

#### The new generation of functional flooring.



Raised flooring with sound and practical solutions for ventilation, installations, acoustics and outdoor environments



### The new generation of functional flooring.

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## A functional floor full of knowledge and experience!

SubFloor is the new generation of functional flooring. Our concept is the culmination of all the knowledge and experience we have gained from 50 years in the flooring industry – including 30 years as specialists in raised flooring.

The development of Subfloor required time, power and know-how. And it's been wonderfully stimulating! Our driving force lies in the company's history and lives on through all the skilled and talented employees with us today. We have always had our sights set on the future.

We want to be the building trade's obvious partner for functional flooring. With SubFloor, I see opportunities to further strengthen our relationship and continue to develop together for a long time to come. We obviously brought in external expertise while developing Subfloor, in order to bring us closer to all our different customer groups and to understand their needs and challenges. With our well-thought-out system, we meet these challenges with smart features and ease of use. Installation, work environment, material selection, acoustics and load are areas that have received particular attention. We have also taken several steps to minimise our environmental impact.

My hope is that we at Prästängen Byggsystem will once again exceed your expectations.

Jens Ljungkvist CEO Prästängen Byggsystem

# SubFloor is an entire family of **modern functional flooring**

Imagine a raised floor covering an area of 5 million square metres. That's more than 700 football pitches. No wonder that we at Prästängen Byggsystem have become specialists in functional flooring.

In developing SubFloor, we have taken all the experience and knowledge accumulated through 50 years of investing ourselves in flooring and related products. We have scrutinised every detail of its design and added new, smart solutions for both form and material selection. Discover the many advantages of raised flooring and its sound and practical functionality.

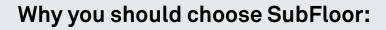


## Our promise is about simplicity, functionality and quality

In developing SubFloor – the new generation of functional flooring – we have weighed the needs of several different parties. Whether you're a fitter or craftsman, a big or a small construction company, retailer, developer, project manager, designer or architect, we meet your needs.

The products and designs are tested and type-approved by RISE (SP).

SubFloor is a range that exceeds even the highest of expectations.



- ✓ Quick, quiet and clean installation.
- ✓ Alternative attachment methods drill, glue or nail.
- ✓ Adapted to high requirements for load.
- A multi-purpose system: acoustics, ventilation, installation and decking.
- ✓ Type-approved by RISE (SP).
- ✓ Freedom of choice between different floor materials.

# Joists for a beautifully even floor

Many surfaces are uneven because of rough concrete and subsidence. When you are doing renovations, SubFloor provides a simple solution to these challenges. A dry and quick installation with laser precision will lay your floor at the right level and horizontally perfect.

A major advantage of raised flooring is that you can get it as nice and even as you want. The air gap that is formed is also a perfect space to draw and conceal installations.

The smart solution is that the floor joists are held up with adjustable screws that provide the exact height to eliminate any unevenness and differences in level that the surface may have. On top of the joists comes particle board flooring, and you are then free to choose exactly what floor material you have planned for the room. Parquet, laminate and plastic and, together with plaster, tiles as well.

We have put a lot of work into developing a durable material for the screws, which means the raised floor can withstand high loads.

#### This has several positive effects:

- ✓ Joists with few attachment points
- ✓ Quick installation
- ✓ Low cost of labour

#### Choice of attachment method:

- ✓ Steel nails
- ✓ Attachment with nail plugs or custom concrete-/wooden screws
- ✓ Custom adhesive

The most suitable method depends on the quality of the surface and on the size of the floor area to be raised. Glue and steel nails provide quick and convenient installation.

#### Plenty of space for installations

The air gap created between the surface and Sub-Floor's joists allows room for installations such as water, sewage, electricity, data and ventilation.





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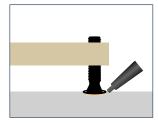
Height 31 – 348 mm. Contact us for other heights.

9

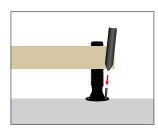
## The screw

Much of the development behind SubFloor is based on our newly developed screw. The material of the screw and screw foot can withstand heavy loads as well as accessories that provide a screw system with great flexibility. This provides us with a screw that meets the demands of the future and provides great opportunities.

