



**WOLF®**

**Bavaria**

# **PhoneStar Sound Insulation Board**

for floors, walls and ceilings

*Better quality of life due to quietness and comfort*



**Impact Sound Insulation  
Airborne Sound Insulation**

# PhoneStar - what is it?

PhoneStar is an innovative, effective sound insulation board, consisting of environmentally friendly raw materials - wood and sand. It significantly reduces both airborne and impact sound through walls, floors and ceilings. At only 15mm thickness, a PhoneStar board provides up to 36 dB (Rw) of airborne sound insulation.

## The PhoneStar collection of boards:

### PhoneStar TRI

- 3 parallel corrugated layers
- for floors, walls and ceilings
- optimized for electrical installations
- LxWxD: 1250 x 625 x 15 mm

### PhoneStar PROFESSIONAL

- 3 cross fluted corrugated layers
- optimized for floors
- LxWxD: 1200 x 800 x 15 mm

### PhoneStar TWIN

- 2 parallel corrugated layers
- for floors, walls and ceilings
- for slim constructions
- optimized for electrical installations
- LxWxD: 1250 x 625 x 10 mm



## 10 Benefits that inspire

- » Very good airborne and impact sound insulation
- » Slim board thickness of 10 or 15 mm
- » Fast, clean and easy application
- » Natural raw materials for sustainable constructions
- » A universal solution for floors, walls and ceilings
- » Very high load bearing capacity
- » Can be used with all popular floor coverings
- » Creates a quiet comfortable environment - it stores heat and is breathable
- » Residential space saving due to very slim thickness
- » Increased property value due to superior sound insulation

