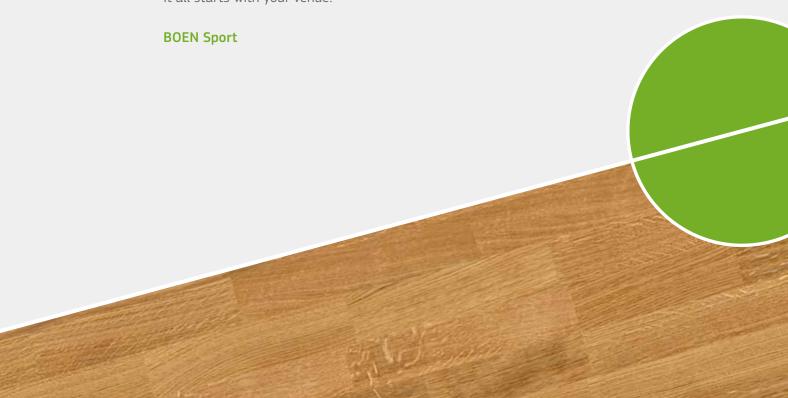
## YOUR VENUE YOUR FLOOR

A durable and beautiful floor is the heart of any sports and recreational venue. In BOEN, we are dedicated to make hardwood floors that are made to match the specific needs and activities of your venue. Our floors are produced in Europe, and conform to the European standard EN14904.

BOEN Sport specialise in area elastic sport floors because they are suitable for all kinds of indoor sports and multipurpose usage. Our target is to develop solutions that lead to the best performance in a variety of sports.

Throughout this brochure, we'll guide you to ensure you choose the floor solution with the right functionality and quality for your needs. In reality all the systems contained in this brochure can be used in virtually all locations, however we will guide you to the optimum functionality for your venue.

It all starts with your venue!



# WHAT'S YOUR VENUE?



#### **STUDIO & GYM**

A studio or a gym is the home of pulsating beats, passion and fun. A place where people come to challenge themselves. We know that the right atmosphere and comfort is crucial for a good workout. With our solutions you get the natural beauty of wood combined with high performance, flexibility and for room renovations a quick turnaround.

#### Main activities such as:

Aerobics, dance, yoga, karate and fitness.

#### Venue size:

Small and medium

#### Recommended floors:

**ACTIFLEX / BOFLEX / SINGLEFLEX** 

#### **HOTEL & HEALTH**

Lower your pulse and enter a venue of comfort and elegance. When aesthetics matter, the wooden surface creates a calm and natural atmosphere. Choose between several natural colours to create an experience that fits with the overall architecture and interior style of your hotel, spa or health centre.

#### Main activities such as:

Fitness rooms, Spa-area and rehabilitation centres.

#### Venue size:

Small and medium

#### Recommended floors:

ACTIFLEX / BOFLEX

**BOEN SPORT** 5

solution that will provide the best performance for your specific needs. Important factors to consider are your main activities, size of the floor and elevation.



#### **EDUCATION**

Young children and active youths deserve a sports venue that motivates, stimulates learning and playing. Part of growing up means testing out numerous different sports and activities, which requires a durable floor system optimised for multi-purpose use – from the PE class to the school play. A sports floor with good bounce, good friction and progressive shock absorption will care for students to enjoy sports and activities.

#### Main activities such as:

Sports, ball play, meetings, cultural events and other recreational activities.

#### Venue size:

Small, medium and large

#### Recommended floors:

**BOFLEX / ELASTFLEX / ARENAFLEX** 

#### **ARENA**

A sports arena is recognised by great experiences and a wide variety of events. Large open spaces require the extreme stability and heavy load strength offered by our premium hardwood floor systems. Sports floors that can also accommodate rolling loads, uneven levels of subfloor or different building heights - tailored to your needs.

#### Main activities such as:

Professional sports events, high performance ball play, concerts, shows and fairs.

#### Venue size:

Medium and large

#### Recommended floors:

**BOFLEX / ELASTFLEX / ARENAFLEX** 

## FIND THE RIGHT FLOOR



#### **ACTIFLEX** - page 8

When flexibility and comfort is key, and you need a quick turnaround when renovating, Actiflex is the right choice. This floor system provides deformation for greater flexibility, BOEN's X-press locking technology guarantees fast and secure installation. It is easy to extend, pick-up and relocate – without any special tools. That is why Actiflex is ideal for fitness gyms, dance studios and in private gyms at home.











#### **BOFLEX** - page 10

The premium floor system for high level performance. With unique progressive shock absorption, Boflex offers uniform performance for adult professionals as well as young athletes. The construction can withstand an almost unlimited weight load and is extremely stable.











#### **ARENAFLEX** - page 12

When building heights matters, this is your floor system. Arenaflex is designed for venues with different building heights and the uneven levels of a subfloor. It combines rigidity and comfort, which makes it versatile and practical for arenas and sports halls. The durable cradle system is ideal for incorporating insulation and reduces pre-construction time.











#### SINGLEFLEX - page 14

When height is an issue, Singleflex is the levelling solution needed. It is especially developed for different building heights and uneven levels of sub-floor. With a wide choice of colours available, it is the perfect combination of functionality and looks. Singleflex is also the preferred choice for Squash courts, meeting the World Squash Federations requirements. Singleflex is suitable for a variety of elastic surfaces.