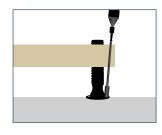
Attaching the screws to the surface:



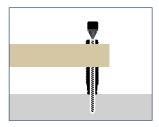
**Glue** Apply SubFloor's glue between the surface and screw foot.



**Nail** Attach nails in the plate on the screw foot.



**Screw/plug (with foot)** Attachment in the screw foot with wood screw or nail plug.



Screw/plug (without foot)

Drill through the screw. Attachment in the screw with screw or nail plug.



#### THE SUBFLOOR SCREW



The plastic in the screw is an extremely durable material that gives the whole design superb load tolerance.

> The same screw is used both indoors and outdoors.



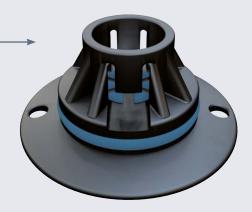
in the lower section of the screw makes it easy to attach the screw foot.



Screw foot with multiple attachment options for quick installation. Glue, drill or nail.



The acoustic foot is designed to minimise transmission of vibrations to the joist frame. Regardless of load.



## One solution for every floor type









#### Simple joisting

The most common type of raised joisting is achieved using plastic screws – with or without a foot. On top come particle board flooring, rag board (or similar) and a free choice of floor material.

#### Acoustic flooring

When the floor design has to meet acoustic requirements, you exchange the foot for our unique acoustic foot with dampening. The design is otherwise the same as for simple raised flooring (see above).

#### Ventilated flooring

In the space formed between the particle board flooring and concrete surface, underpressure is created by means of an ingenious ventilation system that diverts moisture, emissions, odours and radon in a simple and effective way.

#### **Raising with steel joists**

An alternative to our classic wooden joists. Steel joists work well with all floor types – simple joisting, acoustic flooring and ventilated flooring.

#### **Outdoor flooring**

A complete joist system for outdoor environments. Pressure-treated joists with pre-mounted bushing for our adjustment screws. The floor is installed on a solid surface and is simply adjusted to the right level by means of our screws. The c/c distance of the joists is regulated with reference to the decking desired.



## When can SubFloor be used?





**APARTMENTS** 



#### SPORT/ACTIVITY FLOORING



#### PUBLIC ENVIRON-



#### **OFFICE PREMISES**



#### TERRACES/OUTDOOR



# A healthy house with **ventilated flooring**

SubFloor's joist design creates an air gap to the surface. This design provides very good opportunities for ventilation both in older and newly built houses.

Many districts in our cities are characterised by the construction carried out in the 1960s and 1970s. The need for new housing and municipal buildings was huge. New, quicker and untested construction methods were introduced without any knowledge of the long-term consequences. It is now clear today that houses, preschools and schools were actually guinea pigs when their concrete slabs were cast directly on the ground with neither drainage nor insulation. Later, some of the houses were affected by problems with moisture, mould and odours that caused an unhealthy indoor environment.

Ventilated flooring from SubFloor helps a house become healthy again. Floors are often replaced

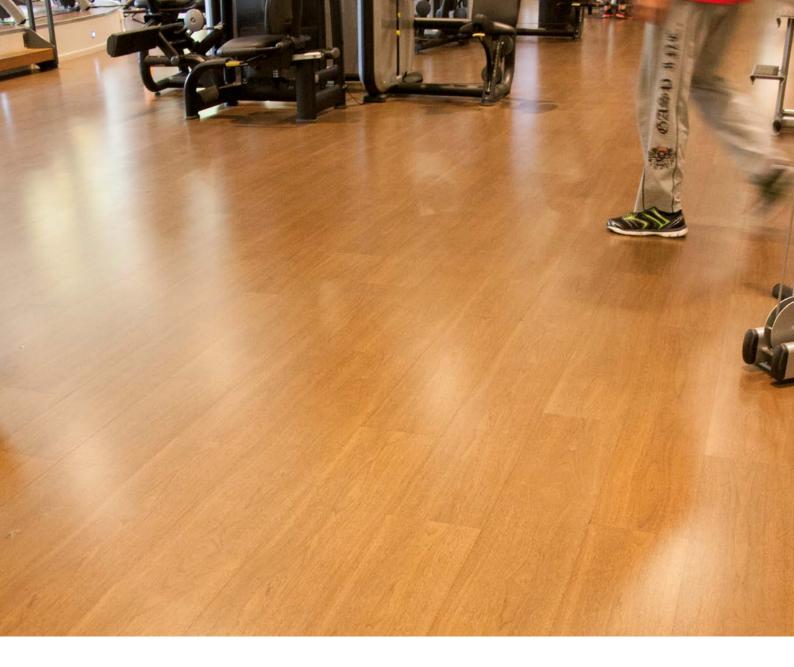
for preventive reasons, for example before a sale or when renovating other parts of the house. Whatever the reason, it is a sound investment for the future.

