Woodland Lifestyle

PhoneStar Installation Guide

Woodland Lifestyle

Alternative Products

This guide includes products unavailable in New Zealand, please see the table below for approved alternatives.

Product	Alternative
Edge Insulation Strip	Woodland Isolation Strip
Wolf rolled adhesive, Wolf system adhesive, or Wolf 1-component parquet adhesive.	Ardex AF180
Self-Adhesive Decoupling Strip	Foam Tape
Wolf Joint Filler	Acoustic Sealant
Wolf Fleece	Woodland Decoupling Fleece
Wolf Decoupling Board	Woodland Decoupling Plate

3 Wilson Road,
Upper Moutere 7175

09 308 7948
hello@woodlandlifestyle.co.nz

woodlandlifestyle.co.nz

LOAD CAPACITY

The load capacity and strength of the substrate must be checked with regard to the static requirements for the planned floor structure, the live loads and the strength.
Particular attention must be paid to this in the case of wooden beam ceilings when renovating/rebuilding.

LOAD CAPACITY

The floor construction must be matched to the planned use in order to determine the correct choice of insulating materials and levelling layers. The possible point distributed load must be observed for the insulating materials.

HUMIDITY

The substrate must be dry in all places.
In the case of mineral substrates, a humidity measurement (CM measurement) must be carried out; the values listed must not be exceeded.

Maximum floor humidity	
Concrete / cement screed	2.0 %
Concrete / cement screed Incl. underfloor heating	1.5 %
Anhydrite / calcium sulphate screed	0.5 %
Anhydrite / calcium sulphate screed Incl. underfloor heating	0.3 %

JOINTS

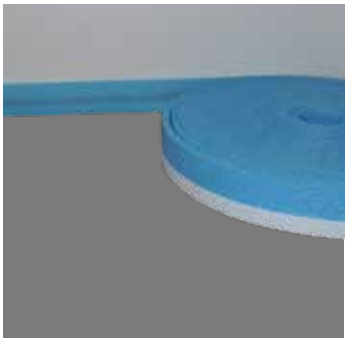
Joints are necessary in order to absorb expansion of the floor and to avoid acoustic bridges. The purpose of an expansion joint is to interrupt components and to prevent stress cracks. Joints are to be specified by the building planner or structural engineer. In the case of heated screeds, the joint plan must be coordinated with the heating installation company.

WALL CONNECTION / EDGE INSULATION STRIPS

An edge insulation strip is to be attached with a sufficient height (above the final covering) to all rising building parts. The self-adhesive edge insulation strip must be butt-jointed in the corner and masked in the case of wet screeds.

	Edge insulation strip: Art. no.: 4300

ATTENTION!
The protruding part of the edge insulation strip must only be removed after installation of the final top covering.



Butt-joint the edge insulation strip in the corners

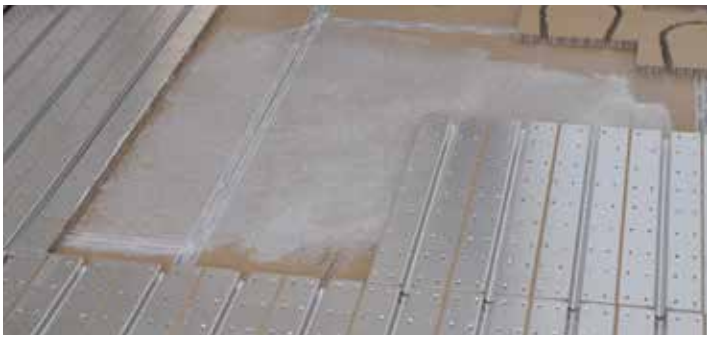
BONDING

When bonding PhoneStar / PowerFloor systems to the substrate, the latter must be generally suitable for permanent bonding.
If a substrate is unsuitable for bonding, it will be necessary to install an additional load-bearing layer between the substrate and PhoneStar / PowerFloor that enables bonding (e.g. a layer of PhoneStar, wood-based panel, dry screed, etc.).

Design basis for the drying time of the adhesive: + 23 °C and 50 % rel. humidity.

NOTE: the floating or bonded installation of PhoneStar / PowerFloor systems depends on the type of final covering.

ATTENTION: BUILDING SITE TRAFFIC!
Building site traffic is not permitted on installed PhoneStar boards / Power-Floor elements and the decoupling layer without suitable protection or covering measures (e.g. wood-based panels).



GENERAL NOTE:
The products described in these installation instructions relate to the current price list.

MEASURES ON THE SUBSTRATE TO PREVENT RISING MOISTURE

If additional measures are necessary to prevent rising moisture in the floor structure, the following points must be observed / prepared depending on the type of measure (e.g. grinding or levelling).

VAPOUR BARRIER

If necessary, a vapour barrier must be applied to the raw floor. This prevents possible vapour diffusion from storeys located below or prevents the escape of moisture from the raw floor (e.g. PE foil, laid overlapping and bonded). This must be determined on-site by the building planner.

In the case of mineral substrates, a damp proofing membrane (DPM) must generally be installed under PhoneStar / PowerFloor systems.

A vapour barrier may make an additional covering layer necessary if the elements have to be installed by bonding. (e.g. suitable wood-based panels, dry screed or PhoneStar boards with Power-Floor).

MOISTURE BARRIER

Mineral floors or foundation slabs under which there is no basement, or components adjoining the soil must be protected in the floor and wall areas against the penetration of moisture. The execution guidelines of the appropriate DIN standards must be followed when sealing buildings against soil moisture. The type of moisture barrier must be determined by the building planner.

In the case of a dry floor structure, a moisture barrier generally necessitates additional compensation in order to establish the required evenness for the installation of PhoneStar / PowerFloor systems. For all mineral substrates, a damp proofing membrane to prevent rising damp from the substrate must be installed in accordance with the state of the art. In the individual case, suitable measures must be taken and the boundary conditions checked by an expert.

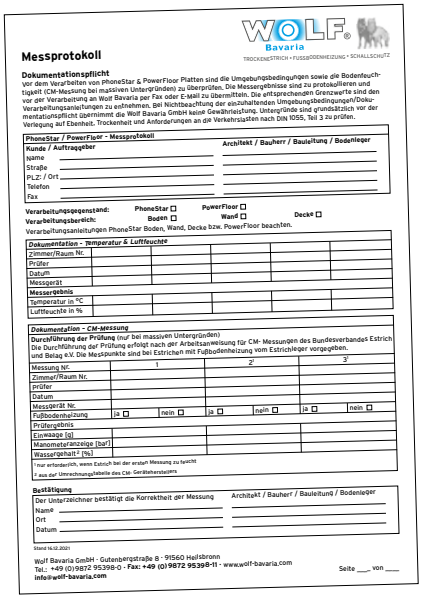
Floors subject to moisture loads:
In areas with high moisture loads (e.g. bathrooms), full-surface sealing will be necessary in accordance with DIN 18534 "Waterproofing for indoor applications".

DOCUMENTATION OBLIGATION

Prior to the processing of PhoneStar / PowerFloor it is necessary to check the ambient conditions (room temperature and air humidity) and, in the case of installation on mineral substrates, the moisture level in the floor. The measurement results are to be documented in the appropriate record and sent by mail or fax to Wolf Bavaria.

Email: info@wolf-bavaria.com
Fax: +49 (0) 9872-95398-11
Record: www.wolf-bavaria.com/

Wolf Bavaria GmbH will not give any guarantee if the specified limit values and the documentation obligation are not complied with.


Messprotokoll

Dokumentationspflicht

PhoneStar / PowerFloor - Messprotokoll

Kunde / Auftraggeber

Architekt / Bauherr / Bauleitung / Bodenleger

Name
Straße
PLZ / Ort
Telefon
Fax

Verarbeitungsgegenstand: PhoneStar ☐ PowerFloor ☐
Verarbeitungsbereich: Boden ☐ Wand ☐ Decke ☐

Verarbeitungsanleitungen PhoneStar Boden, Wand, Decke bzw. PowerFloor beachten.

Dokumentation - Temperatur & Luftfeuchte

Zimmer/Raum Nr.
Prüfer
Datum
Messgerät
Messergebnis
Temperatur in °C
Luftfeuchte in %

Dokumentation - CM-Messung

Durchführung der Prüfung (nur bei massiven Untergründen)

Messung Nr.
Zimmer/Raum Nr.
Prüfer
Datum
Messgerät Nr.
Fußbodenheizung
Prüfergebnis
Einwaage [g]
Manometeranzeige [bar]
Wassergehalt² [%]

Bestätigung

Der Unterzeichner bestätigt die Korrektheit der Messung

Name
Ort
Datum

Wolf Bavaria GmbH · Gutenbergstraße 8 · 91560 Heilsbronn
Tel.: +49 (0)9872 95398-0 · Fax: +49 (0)9872 95398-11 · www.wolf-bavaria.com
info@wolf-bavaria.com

Seite ___ von ___

Measurement record in the download
www.wolf-bavaria.com

INSULATING LAYERS

The properties of the insulation, the filling and the load-distribution layer in terms of building physics must be matched to the complete structure.
Full-surface contact of the insulation to the substrate must be ensured.

COMPRESSIVE STRENGTH OF INSULATING LAYERS IN FLOOR STRUCTURES

Floor structures may contain additional insulating layers underneath PhoneStar / PowerFloor systems, e.g. EPS, XPS, soft wood fibre. Depending on the thickness and type of the final covering, these layers must have a corresponding compressive strength (in kPa) and be in contact over the entire surface.

Minimum compressive strength with EPS, XPS and soft wood fibre		
Thickness in mm	**Compressive strength in kPa**	**Final covering**
< 20	100	All final coverings (except tile)
< 20	150	Tile
20 - 60	150	All final coverings (except tile)
20 - 60	200	Tile

Wolf MiWo 20-2
Art. no.: 3076

Wolf MiWo 12-2
Art. no.: 3075

ATTENTION! When using mineral insulating materials, these must have a corresponding approval for dry screed (e.g. Wolf MiWo). All other insulating materials require approval by Wolf Bavaria.

Technical data sheets in the download centre:
www.wolf-bavaria.com

Levelling fillings

REQUIREMENTS FOR THE FILLING:

Following installation, the filling must form a level, pressure-resistant and load-bearing surface.

It may be necessary to install an appropriate covering layer on top of fillings in order to install the Wolf floor systems on top. **This requires approval by Wolf Bavaria.**
Non-cementitious bonded fillings must first be approved by Wolf Bavaria before use.

In the case of loose fillings, the settling behaviour and possible re-compaction according to the manufacturer's specifications must be taken into account.

Further layers above the filling must be protected against possible moisture emanating from the filling.

TYPES OF FILLING

1. **Bonded fillings not requiring approval:**
   - Mineral-bonded fillings, e.g. with Sopro Rapidur. Installation recommendation according to the manufacturer on:
     www.wolf-bavaria.com
   - Coated bonded fillings, e.g. StoPrefa Coll
   - Elastically bonded fillings, e.g. Köhnke K102
   - Cemwood CW 1000 or CW 2000 – also regarded by Wolf Bavaria as a bonded filling

NOTE:
Cementitious bonded EPS fillings require approval by Wolf Bavaria

2. **Loose contained fillings not requiring approval:**
   - Loose gravel – contained at distances of 70 cm between wooden battens – without load distribution layer
   - Filling material contained in honeycomb – without load distribution layer

3. **Loose fillings with load distribution layer and all others:**
   - require approval by Wolf Bavaria

NOTE:
Observe the minimum and maximum height of the filling! Observe drying times!

Processing times

When processing Wolf Bavaria systems, the following processing times can be taken as the calculation basis. The specified times are guiding values that may vary depending on routine, room geometry and installation conditions.

PhoneStar	PhoneStar sound insulating boards		
Installation variants	**Floating** on wooden or mineral substrate	**Bonded** to substrate	
		Wood	Mineral
single-layer: min / m²	1 – 4	2 - 5 Wolf rolled adhesive / Wolf system adhesive	3 - 8 parquet adhesive
two-layer: min / m²	2 – 8	4 – 10 Wolf rolled adhesive / Wolf system adhesive	5 – 12 parquet adhesive / PhoneStar to one another: Wolf rolled adhesive, Wolf system adhesive

The specified processing times are related to **one** person and include: installation of the edge insulation strip and the PhoneStar boards incl. board processing

PowerFloor		PowerFloor radiant heating		
Installation variants		**Floating** on wooden or mineral substrate	**Bonded** to substrate	
			Wood	Mineral
min / m²	without pipe	10 – 20	12 – 22 Wolf rolled adhesive / Wolf system adhesive	12 – 24 parquet adhesive / PhoneStar with PowerFloor: Wolf rolled adhesive, Wolf system adhesive
	Pipe installation	2 – 4 (with flushing device)		

The specified processing times are related to **one** person and include: Installation of the edge insulation strip and the PowerFloor elements incl. cutting to size.

PhoneStrip	PhoneStrip decoupling strips
Installation variants	**Screwed, nailed or bonded** on wooden or mineral substrate
min / m.	0.5 - 1

The specified processing times are related to **one** person and include: Installation and fixing of the PhoneStrip incl. cutting to size.

