



Grabo
sport
FLOORING

The ultimate flooring,
the ultimate performance

Why GRABO sports flooring?

Wide range of products / applications

- Solutions for competition, training and leisure.
- More options for several applications, from kindergarten, through fitness halls, to high competition level sport facilities.
- 2-8 mm thick sport floorings, special coverings and accessories.



Reduced risk of injury

Optimum vertical deformation

Comfort and protection

Easy change of direction

Coefficient of friction between 0,4-0,7

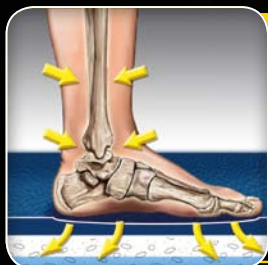
Optimal balance of grip and slide



Long term protection

Excellent shock absorption

Genuine joint and cartilage protection



Superior for ballsports

Outstanding ball rebound

Imposing sporting performance



Innovative surface solutions

	Silver Knight	TECH Surface	PUR Surface	CLP
Extreme		✓		
Supreme		✓		
Elite		✓		
Prima		✓		
Stamina		✓		
Fitness	✓			
Gymfit 60			✓	
Gymfit 50			✓	
Gymfit 25			✓	
Start				✓
Rocket				✓

Environmental attributes

- No Wax / No polish required
- Solvent and heavy metal free
- Compliant with REACH legislation
- 100% recyclable products
- ISO 14001 certified company

Benefits of installation

- Available in rolls
- Light weight products
- Less welding
- Damp proof underlay option

THE ULTIMATE FLOORING, THE ULTIMATE PERFORMANCE

**SOLVENT
FREE**

Our products are made by technological procedures without using solvents or heavy metals
- less environmental impact.

**grabo
SAN**
minimize
the growth of
microorganisms

GraboSAN treatment stops the growth of germs
- reduced risk of contamination in case of injuries.

**NOI
WAX**

Due to its special top layer periodical renewal is not necessary. Therefore they can be use continuously. Reduced life cycle costs, less chemicals and less energy consumption
- environmentally sound product with low maintenance costs.

CDF
COMBINED
DOUBLE-FOAM

High energy absorption due to the bottom foam layer
- comfort and protection.

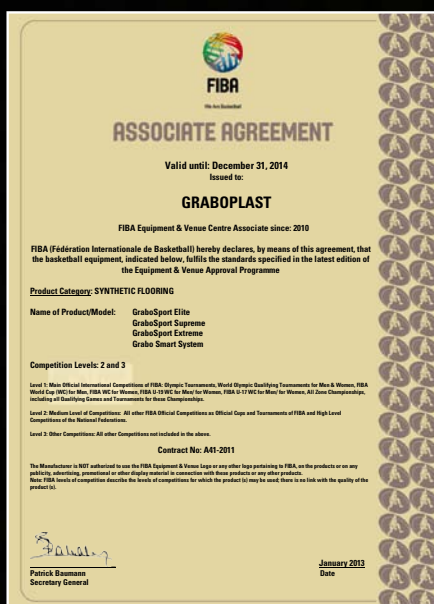
Optimized deformation shape through the upper foam layer
- easy direction change.

**200
cm
WIDTH**

Available in rolls
- easy and quick installation.
2 m wide rolls mean quicker installation and less welding, therefore more aesthetic overall appearance.

**100%
recyclable**

Our vinyl floor coverings are 100% recyclable.
Almost 100% of our manufacturing waste is recycled. We make efforts to improve the recycled content in our products.



MAGYAR OLIMPIAI
BIZOTTSÁG
HUNGARIAN OLYMPIC
COMMITTEE



MAGYAR KÉZILABDA
SZÖVETSÉG
HUNGARIAN HANDBALL
FEDERATION



MAGYAR KOSÁRLABDÁZÓK
ORSZÁGOS SZÖVETSÉGE
HUNGARIAN BASKETBALL
FEDERATION



MAGYAR RÖPLABDA
SZÖVETSÉG
HUNGARIAN VOLLEYBALL
FEDERATION



OTTO-GRAF-INSTITUT
UNIVERSITÄT STUTTGART

ISP

www.ISP-Germany.com
Institut für Sportstättenprüfung



RAPPORT D'ESSAIS
EN LABORATOIRE

CST

Centre for Sports
Technology



Prüf- und Forschungsstelle
Fussbodentechnik

CE

1415 - CPD - 28
(C-49/2006)



What is TECH Surface?

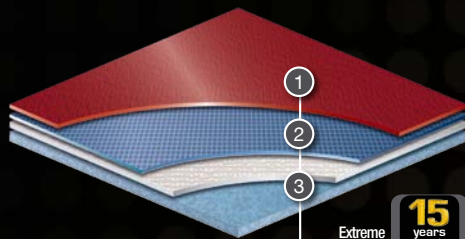
Due to its special composition TECH Surface provides high durability and easy-to-clean properties during the whole lifetime of the product. It contains micronised Al_2O_3 particles for wear resistance, and polyurethane (PUR) for cleanability.