#### Taking control of air flow

With the space that SubFloor creates between the concrete surface and the joist, the ingenious solution with air intake and exhaust fan can give rise to underpressure in the floor. The air flow is then distributed by means of cleverly placed air ducts.

The design diverts, moisture, odours and emissions that pollute indoor air. The same solution can also have an effect when dealing with high radon levels in a building.





The principle of SubFloor's floor ventilation can also be applied to basement walls exposed to moisture.

#### Quicker restoration after water damage

More and more people are choosing a mechanically ventilated floor in consultation with their insurance company, following water damage, for example. This allows them to move back into their house a short time after remediation and there is no need to wait until all the moisture is gone. The good ventilation that is created also continues to dry up the base slab after you have laid your new floor and started living in the house again.

### Choose SubFloor's floor ventilation in the event of:

- ✓ Contributory soil moisture
- ✓ Residual moisture following water damage

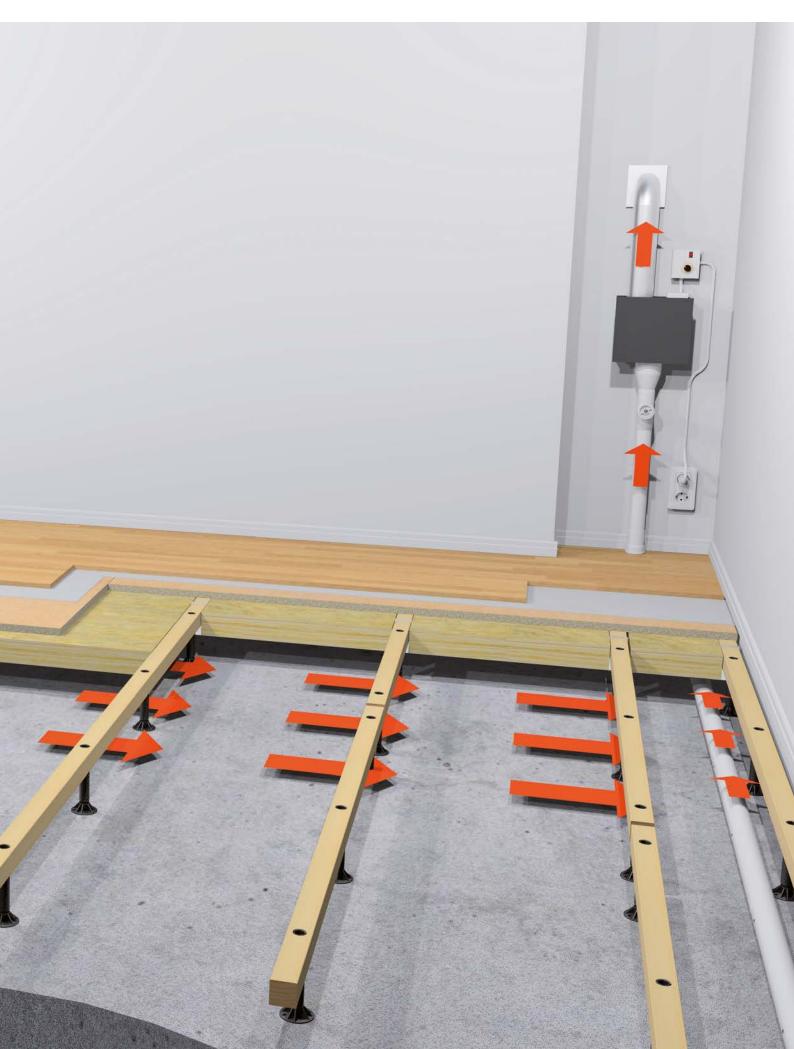
✓ Odours/emissions following mould damage or moisture-damaged plaster/glue