Processing of the Wolf accessory products

Wolf accessories	Wolf Separating web	Wolf decoupling fleece Wolf decoupling board	Wolf Hugo N & F
Installation variants	Floating	**Full-surface bonded** with Wolf parquet adhesive	**Floating installation** Installation with tongue and groove with Wolf Hugo adhesive
min / m²	0.5	2 - 5	3 - 6

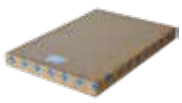
The specified processing times are related to **one** person and include: installation incl. cutting to size.

Not taken into account:

installation of moisture or vapour barriers / installation of additional insulation / filling.
Installation of reinforcement layers and final coverings / transport of materials into the installation room / grouting, grinding or priming / manifold installation / test heating and adjustment of the heating circuits.

NOTE: allow for approx. 3 % waste when calculating the material requirement.
Approx. 5% waste in the case of Wolf Hugo N & F and Wolf PowerFloor radiant heating.

PhoneStar Sound insulating boards

PhoneStar Plus Tri	PhoneStar Tri	PhoneStar Twin	PhoneStar ST Tri	PhoneStar 25
1250 x 625 mm / art. no.: 1015	1200 x 800 mm / art. no.: 1010 1250 x 625 mm / art. no.: 1008	1200 x 800 mm / art. no.: 1009 1250 x 625 mm / art. no.: 1012	1200 x 800 mm / art. no.: 1017 1250 x 625 mm / art. no.: 1019	800 x 600 / art. no.: 1011
				

PhoneStar and PhoneStar 25 – Cutting to size and bonding

1

MEASURING AND MARKING THE CUTTING LINE

ATTENTION!
Process on a stable work surface. Consider work safety!

2

CUTTING THE BOARD TO SIZE

Hand-held circular saw with widia blade & extraction, jigsaw with wood/ metal saw blade, cutter.

3

MASK BOARDS

Mask the cut edge only with Wolf tape.
Allow the tape to overlap by at least 2 cm at the corners.

4

FOLD OVER THE CORNERS AND LONGITUDINAL SIDE

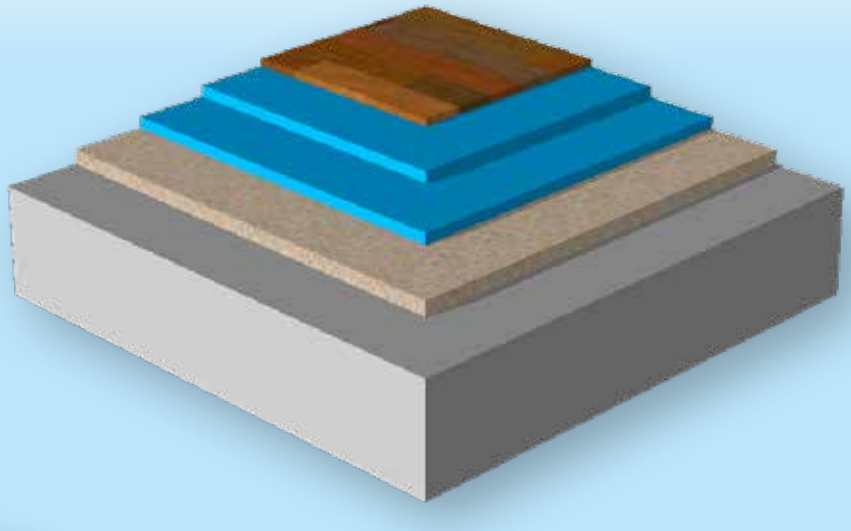
Fold the overlap at the corners downward and press the lateral overlap against the board surface.

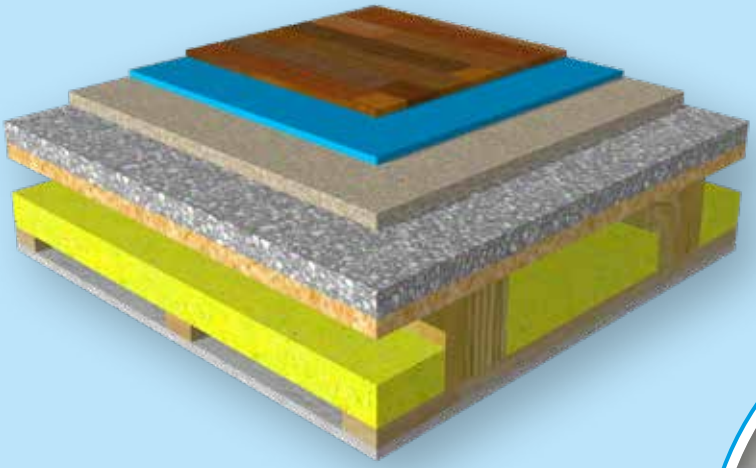
5

DONE

Product videos
www.wolf-bavaria.com:

NOTE: PhoneStar boards and Wolf tape are a matched system.
Use of a different adhesive tape will invalidate the architectonic properties, e.g. building material class E (EN 13501), leading to the exclusion of liability.





PhoneStar

Sound insulating boards

Processing on the floor

Processing of PhoneStar on the floor

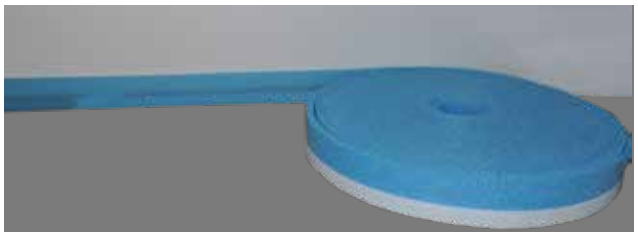
CHECKING THE SUBSTRATE

Before commencing with the PhoneStar installation, the evenness, load capacity and moisture content of the substrate must be checked. The corresponding requirements are to be taken from the chapter ***General processing instructions***.

ATTACHING THE EDGE INSULATION STRIPS

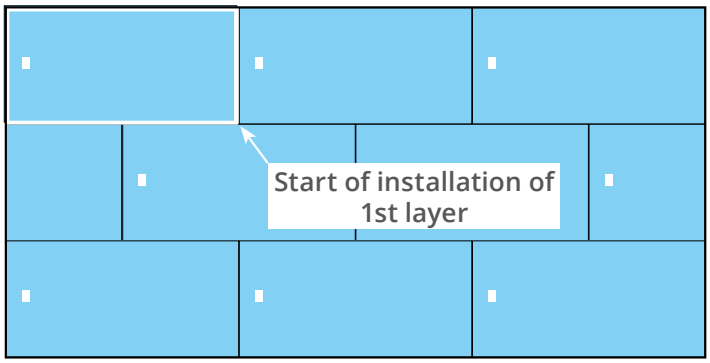
Butt the corners; further details in the chapter ***General processing instructions***.

	Edge insulation strip: Art. no.: 4300



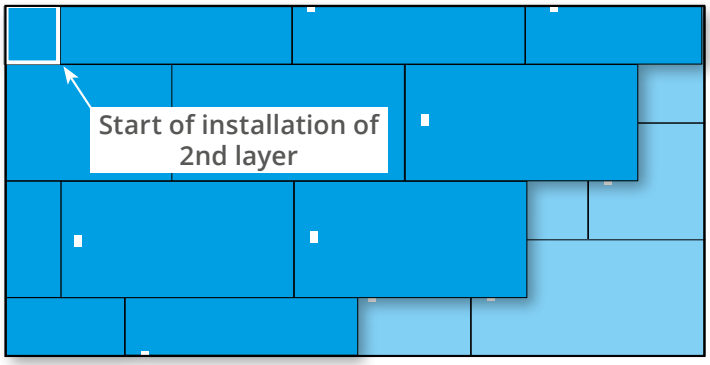
INSTALLING PHONESTAR

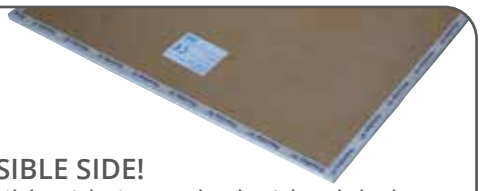
- Install the PhoneStar boards in a stretcher bond.
- Maintain an offset from row to row of at least 10 cm. Avoid cross joints.
- Install the PhoneStar boards with the visible side facing upwards (label must be visible).
- Make sure when installing that the PhoneStar boards contact the substrate over their entire surface.



INSTALLING MULTIPLE LAYERS OF PHONESTAR

When installing multiple layers of PhoneStar boards, ensure that the butt joints of the first layer are fully covered.
Begin the first row of the second PhoneStar layer with half a PhoneStar board or with a board rotated by 90° in relation to the first layer. Then complete the row with PhoneStar boards halved in length or continue to install the boards rotated by 90° accordingly. Continue with the further installation with whole PhoneStar boards.





ATTENTION: VISIBLE SIDE!
The upper or visible side is marked with a label or imprint and must be visible after the installation.

INSTALLATION OF FINAL COVERING
Depending on the type of final covering, install it floating or bonded to PhoneStar (see General installation instructions). Instructions for installing the different final coverings can be found in the chapter Final coverings.

Bonding PhoneStar boards to a wooden substrate or to one another

Depending on the floor structure and the type of installation of the final covering, it may be necessary to bond the PhoneStar boards.

- In the case of installation of a *floating final covering*, the PhoneStar board can be installed floating or bonded.
- In the case of a *bonded installation* of the final covering, the PhoneStar board must also be bonded.

INSTALLATION WITH WOLF ROLLED ADHESIVE

Apply rolled adhesive over the entire surface of the board using the Wolf adhesive roller.

After applying the adhesive (min. 200 g/m²), press the PhoneStar boards firmly onto the substrate.

The installation can start in the "wet phase" or the "semi-wet phase".

The area can be walked on immediately and reaches final strength after about 72 hours.

Processing or substrate temperature of Wolf rolled adhesive: not below 13 °C.

Stir well before use!

Wolf rolled adhesive Art. no.: 4085	Wolf adhesive roller Art. no. 4092	Telescopic handle Art. no. 4093
		

After bonding with Wolf rolled adhesive, you can continue with the installation of the additional layers after about 60 min. (design principle +23 °C and 50% rel. humidity).

BONDING WITH WOLF SYSTEM ADHESIVE

Apply Wolf system adhesive as a bead.

After a drying time of approx. 2 hours (depending on the ambient temperature) you can continue to work on the PhoneStar layer.

	Wolf system adhesive: Art. no.: 4070

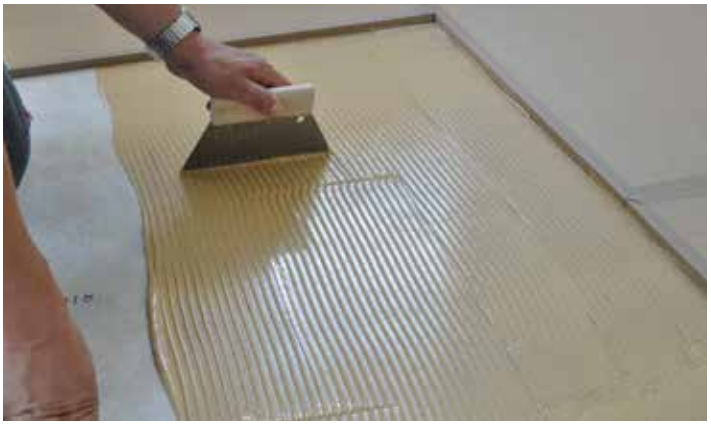
Bonding PhoneStar to a mineral substrate

PhoneStar boards are bonded to mineral substrates with Wolf 1-component parquet adhesive. Further parquet adhesives can be found on our homepage: www.wolf-bavaria.com.

The substrate must be clean, dry and dust-free for bonding.

The parquet adhesive is applied to the entire surface of the substrate. Apply parquet adhesive only in the area currently being processed.

- Use a notched trowel with B11 toothing



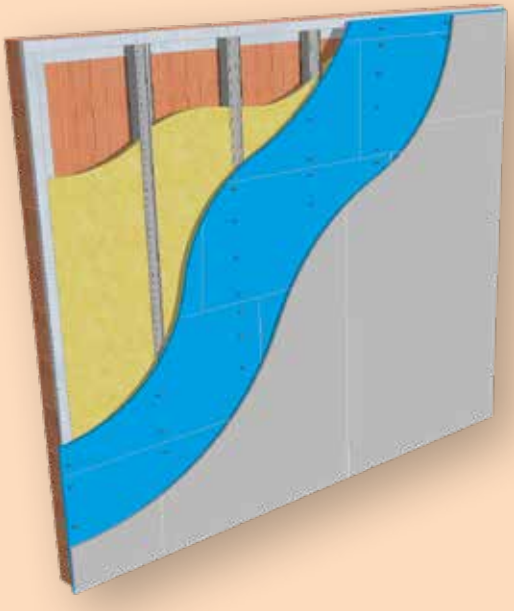
Wolf 1-component parquet adhesive: Art. no.: 4080	Wolf notched trowel: B11 toothing Art. no.: 4090
	

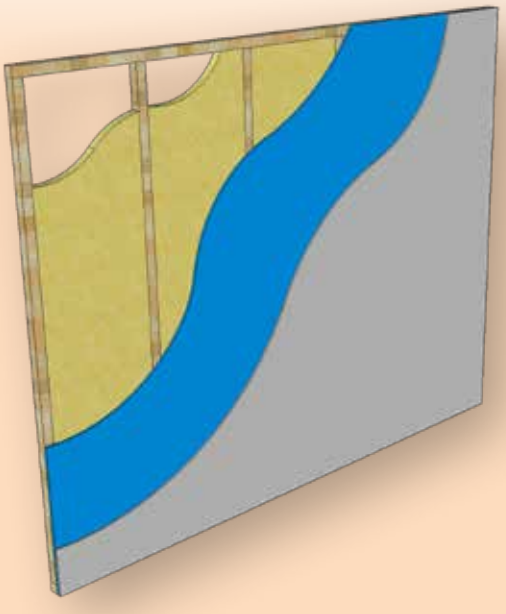
Lay the PhoneStar board in the adhesive bed with a slight pushing movement and press it down over the entire surface.

