



SPORT PARQUET



Grabosport Parquet | **The simplest professional solution**



Grabo Sport Parquet | **The simplest professional solution**

Grabo sport parquet systems

Our sport parquet products are designed for both professional and amateur indoor sports activities.

They are applicable for gym halls used for trainings and competitions in team sports (primarily ball games), gymnastics, dancing and fitness. Functionality, safety, easy installation and durability were the key aspects during the engineering of these products.

	StrongAir Elite		SpringAir Elite		Smart-Fit		JumpAir Basic	
	for professional usage	for non professional usage	for professional usage	for non professional usage	for professional usage	for non professional usage	for professional usage	for non professional usage
SPORTS								
• Basketball	Top	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal
• Handball	Top	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal
• Volleyball	Top	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal
• Squash	Top	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal
• Football	Top	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal
• wheel chair sports	Top	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal
• aerobic	Top	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal
SPORT FACILITY								
• multisport hall	Top	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal
• city sport court	Top	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal
• university sport court	Top	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal
• highschool sport court	Top	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal
• elementary sport court	Top	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal
• fitness center	Top	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal
• kindergarten	Top	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal
• dance studio	Top	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal

Top
 Optimal
 Minimum



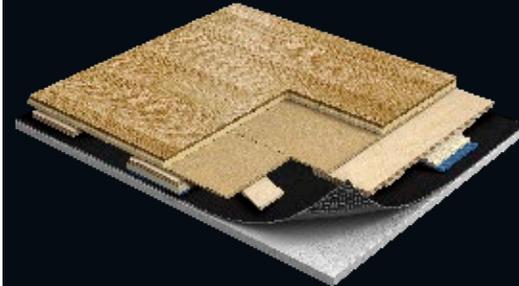
Grabo Smart-Fit system is our new sport parquet for gyms, fitness studios, dance halls, school sport courts.



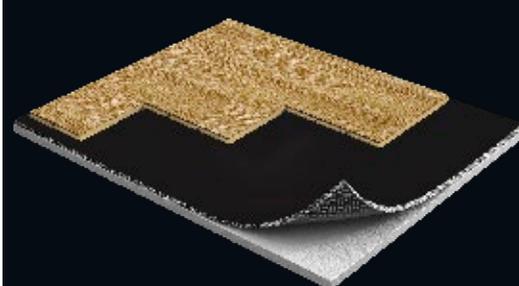
Sports flooring system engineered for amateur indoor sports. Recommended for trainings, competitions as well as leisure sports.



Sports flooring system specially developed for professional competition. For all kind of sport activities, particularly for indoor team ball games.



Ideal solution for fitness centers, dance halls and wheel-chair sports gyms.





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Advantages of Grabo sport parquet systems



Uniform profile properties

The construction of the Grabo sport parquet systems ensures equal conditions for high sports performance to all athletes in every point of the sports ground.



Optimal grip

Due to the special sport varnish and surface texture, the friction coefficient meets the requirements stipulated by EN 13036-4.

This helps to reduce „slip and trip” and adhesion-caused accidents and facilitate quick direction change.

Genuine joint and muscle protection

The ShockPad Elite shock-absorbing underlay significantly reduces the load on the athlete's joints and cartilages. The system reaches the maximum of its shock absorption capacity within less than 0.03 seconds, which means that it performs its protective function when the athlete's body really needs it.



Safe ground contact

The combination of flexible and resilient elements within the balanced flooring system ensures an optimal braking distance, without excessive vertical deformation causing unnecessary muscular strain.

Competitive appearance

Careful selection of the parquet board and finishing gloss contributes to the attractive appearance of the sporting facility and a positive overall atmosphere of the sporting event.



Long lifetime

High-cycle (1 mln cycles) life testing of the system has proved its exceptional durability.

Long-term flexibility

Due to the unique 3 layer shock-absorbing foam and special flexible adhesive, these flooring systems retain their functional quality and protective capacity for a long period of time.