✓ Soil radon

This is what it looks like 📀



#### VENTILATED FLOORING



# SubFloor's effective **acoustic flooring**

The idea is simple. SubFloor acoustic flooring – adapted and built to your requirements and needs – reduces the impact sound level when someone walks on the floor in another room or on another floor in the building. Airborne sounds of calls, TV and radio are also dampened by floor constructions with acoustic feet.

Requirements and needs vary in multi-apartment buildings, offices, preschools, schools or in buildings with other activities, depending on how sound occurs in rooms and surfaces.

SubFloor's acoustic flooring has been developed together with leading experts and means that the screw is combined with a unique acoustic foot. The foot has dual-action dampening that reduces impact sound up to 28 dB without compromising stability. **Always contact Prästängen support for acoustic requirements.** 

However, to ensure compliance with the building's requirements, it is important to take into account

all conditions – the interplay of the floors in the design with the building's structure and layout. Striking the right balance involves meeting the requirements at each point. If a floor has too much give, it feels uncomfortably soft to walk on.

We collaborate with acoustic and material experts who ensure that we exceed the requirements on the sound environment by a good margin.



Visit subfloor.se to read in-depth documentation on testing, requirements and much more.







#### SOUND SCHOOL: This is what we mean when we say ...



IMPACT SOUND Sound that arises and is transmitted down into the floor to the surrounding surfaces.



REVERBERANT SOUND

Sound that arises above a floor and that bounces up in the same room as the sound arises.



AIRBORNE SOUND Sound that arises directly in the air in a room, from a loudspeaker or ordinary speech, for example.



#### FLANKING TRANSMISSION

Arises when sound is transmitted to another room in a way other than directly through the separating wall.

This is what it looks like 📀



#### ACOUSTIC FLOORING



You can always contact us at SubFloor for tips, advice and technical support.



The system provides effective impact sound reduction with a quick attachment method.



Partition walls are placed directly on the particle board.

## Outside is the new inside!

We also want our terraces, patios, balconies and verandas to be comfortable and stylish! Outdoor flooring from SubFloor is the perfect choice when you want a beautiful new raised floor outdoors.

SubFloor is used where some type of surface already exists – such as garden paving slabs, asphalt, concrete slabs, roofing board or roofing plate. Unevenness and any previous wear disappears. Whatever the conditions, SubFloor's outdoor flooring will feel completely new and stable.

The pressure-treated joists are already fully prepared upon delivery with pre-drilled holes and pre-threaded plastic sleeves that can withstand UV radiation. This contributes towards a quicker and easier installation.

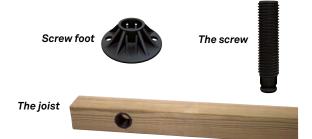
#### Areas of use:

- ✓ Terraces✓ Patios
- ✓ Balconies
- ✓ Conservatories
- ✓ Wooden decking✓ Open-air cafés

#### Surfaces:

- ✓ Cardboard ✓ Sheet metal ✓ Stone slabs
- ✓ Concrete
- ✓ Asphalt ✓ Stone/rock

#### The solution is made up of three components:



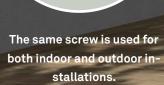






We are well acquainted with the varying conditions of different projects. Call us and we will help you!

This is what it looks like 📀



The system adjusts the level of uneven surfaces quickly and simply.

#### OUTDOOR FLOORING



## SubFloor contributes to active environmental work

## Minimising environmental impact has been an important starting point in both the development and manufacturing of SubFloor.

All of our suppliers operate in Sweden, most of them in our own local area. The goal is to reduce the number of long transports.

FSC stands for Forest Stewardship Council and is an independent, international membership organisation that promotes environmentally-friendly, socially responsible and economically viable use of the world's forests, through its FSC certification system.