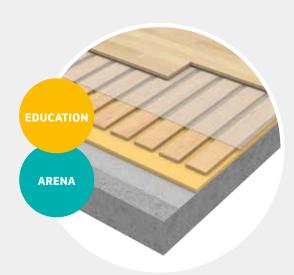












#### **ELASTFLEX** - page 16

Elastflex is a floor solution for multi-purpose usage and is ideal for large arenas and venues. Elastflex ensures a low floor elevation, offers a wide choice of colours and suitable for a variety of elastic layers.









#### **FUNCTIONALITY**



WEIGHT LOAD



LOW FLOOR ELEVATION



FLOOR HEATING



ADDITIONAL COLOUR CHOICE



SUITABLE FOR ELASTIC LAYER



UNEVEN SUBFLOOR



VARIABLE HEIGHTS

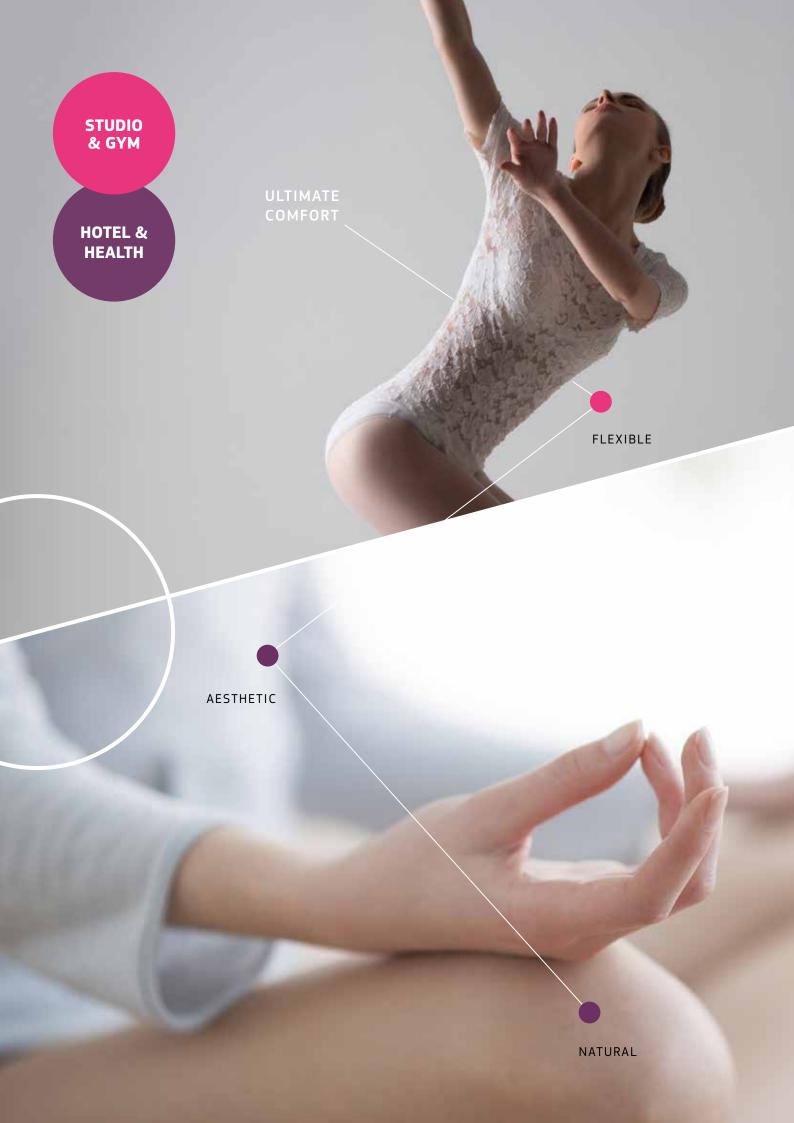


QUICK AND EASY



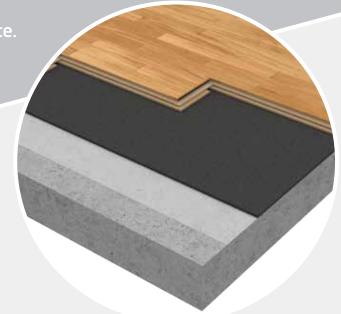
NO TOOLS REQUIRED

\* Refer to loading guidance on page 23.



## **ACTIFLEX**

When flexibility and comfort is key, and you need a quick turnaround when renovating, Actiflex is the right choice.



**Actiflex** is an area elastic sports floor with high deformation for greater flexibility and comfort. It has a resilient foam for optimum energy and sound absorption – ideal for a studio or gym.

When you have limited time to renovate your venue, Actiflex offers short installation time. The BOEN X-press locking technology ensures a fast and secure installation with a perfect result - no specialist tools are required.

Actiflex must be installed on an even and selfsupporting sub-floor or on top of an existing floor. It is also easy to extend, pick-up and relocate.

Actiflex can also be produced in a spectrum of colours in 215mm format to create a visually calm and comfortable atmosphere. Details on request.