Benefits

- **PATENTED TECHNOLOGY**
 - unique combination of Al_2O_3 and PUR
- **PUR PROVIDES EASY CLEANING**
 - no polish required
- **Al_2O_3 PARTICLES INCREASE THE ABRASION RESISTANCE**
 - higher durability

graboSport EXTREME / SUPREME / ELITE



15 years guarantee
Extreme Supreme

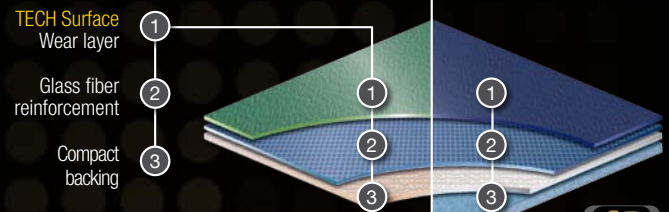
10 years guarantee
Elite



	Extreme	Supreme	Elite
Width EN 426	200 cm	200 cm	200 cm
Standard roll length EN 426	15m ± 10%	15m ± 10%	15m ± 10%
Thickness EN 428	8,0 mm	6,7 mm	6,0 mm

complying with EN 14904

grabo STAMINA | graboSport PRIMA



10 years guarantee
Stamina Prima



	Stamina	Prima
Width EN 426	200 cm	200 cm
Standard roll length EN 426	20 m ± 10 %	20m ± 10 %
Thickness EN 428	2,0 mm	4,5 mm

complying with EN 14904 on subfloor

1. TECH Surface Wear layer
2. Glass fiber reinforcement
3. Combined double-foam backing

1. TECH Surface Wear layer
2. Glass fiber reinforcement
3. Combined double-foam backing

FLOOR COVERINGS WITH TECH SURFACE

Colours of...

Extreme / Supreme / Elite / Prima / Stamina



8,0 / 6,7 / 6,0 mm

3096 Extreme / Supreme Elite



8,0 / 6,7 / 6,0 / 4,5 / 2,0 mm

3338 Extreme / Supreme Elite / Prima / Stamina



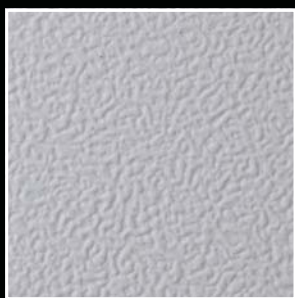
8,0 / 6,7 / 6,0 mm

4289 Extreme / Supreme Elite



8,0 / 6,7 / 6,0 / 4,5 / 2,0 mm

7483 Extreme / Supreme Elite / Prima / Stamina



8,0 / 6,7 / 6,0 mm

1360 Extreme / Supreme Elite



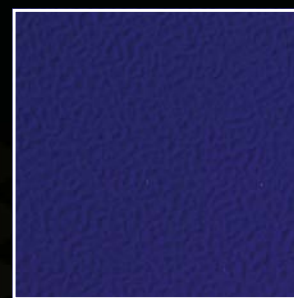
8,0 / 6,7 mm

7143 Extreme / Supreme



8,0 / 6,7 / 6,0 / 4,5 / 2,0 mm

6170 Extreme / Supreme Elite / Prima / Stamina



8,0 / 6,7 mm

6470 Extreme / Supreme



8,0 / 6,7 mm

2000-378 Extreme Supreme



8,0 / 6,7 mm

2561-378 Extreme Supreme



8,0 / 6,7 / 6,0 / 4,5 / 2,0 mm

3151-378 Extreme Supreme / Elite Prima / Stamina



8,0 / 6,7 mm

6107-378 Extreme Supreme



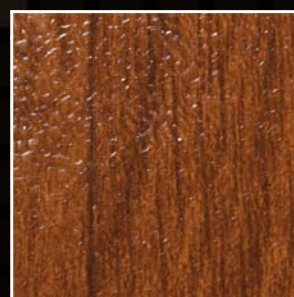
8,0 / 6,7 / 6,0 / 4,5 / 2,0 mm

2519-371 Extreme Supreme / Elite Prima / Stamina



8,0 / 6,7 mm

2209-371 Extreme Supreme



8,0 / 6,7 mm

3111-371 Extreme Supreme



FLOOR COVERINGS WITH SILVER KNIGHT

What is SILVER KNIGHT?

The most hygienic vinyl sport surface, produced by our patented technology. It's disinfecting activity based on a double defense line of nano Silver and nano TiO₂. Through double defense line Silver Knight eliminates more than 99% of harmful bacteria. The Silver Knight Surface reduces the adhesion of dirt and helps to improve indoor air quality.



Benefits

- **DOUBLE DEFENSE LINE**
- permanent disinfection for the highest hygiene
- **DECOMPOSES ODORS AND DIRTS**
- easy maintenance, better indoor air quality
- **ELIMINATES BACTERIA WITHOUT THE USE OF CHEMICALS**
- healthy and environmentally sound solution
- **WEAR RESISTANT TOP LAYER**
- durable flooring

How does Silver Knight eliminate bacteria without the use of chemicals?