Wear resistance

The 9 layer special sport varnish is extremely wear resistant and retains its surface properties for a long time.



Good dimensional stability

Basic materials used in these systems and their specific design account for improved dimensional stability as compared to the solid wood sports parquets.



Easy installation

Due to the shock-absorbing underlay supplied as prefabricated boards, these highly functional flooring systems can be installed easily.



FIBA and IHF certified

Our sport parquet systems meet the international sports requirements and fulfil the expectations of all relevant sport standards.



Excellent sport properties

The Grabo sport flooring systems resume their original shape immediately after the loading has ceased, thus contributing to higher sports performance.





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SMARTFIT

Recommended application areas

- Aerobic
- Ballroom dancing
- Hip-Hop
- Fitness center
- School sport courts
- Non professional ball games squash

Smart-Fit

Grabo Smart-Fit system is our new sport parquet for gyms, fitness studios, dance halls, school sport courts.



5G click system

Smart-Fit sport parquet

HDF board

Shock-absorbing foam

Thanks to the prefabricated product with shock absorbing underlay and 5G click system, it has short laying time and low cost of installation.

Properties:

- Prefabricated construction for the fast installation
- Area elastic sport flooring (category A3 as per EN 14904)
- Special sport varnish for the wear resistant surface with optimal grip
- Efficient joint and cartilage protection

Smart-Fit

Property	Standard	Result
Thickness of parquet	EN 429	14 mm
System thickness	EN 429	28 mm
System thickness (with VaporexT)	EN 429	29 mm
Weight (sports parquet+shockpad)	EN 430	10,3 kg/m ²

Classification

Sport classification	EN 14904	area elastic A3
Reaction to fire	EN 13501-1	Dfl-s1

Sport properties

Friction	EN 13036-4	80-110
Shock absorption	EN 14808	51 %
Vertical deformation	EN 14809	2 mm
Ball rebound	EN 12235	99 %
Specular gloss	EN 2813	< 30 %

Technical characteristics

Resistance to rolling load	EN 1569	≥ 1500 N
Abrasion resistance	EN ISO 5470-1	< 80 ^{mg/1000 cycles}
Formaldehyd emission	EN 717-1, 717-2	E1
Pentachlorophenol	EN 12673	no