After a drying time of about 12 hours at an ambient or substrate temperature of 13 °C, you can continue work on the PhoneStar layer.

NOTE:
The bonding of PhoneStar to other substrates requires approval by Wolf Bavaria.

Technical data sheets in the download centre:
www.wolf-bavaria.com





PhoneStar

Sound insulating boards

Processing on the wall

General installation instructions

GENERAL PROCESSING GUIDELINES

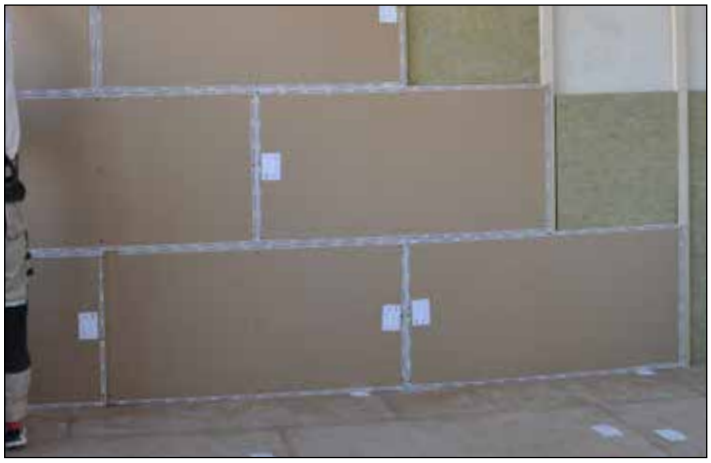
The general processing guidelines must be followed before and during the processing of the PhoneStar system. Observe the chapter: *General guidelines.*

BOUNDARY PARAMETERS RELATING TO BUILDING PHYSICS

When using PhoneStar products and/or Wolf Bavaria systems on outside walls in indoor areas, the boundary parameters relating to building physics (condensation formation, airtightness, etc.) must be assessed on site. If necessary, the condensation formation and damage-free drying must be proven.

BOARD ALIGNMENT

PhoneStar boards are installed on all walls, with or without substructure, horizontal, with the long side parallel to the floor.



TIP:
Align the upper edge of the first layer to the horizontal using a laser or spirit level.
Re-cut the lower edge if necessary.

ATTENTION: VISIBLE SIDE!
The upper or visible side is marked with a label or imprint and must be visible after the installation.

INSTALL PHONESTAR

Install the PhoneStar boards in a stretcher bond, offset by at least 10 cm, end-to-end from row to row. Avoid cross joints in the PhoneStar layer.

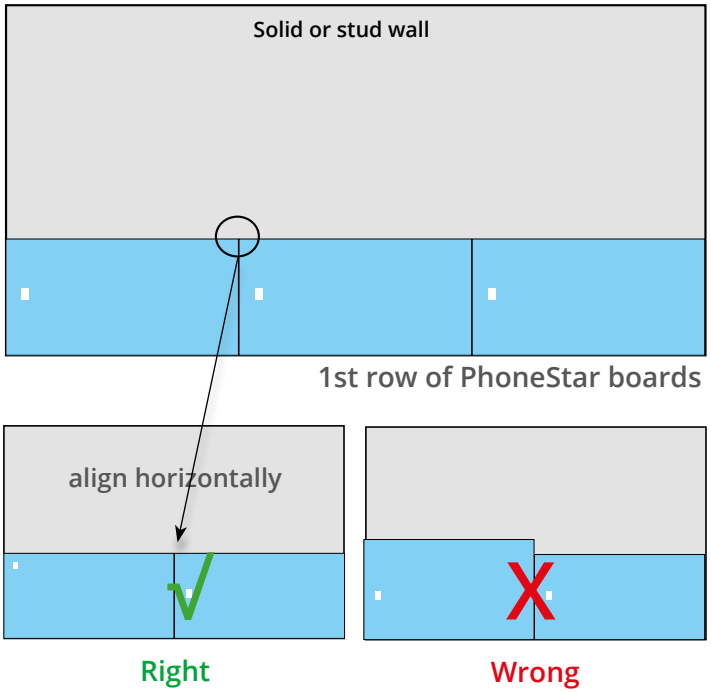
- Begin with the installation of the 1st row in the bottom left or right corner.
- The visible side of the board (side with label) faces the room when installed.

DECOUPLING

Prior to the actual installation, apply a self-adhesive decoupling strip along the base of the wall (e.g. self-adhesive cellular rubber or partition wall tapes).

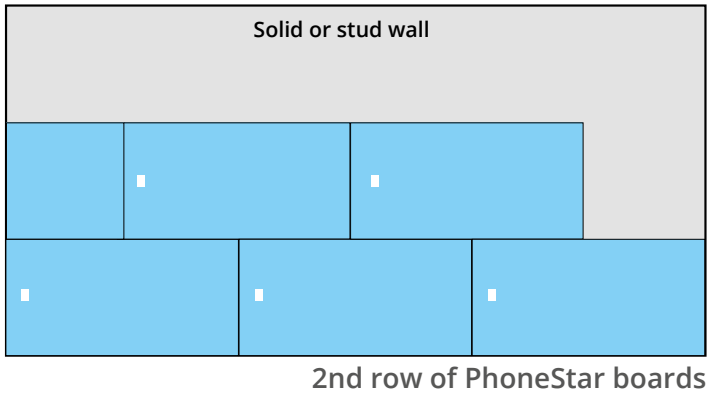
The decoupling strip serves to isolate the PhoneStar layer and the subsequent cladding.

Maintain an edge gap of approx. 4 mm to the adjoining wall and ceiling components.



INSTALL 2ND PHONESTAR ROW

Install all subsequent rows of PhoneStar boards with an offset of half a board length (or at least 10 cm) to the previous row in order to avoid cross joints in the PhoneStar layer.

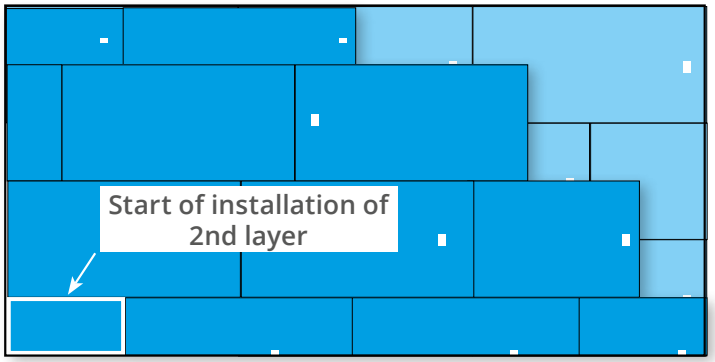


INSTALLING MULTIPLE LAYERS OF PHONESTAR

When installing multiple layers of PhoneStar boards, ensure that the butt joints of the first layer are fully covered.

In order to implement this optimally, the second layer of PhoneStar is started with a board that is halved both in length and width at the same installation starting point as the first layer. Subsequently, the first row of the second layer started in this way is completed with PhoneStar boards that are halved in width. After that, the installation can be resumed with whole PhoneStar boards.

In order to improve the sound insulating effect, we recommend that you fill the gaps at the wall and ceiling connections with Wolf joint filler.



	Wolf joint filler Art. no.: 4095

NOTE ON CLADDING:
PhoneStar sound insulating boards generally require a final cladding (e.g. plasterboard). Direct plastering, painting, wallpapering, etc. on PhoneStar is not possible.

Installations

As a matter of principle, there should be as few penetrations or installation elements as possible in acoustically effective components.

DRILLING THROUGH PHONESTAR

The hole in the board/wall must be sealed with Wolf joint filler to prevent the sand trickling out.

NOTE: Due to the horizontal installation (long side parallel to the floor) only a minimal amount of sand escapes when making holes for wall sockets or cable feed-throughs.

Suitable sound-insulating wall sockets from various manufacturers can be obtained from specialist electrical dealers. For example:

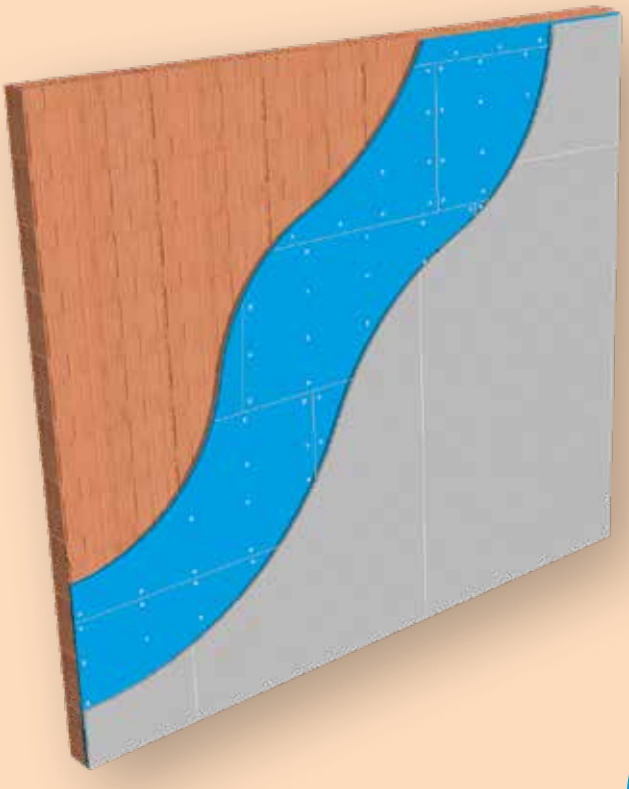
KAISER

Sound-insulating wall sockets

Electrical installation with sound-insulating wall sockets for use in walls with stricter requirements for sound insulation. The solid socket body with additional sound-insulating sheathing absorbs and reflects the sound, so that interference in neighbouring rooms is minimised and the sound insulation is maintained.

1. Junction box with lid
   Kaiser art. no. 9069-01 + 1184-69
2. Junction box, halogen-free
   Kaiser art. no.: 9069-77
3. Electronic wall socket, also usable as a double socket
   Kaiser art. no.: 9069-94
4. Electronic wall socket, also usable as a double socket / Halogen-free version
   Kaiser art. no.: 9069-74

Further information at:
www.kaiser-elektro.de



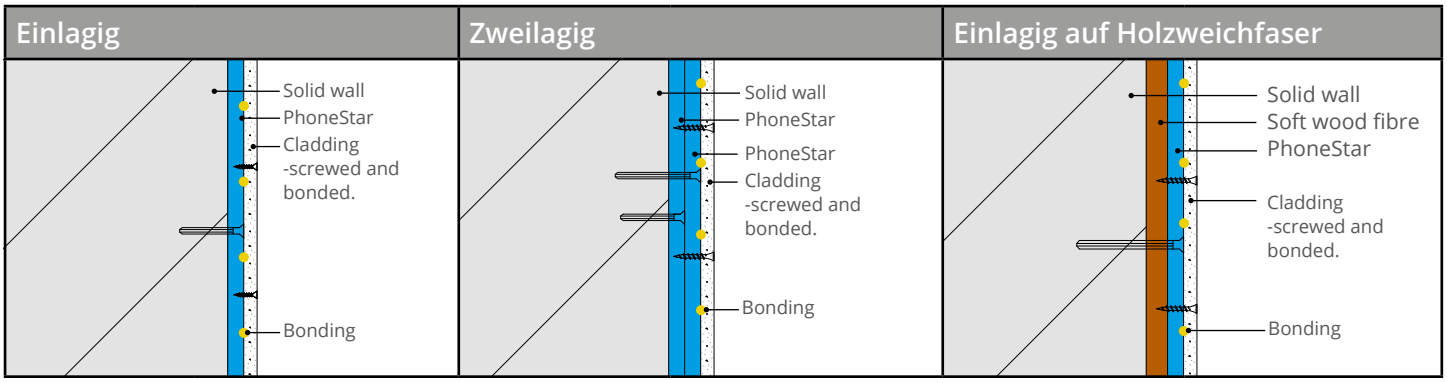
PhoneStar

Sound insulating boards

Mounting on masonry / concrete

Direct mounting on masonry

VARIANT: DIRECT MOUNTING OF THE PHONESTAR TRI 15 MM OR PHONESTAR PLUS TRI 15 MM



WALL PROPERTIES FOR DIRECT MOUNTING

Prerequisite is an even wall surface that ensures full-surface contact of the PhoneStar board.
The Wolf system dowels must be selected in such a way that an anchoring depth of at least 40 mm in the component is guaranteed.
In the case of additional layers such as soft wood fibre between the component and PhoneStar, the Wolf system dowel should be correspondingly longer.

