Woodland Acoustics

PUBLISHED NOVEMBER 2025

Comprehensive PhoneStar Installation Guide

Guide Contents

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General processing guidelines

The general processing guidelines must be followed before and during the processing of the Woodland Acoustics systems. Familiarise yourself in detail with these instructions before commencing with the processing.

ENVIRONMENTAL CONDITIONS

PhoneStar boards may only be processed in closed and frost-free rooms under constant climatic conditions. The building site must be clean, dry and clean swept, and the windows must be installed and glazed.

ENVIRONMENTAL CONDITIONS	
Room temperature	min. 10 °C
Rel. humidity	30 - 60 %

STORAGE

PhoneStar products are to be stored exclusively indoors, lying flat in a dry and frost-free place protected against sunlight.

TIP: Woodland Acoustics products and systems are to be protected against increased humidity, e.g. during the drying of plaster and screed

ACCLIMATISATION

Due to the material makeup, PhoneStar products require acclimatisation in the respective processing room in order to adjust to the prevailing environmental conditions before processing so as to avoid warping or expansion/shrinkage.

ACCLIMATISATION TIME	
PhoneStar boards	24 hours

TIP: Divide PhoneStar into small piles - this shortens the acclimatisation time

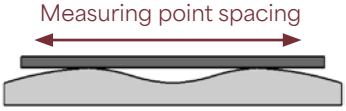
REQUIREMENTS FOR THE SUBSTRATE PRIOR TO INSTALLATION

Dry systems place special demands on the substrate with regard to evenness, load capacity and humidity. The requirements must be checked before the installation.

EVENNESS

The floor must be completely even into all corners of the room. PhoneStar systems cannot compensate any unevenness in the substrate and require flat, full-surface support. The room must also be horizontal. Expansion and construction joints in the substrate must be accepted.

EVENNESS TOLERANCE	
Measuring point spacing	2 m
Max. tolerance	3 m



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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.

RESILIENCE IN TERMS OF USABILITY

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.

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.

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 %

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WALL CONNECTION / WOODLAND ISOLATION STRIPS

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

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

Butt-joint the Woodland insulation strip in the corners

BONDING

When bonding PhoneStar 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 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.

ATTENTION: BUILDING SITE TRAFFIC!
Building site traffic is not recommended rather than not permitted.

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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. 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 or dry screed.)

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 guide lines 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. 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 may be necessary in accordance withNZBC E3 Internal Moisture.

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, 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.

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Processing times

When processing Woodland Acoustics 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** **On wooden or mineral substrate**
Single layer: min/m²	2-5	3-8 Paquet adhesive or Woodland recommended alternatives
Two layer: min/m²	4-10	5-12 Parquet adhesive/ PhoneStar to one another with wood adhesive

PROCESSING OF THE ACCESSORY PRODUCTS

Accessories	**FloorMuffler (decoupling fleece)**	**Plywood/Decoupling plate**
Installation variants	Floating	Full-surface bonded With Woodland recommended adhesive
Min /m²	0.5	2 - 5

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

NOTE: allow for approx. 3 % waste when calculating the material requirement

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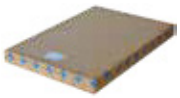
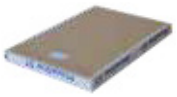
Sound insulating boards

PhoneStar is a revolutionary soundproofing board, made of a combination of sand and cardboard. Designed to reduce both impact and airborne sound, while adding thermal mass to structures.

PhoneStar Plus Tri	PhoneStar Tri	PhoneStar Twin	PhoneStar ST Tri	PhoneStar 25
1250 x 625 mm	1200 x 800 mm 1250 x 625 mm	1200 x 800 mm 1250 x 625 mm	1200 x 800 mm 1250 x 625 mm	800 x 600
				

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PhoneStar - Processing

PhoneStar and PhoneStar 25 - Cutting to size and bonding

MEASURING AND MARKING THE CUTTING LINE

CUTTING THE BOARD TO SIZE

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

TAPE BOARDS

Tape the cut edge with PhoneStar Tape. Allow the PhoneStar Tape to overlap by at least 2 cm at the corners.

ATTENTION: Allow approx 1 roll of PhoneStar tape per 25m² of PhoneStar boards.

FOLD OVER THE CORNERS AND LONGITUDINAL SIDE

Fold the overlap at the corners downward and press the lateral overlap against the board surface. Acoustic sealant mat be used to seal the board where there tape is impracticle such as around electronic outlets.

NOTE:

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

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Installation for floors

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 WOODLAND ISOLATION STRIPS

Butt the corners; further details in the chapter

General processing instructions

Woodland Isolation strip

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.

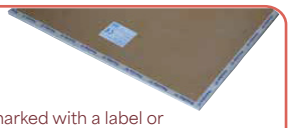
INSTALLING MULTIPLE LAYERS OF PHONESTAR

When installing multiple layers of PhoneStar boards, ensure that the 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 installation and floor covering install Phonestar and corresponding layers floating or bonded (see General installation instructions). Instructions for installing the different final coverings can be found in the chapter Final coverings

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Bonding Phonestar system

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 wet areas where waterproofing is required or by the floor covering manufacturers recommendations Phonestar boards may need to be bonded to the substrate they are installed over.

INSTALLATION WITH ROLL-ON ADHESIVE

Apply rolled adhesive over the entire surface of the board using the 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 Roll-On Adhesive: not below 13 °C. Stir well before use!

Roll-On Adhesive	Adhesive roller	Telescopic handle
		

After bonding with Roll-On 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 ADHESIVE

Apply 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.

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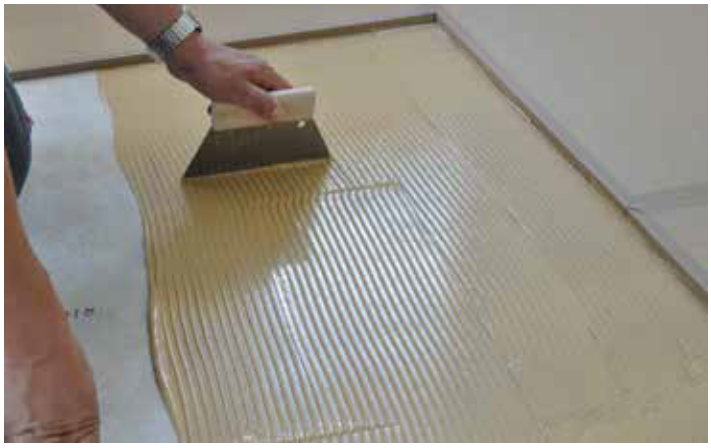
BONDING PHONESTAR TO A MINERAL SUBSTRATE

PhoneStar boards are bonded to mineral substrates with component parquet adhesive. The Substrate must be clean, dry and dust-free for bonding. Visit the Woodland Acoustics website for recommended adhesives, follow adhesive manufacturers guidelines for trowel size, drying time etc.

component parquet adhesive:	notched trowel: B11 toothing
	



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 Woodland Acoustics

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Installation for walls

GENERAL PROCESSING GUIDELINES

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

BOUNDARY PARAMETERS RELATING TO BUILDING PHYSICS

When using PhoneStar products and/or Woodland Acoustics 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 hori zontal 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

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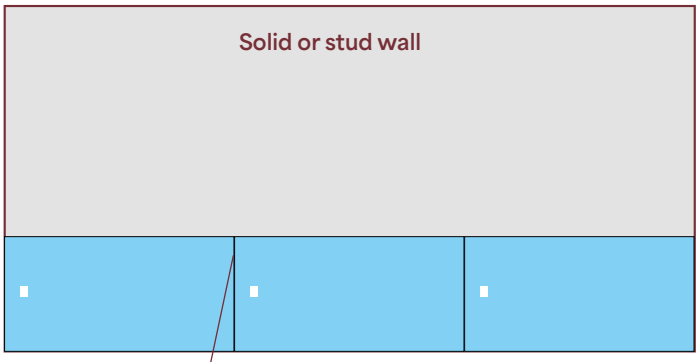
INSTALL PHONESTAR

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.