Appearance

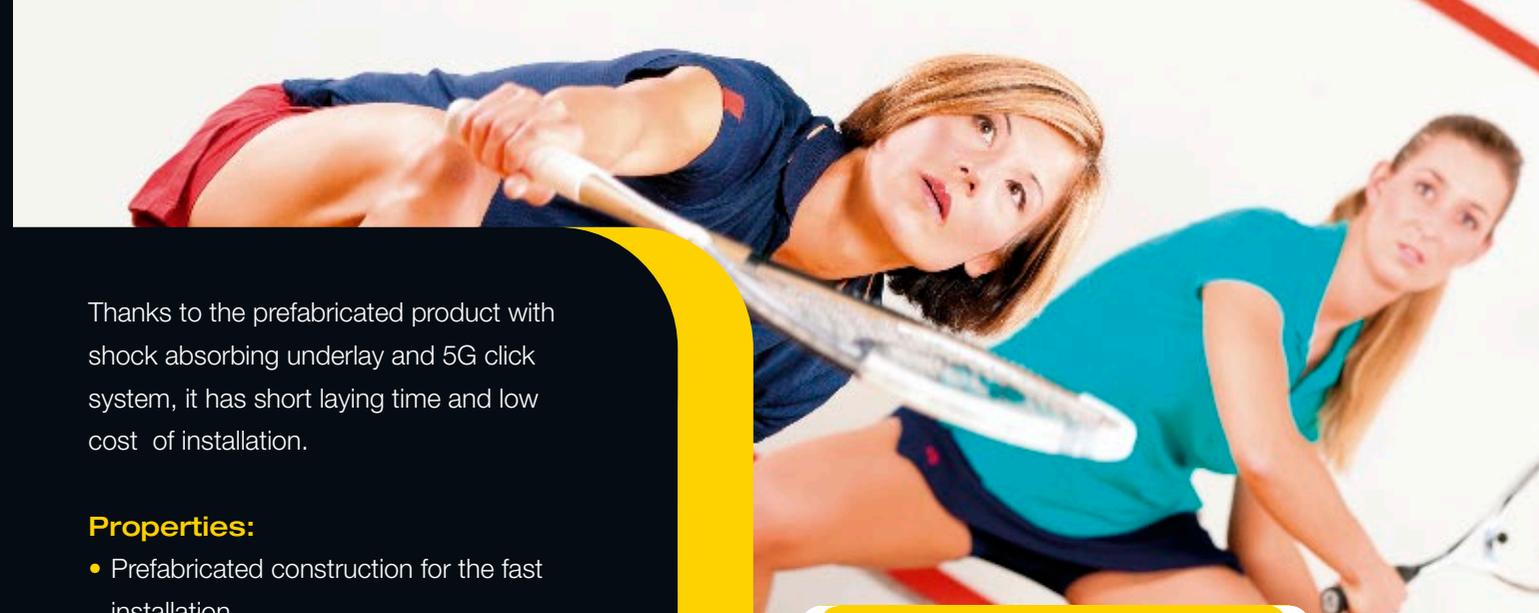


Oak unique

Ash natur



Oak rustic





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STRONGAIR Elite

Recommended application areas

- Competition
- Universities, High schools
- Multisport halls

StrongAir Elite

Ideal wood floor system for high level competitions. Outstanding durable, recommended for places where mainly professionals do sporting activities.

StrongAir sport parquet

- Excellent dimensional stability due to specifically designed profile.
- 5,2 mm hardwood top layer: a long-term solution.
- 9 layer wear resistant sport varnish ensuring optimal grip.



ShockPad Elite 27mm boarded shock-absorbing underlay

- **Easy and fast installation** with simple tools.
- Uniform performance in every point of the sports ground.
- Optimal strength and resilience in spite of small weight.
- Exceptionally durable, three-layer foam that works well both small and large impacts.



Consists of three parts:

• StrongAir: 22 mm thick sports parquet

The nine layer wear-resistant sport lacquer provides optimum sliding friction. Durable 5,2 mm top layer. It has excellent mechanical properties due to bottom plywood layer.

Thanks to the construction the product has better dimensional stability than solid wood parquets

• ShockPad Elite: 27 mm boarded shock absorbing sub floor

Provides consistent sports performance at all points of the sports court.

This sub floor can be easily, quickly and cost-effectively installed.

• Vaporex: damp proof membrane

protects the system from the effects of moisture

Vaporex damp proof membrane

- Protects the sport parquet from sub-floor moisture.
- The use of damp proof membrane can reduce the overall turnover time of the installation project, as the customer does not need to wait till the concrete base dries up completely.
- Rolled form of supply facilitates the application of the product.

StrongAir Elite

Property	Standard	Result
Thickness	EN 429	22 mm
System thickness	EN 429	50 mm
System thickness (with VaporexT)	EN 429	51 mm
Weight (sports parquet+shockpad)	EN 430	16 kg/m ²

Classification

Sport classification	EN 14904	area elastic A4
Reaction to fire	EN 13501-1	Cfl-s1

Sport properties

Friction	EN 13036-4	80-110
Shock absorption	EN 14808	55 %
Vertical deformation	EN 14809	2,4 mm
Ball rebound	EN 12235	98 %
Specular gloss	EN 2813	< 30 %

Technical characteristics

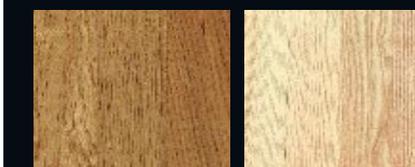
Resistance to rolling load	EN 1569	≥ 1500 N
Abrasion resistance	EN ISO 5470-1	< 80 ^{mg/1000 cycles}
Formaldehyd emission	EN 717-1, 717-2	E1
Pentachlorphenol	EN 12673	no

Appearance



Oak unique

Ash natur



Oak rustic

Ash rustic



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SPRINGAIR Elite

Recommended application areas

- Schools
- Fitness centers
- Squash courts

SpringAir Elite

We developed this sport parquet system for middle school gyms as well as for fitness halls where it is exposed to intensive use through most of the day. Recommended for team ball sports, squash, aerobic and cardio fitness. Suitable for competitions, training and free time sports.