NOTE:
Direct mounting on the wall with PhoneStar boards other than the PhoneStar Tri and the PhoneStar Plus Tri is not possible.

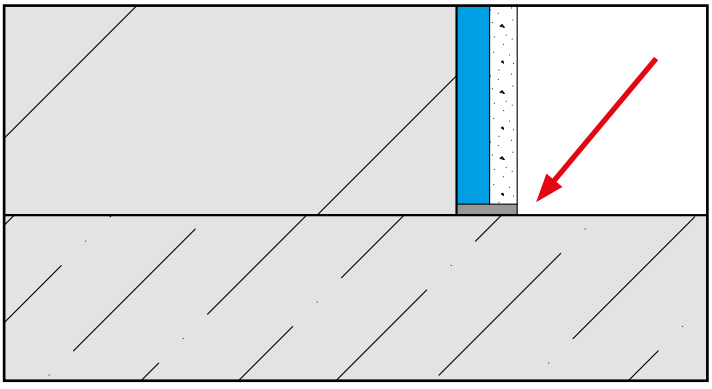
Procedure to mount on masonry and concrete

DECOUPLING

Prior to the actual installation, apply a self-adhesive decoupling strip along the base of the wall (e.g. self-adhesive cellular rubber or partition wall tapes).

The decoupling strip serves to isolate the PhoneStar layer and the subsequent cladding.

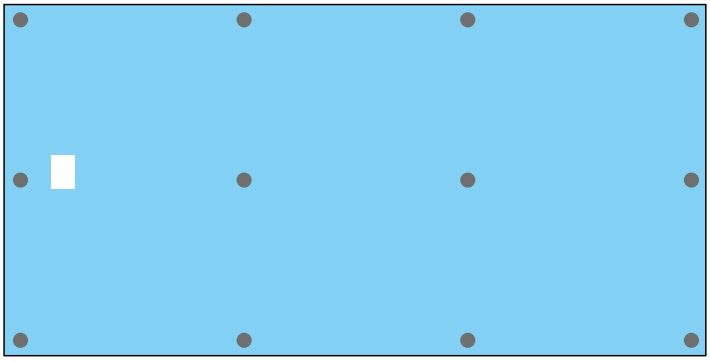
Maintain an edge gap of approx. 4 mm to the adjoining wall and ceiling components.



FIXING PHONESTAR

In the case of single-layer installation of the PhoneStar board:

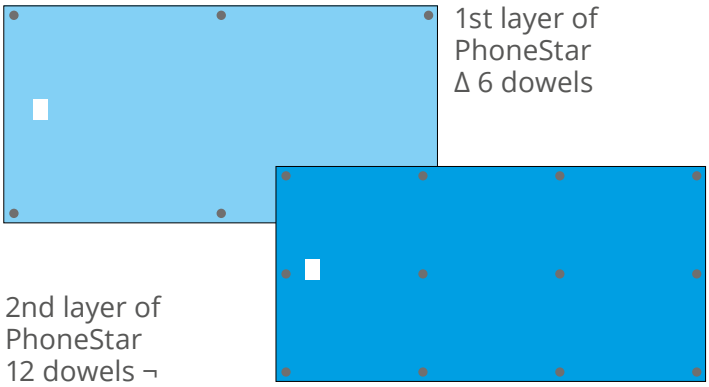
- 12 Wolf system dowels are used per PhoneStar board in a grid of 3 x 4 dowels.
  Place the Wolf system dowels on the outside 4 - 8 cm from the edge of the board.



12 Wolf system dowel / board

In the case of two-layer installation of the PhoneStar board:

- Fix the first layer with 6 dowels per board
- After that, fix the 2nd layer with 12 system dowels per board; select the length accordingly.



1st layer of PhoneStar
Δ 6 dowels

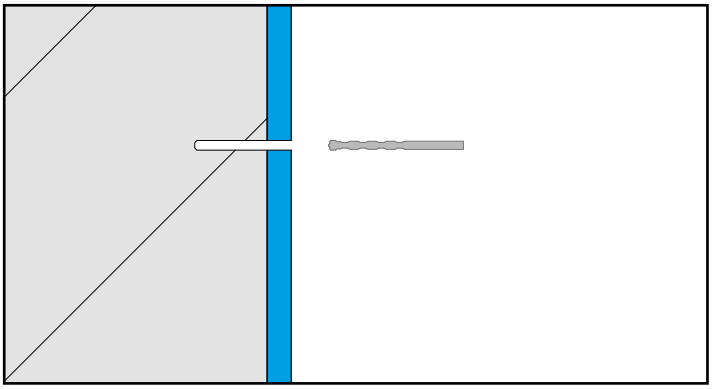
2nd layer of PhoneStar
12 dowels ¬

ATTENTION! Work without a percussion drill in the case of vertical-cored bricks!
Use Wolf system dowels only in walls. Mounting on the ceiling is not possible!

DRILLING DOWEL HOLES

Drill a hole in the brick/concrete wall through the PhoneStar board contacting the wall over its full surface.

Drill diameter:	
Brick	6 mm Ø
Aerated concrete	5 mm Ø
Concrete	6 mm Ø

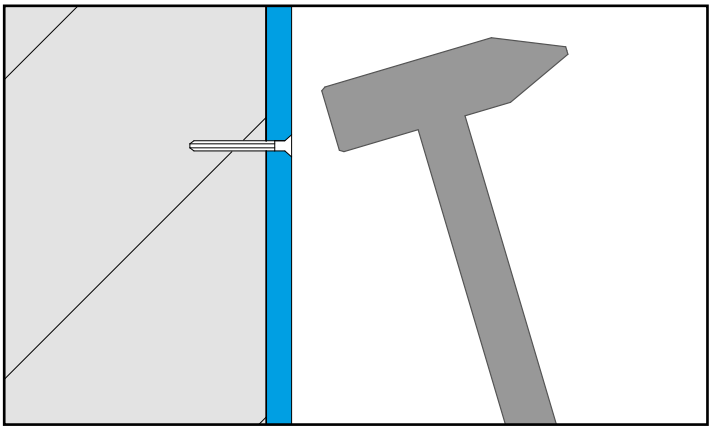


SET WOLF SOUND-INSULATING DOWEL

Using a hammer, tap the Wolf sound-insulating dowel into the hole drilled beforehand.

Lightly tap in the sound-insulating dowel so that it is flush with the board surface.

Wolf sound-insulating dowel	Length / art. no.
	60 mm / 4200 (250 pcs)
	60 mm / 4201 (50 pcs)
	100 mm / 4207 (100 pcs)
	120 mm / 4205 (120 pcs)



CLADDING PHONESTAR

As standard, the PhoneStar layer is clad with a layer of suitable plasterboard. The cladding must have a minimum thickness of 12.5 mm.

BONDING AND SCREWING THE CLADDING

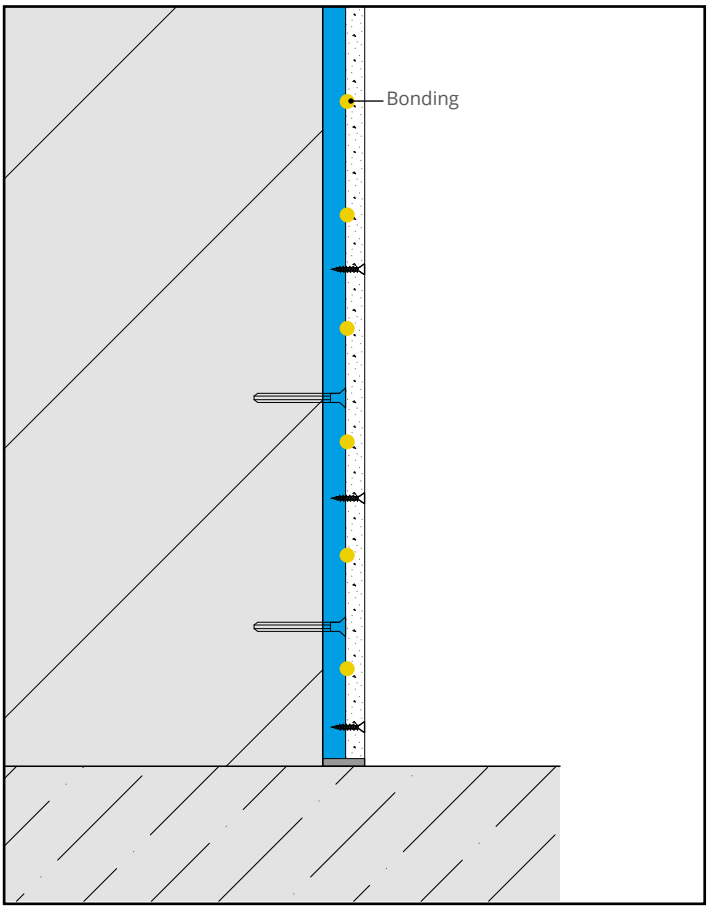
Apply Wolf rolled adhesive to the PhoneStar board using the Wolf adhesive roller. Roll the adhesive only in the area where the plasterboard to be installed. Then place the plasterboard onto the surface wetted with roll adhesive and press it on over the entire surface.

Wolf rolled adhesive Art. no.: 4085	Wolf adhesive roller Art. no. 4092	Telescopic handle Art. no. 4093
		

TIP: Alternatively, Wolf system adhesive can also be used for smaller areas.

	Wolf system adhesive: Art. no.: 4070

Subsequently, the cladding is screwed to the PhoneStar layer with plasterboard screws 3.9 x 22 mm in a grid of approx. 25 cm.



ATTENTION! The bonding of the cladding must be done in the "wet phase"!
It is otherwise no longer possible to align the boards!
Cladding with gypsum fibreboards or hard gypsum boards is not possible in the case of direct mounting due to the surface hardness.

Single-layer PhoneStar installation	
Drywall screw for fixing plasterboards to the single-layer PhoneStar TRI and PhoneStar Plus Tri	
	Art. no.: 4203, 4209 22 x 3.9 mm

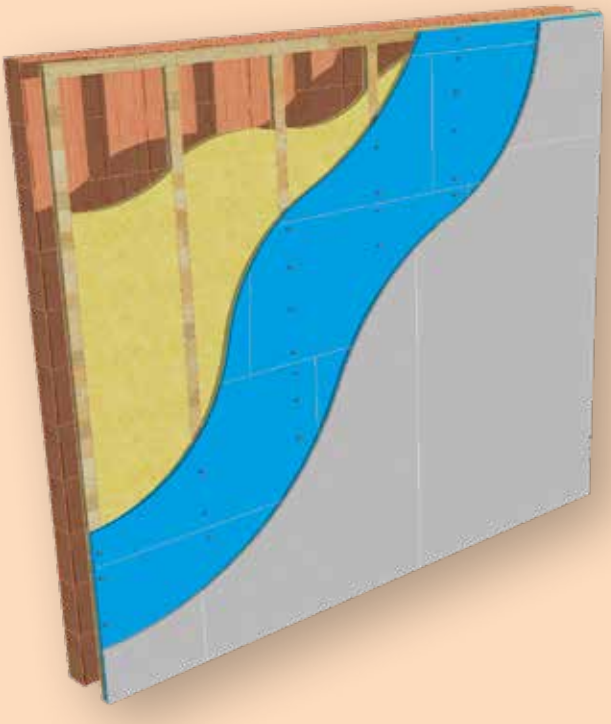
Two-layer PhoneStar installation	
Drywall screw For fixing plasterboards to multi-layer PhoneStar layers or wood fibre under the PhoneStar	
	Art. no.: 4202, 4208 38 x 5.5 mm

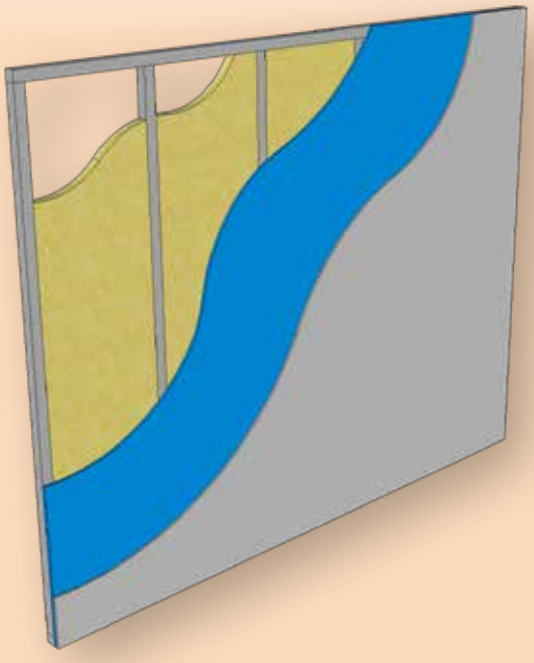
ATTENTION! Do not grout the edge joint! Otherwise, no decoupling is possible and the sound-insulation. Function is badly affected!