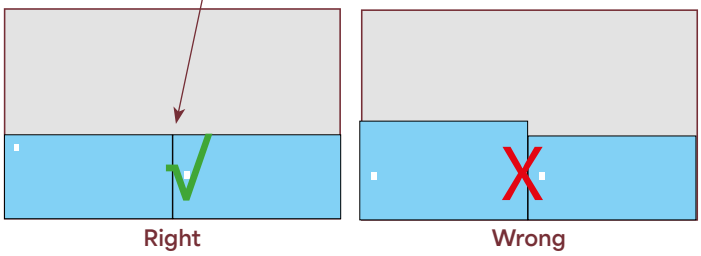
1st row of PhoneStar boards

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.

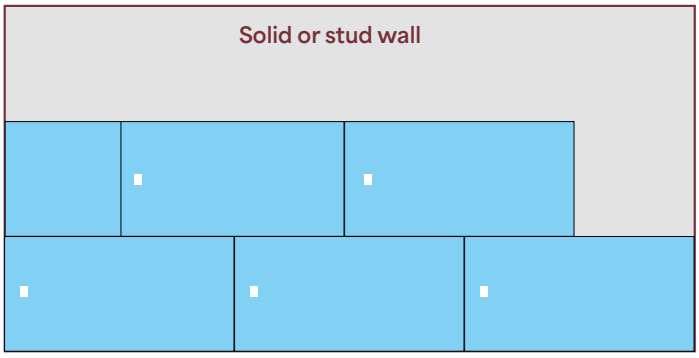
Maintain an edge gap of approx. 4 mm to the adjoining wall and ceiling components



Right Wrong

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.



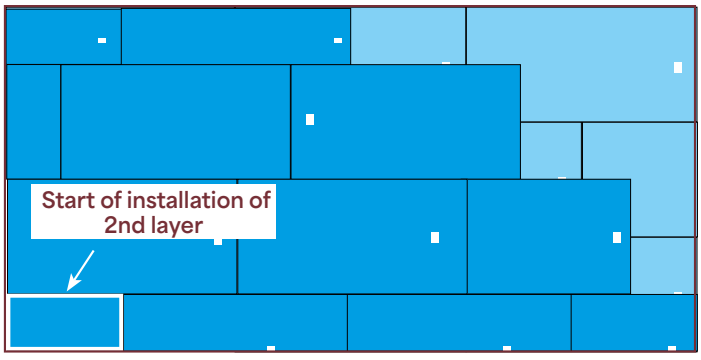
2nd row of PhoneStar boards

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 Acoustic sealant.



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.

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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 Acoustic sealant 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.

Junction box with lid

Kaiser art. no. 9069-01 + 1184-69

Electronic wall socket, also usable as a double socket

Kaiser art. no.: 9069-94t

Junction box halogen-free

Kaiser art. no.: 9069-77

Electronic wall socket, also usable as a double socket

Kaiser art. no.: 9069-74

Further information at:
Kaiser wall boxes for all applications - hollow walls, brick walls, concrete walls | Ivory Egg (NZ)

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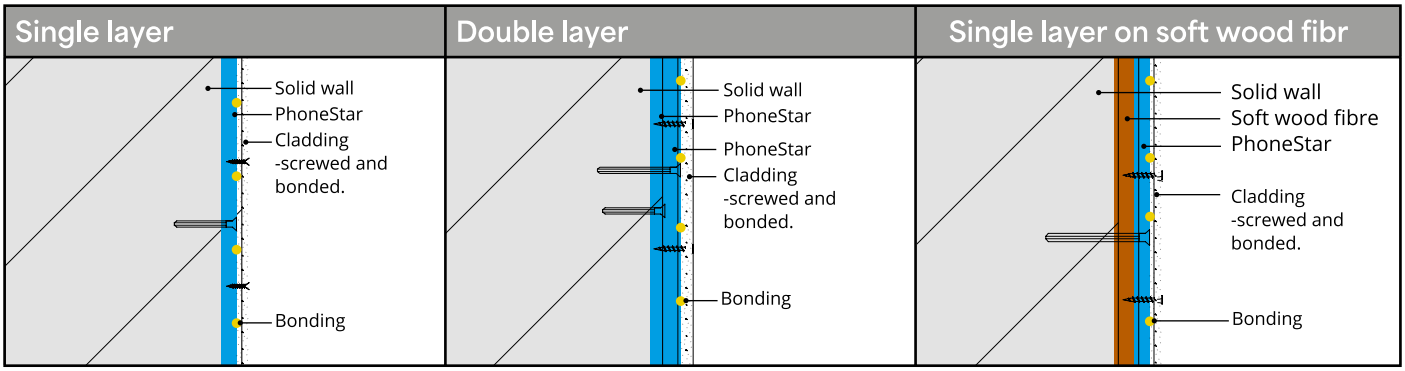
Direct mounting on masonry

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 Masonry dowel 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 Masonry 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 & 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.

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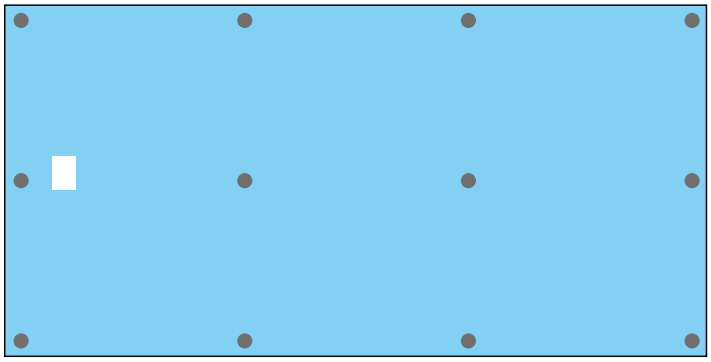
FIXING PHONESTAR

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

12 Masonry dowels are used per PhoneStar board in a grid of 3 x 4 dowels.

Place the Masonry dowels on the outside 4 - 8 cm from the edge of the board.

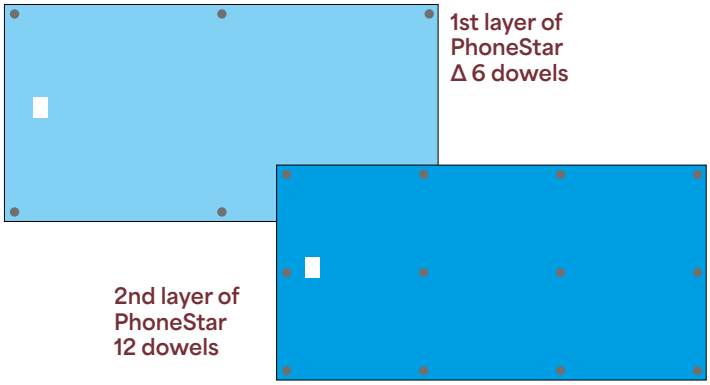


12 Masonry dowel / board

In the case of two-layer installation of the Phone Star board:

-Fix the first layer with 6 dowels per board

-After that, fix the 2nd layer with 12 Masonry dowels per board; select the length accordingly.



ATTENTION:

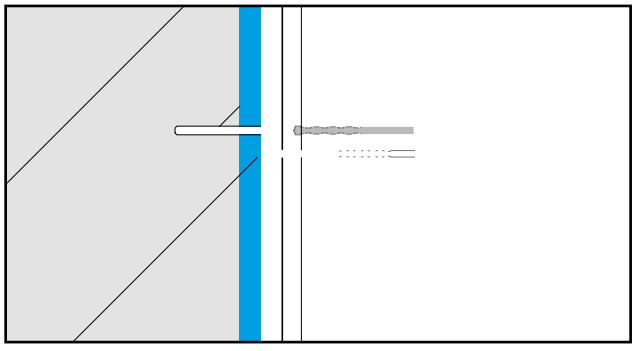
Work without a percussion drill in the case of vertical-cored bricks!

Use Masonry 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



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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 a Wall board adhesive using an appropriate applicator gun. Then place the plasterboard into the adhesive and press it on over the entire surface.