Maximum floor size: 600m<sup>2</sup>

#### **AVAILABLE OPTIONS:**

Stadium

Top-layer: 3.5mm Building height: 29mm

#### **KEY BENEFITS:**

QUICK AND EASY INSTALLATION

GREATER DEFORMATION FOR FLEXIBILITY

BOEN X-PRESS LOCKING TECHNOLOGY

WIDE RANGE OF NATURAL COLOURS

NO SPECIALIST TOOLS REQUIRED

#### **RECOMMENDED FOR:**

STUDIO & GYM
HOTEL & HEALTH
PRIVATE HOMES



LOW FLOOR



ADDITIONAL COLOUR CHOICE



QUICK AND EASY

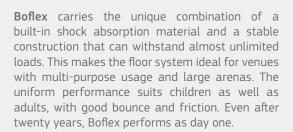


NO TOOLS



## **BOFLEX**

The ultimate sports floor with progressive shock absorption for high-level performance.



Boflex offers flexibility to accommodate your needs. Due to its extremely low building height, it is well suited for renovation purposes. The floor system is suitable with underfloor heating, for rolling loads and allows both hardwood and elastic surfaces. Boflex must be installed on an even and selfsupporting sub-floor, or on top of an existing floor.

#### **AVAILABLE OPTIONS:**

#### Stadium

Top-layer: 3.5mm Building height: 28mm

#### Olympia

Top-layer: 5.5mm Building height: 30mm

Top-layer: Ready for a variety of elastic layers Building height: 26mm



#### **KEY BENEFITS:**

PROGRESSIVE SHOCK ABSORPTION ALMOST IMPOSSIBLE TO OVERLOAD HIGH-LEVEL PERFORMANCE

#### **RECOMMENDED FOR:**

**EDUCATION** 

ARENA







LOW FLOOR



FLOOR HEATING





## ARENAFLEX

When building heights matters,



Arenaflex Elevation System is a resilient hardwood floor laid onto a highly durable cradle system. It is suitable for installation with underfloor heating systems and insulation.

Arenaflex is suitable for new constructions as well as renovation. In addition, construction time can be reduced as no levelling compound or similar is needed. Arenaflex is easy to handle and transport as it is delivered in practical pre-cut and fixed lengths.

#### **AVAILABLE OPTIONS:**

#### Stadium

Top-layer: 3.5mm

Building height: 75mm - 145mm

#### Olympia

Top-layer: *5.5mm* 

Building height: 73mm - 143mm

For greater building heights contact the BOEN team.



#### **KEY BENEFITS:**

**IDEAL FOR UNEVEN SUB-FLOORS** 

**EASY TO HANDLE** 

POSSIBLE TO INCORPORATE INSULATION & **UNDERFLOOR HEATING** 

#### RECOMMENDED FOR:

**EDUCATION** 

ARENA







UNEVEN SUB-





## SINGLEFLEX

When height is an issue, Singleflex is the levelling solution needed.



Singleflex is a sports system topped with beautiful, natural hardwood. It is available for elastic top layer.

Whether your venue has different building heights or uneven levels of surface, Singleflex provides levelling opportunities.

Singleflex is also the preferred choice for Squash courts, meeting the World Squash Federations requirements. The hardwood floor system offers the right combination of bounce and friction to accommodate for the tough impact on the athletes body.

#### **AVAILABLE OPTIONS:**

#### Stadium

Top-layer: 3.5mm Building height: 66mm

#### Olympia

Top-layer: 5.5mm Building height: 73mm



#### **KEY BENEFITS:**

IDEAL FOR SQUASH COURTS
LEVELLING OPPORTUNITIES

#### **RECOMMENDED FOR:**

**SQUASH COURTS** 

STUDIO & GYM







FLOOR HEATIN



ADDITIONAL COLOUR



ONAL SUITABLE FOR



UNEVEN SUB-

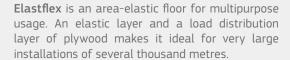


VARIABLE



## ELASTFLEX

Ideal for very large buildings with low elevation.



Elastflex ensures a low building height, and offers different thickness of surfaces to suit your needs. In addition, the floor system has good sound absorption. It's also available for a variety of elastic layers.

Elastflex can be installed on an even and selfsupporting sub-floor, or on top of an existing floor.

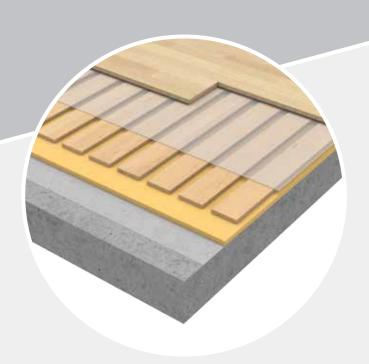
#### **AVAILABLE OPTIONS:**

#### Stadium

Top-layer: 3.5mm Building height: 38mm

Olympia

Top-layer: 5.5mm Building height: 50mm



#### **KEY BENEFITS:**

LOW BUILDING HEIGHT
GOOD SOUND ABSORPTION
IDEAL FOR VERY LARGE VENUES

#### RECOMMENDED FOR:

**EDUCATION** 

ARENA



WEIGHT LOAD



LOW FLOOR



ADDITIONAL COLOUR



SUITABLE FOR

## REFERENCES

WHERE:

NANTES THE DANCE STUDIO, FRANCE

FLOOR:

ACTIFLEX, 250m<sup>2</sup>

Founded in 2005 by Myriam Hauray, the school "The Dance Studio" was re-opened in September 2013 in the new location. "Thanks to Actiflex, my students train in comfort and safety". Myriam Hauray-Sérot. Actiflex offers the right atmosphere and comfort, crucial elements for a dance studio. After multiple searches of good flooring for the three dance rooms, the owners chose Actiflex with a natural Oak surface instead of laminate, originally considered.