EDGE JOINTS

Grout the cladding layer according to the manufacturer's specifications.
Edge joints may not be more than 5 mm wide and must be closed with Wolf joint filler after installation of the cladding.

	Wolf joint filler Art. no.: 4095





PhoneStar

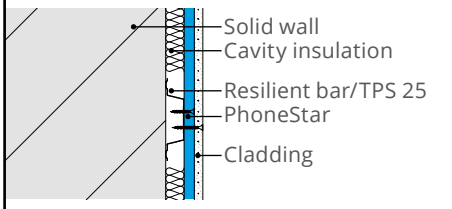
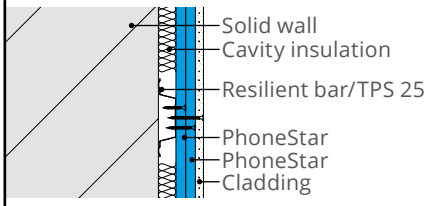
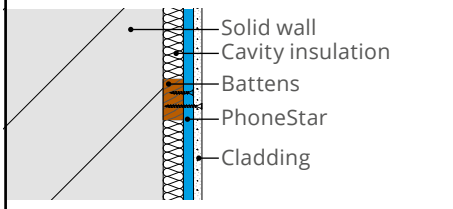
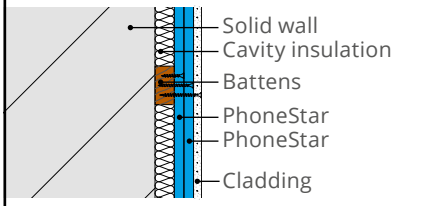
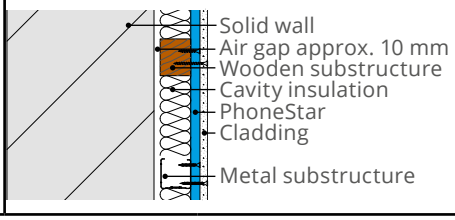
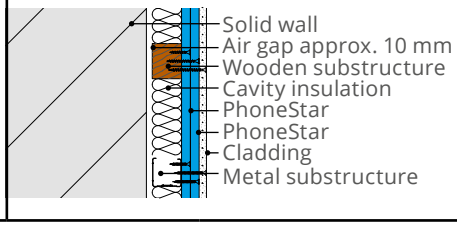
Sound insulating boards

Mounting on substructures and stud frames

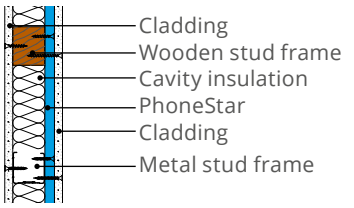
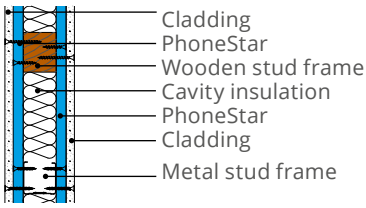
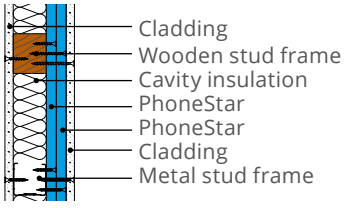
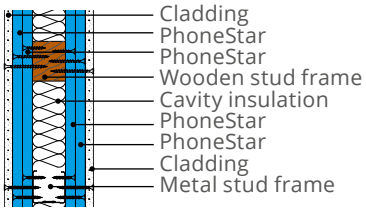
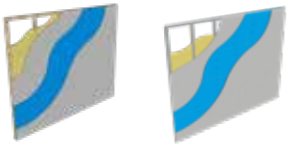
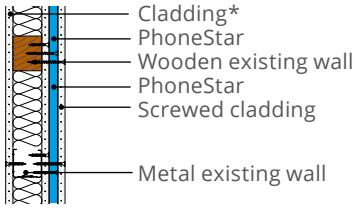
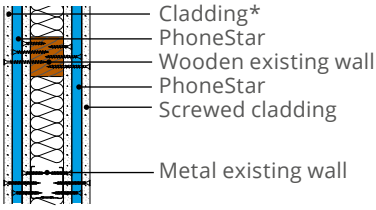
PhoneStar on substructure / stud frame

Stud walls and facing layers can be made of wood or metal stud frames. For this purpose, observe the respective processing instructions of the manufacturers for the manufacture and decoupling of the stud frame. In the case of stud walls, there is the option of single- or double-sided PhoneStar installation, in a single or double-clad design.

VARIANT I: - MOUNTING ON THE BRICK WALL / CONCRETE WALL WITH SUBSTRUCTURE

Variant	Top view – single-layer installation	Top view - Double-layer installation
Resilient bar 		
Battens 		
Facing layer  Wooden or metal stud frame		

VARIANT II: - INSTALLATION ON STUD FRAME AND EXISTING STUD FRAME

Variante	Einseitig	Beidseitig
Ständerwand Holz - Ständerwerk  oder Metall - Ständerwerk 	Single-layer 	Single-layer 
	Two-layer 	Two-layer 
Bestands-Ständerwand Holz oder Metall 	Single-layer 	Single-layer 

REGARDING VARIANT I:

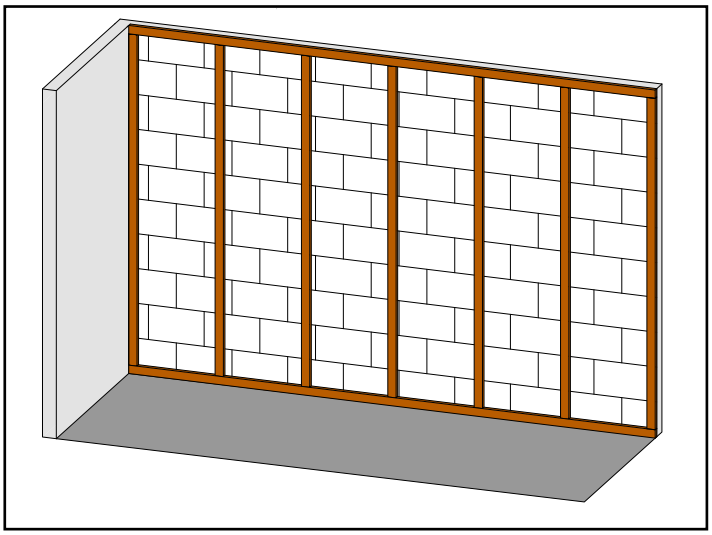
MOUNTING THE SUBSTRUCTURE ON MASONRY AND CONCRETE WALL

A substructure on masonry can take the form of wooden battens, a resilient bar or TPS 25.

ATTENTION!
Impact anchors are not suitable for the mounting of substructures

Resilient bar / TPS 25

The resilient bar or the TPS 25 system is mounted on the wall according to the manufacturer's specification.



Battens

Attach an edge profile to the adjoining components (floor, wall, ceiling).
Start with the first or last row of battens max. 10 cm from the adjoining wall and attach the substructure vertically to the wall at a centre-to-centre distance of 62.5 cm (board size 125 x 62.5 cm) and at a distance of 60 cm (board format 120 x 80 cm).

The precise arrangement is to be selected in accordance with the fixing guidelines of the cladding board manufacturer.

TIP: In the case of a wooden facing layer, back the wooden battens with rubber bearings (approx. 3 mm) at the screw points. In order to improve the sound-damping effect, we recommend the installation of the PhoneStar Schalli decoupling strip as non-load-dissipating sound decoupling. This serves to decouple the substructure.

PhoneStar Schalli		
	15 mm	Art. no. 1025
	25 mm	Art. no. 1026

ATTENTION!
The battens, resilient bar and TPS 25 system should not touch the floor, wall and ceiling.
Therefore, maintain a distance!

MOUNTING A FACING LAYER ON BRICK AND CONCRETE WALLS

During the installation – before screwing – the profiles of the stud frame should be provided with anti-drone coating tapes or PhoneStar Schalli decoupling strips (60 mm).
The facing layer can consist of a wooden or metal frame construction. Install in front of the wall according to the manufacturer's instructions.

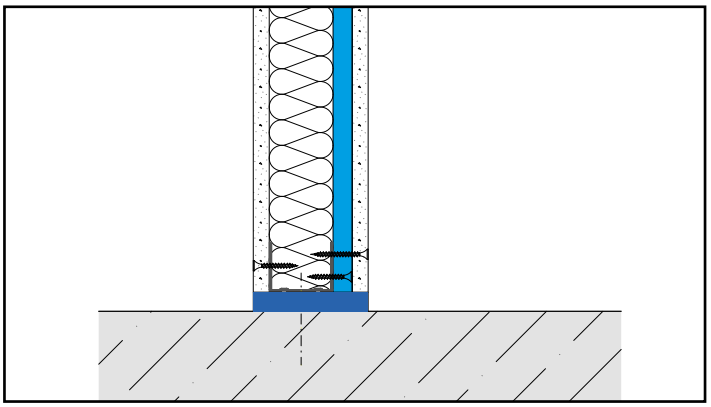
REGARDING VARIANT II:

MOUNTING ON STUD FRAME

Erect the stud frame according to the manufacturer's specifications.

In order to improve the sound insulating effect, we recommend the mounting of the PhoneStar Schalli decoupling strip on all adjoining components when installing a stud wall

- Use fixing materials that are suitable for the substrate.



PhoneStar Schalli		
	15 mm	Art. no. 1025
	25 mm	Art. no. 1026

NOTE:
existing walls require no additional substructure.

NOTE:
In the case of bracket loads, such as kitchen cabinets, appropriate cross beams must be provided in the substructure in which the corresponding components can be mounted.

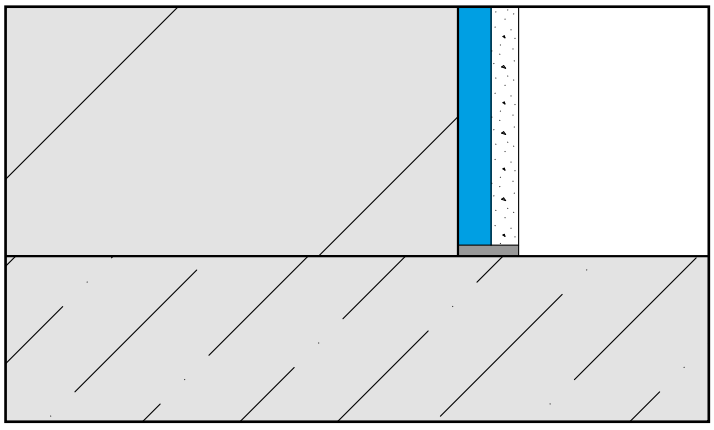
Procedure for mounting on substructure / stud frame

DECOUPLING

Prior to the actual installation, apply a self-adhesive decoupling strip along the base of the wall (e.g. self-adhesive cellular rubber or partition wall tapes).

The decoupling strip serves to isolate the PhoneStar layer and the subsequent cladding.

Maintain an edge gap of approx. 4 mm to the adjoining wall and ceiling components.



CAVITY INSULATION

Cavities in the wall structure create resonating bodies and have a detrimental effect on sound insulation. To avoid this, cavities such as those created by substructures between the individual studs in the stud frame must be lined with an insulating material.

Insulating materials:	
Suitable	Mineral, rock wool, soft wood fibre, hemp or cellulose boards.
Not suitable	XPS, EPS, PU or similar hard insulating materials as well as injected insulating materials!

TIP:
For stud walls and facing layers, use board materials instead of rolled goods for better retention of the insulating material in the stud frame.

NOTE:
The cavities should be filled at least 60% with an insulating material.

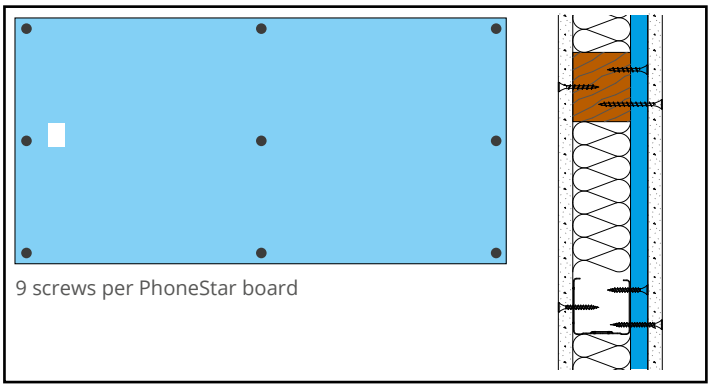
FIXING THE PHONESTAR BOARDS IN THE SUBSTRUCTURE

The PhoneStar boards are fixed in the substructure (UK) with drywall screws. They are fixed by screwing with 9 screws.

The length of the screws is to be selected according to the thickness of the cladding.

When installing a double layer of PhoneStar, fixing also takes place with 9 screws directly into the substructure.

