





to perfect decking

10 steps-



1. WHY SLOPE?

Decking is exposed to the weather and it is therefore crucial to minimise the risk of slipping. Through correct sloping, rainwater drains off the decking properly and the durability of the wood is increased. An inclination of 2% is sufficient in most cases.



2. WHY STAINLESS STEEL A2/A4?

Stainless steel is a must for wooden decking. Which type of stainless steel is best suited depends on the type of wood and application area, since each has specific corrosion resistance against aggressive chemicals and weathering. Chemicals can also include natural tannic acid. which

occurs in woods such as oak, yellow balau and Garapa. Wood containing tannins needs at least stainless steel A2. For applications in coastal areas, we recommend the A4 stainless steel version. Stainless steel is characterised by a high chrome content. This forms a protective layer on the surface of the material.



3. WHY VENTILATION FROM **BELOW?**

SPAX Air and Stick Pro reduce the formation of water stagnation between decking board and substructure. This structural improvement results in a significant increase in the durability of the wooden decking and thus upgrades its use class from 3.2 to the higher class 3.1.

4. AND WHAT ABOUT THE SUBSTRATE?

If at all possible, it is best to position decking so that it is not exposed to the prevailing elements or erected in a particularly damp or shady spot. Particular attention should be paid to the areas of contact between the wooden boards and the substrate



To make sure that the substructure does not come into direct contact with damp soil or stones, it is mounted on evenly spaced concrete slabs. To improve ventilation from below, at least one SPAX Pad should be inserted between the substructure and concrete slabs. Or, even better, use SPAX Lift adjustable feet for easier levelling of the decking surface.

5. HOW ARE BOARDS FASTENED?

The SPAX decking screw with T-STAR plus drive enables completely flush fastening. The result is an impeccable visual appearance and low splitting effect when sinking due to the cylindrical head.



wood covering is permanently and firmly attached to the substructure. Creaking and rattling are significantly reduced.



6. WHY PRE-DRILL?

Especially with hardwoods and tropical woods, pre-drilling is always a must. Pre-drilling and countersinking enable a clean, uniform finish.

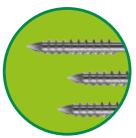
The **pre-drilling rule** also applies to Thermowood since its material behaves like hardwood. However, to achieve a perfect screw pattern, we also recommend pre-drilling soft woods.



9. WHAT ABOUT RAILING HEIGHT?

The most important consideration here is safety. Railing height specifications may vary locally. From a decking height of 60 cm, railing is a requirement for building-authority approval.

Railing height is always measured from the base of the decking. A railing height of **1.2 m** is usually sufficient.



7. WHICH SCREW LENGTH IS RIGHT?

In practice, the following screw lengths have proven to be most effective for decking:

Board thickness up to 21 mm = 60 mm screw length (wood on wood)

Board thickness 22-28 mm = 70 mm screw length (wood on wood)



10. WHERE CAN I FIND MORE INFORMATION?

Visit **spax.com** and access our Decking Portal for **a wide range of valuable tips and know-how.** The sections Wood science and Top tips for users offer easy-to-follow explanations and illustrations.

You can also find out about the most common types of wood

used in decking construction. Or why not gain inspiration from our reference projects? And to round off our comprehensive information service, we have also included some video tutorials on the key points of decking construction.



8. HOW MANY SCREWS DO YOU NEED?

The Decking Portal at **spax.com** offers a decking configurator to help you determine the required amount of screws, boards and the substructure dimensions in just a few clicks.

Everything is tailored to the dimensions of your planned decking area and the materials selected.

SPAX Decking screw







SPAX Decking screw





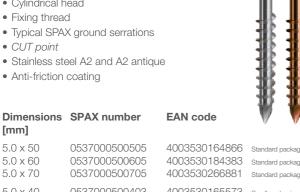


The screw for wooden decking

in stainless steel A2 and A2 antique.