HOTEL & HEALTH

WHERE:

**SOPWELL HOUSE HOTEL, UK** 

FLOOR:

ACTIFLEX, 99m<sup>2</sup>

With its contemporary decor and Japanese elements Sopwell House offers peace and tranquillity for guests giving them the chance to unwind, reflect and recoup in a stunning location. Actiflex is installed in the Fitness Studio. The 99m² of wooden floor create a calm and natural atmosphere. The guests can enjoy the training section and experience some of the finest leisure, health and beauty facilities in Hertfordshire

Further references can be found at **boensport.com** 

WHERE:

#### **ALLERTON HIGH SCHOOL, UK**

FLOOR:

#### ARENAFLEX, 1300m<sup>2</sup>

As part of the UK Governments school building project BOEN Arenaflex Beech was chosen to be installed in the brand new high school opened in 2008 enabling young people to develop team work and achieve success. Arenaflex Elevation, with its resilient hardwood floor laid onto a highly durable cradle system, was suitable for installation with underfloor heating systems and insulation.



TRAINING STUDIO



#### FLEKKEROYHALLEN, NORWAY

FLOOR:

#### BOFLEX, 1100m<sup>2</sup>

In 2005 Boflex was chosen for this multi-purpose usage venue. From early the morning with PE activities to late in the evening with professional athletes training, this arena of  $1100 \text{m}^2$  has a high traffic and usage. Municipality allocates in the venue also fairs and big arrangements during the weekend. The construction can withstand an almost unlimited weight load and is extremely stable. The uniform performance suits children as well as adults, with good bounce and friction. After 10 years the floors looks still new.

WHERE:

#### LTA NATIONAL TENNIS CENTRE, WIMBLEDON, UK

FLOOR:

#### BOFLEX CHAMPION, 4000m<sup>2</sup>

Six indoor tennis courts covering more than 4000m², with Boflex Champion sub-structure & Greenset tennis coating. Officially opened by the Queen on 24th of March, 2008, this venue will be the official training centre for top British professional tennis players.

## THE BEAUTY OF WOOD



In all its beauty, wood is a product of nature. Each tree offers a unique look that brings a lively, yet soothing atmosphere to a room or arena.

Furthermore, wood is a solid and comfortable material which performs along with the performers. From the young, growing athletes, to professional adults - wood supports every step with just the right bounce and flexibility. Wood is a highly durable material, and with the right care it looks as good as new after 20 years. Moreover, it is available in a variety of colours to suit your style and preferances.



We know that as a manufacturer of timber products we have an important heritage to manage. That is why we promote an open and ongoing dialogue with environmental authorities and organisations. BOEN's clear ambition is to terminate manufacture from timber of endangered wood species by developing innovative technology.

The raw materials we use come from forest areas which are properly managed with a high degree of regeneration. The goal is to ensure that all of our raw materials are certified in accordance with internationally recognised certification schemes.

The main components of the BOEN Sport product range come from renewable timber. The glue, lacquer and oil we use do not produce any hazardous gases or other bi-products.

#### **ENVIRONMENT FRIENDLY - GUARANTEED STABILITY**

#### WHY CHOOSE MULTILAYER HARDWOOD FLOORS?

BOEN multi-layer hardwood flooring is always an environment friendly decision. Compared with solid floors, multilayer hardwood flooring needs less slow growing hardwood. The amount of hardwood that is needed to manufacture one solid floor is sufficient for six multilayer hardwood floors.

#### NATURAL HARDWOOD TOP LAYER

There is a variety of wood types available for the top layer. The various surface treatments underline and accentuate the grain of the wood, each in their own unique way.

#### MIDDLE LAYER

The middle layer consists of carefully selected wooden slats from quickly replenishable spruce trees. Vertical or semi-vertical annual growth rings ensure a high level of dimensional stability.

#### **BOTTOM LAYER**

The bottom layer is made from a single piece of spruce veneer and ensures a stable counter draw.



#### SURFACE FINISH



#### T79 Sport Lacquer

Formulated for the easy application of additional protective coats, where applicable.



#### Squash Finish

Factory finished to a 60 grit finish. Available in Oak, Ash and Beech within all Stadium systems. Sanded to a 60 grit finish, 1 coat of primer and 2 coats of topfinish.



#### Additional colour choice

BOEN sports systems marked with this icon are also available in a much wider range of colours, contact BOEN Sport for further information

#### **WOOD SPECIES**







Can Maple



Beech



Oak

#### **ENVIRONMENTAL CREDENTIALS**





Across the globe, *the Forest Stewardship Council™*, *FSC™*, promotes an approach to forest management that is environmentally appropriate, socially beneficial and economically viable. The companies within the BOEN Group have implemented a chain-of-custody system in accordance with the standards of the FSC and are able to supply FSC-certified products. BOEN supplies products with the FSC Mix label. We hold the following licences: BOEN Bruk (Norway) FSC™ C051117, BOEN Parkett Deutschland (Germany) FSC™ C101713, BOEN Lietuva (Lithuania) FSC™ C021510, BOEN UK FSC™ C047288, BOEN US FSC™ C095158. www.fsc. org, FSC – The mark of responsible forestry.

**Rainforest Alliance** makes high demands on purchasers, manufacturers and land owners in order to achieve a sustainable approach to forest management worldwide.



