ISOLFON ReBond

Sound Absorption, Soundproofing & Impact noise reduction

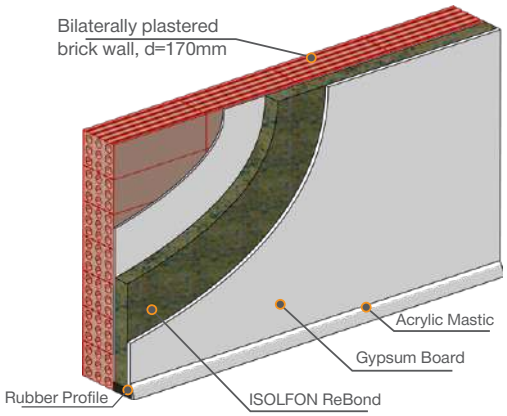
ISOLFON - ReBond : Complex material, that can be used for sound absorption, soundproofing & impact noise insulation.

ISOLFON-ReBond is produced by mixing recycled chopped polyurethane foam with a liquid polyurethane polymer adhesive, and thermocompression the mixture until the desired specific gravity is achieved. It has excellent dynamic stiffness, very good elasticity, very low permanent deformation, high consistency and mechanical strength.

It is environmentally friendly, as it is obtained from recycled foam, it is 100% recyclable, it does not contain fibers or other health harmful substances.

APPLICATIONS

Its primary application is to solve complex acoustic problems in buildings. Used in wall & ceiling cladding to fill the air gaps and create the Mass Spring effect, to improve the Sound Insulation properties of the wall system. The consistency and elasticity of ISOLFON-ReBond composition is used as «spring», in combination with materials which play the role of the mass, such as plasterboards, MDF, hardboard, etc.



USES ON FLOOR

· **Floating floor sound insulation** with separation of the load-bearing plate from the final floor for optimum sound insulation performance.

· **Floating floor sound proofing system**, with an intermediate substrate underneath sheets of cement-board, chipboard, MDF or similar substrate, ensuring improved sound insulation of airborne noise.

· **Anti-vibration underlay for impact noise sound reduction**, ideal for use under parquet, laminate or glued down wooden floors, Gym floors, carpets, LVT floors, ensuring reduced vibration and structure-borne noise transmission. It can offer an impact sound reduction ΔLw = 33 dB according to ISO 717.2.

ISOLFON-ReBond in floating floor

ISOLFON ReBond

ACOUSTIC PERFORMANCE (CONT.)

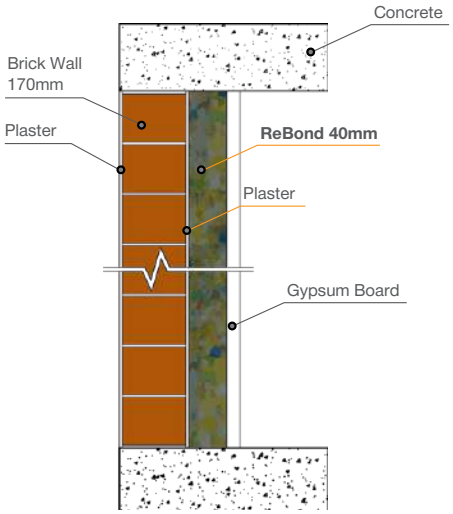
Wall Soundproofing

The noise reduction of a single-layer partition, is depended by their surface mass, -deflection- stiffness. As doubling the mass, increases sound insulation by 6 dB.

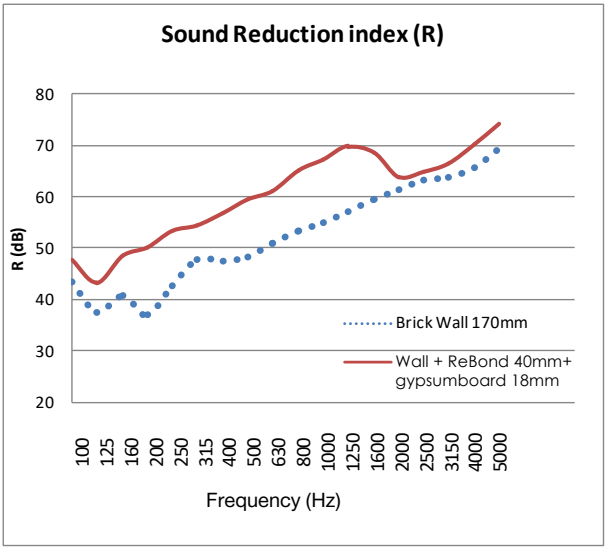
To ensure good noise reduction (Rw > 50 dB), single layer partitions require surface masses greater than 250 kg/m^2.

For multi-layer panels with facing, greater noise reduction can be achieved with less mass, taking advantage of the mass-spring principle.

Sound Insulation can be improved by, increasing the gaps between layers. To avoid cavity resonance, the gap should be filled with sound-absorbing light weight soft material, such as ISOLFON-ReBond.



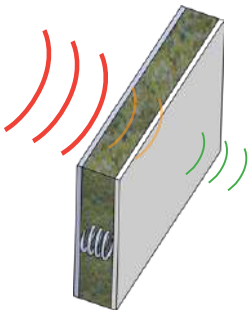
Wall Section View



Sound Reduction index according to ISO 140-3

Weighted Noise Reduction Index	Rw (dB)
Brick wall 170mm with plaster	53
Brick wall with ReBond 40mm + gypsumboard 18mm	62

According to ISO 717-1



Spring Mass Effect

Mass-spring-mass systems (Lightweight double-leaf partition wall) are light and efficient, easy and quick to install and consume less space. As the sound waves pass through ISOLFON-ReBond, friction occurs between the sound wave and the ReBond slab. This friction converts the acoustic energy into heat.

Sheet's Dimensions: 100x50cm with thickness: 20 mm, and 100x100 with thickness: 10 mm
(*Other dimensions and thicknesses on request with minimum order quantity).*

ALPHA ACOUSTIKI

ALPHA ACOUSTIKI S.A.
EUID: ELGEMI.004207401000

T. +30 210 67 79 875
info@alphacoustic.com
www.alphacoustic.com