Drywall screws	
Wooden substructure	**Metal substructure**
	
PhoneStar, single layer 35 x 3.9 mm • Art. no.: 4253	PhoneStar, single layer 35 x 3.9 mm • Art. no.: 4251
PhoneStar, double layer 55 x 3.9 mm	PhoneStar, double layer 45 x 3.9 mm



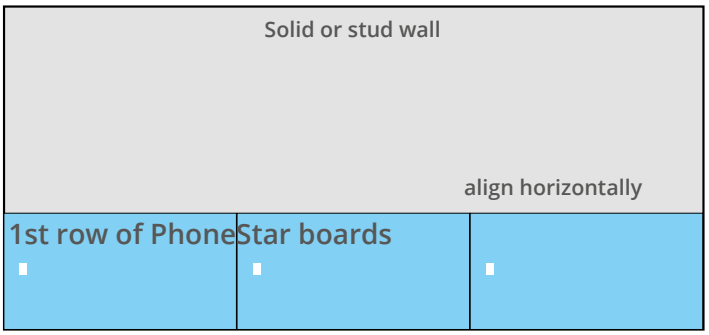
TIP: Align the upper edge of the first layer to the horizontal using a laser or spirit level. Re-cut the lower edge if necessary.

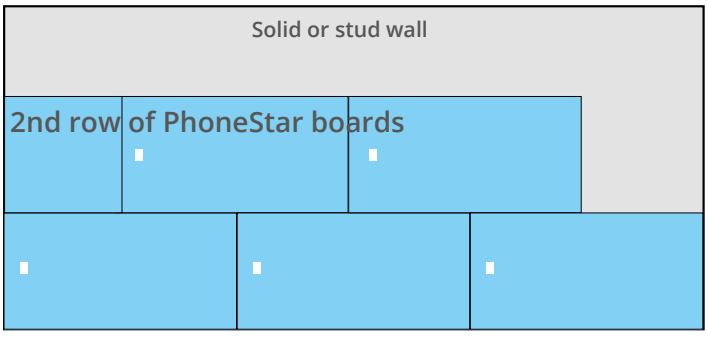
INSTALL PHONESTAR

Install the PhoneStar boards in a stretcher bond, offset by at least 10 cm, end-to-end from row to row.

- Begin with the installation of the 1st row in the bottom left or right corner.
- The visible side of the board (side with label) faces the room when installed.
- Maintain an edge gap of approx. 4 mm to the adjoining wall and ceiling components.

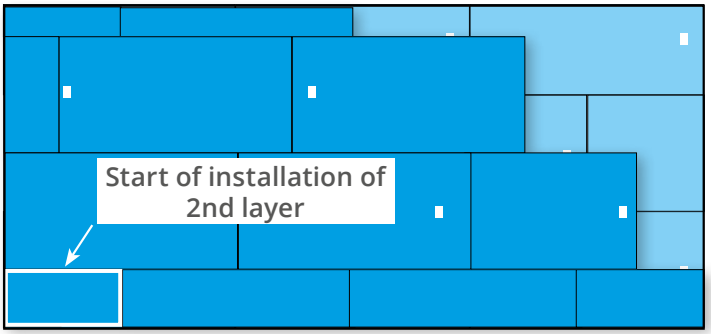
Install all subsequent PhoneStar board rows with an offset of at least 10 cm.
Avoid cross joints in the PhoneStar layer.





INSTALLING MULTIPLE LAYERS OF PHONESTAR

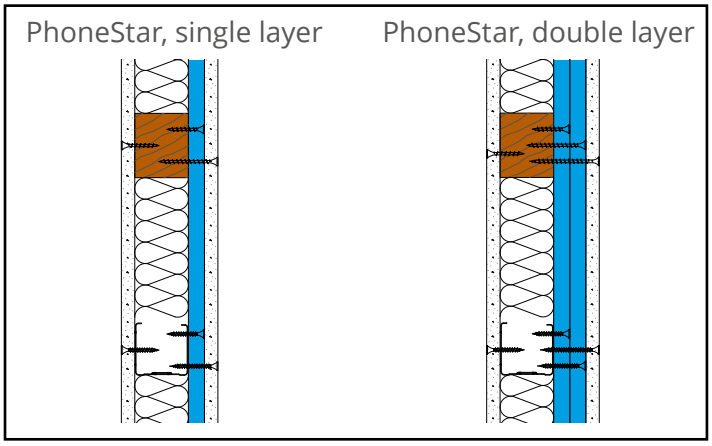
When installing multiple layers of PhoneStar boards, ensure that the butt joints of the first layer are fully covered.
In order to implement this optimally, the second layer of PhoneStar is started with a board that is halved both in length and width at the same installation starting point as the first layer. Subsequently, the first row of the second layer started in this way is completed with PhoneStar boards that are halved in width. After that, the installation can be resumed with whole PhoneStar boards.



CLADDING PHONESTAR

All plasterboards and gypsum fibreboards are suitable for the final cladding of the PhoneStar layer. The suitability of other claddings must be approved by Wolf Bavaria. The cladding layer requires a minimum thickness of 12.5 mm.

The final, mandatory cladding on PhoneStar is fixed according to the board manufacturer's specifications with appropriate drywall screws for plasterboard through the PhoneStar board layer into the substructure.



EDGE JOINTS

Grout the cladding layer according to the manufacturer's specifications.
Edge joints may not be more than 5 mm wide and must be closed with Wolf joint filler after installation of the cladding.

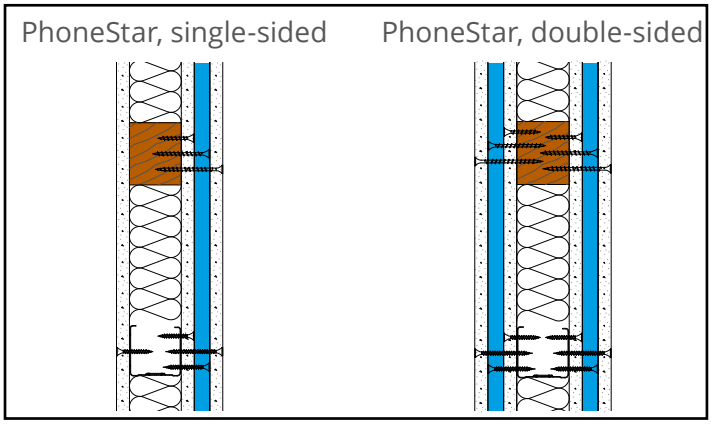
Wolf joint filler
Art. no.: 4095

ATTENTION!
Do not grout the edge joint! Otherwise, no decoupling is possible and the sound-insulation is badly impaired!

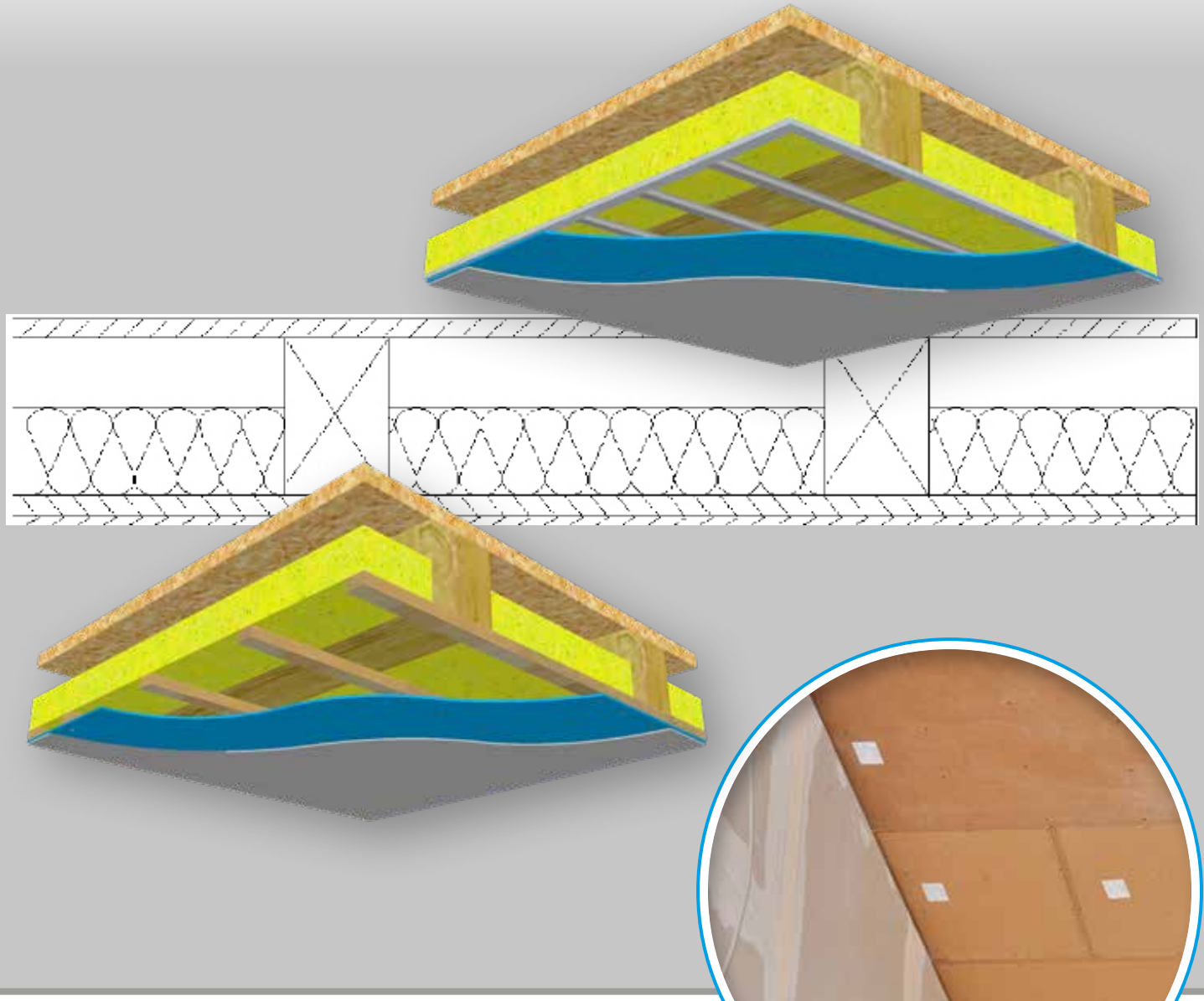
Mounting PhoneStar on an existing stud wall

Existing stud walls can be retrofitted with PhoneStar boards on one or both sides.

The procedure is the same as when mounting the PhoneStar boards on the stud wall or on a facing layer.



NOTE ON CLADDING:
PhoneStar sound insulating boards generally require a final cladding (e.g. plasterboard). Direct plastering, painting, wallpapering, etc. on PhoneStar is not possible.



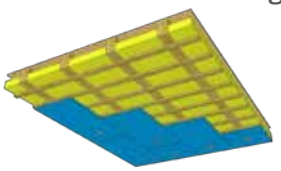
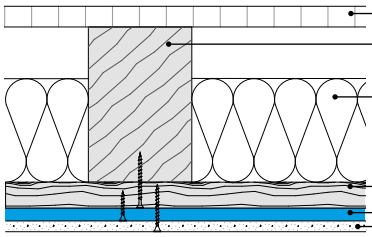
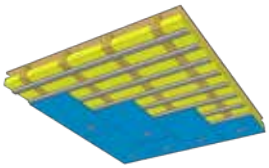
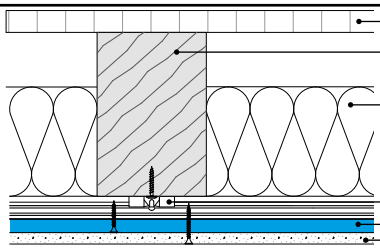
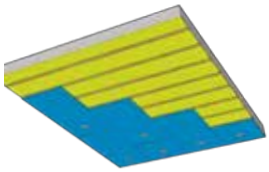
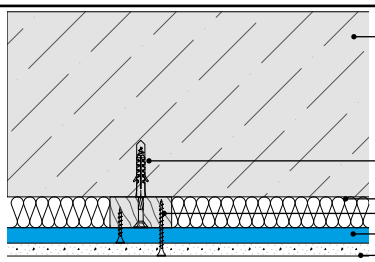
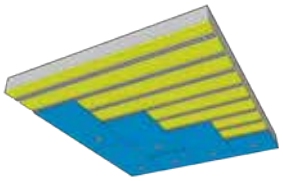
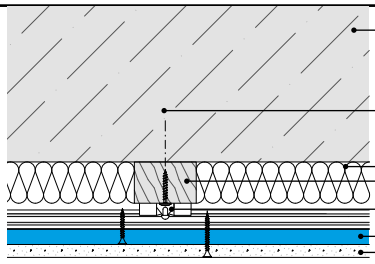
PhoneStar

Sound insulating boards

Processing on the ceiling

General notes

CEILING INSTALLATION VARIANTS

Variant	Sectional view	Description
Wooden beam ceiling  Battens		Floorboard Wooden beam Insulation Battens PhoneStar Cladding
 TPS 25		Floorboard Wooden beam Insulation TPS 25 PhoneStar Cladding
Mineral ceiling  Battens		Mineral ceiling Fixing materials suitable for the substrate Insulation Battens PhoneStar Cladding
 TPS 25		Mineral ceiling Fixing materials suitable for the substrate Insulation Battens TPS 25 PhoneStar Cladding

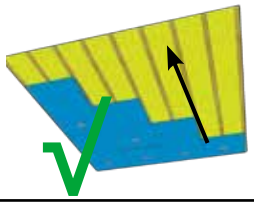
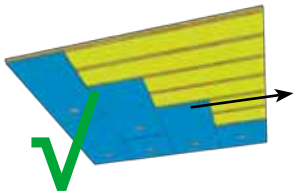
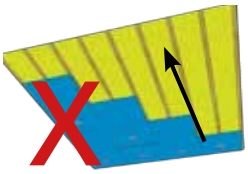
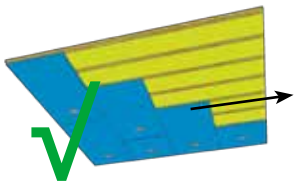
BOUNDARY PARAMETERS RELATING TO BUILDING PHYSICS

In order to demarcate the ceiling from unheated rooms, the structural boundary conditions (condensation formation, airtightness, etc.) must be evaluated on site. If necessary, the condensation formation and damage-free drying must be proven.