SpringAir
18 mm
sports parquet

ShockPad Elite
27 mm boarded
shockabsorbing
underlay

Vaporex
damp proof
membrane

Components of the SpringAir Elite module are damp proof membrane (Vaporex), boarded shock-absorbing underlay (ShockPad Elite) and sports parquet (SpringAir).

5.2 mm hardwood top layer

The top layer of our parquet products is made of hardwood that is optimal for sporting purposes and offers long-term, durable solutions due to its robustness and excellent constructional stability. The 5.2 mm thickness allows multiple renovation of such flooring.

Improved dimensional stability and resilience

Basic materials used in these systems and their specific design account for improved dimensional stability as compared to the solid wood sports parquets.

UV cross-linked sport varnish

The wear resistant varnish designed specifically for this purpose is applied to the surface in 9 layers under perfectly dust-free conditions. The result is a durable, easily cleaned surface that enables rapid direction changes and protects the athlete from uncontrollable slipping.

Easy-to-install professional shock-absorbing underlay

Due to its boarded design, installation of the underlay is as simple as the ABC. Basic materials used in the manufacturing process ensure exceptional durability and efficiency of the product. Structure of the product allows to drastically reduce the loss of material during installation.

SpringAir Elite

Property	Standard	Result
Thickness	EN 429	18 mm
System thickness	EN 429	46 mm
System thickness (with VaporexT)	EN 429	47 mm
Weight (sports parquet+shockpad)	EN 430	14 kg/m ²
Classification		
Sport classification	EN 14904	area elastic A4
Reaction to fire	EN 13501-1	Cfl-s1
Sport properties		
Friction	EN 13036-4	80-110
Shock absorption	EN 14808	56 %
Vertical deformation	EN 14809	3,2 mm
Ball rebound	EN 12235	100 %
Specular gloss	EN 2813	< 30 %
Technical characteristics		
Resistance to rolling load	EN 1569	≥ 1500 N
Abrasion resistance	EN ISO 5470-1	< 80 mg/1000 cycles
Formaldehyd emission	EN 717-1,717-2	E1
Pentachlorophenol	EN 12673	no

Appearance



Oak rustic

Ash rustic



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JUMP AIR Basic

Recommended application areas

- Fitness centers
- Dance halls
- Kindergartens

JumpAir Basic

JumpAir Basic is applicable primarily in cardio training centers, fitness and dancing halls.

