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 - Ausgezeichnet zur Bau 2011

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The PhoneStar collection of boards:

ONE Solution - universal for all applications PhoneStar

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

On resilient bars, battens or directly screwed

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

More details, see www.wolf-bavaria.com/Produkte
**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

Two layer PhoneStar structures are also possible
PhoneStar on floors

Concrete floor

PhoneStar on Solid / Concrete Floors

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

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

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

BM 1.2

PhoneStar on Timber Joist Floors

1. Finished flooring**
2. PhoneStar TRI 15 mm (2 Layers)
3. Wood fibre 19 mm
4. Timber Joist 180 mm

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

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

BHG 1.6

*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

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.
**Concrete walls**

**Existing wall**
- Solid Brick 115 mm
- Airborne sound insulation $R'_{W,R} = 42 $ dB

**PhoneStar directly on battens**
- WMZ D 1.2
- ... up to $R'_{W,R} = 48 $ dB*

**... on resilient bars**
- WMZ L 1.2
- ... up to $R'_{W,R} = 53 $ 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*

**Impact sound reduction, up to:**
- $\Delta L_{W,R} = 10$ dB*

**Concrete Ceiling without PhoneStar** $L'_{n,w,R} = 73$ dB*
**Concrete Ceiling with PhoneStar** $L'_{n,w,R} = 63$ dB*

**Solid Brick 115 mm**

**More applications see** www.wolf-bavaria.com/Planungsordner

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**PhoneStar on ceilings and roofs**

**PhoneStar directly on OSB...**

**screwed on joists**

**on sloped attic roofs**

**DM H 1.2**
## Technical Data

<table>
<thead>
<tr>
<th>Approximate value</th>
<th>PhoneStar PROFESSIONAL</th>
<th>PhoneStar TRI</th>
<th>PhoneStar TWIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>L x W x D</td>
<td>1200 x 800 x 15 mm</td>
<td>1250 x 625 x 15 mm</td>
<td>1250 x 625 x 10 mm</td>
</tr>
<tr>
<td>Area</td>
<td>0,96 m²</td>
<td>0,78 m²</td>
<td>0,78 m²</td>
</tr>
<tr>
<td>Weight approx. / m²</td>
<td>18,00 kg</td>
<td>18,00 kg</td>
<td>12,00 kg</td>
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</tbody>
</table>

### Sound Reduction

<table>
<thead>
<tr>
<th>Impact, up to</th>
<th>ΔLnw = 21 dB</th>
<th>ΔLnw = 22 dB</th>
<th>ΔLnw = 19 dB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airborne up to</td>
<td>Rw = 36 dB</td>
<td>Rw = 36 dB</td>
<td>Rw = 26 dB</td>
</tr>
</tbody>
</table>

### Fire Behaviour

- **Pressure Solidity**: B2
- **Punctual Load**: 5 kN/m²
- **Sd-Value, approx.**: 4 kN
- **Thermal Conductivity**: 0,17 W/(mK)
- **Bending Tensile Load**: 2107 N Lengthwise
- **Bending Tensile Load**: 2123 N Widthwise
- **Bending Tensile Strength**: ≥16 N/mm² Lengthwise
- **Dynamic Stiffness**: 32,6 MN/m³

### Application Areas:

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

### Possible Application Areas:

- **Floors**
- **Floors, Walls, Roofs, Ceilings**

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.
WOLF BAVARIA GmbH is a company based in Germany, D-91560 Heilsbronn near Nürnberg.

WOLF BAVARIA develops, manufactures and markets innovative Sound Insulation products and underfloor heating systems with and without integrated sound insulation. The Sound Insulation products are produced by an innovative method using environmentally, friendly materials. Wolf products are used in the private, public and industrial areas.

Phonewell (the original brand name, prior to re-branding to PhoneStar Professional in 2010) was awarded the 'Federal Prize for an Outstanding Innovative Construction Product' by the German Federal Minister for the Economy and Technology in 2007.

Under the patronage of the German Federal Minister for Transport, Building and Urban Development, the PhoneStar TRI was awarded during BAU 2011 by Messe München, Bauverlag BV and the "Bundesarbeitskreis Altbaubetrieb" within the „Praxis Altbau - Preis für Produktinnovation 2011“.

We strive to be a strong partner to our customers by offering you commitments and incentives in the field of sound insulation and innovative underfloor heating systems.

Information in this brochure and any sound insulation values are approximate and given in good faith. Sound insulation values can vary depending on the type of building and structure in question. Wolf Bavaria cannot accept responsibility for any printing errors.

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