Silver Knight has a self-disinfecting surface reached by a unique double-defense-line.

1ST LINE OF DEFENSE: NANO-SILVER

The natural disinfecting properties of silver have been known for more than 3000 years. Bacteria have no chance to survive as silver ions hinder the process of cell division, secondly destabilize the cell membrane, thirdly interrupt the enzyme's transport of nutrients.

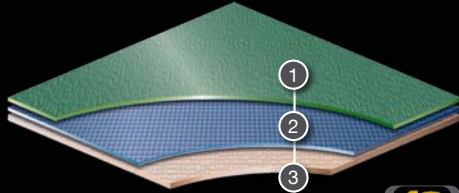
2ND LINE OF DEFENSE: NANO TiO₂

Titanium dioxide is a photocatalyst and helps to transform harmful organic substances into harmless compounds through an oxidation process, without being used up, so the effect is lasting. For the function to work only light, oxygen and air humidity are required.

Bacteria		Standard ISO 27447:2009
MRSA (Methicillin-resistant Staphylococcus aureus)	Reduction in number of viable bacteria in 8 hours 	
VRE (Vancomycin-resistant Enterococcus)		
ESBL (Extended-spectrum β-lactamas producing enterobacter species)		
E-coli (Escherichia coli)		

FLOOR COVERINGS WITH SILVER KNIGHT

Silver Knight FITNESS



10
years
guarantee

100%
recyclable

SOLVENT
FREE

NOI
WAX!

Silver Knight Fitness	
Width EN 426	200 cm
Standard roll length EN 426	15 m ±10 %
Thickness EN 428	5,0 mm

- ① Silver Knight
Wear layer
- ② Glass fiber
reinforcement
- ③ High density
foam

Vinyl floor covering with disinfecting Silver Knight surface, specially developed for fitness halls. Low residual indentation due to its high density foam backing. Hygienic, easy to maintain and durable flooring for aerobic and cardio fitness purposes.

Due to the double defense line

- the flooring can be kept clean and hygienic without using chemical disinfectants;
- the span between the cleanings can be increased;
- the sporting activities need not be interrupted for frequent cleaning;
- environment-friendly application is ensured due to reduced disinfectant and water consumption;
- cost reduction on power, chemicals and labor can be achieved.



7483

Fitness



2170

Fitness

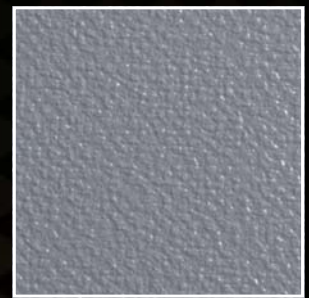
5,0 mm



3338

Fitness

5,0 mm



1286

Fitness

5,0 mm



455-753-279

Fitness

5,0 mm



6170

Fitness

5,0 mm



2519-371

Fitness

5,0 mm



3151-378

Fitness

5,0 mm

What is
PUR
Surface?

Durable polyurethane surface treatment, which helps to keep the floor clean. The flexible surface provides aesthetical appearance and easy cleaning. Besides the dirt resistance, it contributes to the optimal balance between grip and slide, and therefore ensures the possibility of high level and safe sport activity.

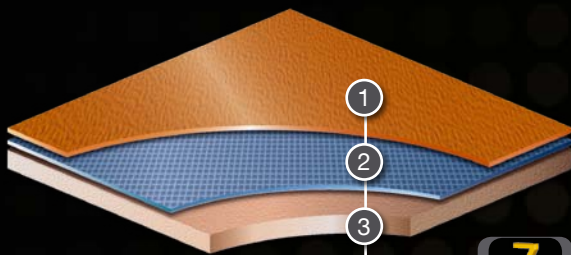


Benefits

- **CONTINUOUS DIRT RESISTANT SURFACE**
- helps to remove dust and dirt so keep the floor clean
- **NON - SLIP SURFACE**
- provides easy and quick direction change
- **COST EFFECTIVE MAINTENANCE**
- reduced life cycle costs

graboflex

GYMFIT 60/GYMFIT 50/GYMFIT 25



Gymfit 60
Gymfit 50
Gymfit 25

7
years
guarantee



1

Top layer with PUR

2

Glass fiber reinforcement

3

Closed-cell foam

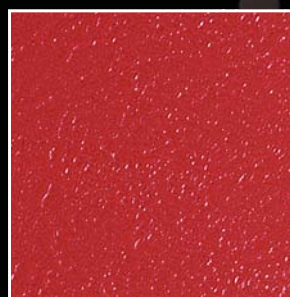


	Gymfit 60	Gymfit 50	Gymfit 25
Width EN 426	200 cm	200 cm	200 cm
Standard roll length EN 426	15 m ±10 %	20 m ±10 %	25 m ±10 %
Thickness EN 428	6,0 mm	5,0 mm	2,5 mm

FLOOR COVERINGS WITH PUR SURFACE

Colours of...