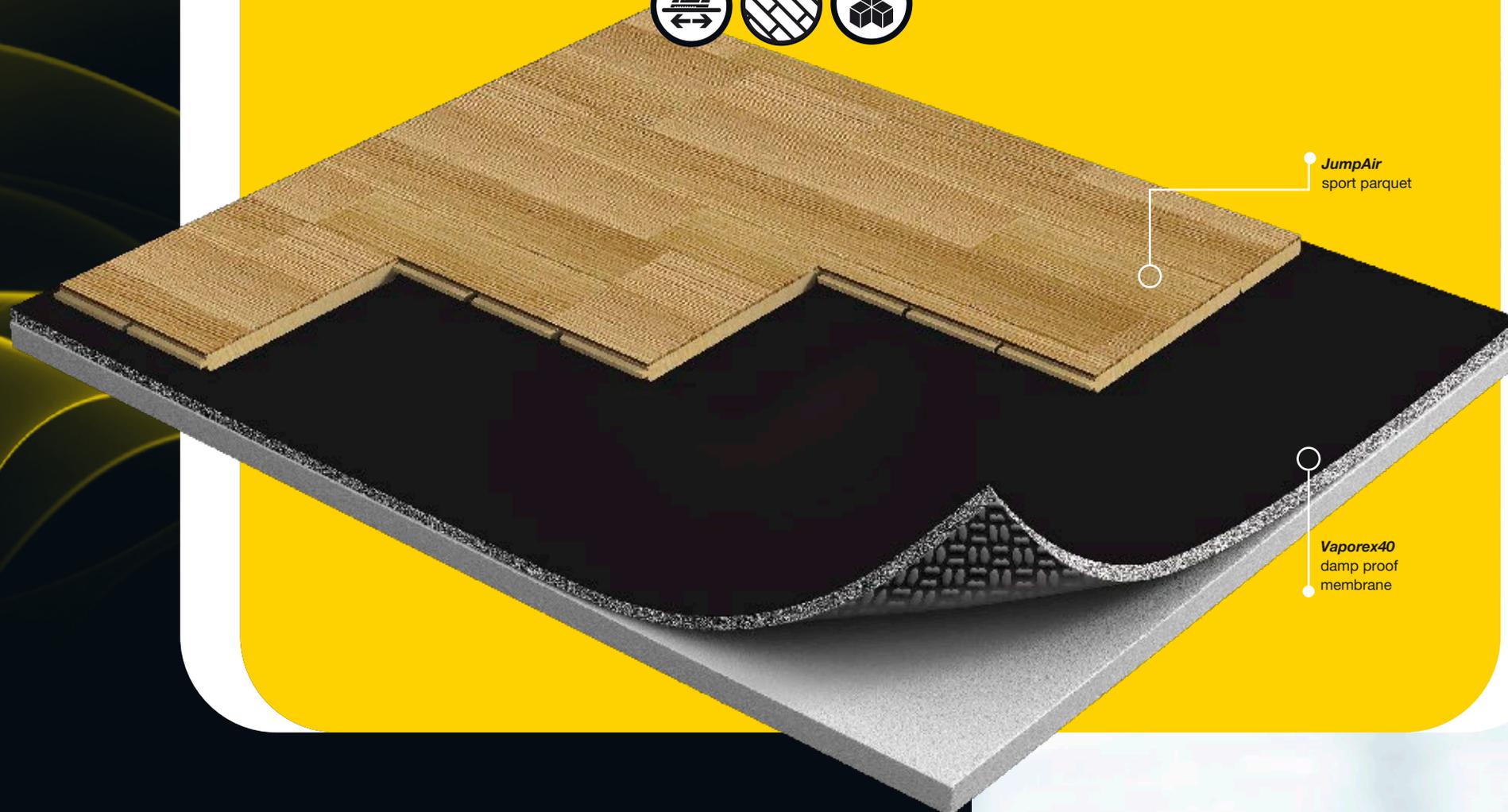
It can also be installed in gyms, studios, or in sports rooms of homes, childcare and educational institutions.



Components of the JumpAir Basic module are damp proof membrane with an integrated foam layer (Vaporex40) and the sports parquet (JumpAir).

Properties:

- Simple construction.
- Special sport varnish ensuring excellent wear resistance and optimal grip.
- Uniform performance in every point of the sports ground.
- Fast installation.



JumpAir Basic

Property	Standard	Result
Thickness	EN 429	14 mm
System thickness	EN 429	18 mm
Weight (sports parquet+Vaporex 40)	EN 430	9 kg/m ²

Classification

Reaction to fire	EN 13501-1	Dfl-s1
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Sport properties

Friction	EN 13036-4	80-110
Shock absorption	EN 14808	17 %
Vertical deformation	EN 14809	0,4 mm
Ball rebound	EN 12235	99 %
Specular gloss	EN 2813	< 30 %