Subsequently, the cladding is screwed to the PhoneStar layer with plasterboard screws 6g x 25mm in a grid of approx. 25 cm

SINGLE-LAYER PHONESTAR INSTALLATION

Drywall screw
for fixing plasterboards to the single-layer PhoneStar TRI and PhoneStar Plus Tri

6g x 25mm

TWO-LAYER PHONESTAR INSTALLATION

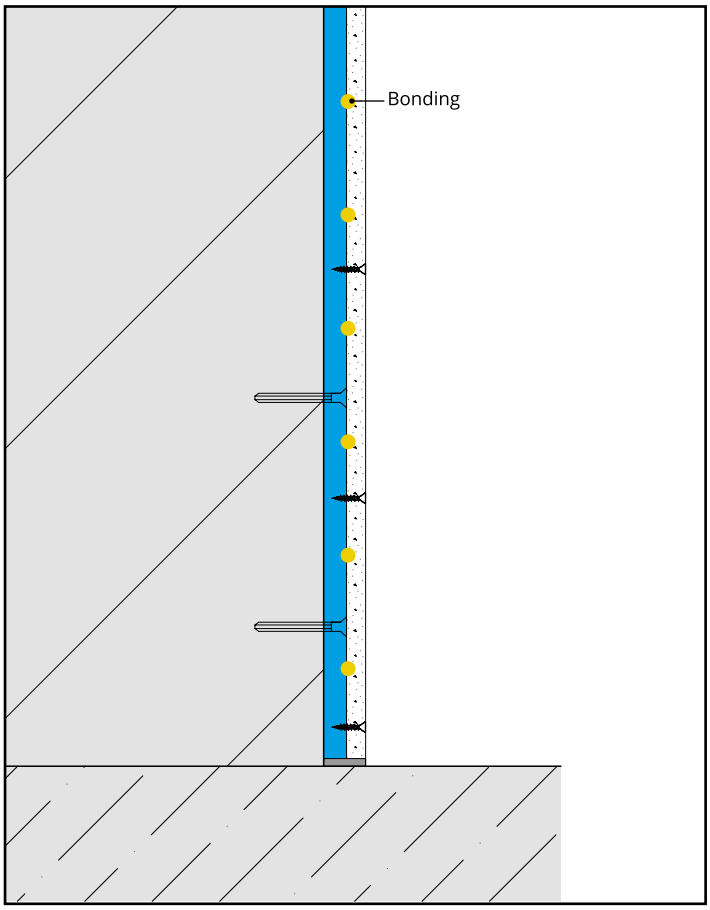
Drywall screw
For fixing plasterboards to multi-layer PhoneStar layers or wood fibre under the PhoneStar

10g x 38mm

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 acoustic sealant after installation of the cladding.



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.

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

Function is badly affected!

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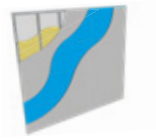
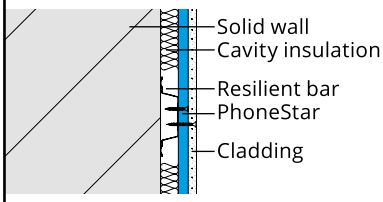
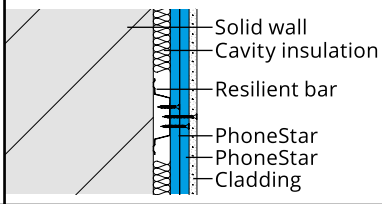
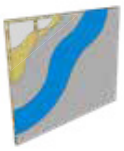
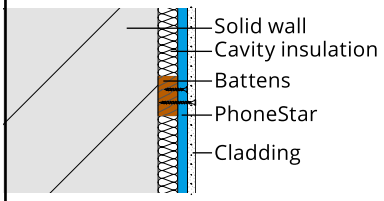
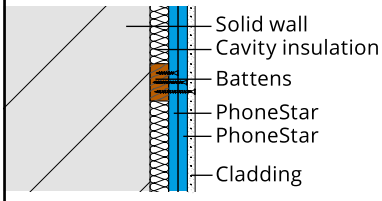
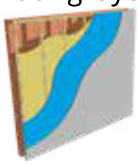
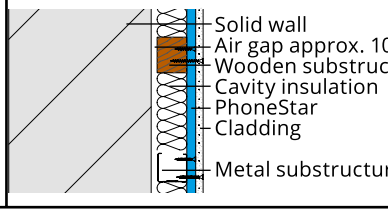
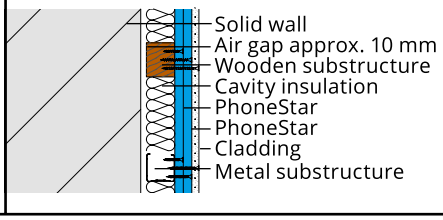
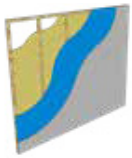
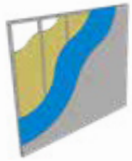
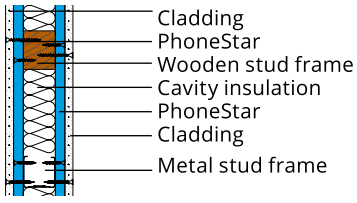
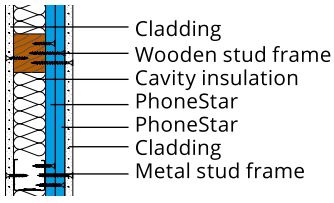
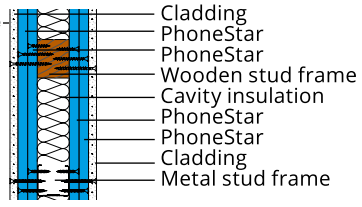
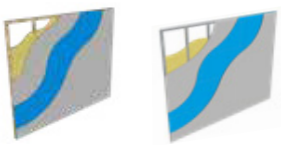
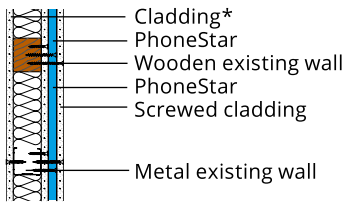
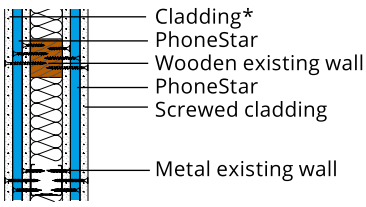
Stud walls and facing layers can be made of wood or metal stud frames. For this purpose, observe the respective processing instructions of the manufacturers for the manufacture and decoupling of the stud frame.

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

VariantT	op view - single-layer installationT	op view - Double-layer installation
Resilient bar 		
Battens 		
Facing layer  Wooden or metal stud frame		

VARIANT II: MOUNTING ON THE BRICK WALL / CONCRETE WALL WITH SUBSTRUCTURE

Variant	One-sided	On both sides
Stud wall Timber - stud frame  or metal stud frame 	Single-layer 	Single-layer 
	Double-layer 	Double-layer 
Existing stud wall Wood or metal 	Single-layer 	Single-layer 

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REGARDING VARIANT I:

MOUNTING THE SUBSTRUCTURE ON MASONRY AND CONCRETE WALL

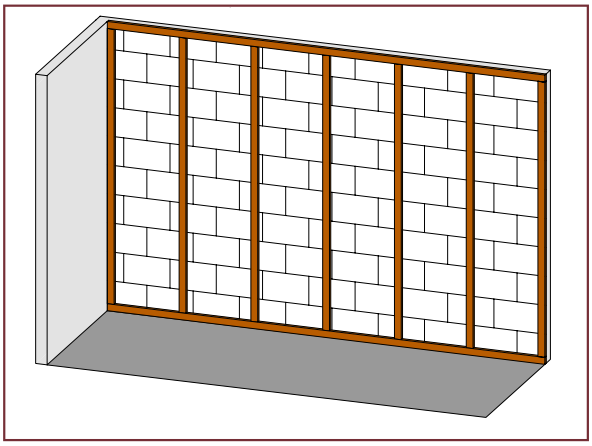
A substructure on masonry can take the form of wooden battens, a resilient bar.