Gymfit 50
Gymfit 25
Gymfit 60



4000-647 Gymfit 50



4000-616 Gymfit 50



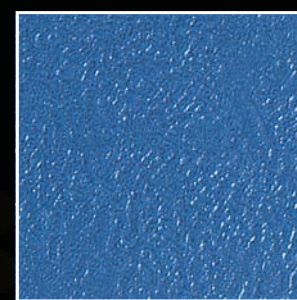
3338 Gymfit 60



3096 Gymfit 60



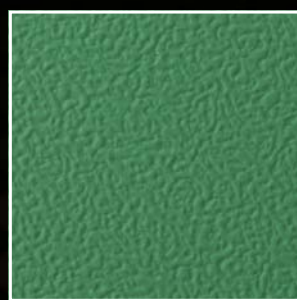
4000-635 Gymfit 50
Gymfit 25



4000-661 Gymfit 50
Gymfit 25



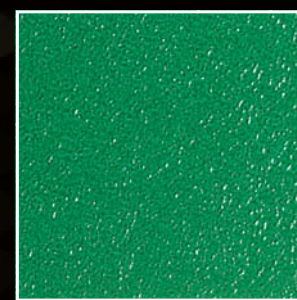
6170 Gymfit 60



7483 Gymfit 60



4000-630 Gymfit 50



4000-675 Gymfit 50
Gymfit 25



2519-371 Gymfit 60



4217-671 Gymfit 50

What is CLP?

To keep the original surface properties, we use a special crosslinked polymer in the wear layer. It increases the durability of the surface and reduces the adherence of dirt. Thanks to CLP surface the original friction, shine and cleanability of the floor can be maintained in longterm.

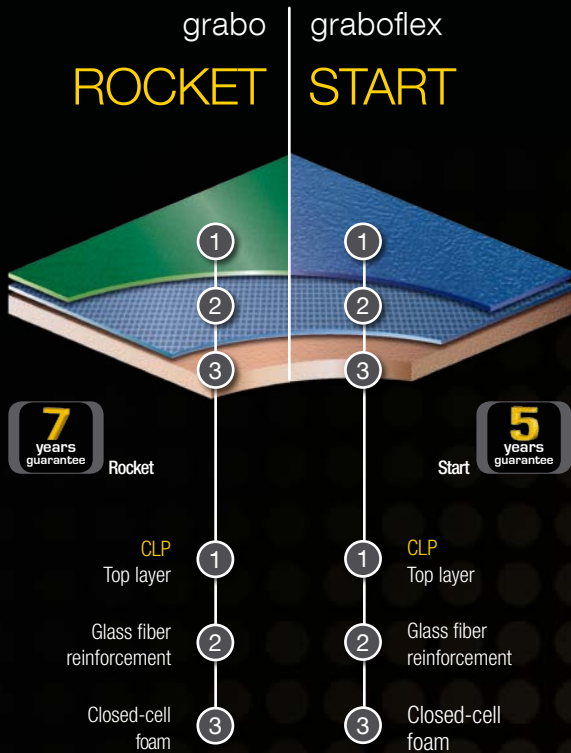
We produce two sport floorings with CLP top layer: Start and Rocket.

Start is a multisport flooring, mainly for schools and kindergartens.

Rocket was developed specially for badminton and for table tennis.



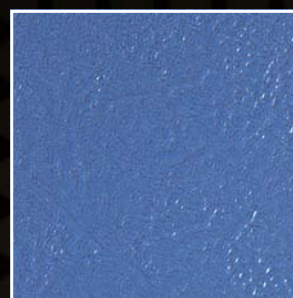
Colours of START



4181-651 Start 4,0 mm



4000-665 Start 4,0 mm



4000-659 Start 4,0 mm



4000-660 Start 4,0 mm

Colours of ROCKET



4387 Rocket 3,8 mm



7533 Rocket 3,8 mm



	Rocket	Start
Width EN 426	200 cm	200 cm
Standard roll length EN 426	15 m ± 10 % 20 m ± 10 %	20 m ± 10 %
Thickness EN 428	3,8 mm	4,0 mm

SPECIALITIES

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VAPOREX



Damp proof membrane for protection against moisture and for quicker installation.

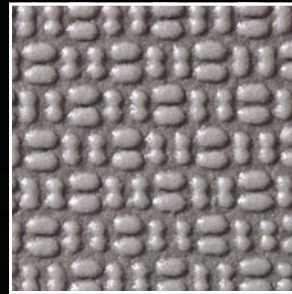
	Vaporex T	Vaporex 40	Vaporex
Width EN426	200 cm	145 cm	145 cm
Standard roll length EN426	35 m ±10 %	25 m ±10 %	25 m ±10 % 45 m ±10 %
Thickness EN428	1,3 mm	4,0 mm	1,4 mm



1,3 mm

4250-991

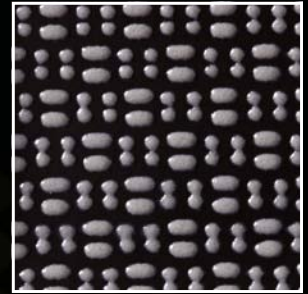
Vaporex T



4,0 mm

1991-S-01/1

Vaporex 40



1,4 mm

1991-S-03/1

Vaporex

grabo

PROTECTSPORT



Protects the sport flooring during non-sportive events. Easy to roll up and down.

