

## Bondal®



**Structural noise is the result of vibrations of engines, aggregates, generators and other industrial equipment. These vibrations transmit easily through a structure. If sound reduction material is installed, then the vibrations will be converted into heat. As a result of this conversion, the noise radiating from the structure will decrease. To prevent vibrations spreading through the structure, it makes sense to disconnect parts of the structure . Pull B.V. has developed Bondal®. The sandwich sheet is worldwide used for the reduction of contact sound.**



Bondal® is a sandwich sheet, composed of two Galfan® galvanized steel plates (continuously hot dip galvanized steel with 5% aluminium) or aluminium plates (EN AW 5754 H12/H22) with a viscoelastic core layer. The aluminium Bondal® plates are always provided of an one sided protection foil to prevent damage. The composition of the viscoelastic layer gives Bondal® a very high loss factor, which is shown in the graph. There are two standard types of Bondal® steel available. The specific properties of the standard Bondal® types are shown below.



Bondal® Type	N-Galfan®	H-Galfan®	Aluminium
Temp. range of application	-10°C-75°C	50°C-130°C	-10°C-75°C
Distortion temperature	200°C	250°C	200°C
Decomposition temperature	230°C	260°C	230°C
Processing temperatuur	15°C	15°C	15°C

### Applications of Bondal®

The product is mostly used as a low-noise (sheet) structure in machine building, yachtbuilding and shipbuilding, hoppers, partition walls, floors, footbridges, pipeline insulation and numerous other applications.

### Using Bondal®

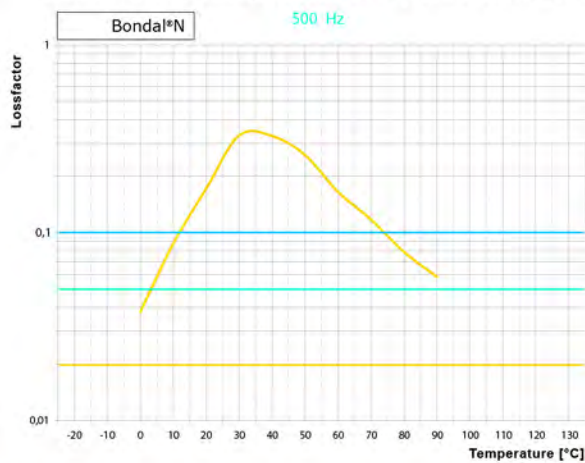
The sandwich sheets can be cut, drilled, punched or sawn like normal plates. Distorting (bending, angle folding, scoring) the material is no problem if the sheets can move independently from one another. Mechanical connections can be applied without advance measures. There are guidelines for welding.





## Acoustic properties of Bondal®

Loss factor measuring according to DIN EN ISO 6721-3 - Material layers 0,75 / 0,05 / 0,75 mm



## Bondal® delivery range

Bondal® H*	Sheet size	Alternative size
0,5 / 0,05 / 0,5	2000 x 1000 mm	2500 x 1250 mm
Bondal® N*	Sheet size	Alternative size
0,75 / 0,05 / 0,75	2000 x 1000 mm	2500 x 1250 mm
1,0 / 0,05 / 1,0	2000 x 1000 mm	2500 x 1250 mm
Bondal® Aluminium*	Sheet size	Alternative size
0,6 / 0,05 / 0,6	2000 x 1000 mm	2500 x 1250 mm
1,0 / 0,05 / 1,0	2000 x 1000 mm	2500 x 1250 mm
1,5 / 0,05 / 1,5	2000 x 1000 mm	2500 x 1250 mm

\*one sided RAL powder coating with protection film is possible

## Product specifications of Bondal®

This viscoelastic core layer contains no toxic components and decomposes at extreme heating into CO<sub>2</sub> and H<sub>2</sub>O. Bondal® can be cleaned (if necessary) with Mek, ethyl acetate or Isobutanol. Bondal® waste can be disposed of as scrap (similar to varnished plate work).