ATTENTION:

Impact anchors are not suitable for the mounting of substructures

RESILIENT BAR

The resilient bar system (by Protector) 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 accord ance with the fixing guidelines of the cladding board manufacturer.

PHONESTRIP	
	15 mm
	25 mm

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 instal lation of the PhoneStrip decoupling strip as non-load-dissipating sound decoupling. This serves to decouple the substructure.

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 PhoneStrip decoupling strips (60 mm).

ATTENTION:

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

Woodland Acoustics

REGARDING VARIANT II:

MOUNTING ON STUD FRAME

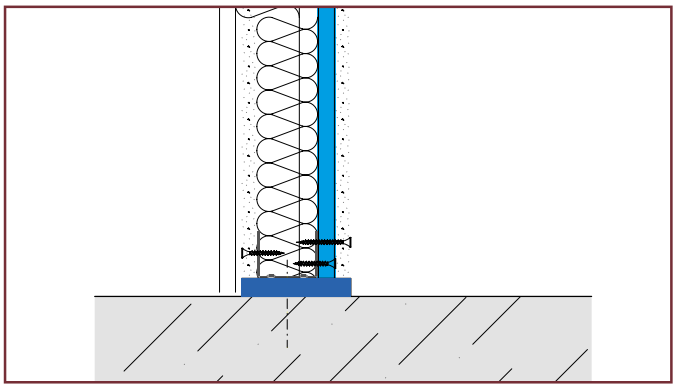
Erect the stud frame according to the manufacturer's specifications.

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

- Use fixing materials that are suitable for the substrate.

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.



PHONESTRIP	
	15 mm
	25 mm

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).

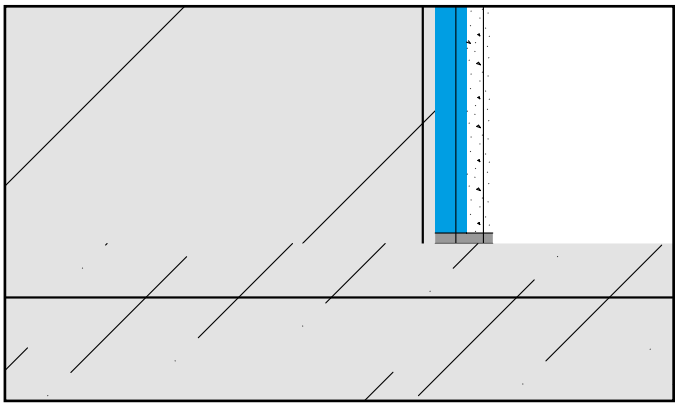
The decoupling strip serves to isolate the PhoneStar layer and the subsequent cladding.

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.

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.



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.

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FIXING THE PHONESTAR BOARDS IN THE SUBSTRUCTURE

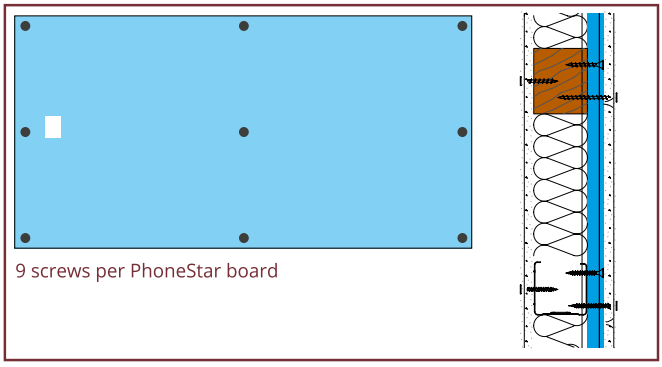
The PhoneStar boards are fixed in the substructure with drywall screws. They are fixed by screwing with 9 screws.

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 sub-structure.

TWO-LAYER PHONESTAR INSTALLATION

Wooden substructure	Metal substructure
	
PhoneStar, single layer 6g x 38mm	PhoneStar, single layer 6g x 38mm
PhoneStar, double layer 7g x 51mm	PhoneStar, double layer 7g x 51mm



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.

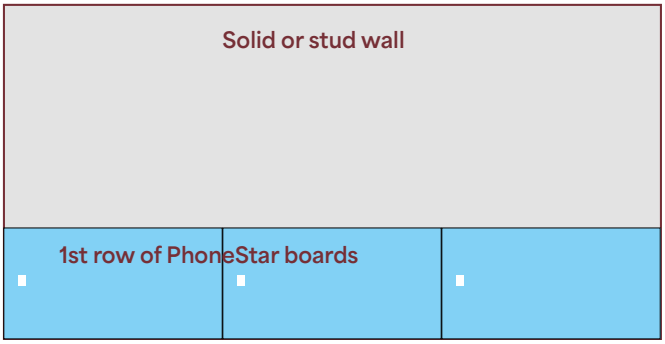
INSTALL PHONESTAR

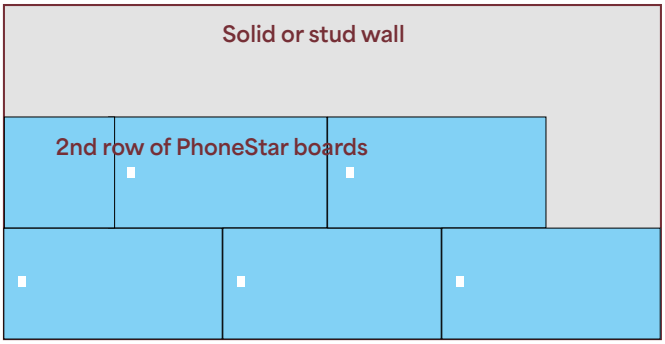
Install the PhoneStar boards in a stretcher bond, offset by at least 10 cm, end-to-end from row to row.

- 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.



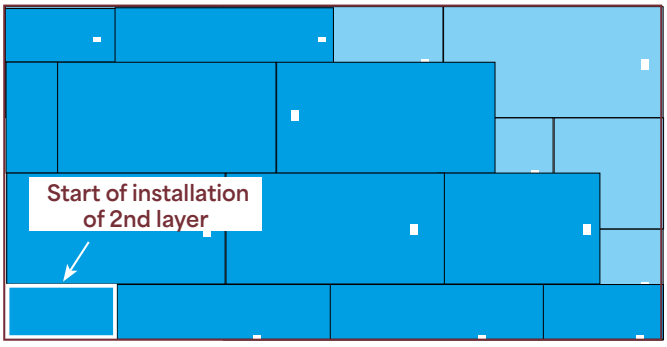


INSTALLING MULTIPLE LAYERS OF PHONESTAR

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.



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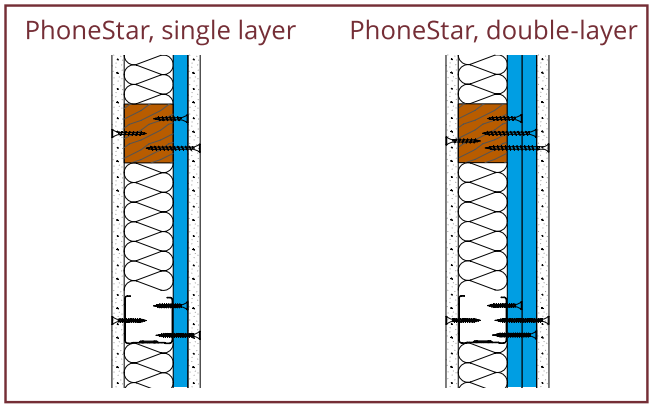
CLADDING PHONESTAR

All plasterboards and gypsum fibreboards are suitable for the final cladding of the PhoneStar layer. The suitability of other claddings must be approved by Woodland Acoustics. 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 Acoustic sealant after installation of the cladding.