Technical characteristics

Resistance to rolling load	EN 1569	≥ 1500 N
Abrasion resistance	EN ISO 5470-1	< 80 ^{mg/1000 cycles}
Formaldehyd emission	EN 717-1, 717-2	E1
Pentachlorophenol	EN 12673	no

Appearance

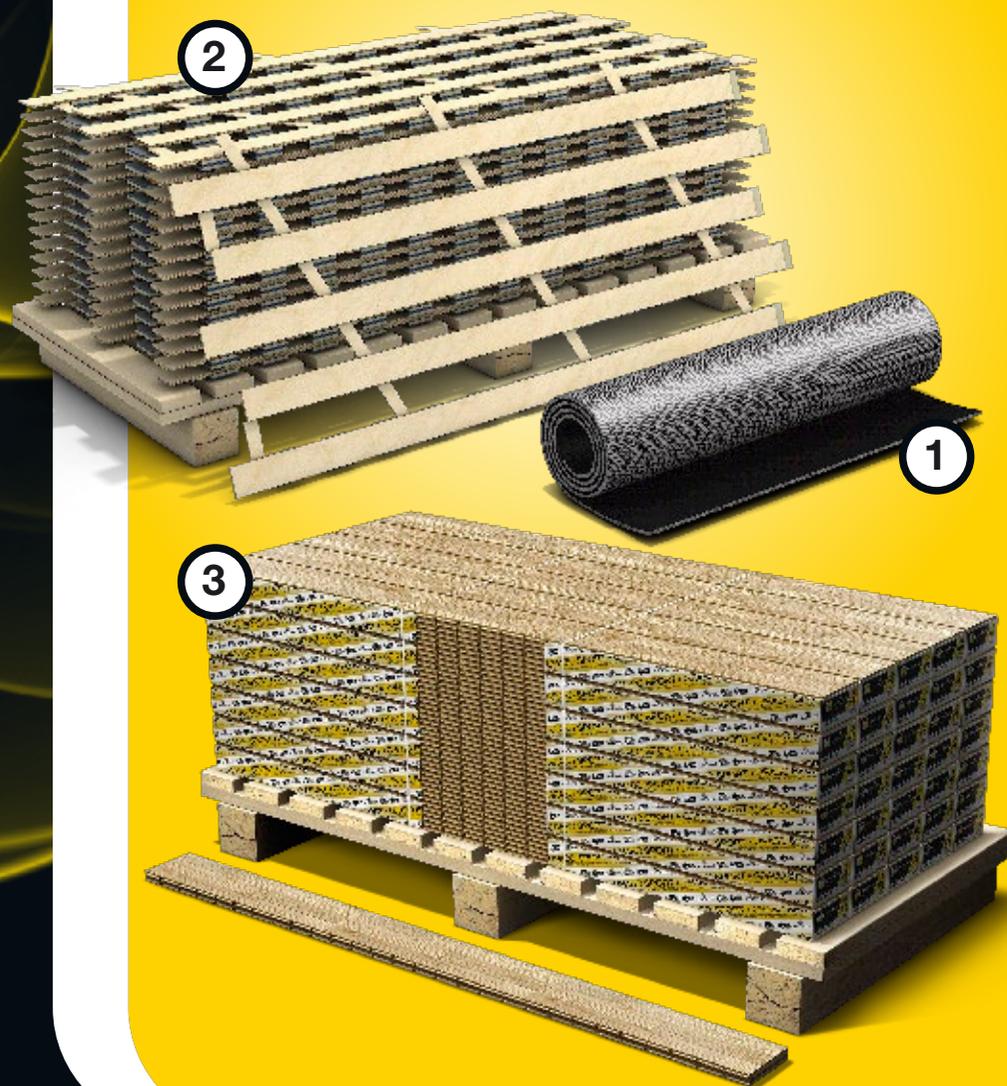




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Delivery, storage and installation