THE SPAX ADVANTAGES

- T-STAR plus T25
- Cylindrical head



5.0 x 50	0537000500505	4003530164866	Standard packaging
5.0 x 60	0537000500605	4003530184383	Standard packaging
5.0 x 70	0537000500705	4003530266881	Standard packaging
5.0 x 40	0537000500403	4003530165573	Small packaging
5.0 x 50	0537000500503	4003530159589	Small packagingg
5.0 x 60	0537000500603	4003530159596	Small packaging
5.0 x 70	0537000500703	4003530159602	Small packaging
5.0 x 80	0537000500803	4003530159619	Small packaging
5.0 x 50	0537900500503	4003530181948	A2 antique small packa

0537900500603 Recommendation: Use SPAX Step Drill 4 height-adjustable drill.

SPAX boardwalk screw





4003530182150 A2 antique small packaging



The screw for decking, boardwalks and footbridges in stainless steel A4.

THE SPAX ADVANTAGES

- T-STAR plus T40
- Cylindrical head
- Fixing thread

 5.0×60

- Typical SPAX ground serrations
- CUT point
- Stainless steel A4
- Anti-friction coating

Dimensions	SPAX number	EAN code
[mm]		
8.0 x 120	0538000801205	4003530241024

Recommendation: Use SPAX Step Drill 6 height-adjustable drill.

The screw for wooden decking in stainless steel A4.

THE SPAX ADVANTAGES

- T-STAR plus T25
- Cylindrical head
- · Fixing thread
- Typical SPAX ground serrations
- CUT point
- Stainless steel A4
- · Anti-friction coating

Dimensions [mm]	SPAX number	EAN code
6.0 x 40	0538000600403	4003530247026
6.0 x 50	0538000600503	4003530246678
6.0 x 60	0538000600603	4003530246708
6.0 x 70	0538000600703	4003530247033
6.0 x 80	0538000600803	4003530247040
6.0 x 100	0538000601003	4003530247064

Recommendation: Use SPAX Step Drill 4 height-adjustable drill.

SPAX Bold







The screw for wooden decking with visible connection in stainless steel A2.

THE SPAX ADVANTAGES

- T-STAR plus T20
- Decorative head
- Fixing thread
- Typical SPAX ground serrations
- 4CUT
- Stainless steel A2
- Anti-friction coating

Dimensions [mm]	SPAX number	EAN code
5.0 x 56	0567000500563	4003530243240

Recommendation: Use SPAX Step Drill 4 height-adjustable drill.

SPAX Aluminium





The screw for wooden decking on aluminium in stainless steel A2.

THE SPAX ADVANTAGES

- T-STAR plus T25
- Cylindrical head
- Drill point
- Stainless steel A2
- Anti-friction coating



Dimensions [mm]	SPAX number	EAN code
5.0 x 44	0557000500443	4003530244001
5.0 x 48	0557000500483	4003530243998
5.0 x 51	0557000500513	4003530243981

Recommendation for use with wood on aluminium:

Use SPAX Air between cover board and aluminium profile. Use SPAX Step Drill 4 in combination with SPAX Drill 5.2. Use SPAX Drive STOP - adjustable depth gauge.

Warning: Only pre-drill the wood, not the aluminium!

Not suitable for:

Timbers with heavily interlocked grain (Brazilian teak, massaranduba, IPE boards > 21 x 120 mm etc.)

Technical information:

Length: 44 mm for max. 20 mm decking boards Length: 48 mm for max. 24 mm decking boards 3.0 mm-thick aluminium substructure for softwood 4.0 mm-thick aluminium substructure for hardwood

Recommendation for wood on wood:

Use SPAX Air between cover board and wooden substructure. Use SPAX Step Drill 4 height-adjustable drill. Use SPAX Drive STOP - adjustable depth gauge.

SPAX accessories for a clean screw pattern

MANAGE

SPAX Drill 2 Step

with 2 drill steps of 4.1 mm and 6.5 mm diameter

for SPAX decking screws

PU: 5 cans with one drill each SPAX number: 5009409873005

EAN: 4003530189388

SPAX Drill 5.2

Wood drill with 4.0 mm diameter shank and 5.2 mm diameter shank, spindle length 19mm T

Recommendation:

Use in combination with a SPAX Step Drill 4 in the application wooden deck on aluminium

For pre-drilling of the wooden deck only

PU: 5 cans with one drill each SPAX number: 5009409875005

EAN: 4003530248139

SPAX Step Drill 4

1 x wood drill 4 mm diameter. 1 x countersink 6.5 mm diameter. spindle length 60 mm, height-adjustable

for SPAX decking screws

PU: 1 set in can, individually packaged SPAX number: 5000009186049

EAN: 4003530241581

SPAX Step Drill 6

1 x wood drill 6 mm diameter. 1 x countersink 9.5 mm diameter. spindle length 100 mm, height-adjustable

for SPAX boardwalk screw

PU: 1 set in can, individually packaged SPAX number: 5000009186069

EAN: 4003530241598



The accessories for optimal force transmission.