ATTENTION:

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

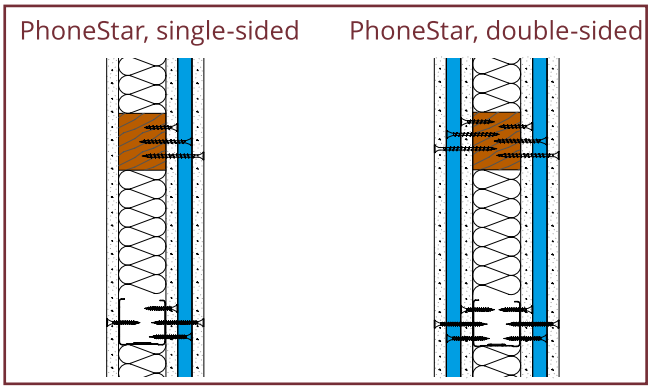
Mounting PhoneStar on an existing stud wall

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.



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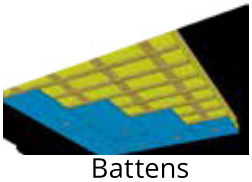
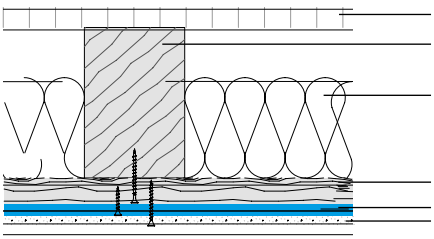
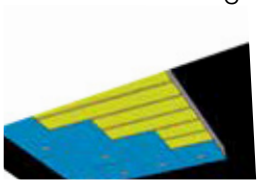
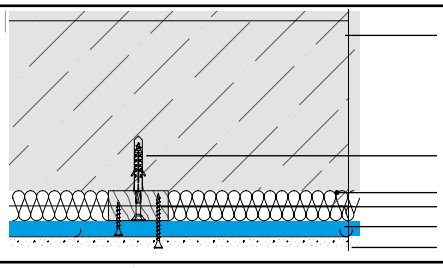
Installation for ceilings

CEILING INSTALLATION VARIANTS

Variant	Sectional view	Description
Wooden beam ceiling  Battens		
Mineral ceiling  Battens		

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.

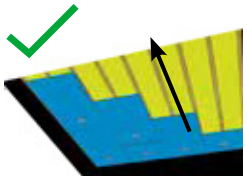
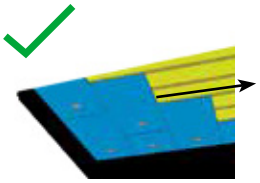
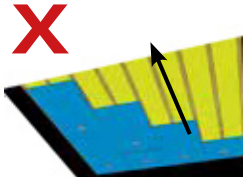
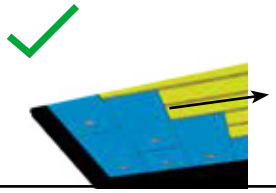
ATTENTION:

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.

Woodland Acoustics

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.

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

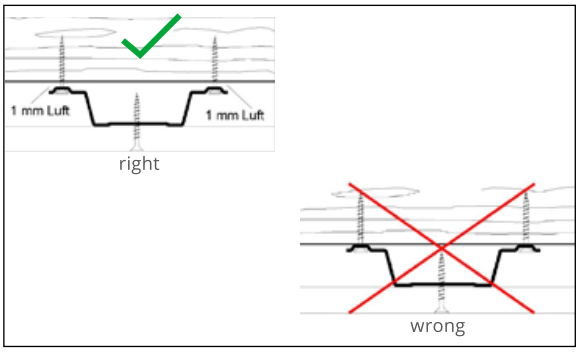
MOUNTING ON A METAL RESILIENT BAR

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.



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Installation of PhoneStrip

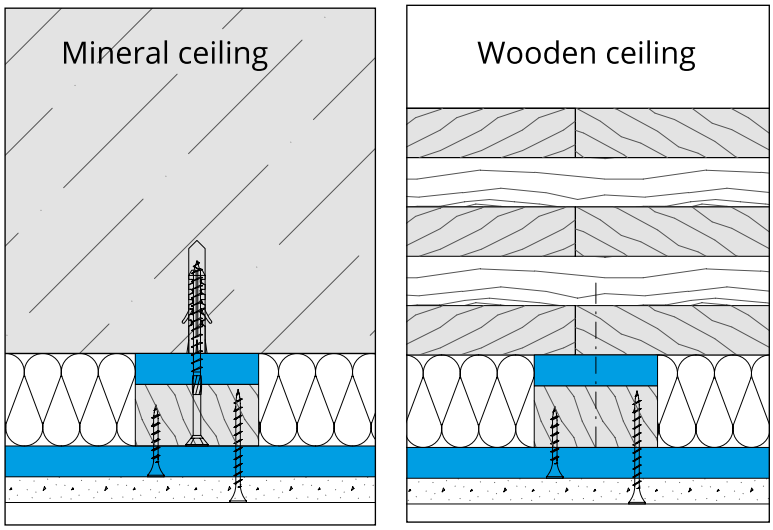
MOUNTING ON PhoneStrip

Fix PhoneStrip to the ceiling using suitable mounting materials.

Start with the first row of PhoneStrip 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 PhoneStrip, the substructure (wood or metal) on the PhoneStrip is fixed in the existing ceiling with suitable mounting material.



PHONESTRIP	
	15 mm
	25 mm

Woodland Acoustics

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.

NOTE:
The cavities should be filled at least 60% 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!

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

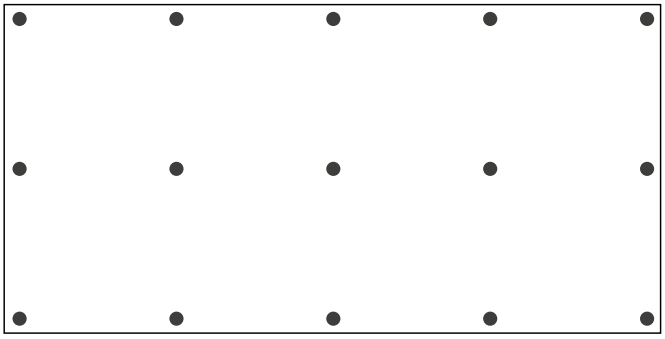
SCREWING THE PHONESTAR BOARDS TO THE SUBSTRUCTURE

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

The screw connection is done with 15 screws per PhoneStar board, e.g. 6g x 38mm in a grid of 5 x 3 screws.

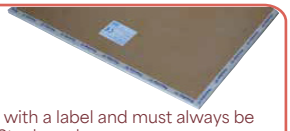
Metal substructures require fine-threaded screws, while wooden substructures require coarse-threaded screws.

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



ATTENTION:

VISIBLE SIDE!



The top or visible side is marked with a label and must always be visible after installing the PhoneStar boards

NOTE:
15 screws per PhoneStar board

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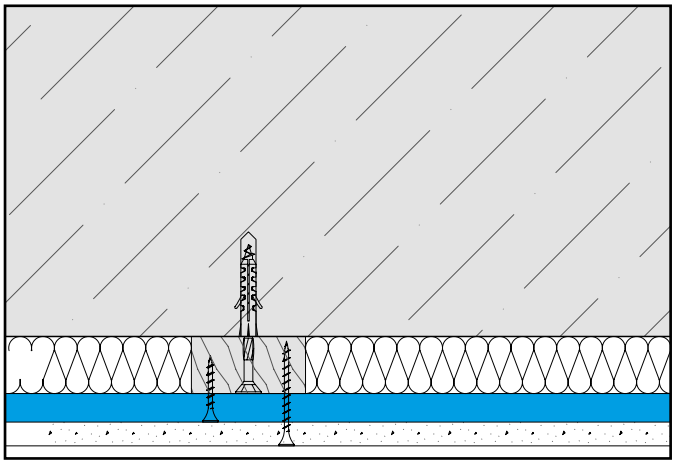
PHONESTAR CLADDING

All plasterboards and gypsum fibreboards are suitable for the final cladding of the PhoneStar layer.

The suitability of other claddings must be approved by Woodland Acoustics. 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 Acoustic sealant after installation of the cladding.