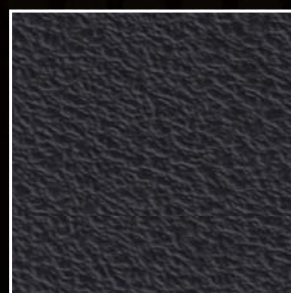
	ProtectSport	ProtectSport T
Width EN426	140 cm	200 cm
Standard roll length EN426	25 m ±10 %	35 m ±10 %
Thickness EN428	1,5 mm	1,0 mm



1,5 mm

7522

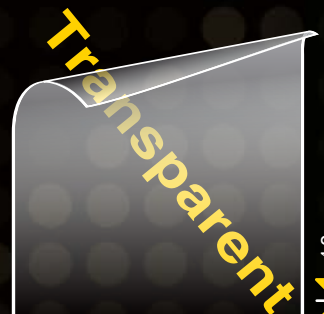
ProtectSport



1,5 mm

1784

ProtectSport

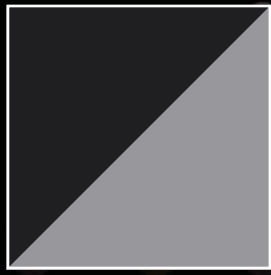


4,0 mm

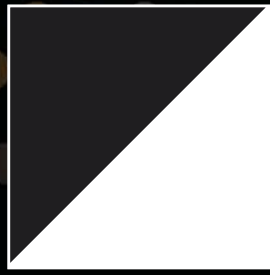
5000-510

ProtectSport T

DANCE FLOORS



1991 / 1535 Black / Gray



1991 / 1001 Black / White

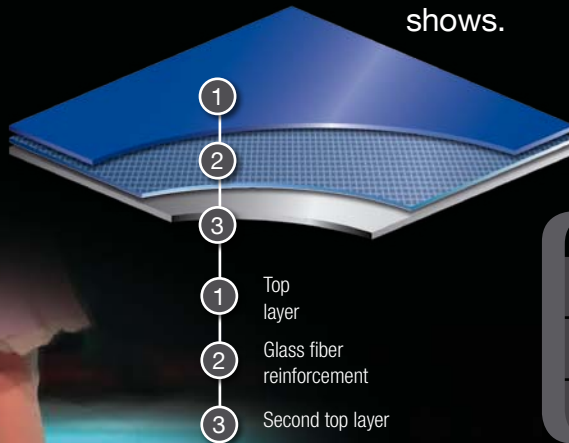


6271 / 1991 Blue / Black

1,7 mm

1,7 mm

1,7 mm



- 1 Top layer
- 2 Glass fiber reinforcement
- 3 Second top layer

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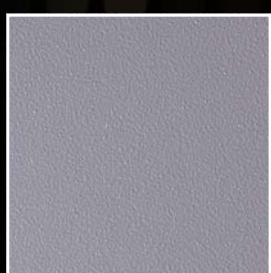
BROADWAY 17

Reversible floor covering for ballet/dance performances with fiberglass lining for better lie flat and dimensional stability. You can roll-in roll-out and change sides as many times as you want. It can be used as a temporary covering as well, to protect the original floor during any events or shows.



Broadway 17	
Width EN 426	200 cm
Standard roll length EN 426	25 m ±10 % 45 m ±10 %
Thickness EN 428	1,7 mm

Evidence is a hard wearing floor covering with an embossed non-slip surface. Ideal solution for all kind of dances. Its structure makes this floor extremely flexible but stable. Available also with foam backing for the higher shock absorption i.e. better cartilage protection. Evidence 60 reduces also sound transmission affecting the quality of tap sounds. The glass fiber reinforcement provides dimension stability to the Evidence floor coverings.