The Real Wood logo is administered exclusively by authorised manufacturers belonging to the European Federation of the Parquet Industry (FEP). The decision in favour of real wood owes ecological benefits. To manufacture, work and store wood one need considerably less energy than for other materials.



Products with the *Der blaue Engel* (Blue Angel) seal of quality contain very low levels of emissions in order to ensure a healthy indoor climate.

## PRACTICAL INFORMATION

#### MAINTENANCE

Your new BOEN sports floor will continue to give excellent training conditions for many generations to come. If the floor is taken care of it will remain beautiful for decades! If you want your floor to stay looking as good as the day you bought it, we recommend starting a regular system of maintenance from day one. The amount of maintenance your floor requires will depend on how you use and treat it.

#### **BASIC CLEANING**

Basic cleaning is carried out by using a floor-care machine with a very low water consumption. After basic cleaning the

apparatus frame covers must be opened to allow any excess water which may have seeped in, to evaporate.

#### **ROUTINE CLEANING**

After every day of use. The sports floor must be cleaned by dry mopping. This is necessary for reasons of hygiene, to remove dust, hair, light dirt, sweat etc. from the surface. Intermediate care should be carried out once or twice a week, depending on the usage of the hall.

NB! Take care not to over-wet the floor.

## BONA SPORTIVE SYSTEM



BOEN Sport recommends Bona Sportive products. Bona provides a complete program of products for installation, maintenance and renovation of wooden sports floors.

#### TIP

Remember planning for apparatus fittings, covers, line markings, etc. before installation.

BOEN Sport offers a wide range of accessories such as covers,

#### **UNDERFLOOR HEATING**

BOEN sports flooring is an ideal floor covering for placing on top of underfloor heating systems having favourable thermal resistance properties.

A well-functioning under-floor heating system, hot water or electrical, results in ideal thermal distribution throughout the area to be heated, giving maximum comfort. It is therefore necessary for the floor-covering to have good thermal conductivity, i.e. low resistance to heat transmission. There are many different types of under-floor heating systems available, e.g. electric cable, hot water pipes and low voltage foils, the majority of which can be used together with BOEN Sports flooring.

\*Beech and Canadian Maple are not ideally suited for use with underfloor heating, gaps may appear.

Thickness	Thermal Resistance	Thermal Conductivity
•	•	•
14mm	0.10m2k/w	0.14 W/mk
21mm Olympia 23mm Arenaflex	0.15m2k/w 0.17m2k/w	0.14 W/mk 0.14 W/mk
28mm Boflex Stadium	0.17m2k/w	0.14 W/mk
30mm Boflex Olympia	0.18m2k/w	0.15 W/mk

#### **EN14904 - EUROPEAN STANDARD**

All BOEN Sport's floors meet the demands of the five test elements within EN14904 certification.

PERFORM	MANCE	SHOCK AB	SORPTION <sup>1)</sup>	DEFORMATION <sup>2)</sup>		FRICTION <sup>3)</sup>	BALL BOUNCE <sup>4)</sup>	ROLLING LOAD <sup>5)</sup>
	ACCORDING TO EN14904		<b>TYPE 4:</b> ≥ 55% ≤ 75%	<b>TYPE 3:</b> ≥ 1.8mm ≤ 3.5mm	TYPE 4: ≥ 2.3mm ≤ 5.0mm	80 - 110	<u>&gt;</u> 90%	Min. 1500N
	STADIUM		62%		3.4mm	86	97%	OK
Boflex	OLYMPIA		60%		2.9mm	86	97%	OK
	CHAMPION		58%		2.6mm	-	93%	OK
Actiflex	STADIUM		61%		3.8mm	86	95%	OK
	STADIUM		61%		3.5mm	86	96%	OK
Elastflex	OLYMPIA		59%		3.3mm	86	95%	OK
	CHAMPION		57%		3.3mm	-	96%	OK
	STADIUM		58%		3.0mm	86	97%	OK
Singleflex	OLYMPIA		59%	1.9mm		86	97%	OK
	ATHLETIC**		62%		3.1mm	-	97%	OK
Arenaflex	STADIUM		64%		2.9mm	86	96%	OK
Elevation	OLYMPIA		65%		2.6mm	86	93%	OK

- 1) The ability of the sports floor to absorb pressure. EN 14904 divides into two groups of area-elastic floors.
- 2) A given test-load is dropped from a given height. The vertical deformation shall not exceed 3,5mm for Type 3 floors and 5mm for Type 4 area-elastic
- 3) Adapted friction shall provide the athlete from uncontrolled sliding. This requirement is a compromise adjusted to several sports.
- 4) Ball bounce indicates how high a basketball rebounds on an area-elastic floor when dropped from a given height (concrete=100%)
- 5) Resistance to rolling loads (e.g. heavy transporters, portable goals, mobile grandstands, etc.) shall be minimum 1500 N.
- \*\* Test according to DIN18032

#### LOADING GENERAL GUIDANCE

It is advised that when employing heavy loads such as scissor lifts or heavy mobile bleacher seating on a Boen Sport floor it is highly recommended to use in combination with load distribution layer such as plywood to avoid surface damage that may occur.

#### **UNIQUE SQUASH SURFACE**

- FOR ALL BOEN SPORT SYSTEMS



BOEN Sport squash surface has been developed for modern day usage and has been factory sealed and sanded to a 60 grit finish for squash performance.

The unique squash surface is available in Oak, Ash and Beech within all Stadium systems.