## PhoneStar on concrete walls



On resilient bars, battens or directly mounted

## PhoneStar on ceilings and roofs



On resilient bars, battens or directly screwed

## PhoneStar on Timber or Steel Stud Walls

High sound insulation

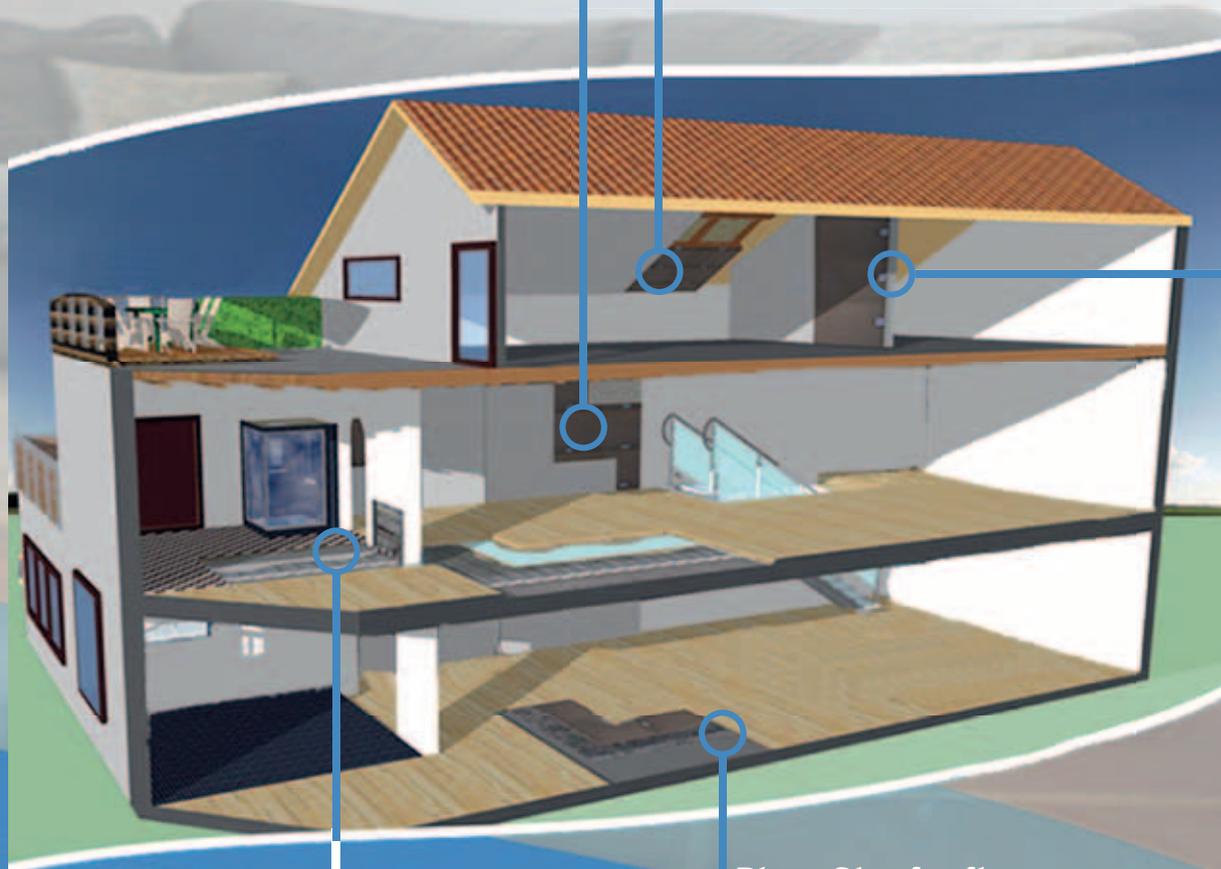


PhoneStar on a stud wall covered by plasterboard

## Timber Stud Wall

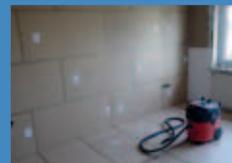


Model - Timber Stud Wall. PhoneStar screwed to the studs and plasterboard screwed to the PhoneStar



## PhoneStar for floors

- One or two layers
- Butted tightly together
- Floating or glued
- Walk on immediately
- Immediate finishing
- High compressive strength



## PowerFloor Underfloor Heating



### PowerFloor Exclusiv

- with integrated PhoneStar sound insulation
- Element only 34 mm thick

### PowerFloor Slimline

- Super-slim underfloor heating system
- Element only 19 mm thick



## LAYING:

On floors lay the PhoneStar boards floating and tightly butted together in a brickwork formation. If using a glued floor covering either bond PhoneStar to the floor or bond two layers of PhoneStar together.  
For walls and ceilings PhoneStar should be mounted onto resilient bars or battens for best decoupling results. Alternatively it can be mounted directly.

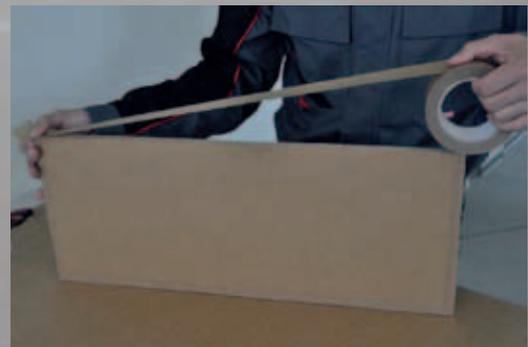
## CUTTING

- with Circular Saw
- with Jigsaw



## TAPING

After cutting, the edges are sealed with WOLF Tape



**Floor finishing:** Most coverings are suitable for fitting over PhoneStar, for example Solid Wood, Engineered Wood, Parquet & Laminate Floors, Linoleum & Vinyl Floors and Tiles.  
For details see "Instructions for floors" ( "Verarbeitungsanleitung Boden" ).

**Wall and Ceiling finishing:** plasterboard or wood can be used as the finishing material.

## More details see:

[www.wolf-bavaria.com/Verarbeitung](http://www.wolf-bavaria.com/Verarbeitung)

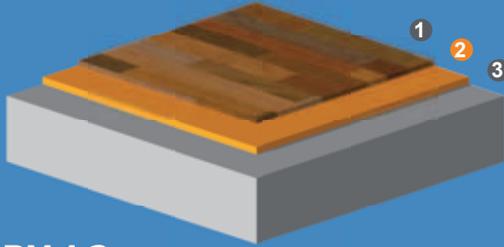


Two layer PhoneStar structures are also possible

## Concrete floor

For more examples see [www.wolf-bavaria.com/Planungsordner](http://www.wolf-bavaria.com/Planungsordner)

### PhoneStar on Solid / Concrete Floors



**BM 1.2**

- 1 Laminate\*\*
- 2 PhoneStar TRI 15 mm
- 3 Concrete floor 180 mm

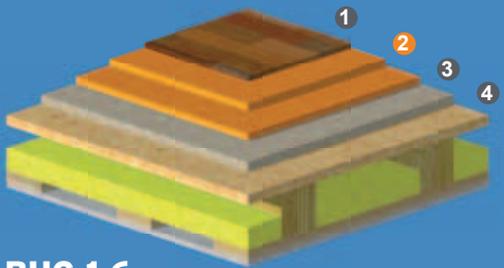
Thickness 15 mm  
without finished  
flooring)