ATTENTION!
In the case of fire classes, requirements for the suspended ceiling and in the case of cladding, the technical standards or DIN 4102 must be observed in the design of the edge area.

BOARD ALIGNMENT AND CENTRE-TO-CENTRE DISTANCES

Depending on the board format, PhoneStar boards can be installed in the direction of the substructure or rotated by 90 degrees with respect to the substructure. Mounting on battens or metal rails is possible.

Size:	Parallel to substructure	Rotated 90° with respect to substructure
PhoneStar board: 125 x 62.5 cm Substructure in centre-to-centre distance 31.25 cm		
PhoneStar board: 120 x 80 cm Substructure in centre-to-centre distance 30 cm	 No installation parallel to the substructure	

Mounting on a rigid substructure

Battens

Start with the first row of battens max. 10 cm from the adjoining wall and attach the substructure vertically to the ceiling at a centre-to-centre distance of 31.25 cm (board size 125 x 62.5 cm) and at a distance of 30 cm (board format 120 x 80 cm).

The precise arrangement is to be selected in accordance with the fixing guidelines of the cladding board manufacturer.

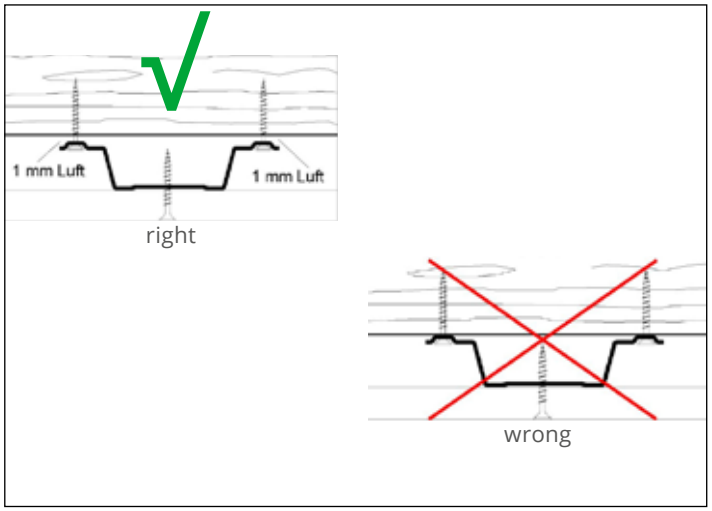
Mounting on a resilient bar

MOUNTING ON A METAL RESILIENT BAR

PhoneStar is mounted on metal resilient bars or other decoupled vibration suspenders according to the manufacturer's specification.

The fixing screws must not be fully tightened!

Install resilient bars with a play of 1 mm in the ceiling or additionally attached substructure.



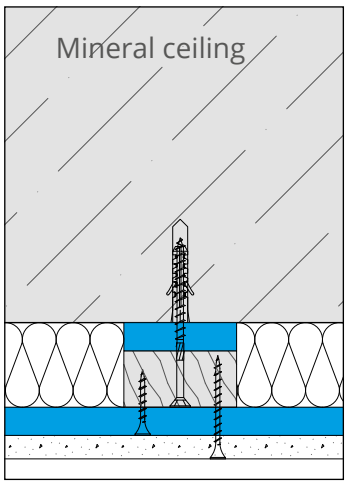
NOTE: The use of other sound-decoupling suspenders is also possible if uneven ceilings are levelled in the process.

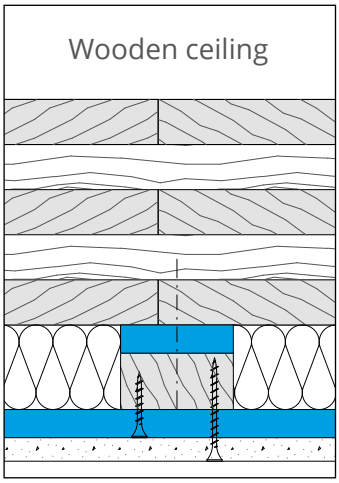
Mounting on a sound-decoupled wooden or metal substructure

MOUNTING ON PHONESTAR SCHALLI

Fix PhoneStar Schalli to the ceiling using suitable mounting materials.
Start with the first row of PhoneStar Schalli max. 10 cm from the adjoining wall and attach the sound decoupling vertically to the ceiling at a centre-to-centre distance of 31.25 cm (board size 126 x 62.5 cm) and at a distance of 30 cm (board format 120 x 80 cm).
The precise arrangement is to be selected in accordance with the fixing guidelines of the cladding board manufacturer.

After attaching the PhoneStar Schalli, the substructure (wood or metal) on the PhoneStar Schalli is fixed in the existing ceiling with suitable mounting material.





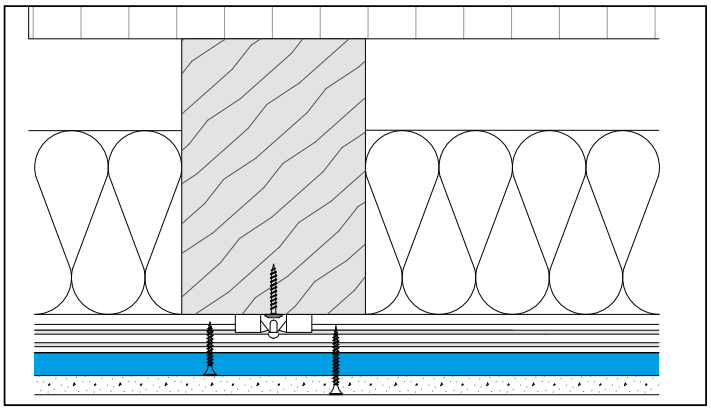
PhoneStar Schalli		
	15 mm	Art. no. 1025
	25 mm	Art. no. 1026

Mounting on a spring-suspended ceiling construction

MOUNTING ON A TPS 25 SYSTEM

The centre-to-centre distance is based on the table below.
The profiles are divided into mounting distances depending on the type of cladding.
Always install the first and last profile as close as possible to the wall and transverse to the beams.

If necessary (if the last beam is too far away from the walls), the U-connection profile can be provided as a mounting aid at the wall connection.



DETERMINATION OF MATERIAL REQUIREMENTS FOR TPS 25 SYSTEM

With max. 30 kg/m² cladding weight. / Cladding: PhoneStar ST Tri with 17.5 kg/m² + GKF approx. 10.5 kg/m²

Cladding weight in kg/m²	Profile centre-to-centre distance in m	Beam centre-to-centre distance in m	Load per spring clip in kN	TPS spring clip qty/m²	CD profile m/m²	CD connector qty/m²
30	0.331 0.313 0.300	0.7	0.07 0.066 0.063	4.32 4.56 4.76	3.0 3.2 3.33	0.56 0.65 0.70
30	0.331	0.6	0.06	5.0	3.0	0.58

For reasons of serviceability, the deformation is limited to 2 mm (l/500), which, for a linear force deformation curve, results in a permissible load FG of 0.08 kN/per spring clip. Approx. material requirement without waste.

NOTE:
A second substructure layer is necessary with larger beam distances.

CAVITY INSULATION

Cavities in the ceiling create resonating bodies and have a detrimental effect on sound insulation. To avoid this, cavities such as those created by substructures between the individual beams must be lined with an insulating material.

Insulating materials:	
Suitable	Mineral, rock wool, soft wood fibre, hemp or cellulose boards.
Not suitable	XPS, EPS, PU or similar hard insulating materials as well as injected insulating materials!

NOTE:
The cavities should be filled at least 60% with an insulating material.

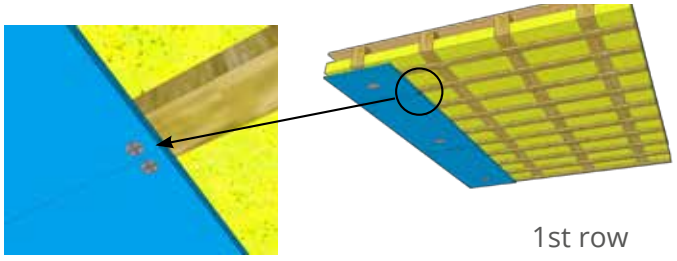
INSTALLING THE PHONESTAR LAYER

Install the PhoneStar boards without gaps and in a stretcher bond, butt-jointed and offset from row to row.

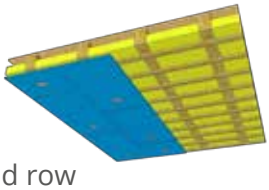
When mounting the first row, be sure to mount it without a lateral offset under the individual PhoneStar boards so that all subsequent rows can be built on it cleanly and without forming gaps.

Mount the second row and all further rows offset by half a PhoneStar board (or at least 10 cm) in order to avoid cross joints.

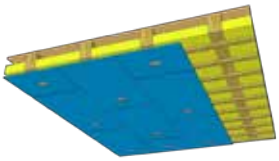
Maintain an edge gap of approx. 4 mm to the adjoining components.



1st row



2nd row



3rd row

ATTENTION: VISIBLE SIDE!
The top or visible side is marked with a label and must always be visible after installing the PhoneStar boards.

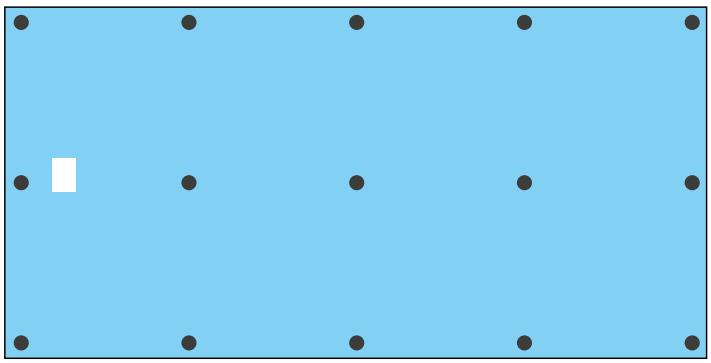
SCREWING THE PHONESTAR BOARDS TO THE SUBSTRUCTURE

PhoneStar boards are screwed to the respective substructure with drywall screws.

The screw connection is done with 15 screws per PhoneStar board, e.g. 3.9 x 35 mm in a grid of 5 x 3 screws.

Metal substructures require fine-threaded screws, while wooden substructures require coarse-threaded screws.

Drywall screws for standard plasterboard	
Wooden substructure Art. no.: 4253	Metal substructure Art. no.: 4251
	



15 screws per PhoneStar board

In order to improve the sound insulating effect, we recommend that you fill the gaps at the wall and ceiling connections with Wolf joint filler.

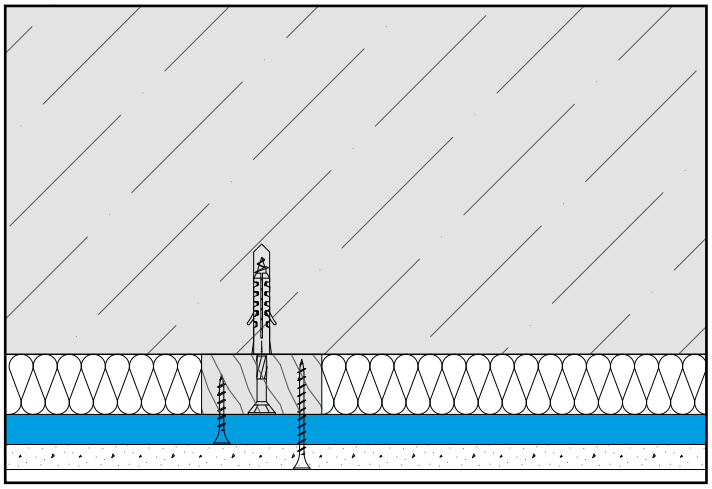
	Wolf joint filler Art. no.: 4095

PhoneStar on the ceiling

PHONESTAR CLADDING

All plasterboards and gypsum fibreboards are suitable for the final cladding of the PhoneStar layer.
The suitability of other claddings must be approved by Wolf Bavaria.
The final, mandatory cladding of PhoneStar is fixed according to the board manufacturer's specifications with appropriate drywall screws through the PhoneStar board layer directly into the substructure.