NOTE:
silicone must not be used

ATTENTION:

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

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.

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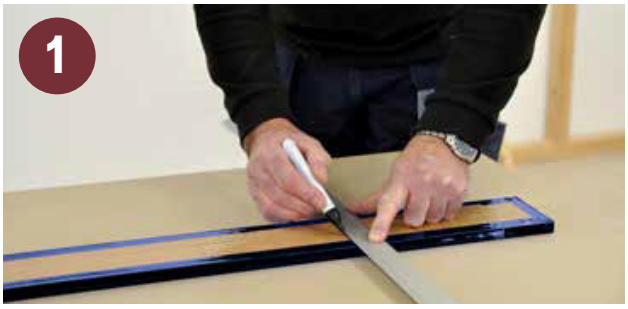
PhoneStrip – cutting to size & masking



MEASURING AND MARKING THE CUTTING LINE

CUT THE DECOUPLING STRIP TO SIZE

Hand-held circular saw with Widia blade & extraction Jigsaw with wood or metal saw blade, cutter.

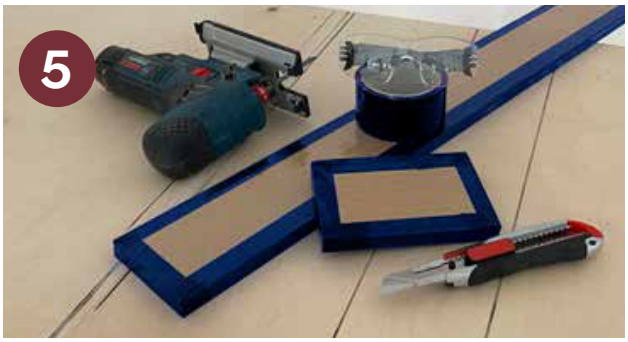
MASK THE DECOUPLING STRIPS

Mask the cut edge only with PhoneStar Tape. Allow the PhoneStrip PhoneStar Tape to protrude by at least 2 cm at the corners.

The colour of the adhesive tape may vary.

FOLD OVER THE CORNERS

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



DONE

NOTE:

PhoneStrips and PhoneStar 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. (EN 13501).

ATTENTION:

Process on a stable work surface
- Consider work safety!

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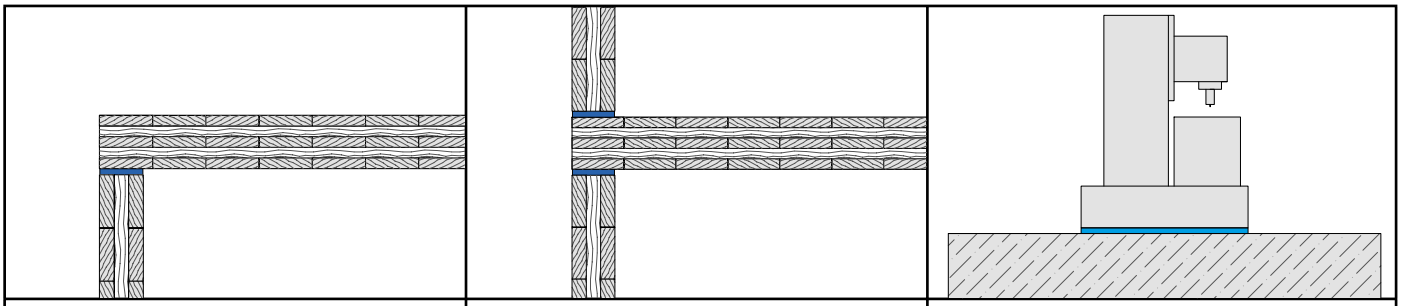
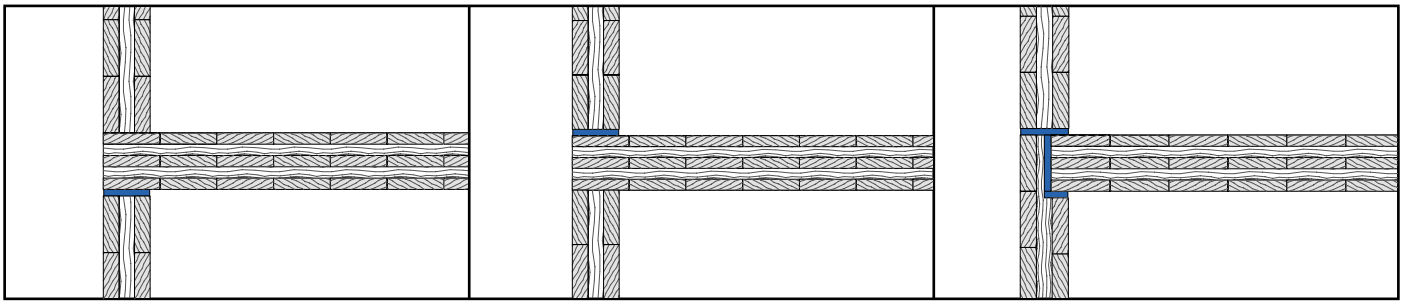
Application options

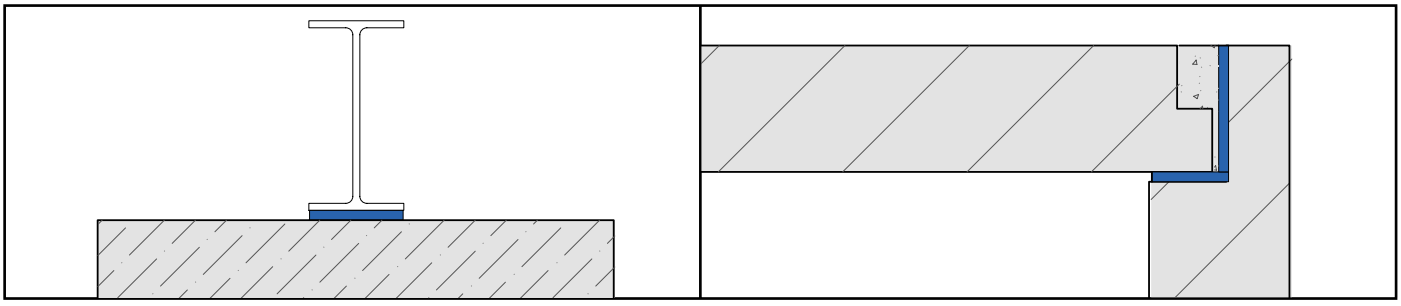
PhoneStrip can be used with wooden, metal and concrete precast construction methods due to its high vertical load capacity.

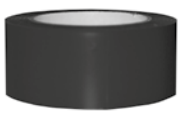


L-joint	T-joint	PhoneStrip under machines

WAYS TO POSITION PHONESTRIP





PhoneStrip shadow joint	PhoneStrip shadow joint tape
	

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PhoneStrip processing example

INSTALLATION

Place the PhoneStrip decoupling strip on the surface to be isolated, laminated side up, in the required width.

FIXING

The decoupling strips can be nailed, bonded, stapled or screwed to the structure in order to fix the position.

NOTE:
Countersink the screw head at least one millimetre in the PhoneStrip.

ATTENTION:

PhoneStrips have a laminated side. This is marked with a label and must be visible after the installation of the strips.

CONNECTORS

No decoupling connectors are required to install the PhoneStrip decoupling strips.

FIRE RESISTANCE

On the basis of the fire resistance test based on EN 1365-2:2015-02, it is possible for specialist planners to use PhoneStrip in building class 5.

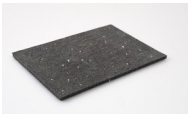
The test report proves that PhoneStrip decoupling strips of building material class E according to EN 13501 have a high fire resistance duration. The necessary requirements for the flank decoupling of timber constructions are now covered in terms of fire and sound.