Our squash surface meets the requirement from the players with a friction of 0.59 tested according to DIN 18032-2. Boen Squash Flooring has been approved World Squash Federation Accreditation in conjunction with Courtwall Innovation, who satisfied the requirements of the WSF Accreditation Scheme.

Special rough surface for optimal friction: Sanded to a 60 grit finish, 1 coat of primer and 2 coats of top-finish

#### **BOEN AND FIBA**

BOEN Sport is an Equipment & Venue Centre Partner. All our floors are tested and have been awarded the FIBA Equipment & Venue Certificate. This means that BOEN SPORT quality is approved by 215 National Basketball Federations throughout the world and by the International Olympic Committee (IOC).







### **BOEN SPORT HISTORY**

For more than 50 years BOEN Sport has played a leading role in the research and development work on new constructions methods of sports floors. Our products are sold in more than 60 countries.

Through all these years we have used our talent and passion to develop the best wood flooring possible. The big challenge

was, and still is, to maintain the beauty of nature, controlling its strength and potential and make it available to athletes. ambitions, skills and thoroughness, created the history of BOEN Sport. Innovations in technology and human creativity are the tools that have let BOEN write a page in the history of both the wood and sports flooring industry. BOEN Sport is pure passion at your disposal!

#### **OVER 50 YEARS IN SPORT & RECREATION**

#### 1953

We implemented the first machine for planing parquet flooring. And thus began our parquet production. Solid long boards and mosaic parquet were the first products - strong quality flooring that quickly became popular.

#### 1970s

Our export adventure began in earnest. German company Theodor Höhns near Hamburg started producing hardwood floors following a BOEN model, and we took over the factory in 1976. We thus acquired the most modern production line for wooden flooring in Europe. The door to the rest of the world was now open!

G. Olsen

**BOEN Bruk was sold** 

to shipping owner and

lumber importer Johan

1940

1960

1966

1980

1990

It all began with two traditional sawmills at the BOEN waterfalls outside Kristiansand. At the start of the 1700s, 12,000 floorboards were made at the sawmill every year. The force of the falls would take us on a long journey out into the world.

1641



We supplied the first parquet sports floor. The natural wooden floor improved the indoor environment of sports halls, and resulted in fewer sports injuries.



We built the first machines for producing hardwood flooring, where the boards consist of three layers glued together, which made the floor more stable.

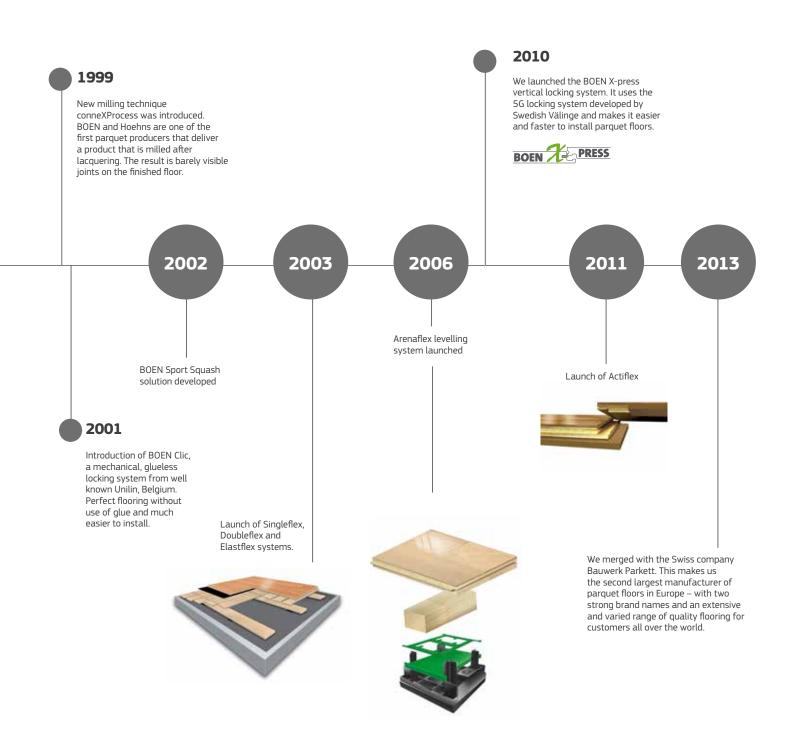


BOEN was one of the first to introduce finished parquet flooring to America, with great success. The Netherlands, France and Spain also become important markets for us.

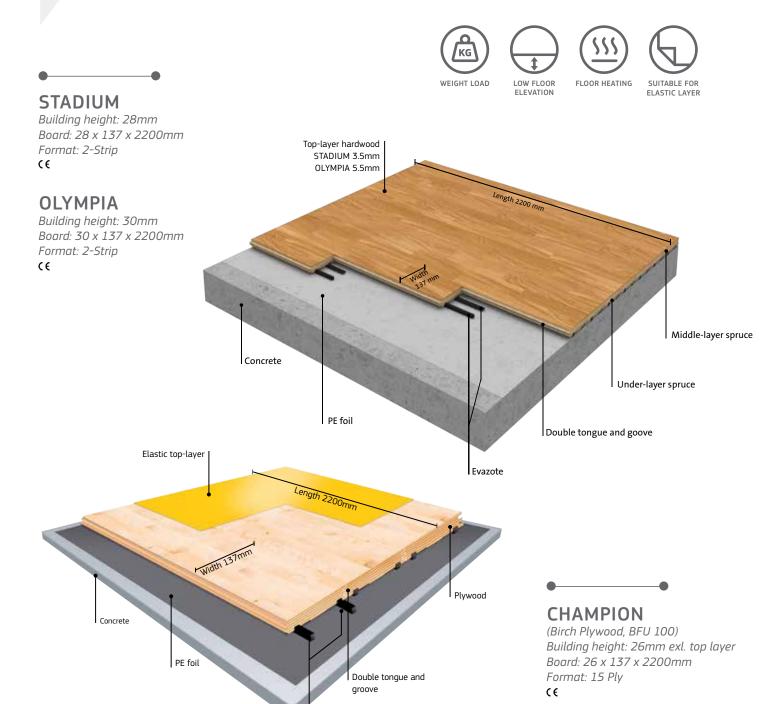
Launch of Boflex patent, sports flooring with built-in shock absorption.