1290 Evidence 25
Evidence 60

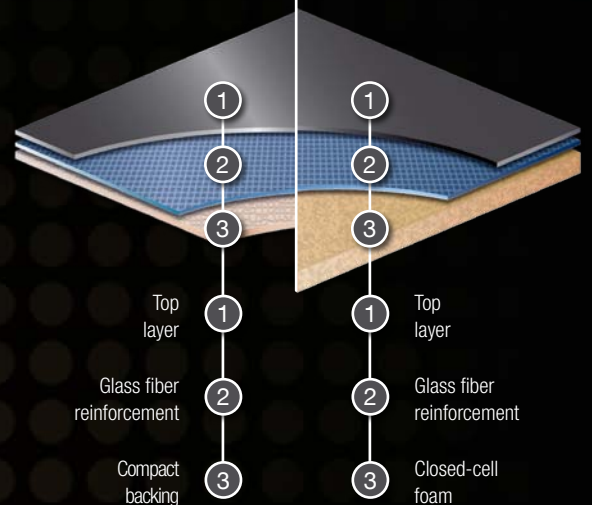


1991 Evidence 25
Evidence 60

6,0/2,5 mm

6,0/2,5 mm

grabo EVIDANCE 25 | grabo EVIDANCE 60




























- 1 Top layer
 - 2 Glass fiber reinforcement
 - 3 Compact backing
- 1 Top layer
 - 2 Glass fiber reinforcement
 - 3 Closed-cell foam

	Evidence 25	Evidence 60
Width EN 426	200 cm	200 cm
Standard roll length EN 426	20 m ±10 %	20 m ±10 %
Thickness EN 428	2,5 mm	6,0 mm



ACCESSORIES

Flooring	Recommended welding rod	
2000		2000
2519		2529
2561		2561
2209		2219
4000-630		3086
3096		3096
3338		3338
4000-665		3573
4000-635		3553
4000-647		4725
4289		4289
4387		4387
1360		1360
7483		7483
4217-671		2066
4181-651		2216
3151		3151
3111		3648
6170		6170
4000-661 / 4000-659		6161
6107		6107
6470		6470
7143		7143
7533 / 4000-675		7533
4000-660		7507

grabo

WELD

Welding rod, matching to grabo sports flooring designs, guarantees an impermeable joints by hot welding.



Diameter

4,5 mm



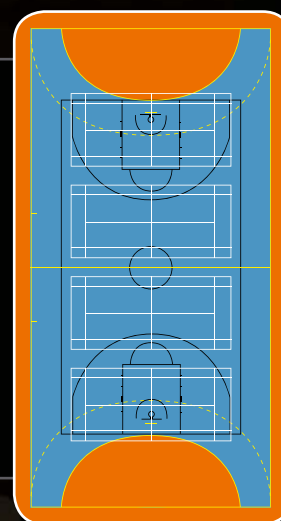
Roll length

100 m

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COLOR

Paints for marking sports ground lines. Required quantity: 1l for 100 m long and 5 cm wide line.



Type of the Court	Length of the Marking Line (m)	Color of Paint
Badminton	110	white
Basketball	210	black / dark blue
Floorball	60	white
Handball	230	yellow
Indoor football	210	yellow
Indoor hockey	180	white / light blue / yellow
Netball	150	red
Tennis	150	white / red / yellow
Volleyball	80	green / white



yellow



blue



red



white



black

References ▼

GYMFIT

Becon Primary School - Singapore
Private fitness club – Moscow / Russia
Turgeliu high school – Salchininkai / Lithuania
Hotel Slovan, fitness room – Brno / Czech Republic
Municipal Gymnasium – Skidras / Greece
National Ed. Ministry high school – Düzce / Turkey
Wuxi Chonming Lu Prim. School – Wuxi / China
E. Rojo gym – Madrid / Spain
Gymhall – Xian / China
Badminton club – Kosice / Slovakia
Sportshall – Wuhan / China
Sports hall – Treppo Carnico / Italy
University CVUT – Prague / Czech Republic
MEF Education high school – Izmir / Turkey
Sz.Györgyi primary school – Győr / Hungary
Government Club – Nanjing / China
City Sports hall – Velky Krtis / Slovakia
City sports hall- fitness room- Dubnany / Czech Republic
G. Galilei gym – Verona / Italy
Primary school – Böhönye / Hungary
Primary school – Bszentgyörgy / Hungary
Greendale Primary School – Singapore
Sports complex – La Fontina / Italy
Sports hall Ruzyně – Prague / Czech Republic
Aupark Shopping Center – Bratislava / Slovakia
Golf club - Moscow / Russia
4 th high school – Larisas / Greece
Fitness center – Ankara / Turkey
Multifunctional sports hall – Moscow / Russia
Multifunctional sports hall – Krakow / Poland
City sports hall – Castronuno / Spain
Multifunctional sports hall – Tresto-Ospedaletto / Italy
Primary school – Nagysáp / Hungary
Dusetu high school – Zarasai / Lithuania
Primary school – Győrzámoly / Hungary