Certified companies follow FSC's regulations (standards) on forestry and traceability. Those who follow the regulations may label their products with the FSC trademark. The FSC trademark helps consumers and companies choose wood products that originate from responsible forestry, that is to say, forestry that takes people and the environment into consideration.

The forest provides us with clean water, fresh air and contributes to curbing global warming. It provides food, medicine and important natural resources such as timber and paper. Responsible forestry ensures that forests are also able to provide these commodities in the long term. Those who participate in the FSC wish to voluntarily contribute to this:

## SubFloor's product range is **assessed by:**



#### RISE (Formerly SP)

The Subfloor floor regulation system is type-approved by RISE according to EKS and BKR.

#### Byggvarubedömningen

Sweden's largest property owners and developers have joined forces to produce a standard for the environmental assessment of construction goods.

#### SundaHus Environmental Data

A system for health and environmental assessment of products in the construction and property industry.

#### BASTA

- The system has been developed in collaboration between stakeholders in the construction sector and aims to phase out substances that have particularly hazardous properties from construction goods. The requirements are in line with the Swedish Chemicals Agency's regulations, Sweden's national environmental objectives and the European chemicals legislation REACH.

#### Patent

Prästängen Byggsystem owns the patent for and the registered design of SubFloor.

## Quieter and cleaner work environment

SubFloor is the new generation of functional flooring from Prästängen Byggsystem. In developing the products, an important factor has been a better work environment for craftsmen and fitters.

With few fixing points, Subfloor withstands heavy loads. This provides both a quieter and a cleaner work environment.

The option to attach the joisting in the surface using a specially adapted adhesive means that the work is also convenient to carry out over very large floor areas.



### List of articles

ART.NO	PRODUCT	PACKAGING	ART.NO	PRODUCT	PACKA
JOISTS			ROCKWO	DOL	
10450	Wooden joist 45x45x3600 mm	9 pcs/bundle = 32.4 rm	60450	Insulation 45x555x1200 mm	6.66 sq
10700	Wooden joist 45x70x3600 mm	9 pcs/bundle = 32.4 rm	60700	Insulation 70x555x1200 mm	4.00 sq
11300	Steel joist 45x30x3800 mm	9 pcs/bundle = 34.2 rm			
12450	Prtreated joist 45x45x3600 mm	6 pcs/bundle = 21.6 rm	ATTACH	MENTS	
12700	Prtreated joist 45x70x3600 mm	6 pcs/bundle = 21.6 rm	80000	Concrete plug 6/40 mm	100 pcs
			83000	Concrete/wooden screws 7.5/4	2 mm
SCREWS	6				
21050	Plastic screw 50 mm	100 pcs/30 pcs	TOOLS		
21100	Plastic screw 100 mm	100 pcs/30 pcs	90350	Screw tool 350	1 pc
21200	Plastic screw 200 mm	100 pcs/30 pcs	90601	Screw tool 601	1 pc
21300	Plastic screw 300 mm	100 pcs/30 pcs	95250	Mounting mandrel 250	1 pc
			95500	Mounting mandrel 500	1 pc
SCREW	FOOT/THREADED INSERT		91250	Mandrel 250	1 pc
30000	Screw foot	100 pcs/30 pcs	91500	Mandrel 500	1 pc
31000	Screw foot acoustic	100 pcs/30 pcs	92000	Bit 8 mm	1 pc
43030	Threaded insert steel joist	30 pcs	92200	Chuck 200 mm	1 pc
			92400	Chuck 400 mm	1 pc
INSULAT	TION BEARER		93100	Joist holder combi	1 pc
70200	Insulation bearer 20 mm	100 pcs/30 pcs	94200	Concrete drill 6x270 mm	
70350	Insulation bearer 35 mm	100 pcs/30 pcs		(working length 200 mm)	1 pc
70450	Insulation bearer 45 mm	100 pcs/30 pcs	94250	Concrete drill 6x320 mm	
70700	Insulation bearer 70 mm	100 pcs/30 pcs		(working length 250 mm)	1 pc
70950	Insulation bearer 95 mm	100 pcs/30 pcs	94440	Concrete drill 6x510 mm	
70120	Insulation bearer 120 mm	100 pcs/30 pcs		(working length 440 mm)	1 pc
ISOVER		SUBFLOOR VENTILATION			
61352	Insulation 35x555x1200 mm	6.66 sqm/pack	449056	Subfloor vent package 50 comp	ol. 1 pc
61452	Insulation 45x555x1200 mm	5.33 sqm/pack	449057	Subfloor vent package 50 comp	ol. 40 mm
61702	Insulation 70x555x1200 mm	3.33 sqm/pack	449078	Subfloor vent package 70 comp	ol. 1 pc
61952	Insulation 95x555x1200 mm	2.66 sqm/pack	449122	Exp. sealing fibre 5m roll	
			449135	Sealing tape Butyl/Alu 10m b=	50mm
PAROC			449129	Sealing tape Butyl/Alu 2m b=10	
60201	Insulation 20x555x1200 mm	6.66 sqm/pack	449130	Sealing tape Butyl/Alu 10m b=	100mm
60451	Insulation 45x555x1200 mm	6.66 sqm/pack		-	
60701	Insulation 70x555x1200 mm	4.0 sqm/pack			