**BOEN SPORT** has played a leading role in the research and development of new construction methods in sports floors. From the beginning, using traditional construction solid parquet to today's well known patented Boflex system. We are strongly focused on solutions that combine a natural wooden parquet surface layer with other materials.



## **BOFLEX**



	PERFORMANCE		SHOCK ABSORPTION		DEFORMATION		FRICTION	BALL BOUNCE	ROLLING LOAD
ACCORDING TO EN14904		TYPE 3: ≥ 40% ≤ 55%	TYPE 4: ≥ 55% ≤ 75%	<b>TYPE 3:</b> ≥ 1.8mm ≤ 3.5mm	TYPE 4: ≥ 2.3mm ≤ 5.0mm	80 - 110	<u>≥</u> 90%	Min. 1500N	
		STADIUM		62%		3.4mm	86	97%	OK
	Boflex	OLYMPIA		60%		2.9mm	86	97%	OK
		CHAMPION		58%		2.6mm	-	93%	OK

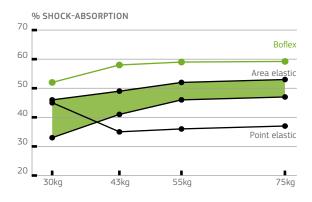
Evazote

#### PROGRESSIVE SHOCK ABSORPTION

Boflex system has a built-in shock absorption material and the construction can withstand an almost unlimited load. Evazote 50 (etylen-vinylacetat) is a cross-linked, closed cell system (layers not laid parallel). Evazote 50 is manufactured without the use of environmentally hazardous gases. Due to the special construction the material can never be compressed more than 50% which means a Boflex floor can never be overloaded.

#### EASY, FAST AND SECURE INSTALLATION

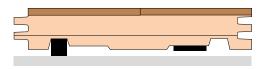
BOEN Sport has developed special installation equipment that ensures the correct application of adhesive and effective installation of the floor. Experience shows that a sports complex of approximately  $1000\text{m}^2$  can be installed in 4-5 days by 3 persons.



The majority of experts state that indoor sports flooring properties should be tested for shock-absorption using a person weighing approximately 75kg. While in the process of developing the Boflex Sports Floor, it was always our top priority that Boflex should work well for all user groups, including children.

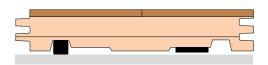
#### LOADING CAPACITY:

#### **NON-LOADED**



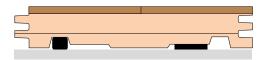
The parquet rests on each alternate Evazote strip.

#### LIGHT LOAD



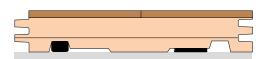
The parquet rests on each alternate Evazote strip.

#### MEDIUM LOAD



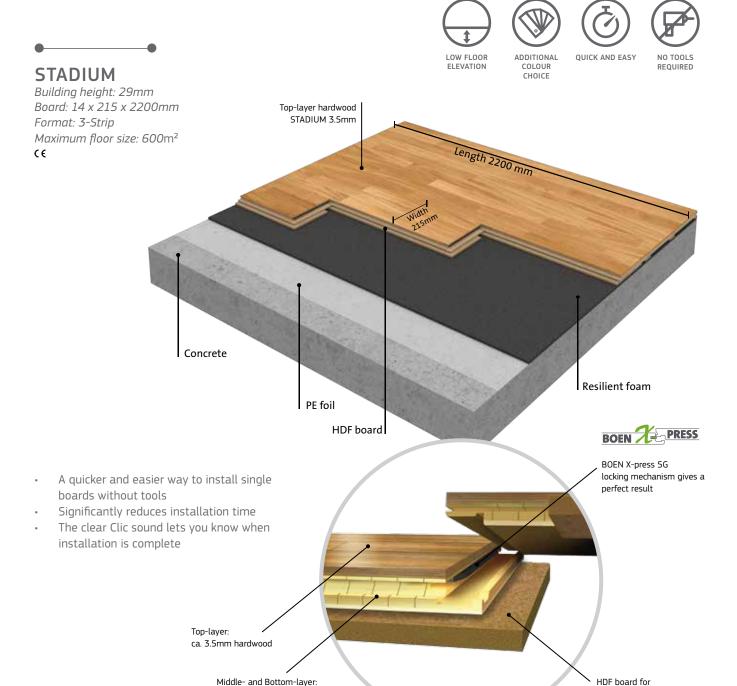
Whether all or alternate Evazote strips are under restrain is dependant on the type of sport.