SPAX-BITBOX T-STAR plus

Bitholder, Length: 60 mm and 6 SPAX Bits T-STAR plus T10-T40, Lenath: 25 mm

PU: 5 SPAX-BITBOX in transport box SPAX number: 4000007899019

EAN: 4003530271014





SPAX Bits

Clean bit positioning and better insertion, e.g. when working overhead. SPAX screwdriver inserts for manual screwdrivers, electric and cordless screwdrivers, drills and air screwdrivers impress through their precise fit, optimal hardness and torque transmission values and long service life.

SPAX Bits T-STAR plus T25, length 25 mm

Contents sorted by type:

10 cans with 5 pieces or 50 pieces per SPAX CUT CASE with 25 mm length



PU: 10 cans in SPAX CUT CASE = 50 Bits, 5 Bits per can SPAX number: 5000009192259

EAN: 4003530239663

SPAX Bits T-STAR plus T25, length 50 mm

Contents sorted by type:

10 cans with 5 pieces or 50 pieces per SPAX CUT CASE with 50 mm length

PU: 10 cans in SPAX CUT CASE = 50 Bits, 5 Bits per can SPAX number: 5000009193259

EAN: 4003530192883

The accessories for structural wood protection.

SPAX Pads

Protect the wooden substructure from soil moisture

Dimensions: 100 x 100 x 8 mm PU: 10 x 25 pieces in outer box SPAX number: 5000009186609

FAN: 4003530191688



SPAX Tape

The tape protects the wooden substructure from rain

Low-density polyethylene tape, self-adhesive, leaves no residue

when removed, UV resistant, shock-proof

Dimensions: 30 m x 87 mm on roll

Material thickness: 0.5 mm

PU: 5 rolls in outer box SPAX number: 5000009186419

FAN: 4003530248566



The height-adjustable installation system

SPAX Free Lift

Suitable for metal supports with a width of 91 mm Height continuously adjustable up to 30 mm

For substructure widths of 20-75 mm

For the simple adjustment of height differences during decking construction

The load-bearing capacity of SPAX Free Lift is 250 kg. The load-bearing capacity does not reduce when using the SPAX Lift Extension in combination with SPAX Free Lift.

PU: 15 bags (3 pieces each) in outer box SPAX number: 5009400009109

EAN: 4003530241529



SPAX Lift 3.5/5

For decking support widths of 20-75 mm Height continuously adjustable between 35-50 mm Load capacity of up to 800 kg

When using the SPAX Lift Extension, the load-bearing capacity of SPAX Lift 3.5/5 is reduced from 800 kg to 400 kg.

For approx. 6 m²

PU: 10 bags (3 pieces each) in outer box SPAX number: 4009435305009 EAN: 4003530242199





The height-adjustable installation system

SPAX Lift 5/9

For decking support widths of 20–75 mm
Height continuously adjustable between 50–80 mm

Load capacity of up to 800 kg

When using the SPAX Lift Extension, the load-bearing capacity of SPAX Lift 5/9 is reduced from 800 kg to 400 kg.

For approx. 5 m²

PU: 8 bags (3 pieces each) in outer box SPAX number: 5009459558509

EAN: 4003530242205



SPAX Extension 30 for SPAX Free Lift, Lift 3.5/5 and Lift 5/9

Easy-insert attachment, height 30 mm

Enables adjustment even to larger height differences (e.g. on a slope)

Maximum adjustment height:

8 pieces SPAX Extension with 30 mm height

PU: 18 bags (8 pieces each) in outer box

SPAX number: 4009400003009

EAN: 4003530268182



Article discontinued SPAX Extension 35 for SPAX Free Lift, Lift 3.5/5 and Lift 5/9

Easy-insert attachment, height 35 mm Enables adjustment even to larger height differences (e.g. on a slope)

Maximum adjustment height:

8 pieces SPAX Extension with 35 mm height

PU: 18 bags (8 pieces each) in outer box SPAX number: 5009400003500

EAN: 4003530189258



SPAX Extension 100 for SPAX Free Lift, Lift 3.5/5 and Lift 5/9

Easy-insert attachment, height 100 mm Enables adjustment even to larger

height differences (e.g. on a slope)

Maximum adjustment height: 8 pieces SPAX Extension with 100 mm height

PU: 100 pieces in big bag SPAX number:

4009400010000 EAN: 4003530247637



The SPAX Air spacers in 4.5 mm and 6.5 mm

SPAX Air

For decking board spacing of 4.5 mm and 6.5 mm and better decking ventilation.

Damp is the enemy of builders. Waterlogging makes wood the first casualty of rot.

With SPAX Air, there is now a simple way of separating boards from the substructure, which ensures better ventilation.

At the same time, SPAX Air ensures the correct and regular spacing between the boards and makes installation significantly easier.

40 pieces in handle box,

PU: 3 handle boxes

Distance 4.5 mm:

SPAX number 5009422544009

EAN: 4003530241338

100 pieces in handle box,

PU: 1 handle box Distance 4.5 mm:

SPAX number 5009422545009 EAN: 4003530241239



40 pieces in handle box,

PU: 3 handle boxes

Distance 6.5 mm:

SPAX number 5009422564009

FAN: 4003530241345

100 pieces in handle box,

PU: 1 handle box

Distance 6.5 mm:
SPAX number 5009422565009
EAN: 4003530241246

The accessories for optimal force transmission.

SPAX Drive STOP

with adjustable depth gauge 1/4" Bit frame holder with retaining ring

To change the Bit, remove the depth stop to enable easier access to the Bit. If the Bit is stuck in the Bit holder, use a pair of pliers to remove it.

1 SPAX BIT T-STAR plus T25

2 spare felt rings

PU: 1 piece in transparent box SPAX number: 5000009186919 EAN: 4003530189036

The accessories for aligning warped decking boards.

SPAX Kaiman pro

SPAX wrench for the simple alignment of warped cover boards SPAX positioning guide (liner)

4 SPAX Spacer for 4 joint widths: 4, 5, 6, 7 mm

PU: 1 set in case

SPAX number: 5009409872009

EAN: 4003530241093

pards other

SPAX Spacer

Joint gauges for 4 joint widths: 4, 5, 6, 7 mm Please check the individual specifications from timber suppliers

12 pieces in handle box

PU: 3 x 12 pieces in outer box SPAX number: 5000009186209

EAN: 4003530191640



The non-visible connection with SPAX Stick pro

SPAX Stick pro

The non-visible SPAX Stick pro ensures an immaculate appearance.

The high mechanical strength of the stick gives decking boards great stability and load-bearing capacity on both wood and aluminium substructures. Thanks to the large contact surface of the SPAX Stick *pro*, it's practically impossible for the substructure to become crushed.

The fastening screw in the substructure can be removed even after installation. With aluminium substructures: 3 mm thickness for softwood decking boards, 4 mm thickness for hardwood decking boards. The decking board must be at least 20 mm thick at the fixing point. The board width for tropical woods <130 mm, thickness of decking board max. 24 mm. Substructure spacing: max. 400 mm. The end of the decking board should overlap max. 40 mm at the end of the substructure.

Content:

SPAX cylindrical head screws stainless steel A2

black 4.5 x 28 mm

SPAX cylindrical head screws WIROX 4.5 x 22 mm 1 Bit SPAX T-STAR plus T20 length 50 mm

SPAX Stick 1 m²

PU: 3 handle boxes

SPAX number: 5009422556609

EAN: 4003530252433

SPAX Stick 3 m²

PU: 1 handle box

SPAX number: 5009422556619

EAN: 4003530252440



Not suitable for timbers with heavily interlocked grain (Brazilian teak, massaranduba, etc.) and wood plastic composite (WPC). For very hard imported timbers, we recommend pre-drilling with 3 mm dia, and substructure clearance of max. 40 cm.

Discover our new

SPAX Decking Portal and Configurator.

The Ideal assisstant to make your projekt a success!



build.your-own-deck.com

SPAX International GmbH & Co. KG

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04/2022 Subject to technical change.