See subfloor.se for current installation instructions, checklists, design tips, and more.

ART.NO	PRODUCT	PACKAG	iING				
ROCKWOOL							
60450	Insulation 45x555x1200 mm	6.66 sqr	6.66 sqm/pack				
60700	Insulation 70x555x1200 mm	4.00 sqn	4.00 sqm/pack				
ATTACHMENTS							
80000	Concrete plug 6/40 mm	100 pcs	100 pcs				
83000	Concrete/wooden screws 7.5/42	mm	100 pcs				
TOOLS							
90350	Screw tool 350	1 pc					
90601	Screw tool 601	1 pc					
95250	Mounting mandrel 250	1 pc					
95500	Mounting mandrel 500	1 pc					
91250	Mandrel 250	1 pc					
91500	Mandrel 500	1 pc					
92000	Bit 8 mm	1 pc					
92200	Chuck 200 mm	1 pc					
92400	Chuck 400 mm	1 pc					
93100	Joist holder combi	1 pc					
94200	Concrete drill 6x270 mm						
	(working length 200 mm)	1 pc					
94250	Concrete drill 6x320 mm						
	(working length 250 mm)	1 pc					
94440	Concrete drill 6x510 mm						
	(working length 440 mm)	1 pc					
SUBFLOOR VENTILATION							
449056 Subfloor vent package 50 compl. 1 pc							
449057	Subfloor vent package 50 compl. 40 mm 1 pc						
449078	Subfloor vent package 70 compl. 1 pc						
449122	Exp. sealing fibre 5m roll		1 pc				
449135	Sealing tape Butyl/Alu 10m b=5	0mm	2 pcs				

1 pc

1 pc

### For further information: Visit www.subfloor.se

All information about SubFloor can be found on our website, including:

- » Loads/EKS » Product sheet » Assembly/step-by-step
- » Type-approval » Quantity calculation system

## Welcome!

Contact us if you have questions about our products and services. All our employees have extensive experience and our knowledge is constantly updated to enable you to choose the solution that best suits your specific needs.

#### Call!

Switchboard +46 (0) 500 - 46 98 60

#### Write!

support@prastangen.se offert@prastangen.se order@prastangen.se ekonomi@prastangen.se Postal address: Prästängen Byggsystem Kylarvägen 7, 541 34 Skövde

#### Visit us for a demonstration!

The different types of functional flooring in the SubFloor concept are installed at our office in Skövde. clearly demonstrating the interplay between design and smart details.

### Bookmark www.prastangen.se in your browser!

More information about Prästängen and SubFloor can be found on our website www.prastangen.se.

#### Retailers

You can purchase our products via our network of retailers. Find your nearest retailer on our website www.prastangen.se.





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The result is an entire family of modern functional flooring. Discover the many advantages of raised flooring combined with sound and practical solutions for ventilation, installations, acoustics and outdoor environments.

Contact info for UK customers:



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