# ISOLFON-Barrier

## Technical Characteristics

**High performance, flexible, mass – loaded vinyl noise barrier, offering superior acoustic transmission loss.**

### General Properties

| Product Name | Packing | Dimensions (Length x Width x Thickness) |
|---|---|---|
| **ISOLFON - Barrier 3.5 R** | In Rolls | 5m x 100cm x **1.85mm** |
| **ISOLFON - Barrier 5 R** | In Rolls | 5m x 100cm x **2.65mm** |
| **ISOLFON - Barrier 10 P** | Sheet | 120cm x 100cm x **5mm** |

### Mechanical Properties

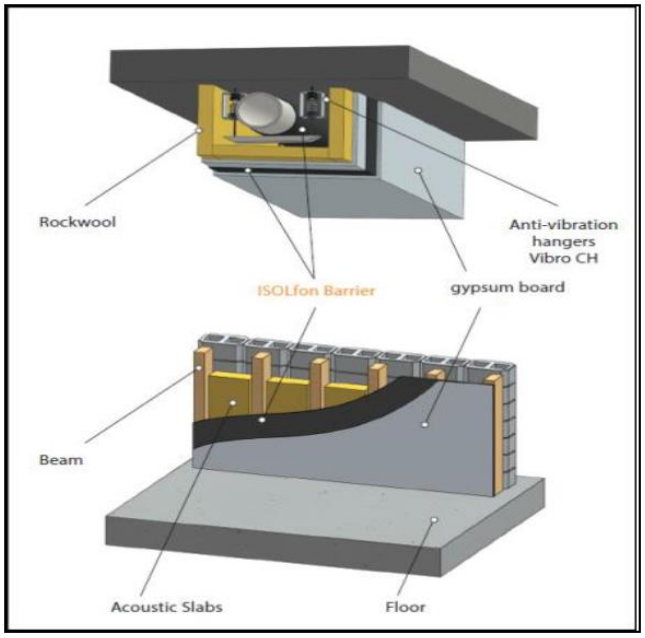
| Name | Mass ($kg/m^2$) | Thickness (mm) | Density ($g/cm^3$) | Resistance to traction | Elongation to Break | Hardness Shore A |
|---|---|---|---|---|---|---|
| **ISOLFON-Barrier 3.5** | 3.5 | 1.85 | 1.95 | > $1N/mm^2$ | > 100 % | 85°Shore A |
| Tolerance | ± 5 % | ± 0.5 % | ± 0.3 % | -- | -- | ± 10 |
| Test Method | -- | -- | ISO 2781 | -- | ISO 37 | ISO 868 |
| **ISOLFON-Barrier 5** | 5 | 2.65 | 1.95 | > $1N/mm^2$ | > 100 % | 85°Shore A |
| Tolerance | ± 5 % | ± 0.5 % | ± 0.3 % | -- | -- | ± 10 |
| Test Method | -- | -- | ISO 2781 | -- | ISO 37 | ISO 868 |
| **ISOLFON-Barrier 10** | 10 | 5 | 1.95 | > $1N/mm^2$ | > 100 % | 85°Shore A |
| Tolerance | ± 5 % | ± 0.5 % | ± 0.3 % | -- | -- | ± 10 |
| Test Method | -- | -- | ISO 2781 | -- | ISO 37 | ISO 868 |

## Thermal Properties

| Name | Resistance Cold Shock 200/50/-25 ° C | Flammability for ISOLFON-Barrier 5 Between 2 plasterboards | Shock Resistance 200/50/-23 ° C |
|---|---|---|---|
| **ISOLFON-Barrier 3.5** | No break | -- | No break |
| Test Method | -- | -- | -- |
| **ISOLFON-Barrier 5** | No break | B $S_1$ d0 | No break |
| Test Method | -- | UNE-EN 13501 1:2007 A1:2010 | -- |
| **ISOLFON-Barrier 10** | No break | -- | No break |
| Test Method | -- | -- | -- |

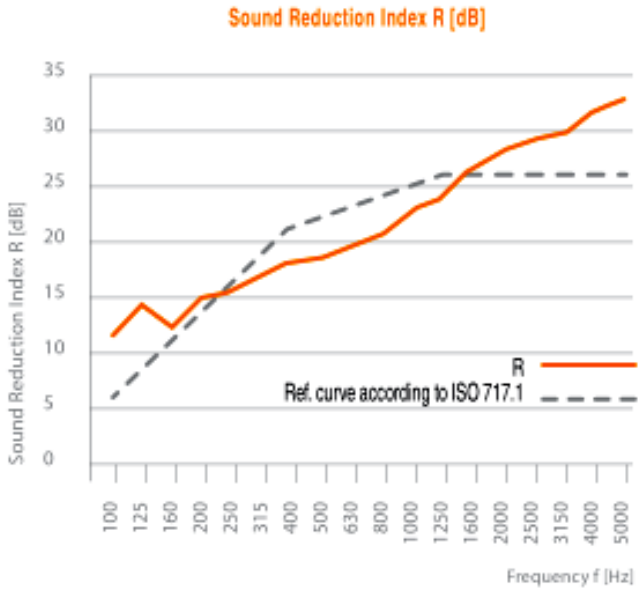
## Sound Insulation Index (*according to EN ISO 10140-2:2022*)

| Name | Frequency [Hz] | | | | | | |
|---|---|---|---|---|---|---|---|
| | 125 | 250 | 500 | 1000 | 2000 | 4000 | $R_w$ [dB] |
| **ISOLFON-Barrier 3.5** | 10.4 | 16.0 | 20.2 | 24.7 | 29.3 | 33.9 | **24.3** |
| **ISOLFON-Barrier 5** | 14.5 | 19.5 | 23.7 | 27.2 | 32.0 | 36.4 | **27.1** |
| **ISOLFON-Barrier 10** | 17.5 | 22.5 | 27.7 | 31.6 | 36.2 | 40.5 | **30.9** |



## Sound Insulation Index in a Drywall Construction

| System | Details | Acoustic Results | | | | | |
|---|---|---|---|---|---|---|---|
| **Drywall system** | ISOLFON-Barrier 5 between two plasterboards in each side with Metal Stud 50 mm& infill Rockwool (50 mm 50 kg/m$^3$) | Rw(C:Ctr)= 56 (-4;-11) dB ISO 717-2<br>R(A) = 52,9 dBA NBE CA-88 | | | | | |
| Frequency | Hz | 125 | 250 | 500 | 1000 | 2000 | 4000 |
| Attenuation | dB | 27 | 48 | 55 | 63 | 69 | 69 |
| Brick wall cladding with Drywall system | brick wall 70 mm with two plasterboards in between ISOLfon-Barrier 5 each side with Metal Stud 50 mm & infill Rockwool (50 mm 50 kg/m3) | Rw = 60 dB<br>R(A) = 59,5 dBA | | | | | |
| Frequency | Hz | 125 | 250 | 500 | 1000 | 2000 | 4000 |
| Attenuation | dB | 45 | 52 | 52 | 63 | 70 | 67 |

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