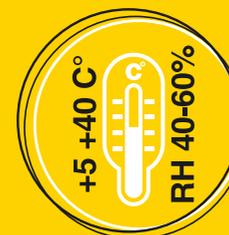
The **three major elements** of the Grabo sport parquet system, the parquet (3) and the boarded shock-absorbing underlay (2) are supplied separately stacked on pallets, while the damp proof membrane (1) in rolls,



Do not pile more than two bundles of parquet boards on top of one another. Batches of underlay components should not be piled for transportation. After the product has arrived at the place of installation, cut off the straps holding the batches together. Components of the flooring module should be stored indoors at a constant temperature between +5 and +40 °C and at 40–60 % relative humidity. Store the boards at the intended place of their installation for approximately one week before application.

The sport parquet components should be protected from the sub-floor moisture. We recommend the use of Grabo Vaporex damp proof membrane as moisture barrier instead of traditional polyethylene film. Due to its specially engineered surface Grabo Vaporex provides appropriate ventilation. By the walls the edges of the membrane should be folded up for 10 cm in order to facilitate escape of the moisture from the sub-floor. Prior to any installation the moisture content of the sub-floor should be measured. While the measured moisture content stays within 1,8–5,0 CM%, or else in the case the surface area intended for parquet floor installation exceeds 800 m², the use of Grabo Vaporex damp proof membrane is recommended. Flooring installation cannot commence at moisture content above 5 CM%.

Detailed installation guide is included in the product description which is inserted in the packaging of the sport parquet.





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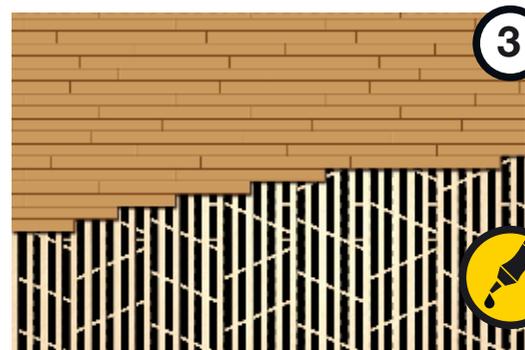
Installation for SpringAir Elite and StrongAir Elite



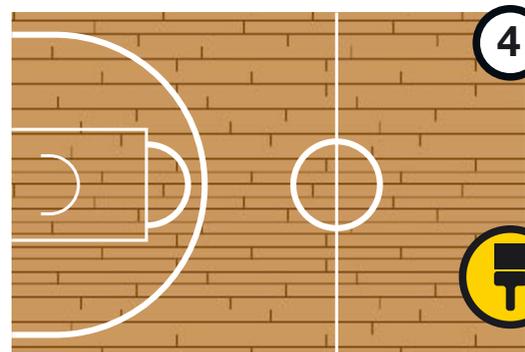
1 Vaporex
Grabo Vaporex should be laid with the pattern side facing down and adjusted edge-to-edge; the edges then should be closed with an at least 5 cm wide vapor-tight tape.



2 ShockPad
The shock-absorbing underlay should be laid across the hall (along its shorter side). The boards should be stitched together.



3 Parquet
The parquet boards should be laid down the longer axis of the hall and glued to the underlay with a flexible adhesive. The boards should be interlocked by applying a waterproof tongue and groove glue.

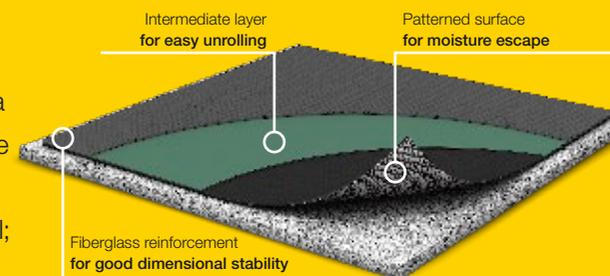


4 Game line painting
Use Grabo Color two-component type paint to draw the game lines in order to mark different parts of the hall and make it playable.