The minimum thickness of plasterboard must be 12.5 mm and that of gypsum fibreboard at least 10 mm.



EDGE JOINTS

Grout the cladding layer according to the manufacturer's specification, then cut off the expansion joint tape flush.
Edge joints may not be more than 5 mm wide and must be closed with Wolf joint filler after installation of the cladding.

	Wolf joint filler Art. no.: 4095

ATTENTION! Do not grout the edge joint! Otherwise, no decoupling is possible and the sound-insulation is badly impaired!

NOTE:
silicone must not be used.

NOTE ON CLADDING:
PhoneStar sound insulating boards generally require a final cladding (e.g. plasterboard). Direct plastering, painting, wallpapering, etc. on PhoneStar is not possible.

Laying Wolf fleece

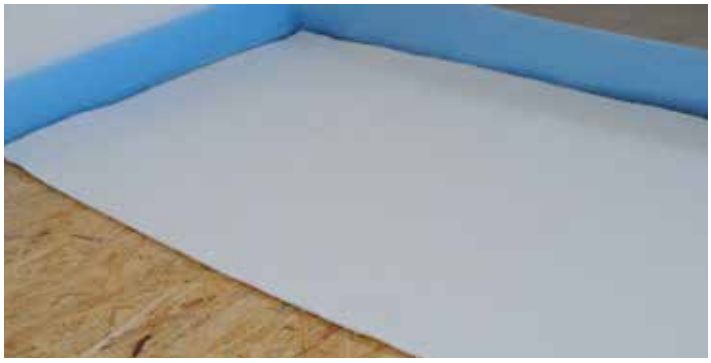
The Wolf fleece is laid floating on the substrate.
For laying, the substrate must be clean, dry and free from separating layers of all kinds.

	Wolf fleece Art. no.: 3041

PROCESSING WOLF FLEECE

Cut the Wolf fleece to the appropriate length and lay it floating on the substrate.

Each subsequent web is butted against the previously laid web (edge to edge). Gaps between the webs are to be avoided. The webs must not overlap.
Avoid cross joints.
Maintain an offset of at least 10 cm.



Installing the Wolf decoupling board

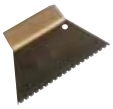
The 4 mm-thick Wolf decoupling board is installed by means of full-surface bonding to PhoneStar or PowerFloor Light / Slim systems. For the installation, the surface must be clean, dry and free from separating layers of all kinds.

Apply the Wolf 1-component parquet adhesive to the complete surface of the PowerFloor systems (toothing TKB B6).

Apply adhesive only to the area being processed.

ATTENTION! The layer under the decoupling board must also be bonded.

NOTE: The parquet adhesive is applied over the full surface. When bonding to the PowerFloor elements, the pipes do not have to be completely filled with parquet adhesive.

Wolf decoupling board Art. no.: 3091	Wolf 1-component parquet adhesive Art. no.: 4080	Wolf notched trowel B6 toothing, Art. no.: 4091
		

Subsequently, insert the Wolf decoupling board into the adhesive bed with a slight pushing movement and press down over the entire surface.

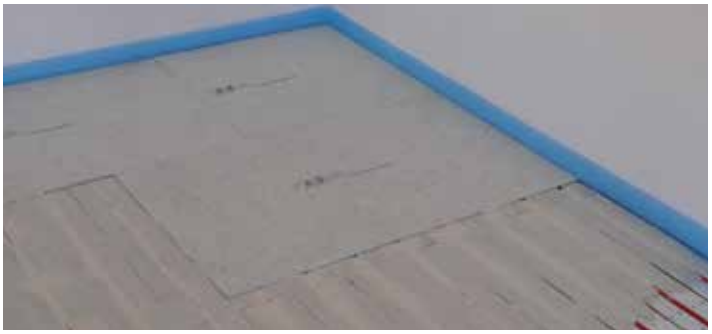
Butt the Wolf decoupling boards against one another and offset them in half drop from row to row in order to avoid cross joints.

Following a drying time of 24 hours*, you can work further on the Wolf decoupling board.

The Wolf decoupling boards are cut to size using a hand-held circular saw or a jigsaw.

When installing the Wolf decoupling board, care must be taken to ensure that the butt edges are not directly above the butt edges of the PhoneStar layer or the PowerFloor Light / Slim systems.
The butt edges must be offset by at least 10 cm.

ATTENTION: Following laying, the decoupling layer must be protected against construction site traffic and dirt until the final covering is installed.



*(at +23 °C and 50 % rel. humidity) The drying time may be longer depending on the ambient conditions.

Final coverings
- on Wolf floor systems

Final coverings on Wolf floor systems

The Wolf floor systems follow a modular construction kit principle. Wolf Bavaria products are optimised for the combination of two different construction goals:

1. individually fulfilling various requirements such as sound insulation, fire protection or radiant heating.
2. complying with limiting conditions such as weight per unit area or construction height.

This means that some layers are then mandatory for functional reasons, while others can be optionally included.

Furthermore, each final covering with its type of installation necessitates specific prerequisites. On the following pages, we will show you how you can combine requirements, conditions and prerequisites in a professional and permanent construction with Wolf flooring systems.

POINTS TO BE GENERALLY OBSERVED DURING THE PLANNING PHASE:

- match any field boundary joints of the floor construction to the top covering.
- adopt building joints into the overall construction.
- seal expansion joints in the final covering tightly with suitable material.
- plan for any necessary seals in damp rooms.
- observe the specifications of the adhesive manufacturers (e.g. for tiles, parquet, etc.).
- the maximum deflection of the overall structure must be matched to the top covering.
- the guidelines of the respective trades must be observed.
- in the case of the installation of underfloor heating, the top coverings must be suitable for it.

The constructions mentioned on the following pages are the most commonly used. However, different solutions are often possible. If you cannot find your chosen final covering, installation method or other criteria on the following pages, it does not mean that this is not possible. In this case, please contact our Field Service or Application Technology department.

THE FOLLOWING GENERALLY APPLIES:
When installing final coverings, the manufacturers' installation instructions must be observed.

Floating installation of click systems

FLOATING INSTALLATION OF THE FINAL COVERING

Lay the floor made of laminate, ready-made parquet, cork, linoleum, vinyl and PVC with click system on the PhoneStar layer according to the manufacturer's instructions.

The click system can be laid on PhoneStar without an additional intermediate layer, and on PowerFloor with a parquet and laminate underlay. The minimum thicknesses of the final covering must be observed.

THICKNESS OF THE FINAL COVERING

Final coverings such as laminate, cork, ready-made parquet, linoleum, PVC and vinyl must have a **minimum thickness of 7 mm.**

Click connection

ATTENTION:
In case of floating installation on PowerFloor underfloor heating, we recommend bonding the underfloor heating to the substrate.

PhoneStar – Floating installation – possible on PhoneStar without additional intermediate layer.

PowerFloor – Floating installation – with a suitable parquet and laminate underlay between PowerFloor and final covering.

FLOATING FINAL COVERING

No warranty can be given in the case of a floating installation of the PowerFloor underfloor heating and a floating end covering.

PRODUCT APPROVAL FOR PHONESTAR TRI, PHONESTAR ST TRI, PHONE STAR TWIN

SWISS KRONO

Swiss Krono confirms that PhoneStar is suitable as an underlay material for laminate flooring (collection-dependent).
The prerequisite for safe use of the products is the minimum evenness of the substrate specified by us.

Bonded installation of ready-made parquet

BONDED INSTALLATION:

It is possible to bond ready-made parquet to PhoneStar, Wolf Hugo and the decoupling board. Ready-made parquet cannot be bonded directly to the underfloor heating.
Due to different shrinkage and swelling behaviour, it is necessary to match the flooring and adhesive manufacturers.

Installing strip planks, solid wood parquet and solid floorboards without tongue and groove

For the installation of parquets and timbers, please refer to the manufacturer's instructions.

Processing instructions from the adhesive manufacturers can be downloaded from our website: www.wolf-bavaria.com

NOTE: If there is an increased need for clarification, please consult your responsible regional manager or Wolf Bavaria Application Technology.

Solid floorboards

NOTE:
The success of a parquet installation depends to a large extent on the appropriate preparation of the substrate. According to VOB DIN 18356 "Parquet work", the installer must check in particular the dryness, evenness and strength of the substrate. The parquet work must be carried out in accordance with the generally accepted rules of the trade.
In addition, the current technical data sheets and instructions of parquet and adhesive manufacturers must be observed.
Constant indoor climate conditions must be maintained before and during the installation – the corresponding TKB data sheets must be observed for this purpose. See: www.klebstoffe.com.

Laying natural stone and tiles

Tiles and natural stone can only be laid on PhoneStar boards and PowerFloor radiant heating with the inclusion of a decoupling layer.

In the case of large-format tiles, the overall construction must be considered in terms of compressive strength and deformation as early as the planning stage.

Large-format tiles, stoneware and natural stone should only be laid in a combined process (buttering-floating) according to the specifications of the tile manufacturer and with a suitable, approved quick-setting adhesive.

Tiles

Decoupling layers			
The processing instructions of the adhesive system manufacturers for the covering formats used, in particular for the specified minimum thickness of the adhesive bed and joint widths, must be complied with – adhesive recommendations at: www.wolf-bavaria.com. When laying the final covering, the instructions of the covering manufacturer must be observed.			
Laying method		Thickness [in mm]	Surface pretreatment
PhoneStar / PowerFloor	Decoupling layer		
Bonded to the substrate	**Wolf decoupling board** bonded to PhoneStar or PowerFloor with Wolf 1-component parquet adhesive	4	When laying tiles, pre-coat the adhesive according to the system. Tiles require a minimum size of 200 cm^2, natural stone a minimum thickness of 10 mm. Ceramics and natural stone can be laid with all conventional, plastic-coated, approved, suitable installation materials. Maximum tile size 60 x 60 cm.
Floating or bonded to the substrate	**Wolf Hugo** (with PowerFloor incl. separating web) **laid floating**	18	Suitable adhesives and the necessary pretreatment of the substrate must be selected according to the technical guidelines of the tile manufacturer or adhesive manufacturer. Maximum stoneware tile size: 60 x 60 cm.

TIP: Even in the case of floating installation of the PowerFloor underfloor heating system, we recommend bonding the return loop and special elements to the substrate to fix the position.

NOTE:
The tiling work must be carried out in accordance with the generally accepted rules of the trade. See: www.klebstoffe.com.

Processing instructions from the adhesive manufacturers can be downloaded from our website: www.wolf-bavaria.com

PVC, vinyl, carpet, linoleum, coconut coverings

Thin elastic coverings can only be laid on PhoneStar and PowerFloor elements with the inclusion of a decoupling layer.

Vinyl covering

Decoupling layers				
When laying the final covering, the instructions of the covering manufacturer must be observed.				
Laying method			Thick-ness [in mm]	Surface preparation
PhoneStar	PowerFloor	Decoupling layer		
Bonded to the substrate	Bonded to the substrate	**Wolf decoupling board** bonded to PhoneStar or PowerFloor with Wolf 1-component parquet adhesive	4	Preparation of the substrate according to the instructions of the adhesive or covering manufacturer.
Floating installation	Floating or bonded to the substrate	**Wolf Hugo** laid floating with PowerFloor incl. separating web	18	Preparation of the substrate according to the instructions of the adhesive or covering manufacturer.

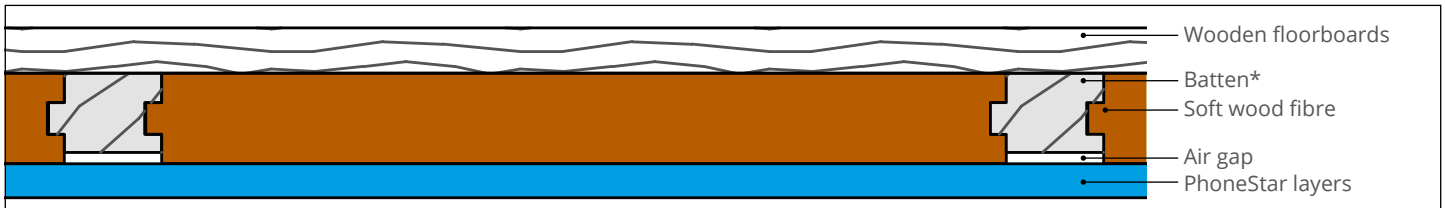
TIP: Even in the case of floating installation of the PowerFloor underfloor heating system, we recommend bonding the return loop and special elements to the substrate to fix the position.

NOTE:
The laying of the final covering must be carried out in accordance with the generally accepted rules of the trade.
See: www.klebstoffe.com.

Processing instructions from the adhesive manufacturers can be downloaded from our website: www.wolf-bavaria.com

Screwed wooden floorboards

In the case of screwed wooden floorboards, a distinction must be made as to whether underfloor heating is installed underneath or not. Screwed wooden floorboards are fastened to a flooring system laid by screwing or bonding, e.g. a combination of battens and soft wood fibre. Wooden floorboards are screwed accordingly in such flooring systems.



*Battens: no contact with the layer situated underneath