Impact Sound:

Concrete Floor without PhoneStar  
Concrete Floor with PhoneStar TRI, up to  
Impact Sound Reduction, up to:

$L'_{n,w,R} = 73 \text{ dB}^*$   
 $L'_{n,w,R} = 51 \text{ dB}^*$   
 $\Delta L_{w,R} = 22 \text{ dB}^*$

### PhoneStar on Timber Joist Floors



**BHG 1.6**

- 1 Finished flooring\*\*
- 2 PhoneStar TRI 15 mm (2 Layers)
- 3 Wood Fibre 19 mm
- 4 Timber Joist 180 mm

Thickness 49 mm  
(without finished  
flooring)

Impact Sound:

Timber Joist without PhoneStar  
Timber Joist with PhoneStar, up to  
Impact Sound Reduction, up to

$L'_{n,w,R} = 75 \text{ dB}^*$   
 $L'_{n,w,R} = 60 \text{ dB}^*$   
 $\Delta L_{w,R} = 15 \text{ dB}^*$

\* The values given are approximate and may vary depending on the nature of the overall structure of buildings.

\*\*Installation instructions must be read and observed carefully. For more details see : [www.wolf-bavaria.com](http://www.wolf-bavaria.com)

## Film Studio Automanager Augsburg



External noise made TV productions very difficult.  
PhoneStar mounted on walls solved the problem.

## Hotel Jungbrunn - Tannheimer Tal

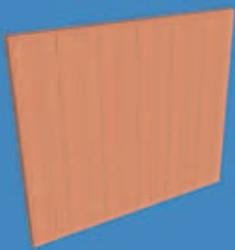
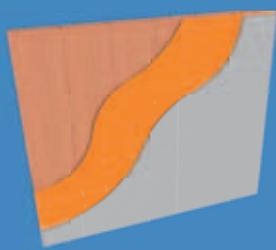
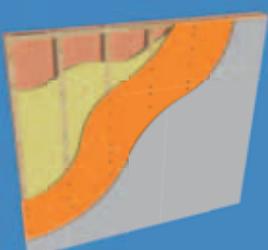
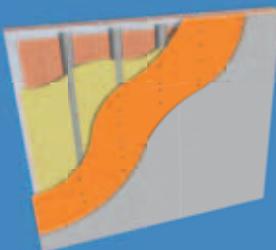


Noise from the Fitness Centre disturbed other guests.  
PhoneStar solved the problem.

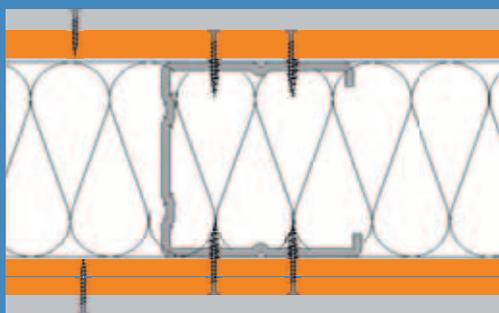
# PhoneStar for walls

## Concrete walls

More applications see [www.wolf-bavaria.com/Planungsordner](http://www.wolf-bavaria.com/Planungsordner)

Existing wall	PhoneStar directly...	... on battens	...on resilient bars
			
Solid Brick 115 mm Airborne sound insulation $R'_{w,R}=42$ dB	WMZ D 1.2 ... up to $R'_{w,R}=48$ dB*	WMZ L 1.2 ... up to $R'_{w,R}=53$ dB*	WMZ H 1.2 ... up to $R'_{w,R}=57$ dB*

## Steel Stud Walls



Plasterboard 12,5 mm  
PhoneStar TRI 15 mm

Steel Stud, 75 mm  
Infilled with Wood Fibre

2 Layers PhoneStar TWIN 2x10 mm  
Plasterboard 12,5 mm

Airborne sound insulation up to  
 $R_w = 60-62$  dB\*

# PhoneStar on ceilings and roofs



PhoneStar directly on OSB...