ELITE

Victoria Sports Hall - Shanghai / China
Elementary school and gyms – Bucuresti / Romania
Military post's gym – Algir / Algeria
Military sport center – Pleseck / Russia
Veterinary university – Brno / Czech Republic
Sportshall – Nanjing / China
Golf club – Dubai / UAE
Institut Couzot – Dinant / Belgium
Sport gymnasium – El Algnian / Spain
Elementary school – Táplánszentkereszt / Hungary
Gym of Gymnastic Association – Deskatis / Greece
Kálvária u. primary school – Győr / Hungary
San Antonio Gym – Cáceres / Spain
Elementary school – Mezőkocsonya / Hungary
Hungarian Language School – N. Zámky / Slovakia
Jiling Laboratory High School – Chanchun / China
Sport center – Astrachan / Russia
Elementary school – Iharosberény / Hungary
Fitness club – Pösneck / Germany
The Waldorf school – Lexington / USA
Daimler-Chrysler Training Center – Alabama / USA
Sports courts – Jawornik / Poland
City sports hall – Dunakiliti / Hungary
Municipal gym – Marano / Italy
Sports Palace – Natisone / Italy
La Lobilla Sports Complex – Estepona / Spain
Police gymnasium – Tarvisio / Italy
Industrial secondary school – Oradea / Romania
Multifunctional Sports Hall – Elista / Russia
Fitness center – Yekaterinburg / Russia
City Sports Hall - Putnok / Hungary

Table tennis hall – Dubnany / Czech Republic
Elementary school – Murakeresztúr / Hungary
Aristotelio University's gym – Thessaloniki / Greece
Erzsébet v. Elementary school – Budapest / Hungary
Elementary school – Szügy / Hungary
FK Saturn Sports Hall - Jegorevszk / Russia
Multifunctional sport halls - Moscow / Russia
Wellesbourne school – Wellesbourne / England
Torre del Camo Sports Hall - Cordoba / Spain
Elementary school – Sándorfalva / Hungary
Sportarena - Minsk / Belorussia
Development Center – Columbus / USA
Salle de sports – Ciney / Belgium
Elementary school – Békéscsaba / Hungary
Sports hall – Villejuif / France
Sports hall – Lys le Lannoy / France
Encinarejos Sport Hall - Cordoba / Spain
City Sports Hall - Balassagyarmat / Hungary
City sport hall – Hämeenlinna / Finland
Sports hall - Sucy en Brie / France
City Sports Hall - Florianapolis / Brasilia
De Marinaleda City Sports Hall - Sevilla / Spain
Military police of Furiani – Furiani / Corsika
City Sports Hall - Elblag / Poland
Sports hall – Lappeenranta / Finland
Grammar-school - Szentendre / Hungary
Private gymnasium – Dubai / UAE
City Sports Hall – Novosibirsk / Russia

EXTREME

Villanova sport hall – Barcelona / Spain
Zonguldak University – Ankara / Turkey
Jeddah Medical Centre – Saudi Arabia
College Basse Wavre – Wavre / Belgium
La Rambla Sports Hall - Cordoba / Spain
Multifunctional sport hall – Valladolid / Spain
Worlds gym – Newnan / USA
Elementary school – Bacau / Romania
Elementary school – Iasi / Romania
SZK Horizont Sports Hall - Zvenigorod / Russia
BHG Sports Hall – Budapest / Hungary
Elementary school – Pannonhalma / Hungary
KOC High School – Istanbul / Turkey
City sports hall – Dubnany / Czech Republic
Abu Dhabi Municipal School / UAE
Apáczai Cs. J. High school - Győr / Hungary
Pannonia Elementary school – Budapest / Hungary
Elementary school – Gelse / Hungary
Anafen High School – Istanbul / Turkey
City Sports Hall - Meknés / Morocco
Gymnasium's sport hall – Elda / Spain
Marina Besos Sport Hall - Barcelona / Spain
Multi-use gym - Larkmead / England
Community Hall – Berente / Hungary
Salle Couverte Ominsport Al Massira - Meknés / Marocco
City Sports Hall - Gyomaendrőd / Hungary
Elementary school – Komló / Hungary
Elementary school – Zomba / Hungary
Kiss Á Elementary school – Balassagyarmat / Hungary
Krudy Gy. Grammar-school - Győr / Hungary
Tamási Á. Grammar-school – Budapest / Hungary
City Sports Hall - Turguju / Roumania
Elementary school – Brno / Czech Republic
Scituate Racquet & Fitness – Scituate / USA
Széchenyi I. University - Győr / Hungary
Al Murooj Complex – Dubai / UAE
Salle de Sports – Grivegnée / Belgium



