BEWI Step and Step Roll impact sound insulation

BEWI Step and Step Roll products made of elastic EPS insulation are effective and functional impact sound insulation for floors and intermediate floors. The dynamic stiffness of the products is <15 MN/m³, which makes the BEWI Step and Step Roll impact sound insulation unique. Explore the products and choose the most suitable ones!

BEWI Step series products

- Step
- Step Roll
- Step+
- Step Edgeband

BEWI Step series products are moisture resistant and do not contain mould-prone or rotting ingredients. The products have M1 emission classification for construction materials. The products also gain praise for their ability to insulate heat: the design value of thermal conductivity is 0.04 W/(mK).

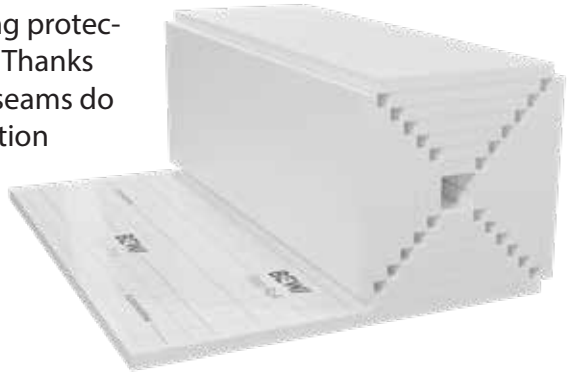
BEWI Step

BEWI Step impact sound insulation is designed for floating and intermediate floors. It is installed in the interlayer between the load-bearing structure and the surface plate, typically resulting in an impact sound level of 40 to 50 dB.

The standard thicknesses of the BEWI Step boards are 20 mm and 30 mm. They are suitable for floor structures with standard loading of less than 5 kN/m² – Thus, BEWI Step is also an excellent choice for aisle spaces with loads higher than normal floor structure.

BEWI Step Roll

BEWI Step Roll is impact sound insulation on a roll. It has a plastic film on the surface, which serves both as a casting protection and a mounting base for underfloor heating pipes. Thanks to the overlap with integrated tape in the product, the seams do not need to be taped separately – dense casting protection prevents wet filler masses or concrete casting from entering sound-technically wrong places.



The standard thicknesses of the BEWI Step Roll products are 20 mm, 30 mm and 40 mm.

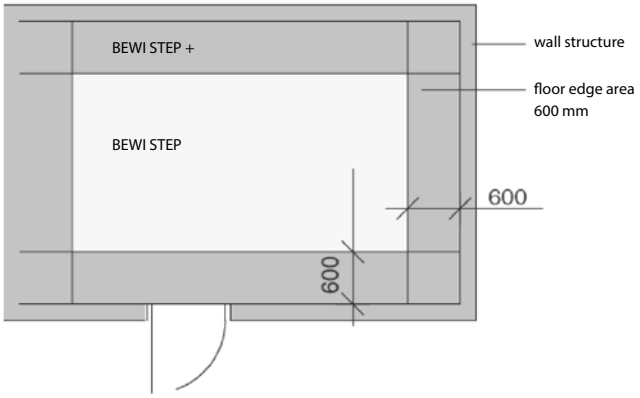
BEWI Step+

More rigid than the traditional BEWI Step board, BEWI Step+ is designed to support the edges of the floors, especially when the surface plate is thin. The compressive strength of the BEWI Step+ board is 20 kN/m^2. BEWI Step+ boards should only be used adjacent to walls – be sure to choose the BEWI Step impact sound insulation in the middle of the floor, which is more effective at absorbing the sound of footsteps.

Did you know? There may be large loads of more than 5 kN/m^2 in the edge areas of the floor due to, for example, bookshelves or other heavy furniture. Depressions of more than 2 to 3 mm are not normally allowed in the edge areas. With BEWI Step+ boards, you can avoid possible depressions.

BEWI Step Edgeband

Elastic BEWI Step Edgeband is used at all edges of floating floor structures. It ensures that the top layer is floating on top of the insulation layer. Sound-technically correctly implemented surface plate is not attached to any sound-conducting structure, for example, walls, columns or pipes.



Features – 5 reasons to choose BEWI Step products for your site

1. Impact sound insulation

The dynamic stiffness of the BEWI Step and BEWI Step Roll products is <15 MN/m^3, allowing them to effectively insulate impact sound.

According to building regulations, the impact sound level between apartments must be less than 53 dB. When BEWI Step boards are used in the floating floor structure, the impact sound level is typically between 40 and 50 dB. Please note, however, that sound insulation is influenced by the materials used: the heavier the floor structure, the better the sound insulation.

Impact sound levels tested for different structures

Suitable as coating for BEWI Step boards are, for example:

- Concrete 50...80 mm
- Gypsum 35...70 mm
- Gypsum boards 2…3 layers
- Particle boards 20…28 mm
- Pumpable floor fillings 25...40 mm (usually reinforced with fibre reinforcement mesh)

The floor surface material is freely selectable and, if necessary, interchangeable.

2. Indoor climate of buildings

BEWI Step products are made of elastic EPS insulation and have M1 emission classification of construction materials. The products do not emit smell compounds or substances hazardous to health to a harmful extent.

3. Moisture resistance

BEWI Step products are moisture resistant, so they do not lose their properties due to moisture. In addition, the products do not contain any mould-prone or decomposing ingredients and do not release any substances harmful to health, even when damp. The BEWI Step Roll product's surface membrane is permeable to water vapour, thus moisture does not condense on the board.

4. Thermal insulation capacity

0.04 W/(mK) can be used as the design value for thermal conductivity. This is taken into account in underfloor heating solutions.

5. Strength properties

BEWI Step products are suitable for floating floor structures on intermediate floors for different surface floor alternatives when the long-term dimensional load is up to 5 kN/m^2. Estimated depression at this load is less than 2 mm. Because BEWI Step products are moisture resistant, moisture fluctuations do not impair their properties.

BEWI Step products

Product	Size	Thicknesses	m²	Package size pcs/pkg	Package size m²/pkg	Usefull load kg/m²	Thermal conductivity W/mK	Dynamic stiffness MN/m³
BEWI Step	1000 X 1200 mm	20 mm	1,2	25	30,00	500	0,040	<15
BEWI Step	1000 X 1200 mm	30 mm	1,2	16	19,20	500	0,040	<15
BEWI Step+	600 X 1000 mm	30 mm	0,6	16	9,60	2000	0,036	-
BEWI Step Roll	1200 X 11360 mm	20 mm	13,63	2	27,26	500	0,040	<20
BEWI Step Roll	1200 X 7315 mm	30 mm	8,77	2	17,54	500	0,040	<15
BEWI Step Roll	1200 X 4840 mm	40 mm	5,81	2	11,62	500	0,040	<15
BEWI Step Edgeband	Lenght 1200 mm Height 80 mm, 100 mm, 120 mm, 150 mm	12 mm	-	60	72,00	-	0,040	<15

Customer service

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