Woodland Acoustics

STRUCTURE LAYERS / DECOUPLING

Depending on the selected system structure, structure layers are necessary for further processing. The following materials are available from Woodland Acoustics:

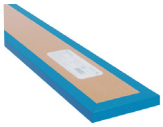
DECOUPLING LAYERS

	Product image	Length x width [m]	Thickness [mm]	Woodland Code
GenieMat RST02/RST05 An acoustic rubber underlay that acts as a decoupling layer		1220mm x 22.86m	2mm	AC-PLGM-RST02
		1220mm x 9.14m	5mm	AC-PLGM-RST05
FloorMuffler US (Decoupling fleece) An underlay with inustry leading acoustic ratings		990 x 1010mm	2mm	UL-FM-US-10
		1830 x 3280mm		UL-FM-US-60
Mineral wool 12/20mm An impact sound insulation board made of compressed rock wool		1200 x 625	12mm	AC-PSMW-15
			20mm	

FLOORING SUBSTRATES

	Product illustration	Length x width	Thickness [mm]	Woodland Code
Decoupling plate For installation of a decoupling layer on PhoneStar for the laying of tiles and natural stone, timber, carpet tile and other floor coverings that require gluing down.		1000 x 600mm	4mm	AC-PSPL-4
High-grade flooring plywood For installation of sheet floor coverings such as sheet vinyl, rubber or marmolium.			recommended min 5mm	

PHONESTRIP

	Product illustration	Length x width [m]	Thickness [mm]	Weight [g/m2]
PhoneStrip*		1200 x 60	12	17.5
		1200 x 60	20	24
		1200 x 100	15	19

*This product is available for customisation

NOTE:
Products are matched to one another.
The decoupling layers suitable for the corresponding systems are listed in the chapter “System solutions”.

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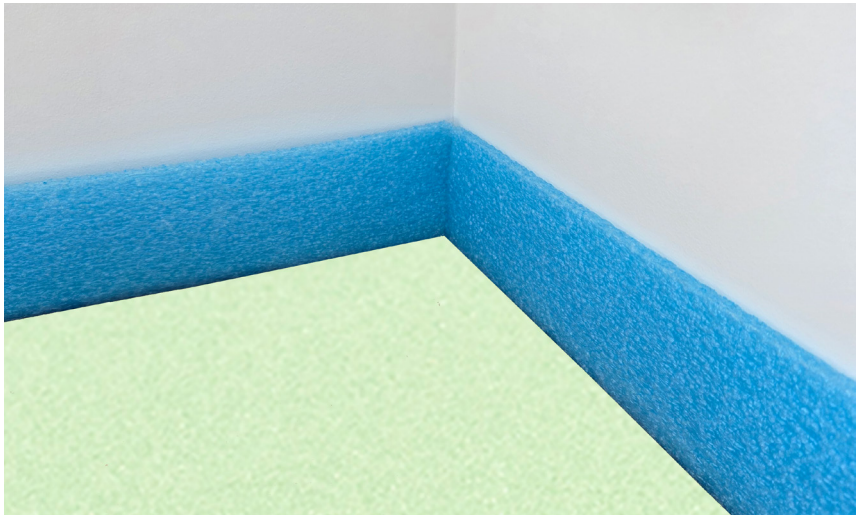
Laying Decoupling Layers

The decoupling layers are laid floating on the substrate.

For laying, the substrate must be clean, dry and free from separating layers of all kinds. In the case of wet areas, the decoupling layers need to be bonded to the substrate, see Woodland Acoustics recommended adhesives page.

INSTALLING FLOORMUFFLER

Cut the FloorMuffler (decoupling fleece) to the appropriate length and lay it floating or bonded on the substrate. Each subsequent row is butted edge to edge with the other and attached using the lip and tape sealing system or duct tape. The rows must not overlap. Avoid cross joints. Maintain an offset of at least 10cm



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Installing the decoupling plate

The 4 mm-thick decoupling plate is installed by means of full-surface bonding to PhoneStar. For the installation, the surface must be clean, dry and free from separating layers of all kinds.

Apply recommended Woodland Acoustics adhesives to the completed surface of the Phonestar boards. Apply adhesive only to the areas being worked on.

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

Butt the decoupling plates 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 decoupling plate.

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

When installing the decoupling plate, care must be taken to ensure that the butt edges are not directly above the butt edges of the PhoneStar layer.

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.

Woodland Acoustics

Installing MiWo

The 12 or 20 mm-thick MiWo is installed in a stretcher bond on the substrate. For the installation, the surface must be clean, dry and free from dirt of all kinds.

MiWo 20-2

MiWo 12-2

ATTENTION:

After the installation, the MiWo layer must not be loaded by treading on it or by building site traffic (point load), as otherwise the mineral structure will be destroyed and the function badly impaired! It is essential to lay out load-distributing boards if walking on the layer is necessary! Protect against damage of any kind!

The installation has to be done in progress with the next layer!

Manufacturer's recommendation:

PhoneStrip as floor stabilisation

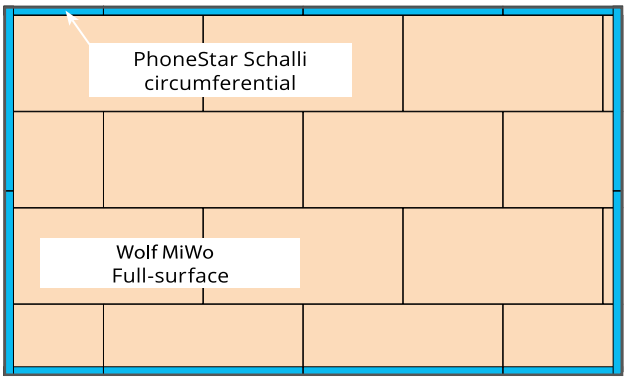
In the floor area, the sound decoupling strips are used as stabilisers in the edge area, at door transitions and corners with soft impact sound insulation.

PhoneStrip 12 mm

PhoneStrip 20 mm

SONIC STABILISATION

- In corners and edges, the use of the edge baffle prevents the top layer from sinking
- A significant increase in payloads is achieved thanks to the sound stabilisation.



NOTE:

The use of PhoneStrip in the edge area does not cause any deterioration in airborne and impact sound.

Woodland Acoustics

Final coverings on Phonestar floor systems

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

1. Individually fulfilling various requirements such as sound insulation or fire protection.
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 Phonestar 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 customer service or Technical department.

THE FOLLOWING GENERALLY APPLIES:

When installing final coverings, the manufacturers' installation instructions must be observed.

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Floating installation of click systems

FLOATING INSTALLATION OF THE FINAL COVERING

Lay the floor made of laminate, ready-made parquet, cork, linoleum, vinyl, SPC 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. 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, SPC, PVC and vinyl must have a minimum thickness of 7 mm.

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

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 Engineered Timber flooring

BONDED INSTALLATION:

It is possible to bond engineered timber flooring over PhoneStar using the decoupling plate or Plywood as a decoupling layer. Engineered timber cannot be bonded directly to Phonestar, Decoupling plate or plywood must be first bonded to the Phonestar boards. See Woodland Acoustics for recommended adhesives.

NOTE:

In the case of a plywood being used, Woodland Acoustics recommends using a high grade flooring plywood, the plywood must be adhered using a Woodland recommended adhesive and not nailed down to the Phonestar boards.

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Laying natural stone and tiles

Tiles and natural stone can only be laid on PhoneStar boards 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.

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. When laying the final covering, the instructions of the covering manufacturer must be observed.