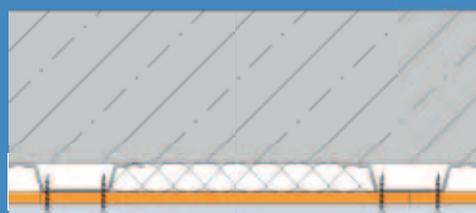


screwed on joists



on sloped attic roofs

## PhoneStar on concrete ceiling



### DM H 1.2

- 1 concrete ceiling 180 mm
- 2 Resilient bars, 27 mm  
infilled with Wood Fibre
- 3 PhoneStar TRI 15 mm
- 4 Plasterboard 12,5 mm

- 2 Impact sound
- 3 Concrete Ceiling without PhoneStar
- 4 Concrete Ceiling with PhoneStar, up to  
Impact sound reduction, up to:

Thickness 54,5 mm

$L'_{n,w,R} = 73$  dB\*  
 $L'_{n,w,R} = 63$  dB\*  
 $\Delta L_{w,R} = 10$  dB\*

## PhoneStar PROFESSIONAL



Cut Section: PhoneStar PROFESSIONAL

## PhoneStar TRI



Cut Section: PhoneStar TRI

## PhoneStar TWIN



Cut Section: PhoneStar Twin

### Approximate value

L x W x D	1200 x 800 x 15 mm	1250 x 625 x 15 mm	1250 x 625 x 10 mm
Area	0,96 m <sup>2</sup>	0,78 m <sup>2</sup>	0,78 m <sup>2</sup>
Weight approx. / m <sup>2</sup>	18,00 kg	18,00 kg	12,00 kg

### Sound Reduction

Impact, up to	$\Delta L_{nw} = 21 \text{ dB}$	$\Delta L_{nw} = 22 \text{ dB}$	$\Delta L_{nw} = 19 \text{ dB}$
Airborne up to	$R_w = 36 \text{ dB}$	$R_w = 36 \text{ dB}$	$R_w = 26 \text{ dB}$

Fire Behaviour	B2	B2	B2
Pressure Solidity	5 kN/m <sup>2</sup>	5 kN/m <sup>2</sup>	5 kN/m <sup>2</sup>
Punctual Load	4 kN	4 kN	4 kN
Sd-Value, approx.	0,2 m	0,2 m	0,2 m
Thermal Conductivity	0,17 W/(mK)	0,17 W/(mK)	0,17 W/(mK)
Bending Tensile Load	2107 N Lengthwise	650,8 N Lengthwise	278,4 N Lengthwise
Bending Tensile Load	2123 N Widthwise	414,4 N Widthwise	159,4 N Widthwise
Bending Tensile Strength	$\geq 16 \text{ N/mm}^2$ Lengthwise	$\geq 5 \text{ N/mm}^2$ Lengthwise	$\geq 4,5 \text{ N/mm}^2$ Lengthwise
Bending Tensile Strength	$\geq 16 \text{ N/mm}^2$ Widthwise	$\geq 3 \text{ N/mm}^2$ Widthwise	$\geq 2,5 \text{ N/mm}^2$ Widthwise
Dynamic Stiffness		$s' = 32,6 \text{ MN/m}^3$	

### Application Areas:

A1	Converted Attic	Converted Attic	Converted Attic
A2, A3	Living rooms and lounges	Living rooms and lounges	Living rooms and lounges
B1-B3	Office, work spaces, floor	Office, work spaces, floor	Office, work spaces, floor
C1-C3, C5	Meeting rooms	Meeting rooms	Meeting rooms
D1, D2	Salesrooms	Salesrooms	Salesrooms
E1	Factories and Workshops	Factories and Workshops	Factories and Workshops

Possible Application areas	Floors	Floors, Walls, Roofs, Ceilings	Floors, Walls, Roofs, Ceilings
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The information given in this brochure reflects our current expertise and experience based on the latest knowledge available. Values given are approximate values and are not to be used as contractual data. Sound insulation values may vary depending on the type of construction in question, flanking conditions and workmanship standards. No commitment is implied. We reserve the right to amend this data as technology progresses and further developments are made. Our information describing the nature of our products and services are not guaranteed. The customer is not exempt from a careful review of the functions and applications of the products by qualified personnel.

**NEW! Sound Insulation Planning Guide online: [www.wolf-bavaria.com/Planungsordner](http://www.wolf-bavaria.com/Planungsordner)**



Approximately 100 examples with PhoneStar on floors, walls and ceilings.