#### **HEAVY LOAD**



The floor can withstand several tons of pressure without any damage being done. Even heavy vehicles can drive in and out without any detriment to the floor.

## **ACTIFLEX**



pressure distribution

PERFORMANCE		SHOCK ABSORPTION DEFORMATION		FRICTION	BALL BOUNCE	ROLLING LOAD			
	ACCORDING TO EN14904		TYPE 3: ≥ 40% ≤ 55%	<b>TYPE 4</b> : ≥ 55% ≤ 75%	TYPE 3: ≥ 1.8mm ≤ 3.5mm	TYPE 4: ≥ 2.3mm ≤ 5.0mm	80 - 110	<u>&gt;</u> 90%	Min. 1500N
	Actiflex	STADIUM		61%		3.8mm	86	95%	OK

Spruce softwood - engineered

hardwood construction

## **ARENAFLEX**









Top-layer hardwood STADIUM 3.5mm

OLYMPIA 5.5mm

WEIGHT LOAD FLOOR HEATING

UNEVEN SUB-FLOOR

HEIGHTS

#### STADIUM

Building height: 75mm - 145mm Board: 23 x 139 x 2200mm Format: 2-Strip

#### **OLYMPIA**

Building height: 73mm - 143mm Board: 21 x 139 x 2200mm Format: 2-Strip (€

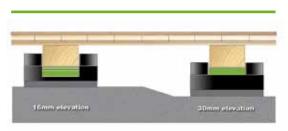


Concrete

PE foil

CRADLE	ELEVATION	ELEVATION
E1	16mm	30mm
E2	45mm	60mm

Using cradles with varying sizes of batten, construction heights between 73mm and 145mm can be achieved. Further solutions are available for heights above 145mm if required. Contact BOEN Sport.



Width 367 mm	Middle an layer spru	d bottom ce
Cradle Foam impact pad	Batten	

PERFORMANCE		SHOCK AE	SORPTION	DEFORMATION		FRICTION	BALL BOUNCE	ROLLING LOAD	
	ACCORDING TO EN14904		TYPE 3: ≥ 40% ≤ 55%	TYPE 4: ≥ 55% ≤ 75%	TYPE 3: ≥ 1.8mm ≤ 3.5mm	TYPE 4: ≥ 2.3mm ≤ 5.0mm	80 - 110	≥ 90%	Min. 1500N
	Arenaflex	STADIUM		64%		2.9mm	86	96%	OK
	Elevation	OLYMPIA		65%		2.6mm	86	93%	OK

## **SINGLEFLEX**



Building height: 66mm Board: 14 x 215 x 2200mm Format: 3-Strip

(€



Building height: 73mm Board: 21 x 139 x 2200mm Format: 2-Strip

(€



WEIGHT LOAD















Top-layer hardwood STADIUM 3.5mm* OLYMPIA 5.5mm**	Length	226
Concrete Plastic sheet PE foil	2139000	Single swing beam  Counter floor

	PERFORMANCE ACCORDING TO EN14904		SHOCK AE	SORPTION	DEFORMATION		FRICTION	BALL BOUNCE	ROLLING LOAD
			TYPE 3: ≥ 40% ≤ 55%	TYPE 4: ≥ 55% ≤ 75%	TYPE 3: ≥ 1.8mm ≤ 3.5mm	TYPE 4: ≥ 2.3mm ≤ 5.0mm	80 - 110	≥ 90%	Min. 1500N
	Singleflex	STADIUM		58%		3.0mm	86	97%	OK
		OLYMPIA		59%	1.9mm		86	97%	OK

## **ELASTFLEX**



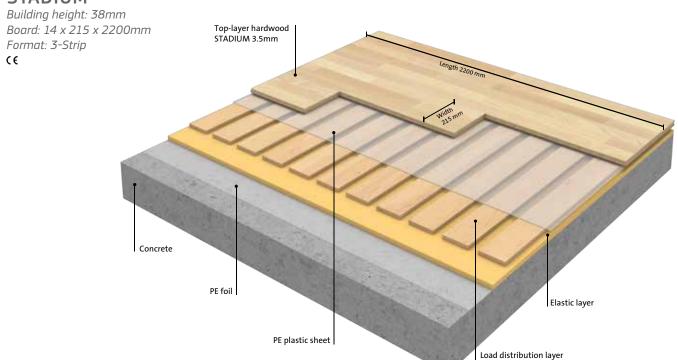




CHOICE



**STADIUM** 



# Top-layer hardwood OLYMPIA 5.5mm Length 2200 min. Concrete PE foil PE plastic sheet Load distribution layer (Plywood)

#### **OLYMPIA**

(Plywood)

Building height: 50mm Board: 21 x 139 x 2200mm Format: 2-Strip

(€

PERFORMANCE ACCORDING TO EN14904		SHOCK AE	SORPTION	DEFORMATION		FRICTION	BALL BOUNCE	ROLLING LOAD
		TYPE 3: ≥ 40% ≤ 55%	TYPE 4: ≥ 55% ≤ 75%	TYPE 3: ≥ 1.8mm ≤ 3.5mm	TYPE 4: ≥ 2.3mm ≤ 5.0mm	80 - 110	≥ 90%	Min. 1500N
Election.	STADIUM		61%		3.5mm	86	96%	ОК
Elastflex	OLYMPIA		59%		3.3mm	86	95%	OK



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