Bethesda, USA



La Coruna, Spain



Elblag, Poland



Meknés, Marocco



Liuzhou, China

Application ▼

	graboSport Extreme	graboSport Supreme	graboSport Elite	graboSport Prima	Silver Knight Fitness	graboflex Gymfit 60	graboflex Gymfit 50	graboflex Gymfit 25	graboflex Start	grabo Rocket	grabo Stamina	Broadway 17	Evidence 25	Evidence 60
Multisport halls *														
- competition level	Best	Best	Good											
- universities / colleges	Best	Best	Recommended											
- schools	Best	Best	Best	Best		Recommended	Recommended		Recommended	Good				
Aerobic / Yoga / Dance	Best	Best	Best	Best	Recommended	Recommended	Recommended		Recommended	Recommended			Good	Best
Badminton			Good	Good		Recommended	Recommended		Recommended	Best				
Ballet / Dance							Good	Recommended	Good		Best	Best	Recommended	
Billiards / Snooker								Good			Recommended			
Body building					Good			Recommended			Best			
Cardio training					Best		Recommended	Best			Recommended			
Fencing	Best	Best	Best	Best	Recommended	Recommended	Recommended	Good	Recommended	Recommended				
Floorball	Best	Best	Best	Best		Recommended	Recommended		Good	Good				
Gymnastics	Best	Best	Best	Best	Recommended	Best	Recommended		Good	Good				Best
Indoor hockey	Best	Best	Best	Best		Recommended	Recommended			Good				
Kindergarten			Best	Best		Best	Recommended		Best	Recommended				Best
Locker room						Good	Recommended	Best	Recommended	Good	Best		Recommended	Good
Martial arts			Recommended	Recommended	Best	Best	Best	Recommended	Recommended	Recommended	Good			
Squash			Good	Good		Good	Good		Good	Good				
Table tennis						Recommended	Recommended		Recommended	Best				
Tennis		Recommended	Recommended	Recommended						Good				
Wheelchair sports			Good	Good	Recommended	Good	Recommended	Best	Recommended	Recommended	Best			

■ - good
 ■ - recommended
 ■ - best solution

* e.g. Handball, Basketball, Volleyball, Futsal, Netball etc.

Technical data

graboSport Extreme	graboSport Supreme	graboSport Elite	graboSport Prima	grabo Rocket	graboflex Gymfit 60	graboflex Gymfit 50	graboflex Gymfit 25	graboflex Start	grabo Stamina	Silver Knight Fitness
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DESCRIPTION

Thickness	mm	EN 428	8,0	6,7	6,0	4,5	3,8	6,0	5,0	2,5	4,0	2,0	5,0
Weight	kg/m ²	EN 430	4,2	3,8	3,7	2,8	2,5	3,7	2,9	2,3	2,7	2,8	3,5
Width	m	EN 426	2	2	2	2	2	2	2	2	2	2	2
Standard roll length	fm	EN 426	15	15	15	20	16; 20	15	20	25	20	20	15
Maximal roll length	fm	EN 426	21	23	25	25	30	25	25	30	25	25	25

CLASSIFICATION

Product specification			EN 14904	EN 14904	EN 14904	EN 651	EN 651	EN 651	EN 651	EN 651	EN 651	EN 649	EN 651
Impact sound insulation	ΔLw (dB)	EN ISO 717-2 EN ISO 140-8	21	22	21	21			16				17
Thermal resistance	m ² K/W		0,08	0,07	0,06	0,04	0,03	0,05	0,04	0,02	0,03	0,01	0,04
Flammability		NFP 92-512	M3	M3	M3			M3	M3	M3			
		EN 13501-1	Cfl - S1	Cfl - S1	Cfl - S1	Cfl - S1		Cfl - S1	Cfl - S1	Cfl - S1	Cfl - S1	Cfl - S1	Cfl - S1
		ÖNORM B3810/B3800/2	B1 - Q1	B1 - Q1	B1 - Q1			B1 - Q1	B1 - Q1	B1 - Q1			
		ISO 3795	100	100	100	100	100	100		100		100	

SPORT PROPERTIES

Rotational friction		EN13036-4	80-110	80-110	80-110	80-110	80-110		80-110				80-110
		PrEN 14903	0,4-0,6	0,4-0,6	0,4-0,6			0,4-0,6		0,4-0,6		0,4-0,6	
Shock absorption	%	DIN 18032	34	31	30	22							17
Shock absorption	%	EN 14808	31	28	27	19							14
Vertical deformation	mm	EN 14809	1,1	1,08	0,96	0,7			0,33				0,1
Ball rebound	%	EN 12235	100	98	99	98	> 90	> 90	100	> 90	> 90	> 90	99
Specular gloss		EN 2813	≤ 30	≤ 30	≤ 30	≤ 30	≤ 30	≤ 30	≤ 30	≤ 30	≤ 30	≤ 30	≤ 30

TECHNICAL CHARACTERISTICS

Dimensional stability	max	EN 434	+/-0,2%	+/-0,2%	+/-0,2%	+/-0,2%	+/-0,2%	+/-0,2%	+/-0,2%	+/-0,2%	+/-0,2%	+/-0,2%	+/-0,2%
Indentation resistance	mm	EN 1516	<0,5	<0,5	<0,5	<0,5		<0,5	<0,5	<0,5		≤ 0,5	≤ 0,5
Resistance to a rolling load	1500 N	EN 1569	1500	1500	1500	1500			1500			1500	1500
Colour fastness		ISO 105 B02	6	6	6	6	6	6	6	6	6	6	6
Resistance to chemicals	50% etilalkohol 5% zsíralkoholszulfonát 5% ecetsav benzin	EN 423	no change										
Abrasion resistance (H18 wheel)	≤ 1000 mg / 1000 cycles	EN ISO 5470-1	< 250	< 250	< 250	< 250		< 250	< 250	< 250		< 250	< 250
Abrasion group		EN 660-1					T	T	T	T	T	T	T

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