Laying method		Thickness [in mm]	Surface pretreatment
PhoneStar	**Decoupling layer**		
Bonded or floating over the substrate	decoupling plate bonded to PhoneStar	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 10mm. Ceramics and natural stone can be laidwith all conventional, plastic-coated, approved, suitable installation materials. Maximum tile size 60 x 60 cm

NOTE:

The tiling work must be carried out in accordance with the generally accepted rules of the trade

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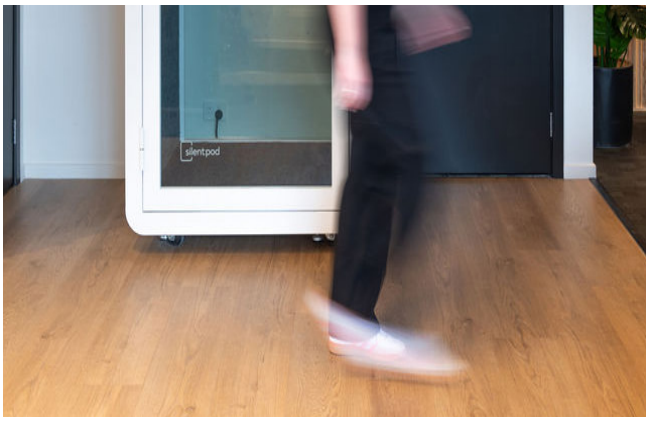
Installation with PVC, vinyl, carpet, linoleum, coconut coverings

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



DECOUPLING LAYERS

When laying the final covering, the instructions of the covering manufacturer must be observed.

Laying method		Thickness [in mm]	Surface pretreatment
PhoneStar	**Decoupling layer**		
Bonded to the substrate or flooring	Decoupling plate bonded to PhoneStar	4	Preparation of the substrate according to the instructions of the adhesive or covering manufacturer.
Bonded or floating over the substrate	Flooring Plywood bonded over Phonestar boards	5mm +	Preparation of the substrate according to the instructions of the adhesive or covering manufacturer.

NOTE:

The laying of the final covering must be carried out in accordance with the generally accepted rules of the trade.

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Floor structure examples

SUBSTRATE - TIMBER JOIST

Substrate	Cover layer	Sound Insulation	Decoupling	Final Covering
Wood based material (OSB, Strandboard, Plywood etc)	FloorMuffler (decoupling fleece), GenieMat Rubber	Phonestar (floating or bonded)	Decoupling plate, flooring plywood (Bonded)	Bonded engineered timber, Ceramic Tile
Wood based material (OSB, Strandboard, Plywood etc)	FloorMuffler (decoupling fleece), GenieMat RST Rubber	Phonestar (floating or bonded)	Flooring Plywood (Bonded)	LVT, Sheet Vinyl
Wood based material (OSB, Strandboard, Plywood etc)	FloorMuffler (decoupling fleece), GenieMat RST Rubber	Phonestar (floating or bonded)		Laminate, Hybrid, Floating Engineered Timber
Wood based material (OSB, Strandboard, Plywood etc)	Mineral Wool, GenieMat FF Rubber	Phonestar (floating)	2x min 9mm Plywood (Screwed and offset)	All traditional floor coverings
Wood based material (OSB, Strandboard, Plywood etc)	FloorMuffler (decoupling fleece), GenieMat Rubber (optional)	Phonestar (floating or bonded)		Traditional roll Carpet

NOTES:
- Plywood minimum thickness 5mm
- Clip together minimum thickness without decoupling layer 7mm
- See adhesive recommendation at www.woodlandacoustics.co.nz

SUBSTRATE - MASS TIMBER

Substrate	Cover layer	Sound Insulation	Decoupling	Final Covering
Mass Timber	Decoupling fleece, GenieMat Rubber	Phonestar (floating or bonded)	Decoupling plate, flooring plywood (Bonded)	Bonded engineered timber, Ceramic Tile
Mass Timber	Decoupling fleece, GenieMat RST Rubber	Phonestar (floating or bonded)	Flooring Plywood (Bonded)	LVT, Sheet Vinyl
Mass Timber	Decoupling fleece, GenieMat RST Rubber	Phonestar (floating or bonded)		Laminate, Hybrid, Floating Engineered Timber
Mass Timber	Mineral Wool, GenieMat FF Rubber	Phonestar (floating)	2x min 9mm Plywood (Screwed and offset)	All traditional floor coverings
Mass Timber		Phonestar (bonded)	Flooring plywood (Bonded)	All traditional floor coverings
Mass Timber	Decoupling fleece, GenieMat Rubber (optional)	Phonestar (floating or bonded)		Traditional roll Carpet

NOTES:
- Plywood minimum thickness 5mm
- Clip together minimum thickness without decoupling layer 7mm
- See adhesive recommendation at www.woodlandacoustics.co.nz

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SUBSTRATE - CONCRETE

Substrate	Cover layer	Sound Insulation	Decoupling	Final Covering
Concrete	Decoupling fleece, GenieMat Rubber	Phonestar (floating or bonded)	Decoupling plate, flooring plywood (Bonded)	Bonded engineered timber, Ceramic Tile
Concrete	Decoupling fleece, GenieMat RST Rubber	Phonestar (floating or bonded)	Flooring Plywood (Bonded)	LVT, Sheet Vinyl
Concrete	Decoupling fleece, GenieMat RST Rubber	Phonestar (floating or bonded)		Laminate, Hybrid, floating engineered timber
Concrete	Mineral Wool, GenieMat FF Rubber	Phonestar (floating)	2x min 9mm Plywood (Screwed and offset)	All traditional floor coverings

NOTES:

- Plywood minimum thickness 5mm
- Clip together minimum thickness without decoupling layer 7mm
- Dampproof membrane must be installed to prevent rising moisture
- See adhesive recommendation at www.woodlandacoustics.co.nz

Scan for further technical information, or visit woodlandacoustic.co.nz

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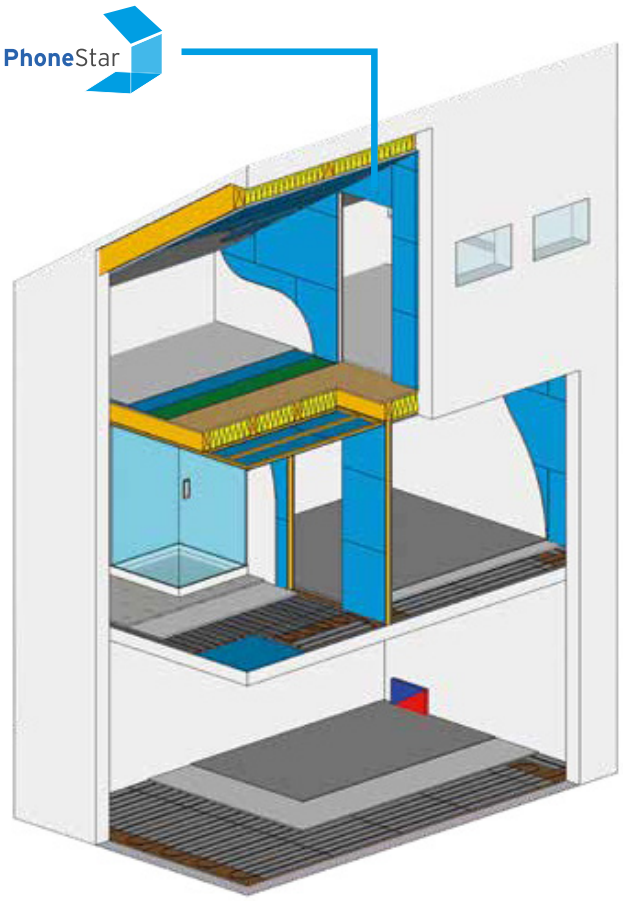
PhoneStar System Advantages



Usable in floor, wall & ceiling

- ✓ New building
- ✓ Renovation
- ✓ Timber construction
- ✓ Solid construction

Woodland Acoustics dry screed systems

HANDLING

- Simple and quick installation
- Modular system elements

CONSTRUCTION TIME

- No drying time means shorter construction time
- No introduction of moisture
- Rapid maturity of the top covering

SOUND INSULATION

- Improvement in impact sound insulation thanks to PhoneStar

CONSTRUCTION HEIGHT / WEIGHT

- Lean construction height
- Weight reduction

COSTS

- Reduction of the coordination costs due to system supplier

Wet screed

HANDLING

- Installation by professional companies

CONSTRUCTION TIME

- Drying time necessary

SOUND INSULATION

- Increased risk of acoustic bridges

CONSTRUCTION HEIGHT / WEIGHT

- Loss of space due to construction Increased ceiling load and introduction of water

COSTS

- Possible additional costs for CM measurements as well as for subsequent surface treatment

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