Accessories

Grabo Vaporex

Vaporex is a fiberglass reinforced waterproofing underlayment that creates a vapor barrier between the subfloor and the flooring materials, assuring good moisture control. Supplied in rolls, it is easy to install; the fiberglass reinforcement ensures its excellent dimensional stability. The use of Vaporex helps to increase the durability of the flooring and reduce the installation time.



Property	Standard	Vaporex	Vaporex40	Vaporex T
Width	EN 426	145 cm	145 cm	200 cm
Standard Length	EN 426	25 45 m ±10%	25 m ±10%	35 m ±10%
Thickness	EN 428	1,4 mm	4,0 mm	1,0 mm

Grabo Color

This is a two-component polyurethane paint for drawing the game lines to mark and distinguish between various parts of the sports ground. Available in yellow, blue, red, white and black colors. Application rate for game lining: 1 liter paint is enough to draw a 5 cm wide, 100 m long line in two coats.



Grabo ProtectSport

This is a temporary shielding to apply for non-sporting events. It helps to protect the valuable sports flooring from accidental damage or contamination. Easy to roll and unroll. Colored and transparent options are available.



Property	Standard	Protect Sport	Protect Sport T
Width	EN 426	140 cm	200 cm
Standard Length	EN 426	25 m ±10%	35 m ±10%
Thickness	EN 428	1,5 mm	1,0 mm
Available colors		gray, green	transparent



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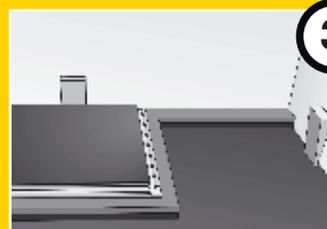
Floating installation for Grabo Smart-Fit sports parquet system



1 Relative humidity between 40 and 60% and temperature minimum 15C° must be ensured during laying and use. The sub-floor flatness tolerance should be max. 2 mm/meter.



2 If the moisture content of the sub-floor is higher than 1,8CM% but less than 5CM%, always use Grabo Vaporex damp-proof underlay floor. If the moisture content is less than 1,8CM% you can put PE-foil under the sports parquet.



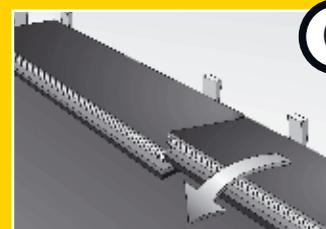
3 Measure the room before starting installation. Leave an open expansion gap around the whole perimeter. Keep dilatation gap also at pipes, stairs, columns, doorframes and thresholds. Start installation in a corner with groove side facing out toward the room. Proper expansion gap must be checked once first three rows are installed.



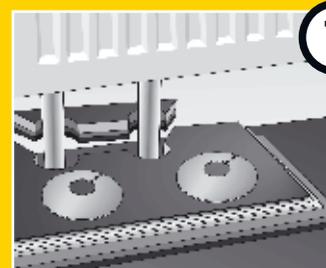
4 The width of last row should be more or equal 10cm. If so, cut the width of the first row to be installed. If the distance between the wall (minus dilatation gap) and the last row is between 10-19cm, in this case place support element in the aperture and glue the parquet cut on the surface of support element with 1-component poly-vinyl-acetate glue.



5 In the first row, at the wall put support element under the sports parquet and glue the sports parquet on its surface with 3D 1-component poly-vinyl-acetate glue.



6 The next board is laid at an angle (approx. 30°), place the plank gently and tight to the short end of the first one. Fold the panel down in a single action movement. During the fold down, make sure the panels are tight against each other. Afterwards press or slightly knock at the short end just installed. Begin the second row with the off-cut board from the first row, which must be minimum of 50cm long. Continue the laying second and next rows. Minimum distance between short ends of planks in parallel rows shall not be less than ca 400 mm.



7 Aperture for piping must be spaciously so as to allow to move free. The apertures should be covered with pipe-collars. The skirtings must be fixed to the walls. In case of Vaporex underlay use ventilated skirting.



2020|01



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