

**Sound reduction index in accordance with PN - EN ISO 10140-2 (2011)**

Laboratory measurements of airborne sound insulation of building elements

Client: **O.H. Industri A/S**  
 Address: **Smedevej 17, DK-7430 Ikast**

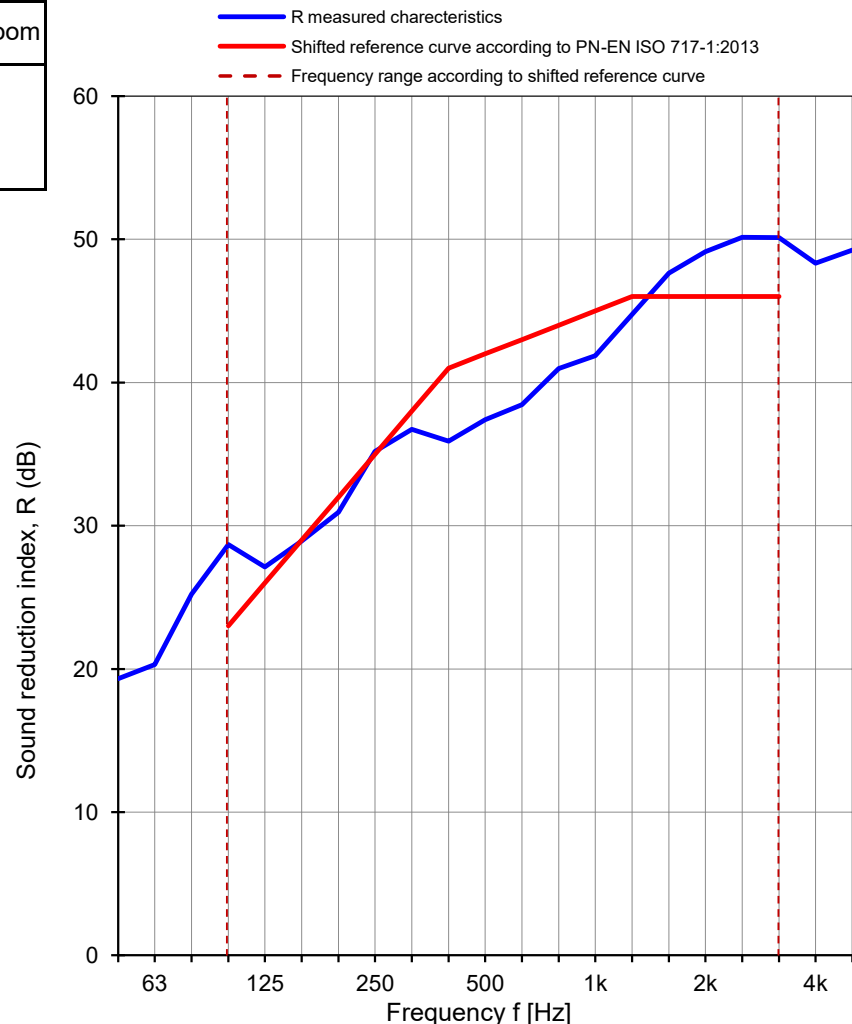
Measurement date: **07.12.2017**Test specimen: **Door panel. Mark 62189-002**Inserts: **4 mm plywood / sonitus 193 / XPS / sonitus 197 / 4 mm plywood**Dimensions of the tested panel: **1000 x 2100 x 68 mm (width x height x thickness)**

Description of the test facility, test specimen and test arrangement:

Size of test specimen: **1000 x 2100 mm**Test specimen mounted by: **Gryfitlab Sp. z o.o.**Mass per unit area: **39,8 kg/m<sup>2</sup>**The surface area of test specimen: **2,22 m<sup>2</sup>**

| Parameter                | Receiving room | Source room |
|--------------------------|----------------|-------------|
| Air temp. [°C]           | 15,3           | 15,7        |
| Humidity [%]             | 60             | 60          |
| Pressure [hPa]           | 1009           | 1009        |
| Volume [m <sup>3</sup> ] | 324            | 372         |

| Frequency [Hz] | Test results with uncertainty |                      |
|----------------|-------------------------------|----------------------|
|                | R [dB]                        | U <sub>CR</sub> [dB] |
| 50             | 19,3                          | 3,1                  |
| 63             | 20,3                          | 3,4                  |
| 80             | 25,2                          | 3,8                  |
| 100            | 28,7                          | 2,6                  |
| 125            | 27,1                          | 2,3                  |
| 160            | 28,9                          | 2,6                  |
| 200            | 30,9                          | 2,1                  |
| 250            | 35,2                          | 2,0                  |
| 315            | 36,7                          | 2,0                  |
| 400            | 35,9                          | 2,0                  |
| 500            | 37,4                          | 2,0                  |
| 630            | 38,5                          | 2,0                  |
| 800            | 41,0                          | 1,9                  |
| 1000           | 41,9                          | 1,9                  |
| 1250           | 44,8                          | 2,0                  |
| 1600           | 47,6                          | 1,9                  |
| 2000           | 49,1                          | 1,9                  |
| 2500           | 50,1                          | 2,0                  |
| 3150           | 50,1                          | 2,0                  |
| 4000           | 48,3                          | 2,0                  |
| 5000           | 49,3                          | 2,2                  |

Measurement uncertainty of sound reduction U<sub>CR</sub>

Confidence level 95% at coverage factor, k=2

Weighted sound reduction index in accordance with PN-EN ISO 717-1:2013

**R<sub>w</sub> (C; C<sub>tr</sub>) = 42 (-1; -4) dB**C<sub>50-3150</sub> = -1 dBC<sub>50-5000</sub> = 0 dBC<sub>100-5000</sub> = 0 dBC<sub>tr, 50-3150</sub> = -6 dBC<sub>tr, 50-5000</sub> = -6 dBC<sub>tr, 100-5000</sub> = -4 dB

GRYFITLAB Sp. z o.o. Laboratory of Acoustics

No. of test specimen: GLA-1356.1/17

Date: 07.12.2017

Signature: Robert Dybicz