

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

Laboratory measurements of airborne sound insulation of building elements.

Client: **NorDan AS**
Address: **Stasjanseveien 46, N-4460 Mio Norway**

Measurement date: 17.09.2014

Test specimen: **Wooden fixed window with glass**
Pyrodur /Pyrostop/Pyrobel 65 mm

Description of the test facility, test element and test arrangement

Size of window 1230x1480 mm

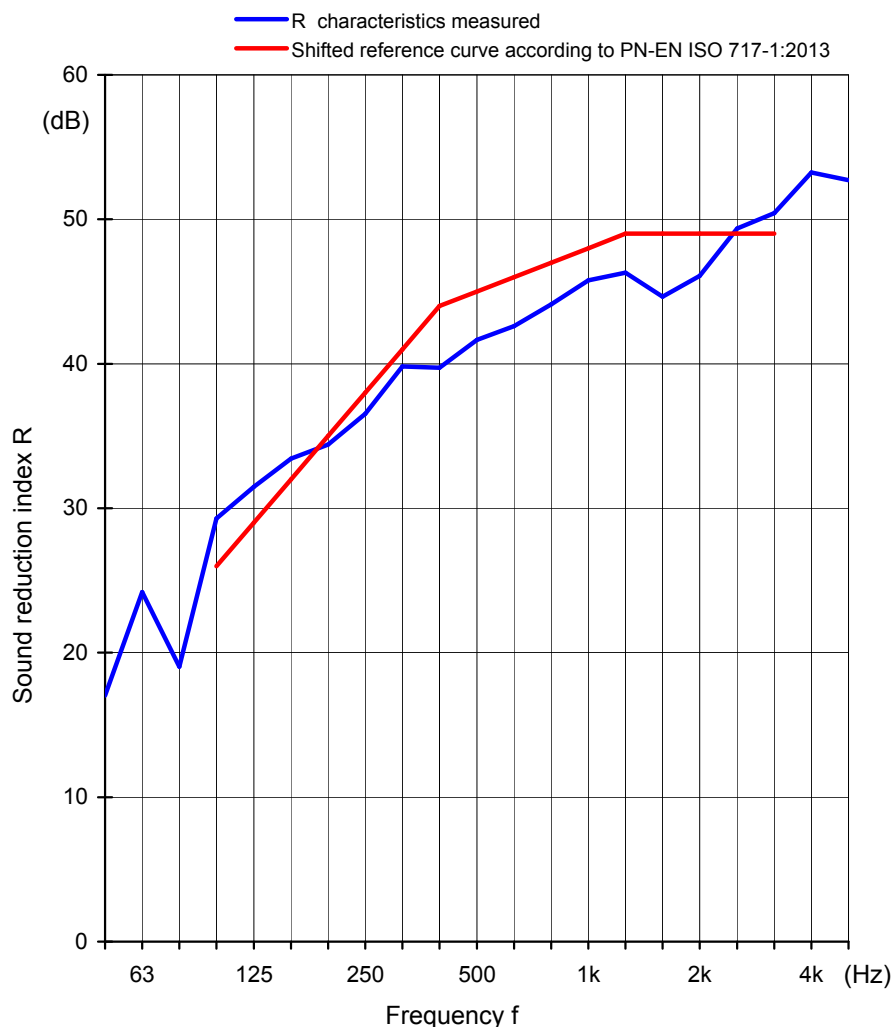
Test element mounted by Gryfitlab

Mass per unit area: kg/m²

The surface area of test specimen: 1,88 m²

	source room	receiving room
Relative humidity	62%	62%
Air temperature	20,7 °C	20,8 °C
Volume	372 m ³	324 m ³
Ambient pressure	1006 hPa	1006 hPa

Frequency [Hz]	R 1/3 octave [dB]
50	17,0
63	24,2
80	19,0
100	29,3
125	31,5
160	33,4
200	34,4
250	36,5
315	39,8
400	39,7
500	41,6
630	42,6
800	44,1
1000	45,8
1250	46,3
1600	44,7
2000	46,1
2500	49,4
3150	50,4
4000	53,2
5000	52,7



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

$R_w(C; C_{tr}) = 45 (-1; -4) \text{ dB}$

$C_{50-3150} = -2 \text{ dB}$

$C_{50-5000} = -1 \text{ dB}$

$C_{100-5000} = 0 \text{ dB}$

$C_{tr, 50-3150} = -9 \text{ dB}$

$C_{tr, 50-5000} = -9 \text{ dB}$

$C_{tr, 100-5000} = -4 \text{ dB}$

Evaluation based on laboratory measurement results obtained by an engineering method.

GRYFITLAB Sp. z o.o. Acoustic Laboratory accredited by PCA No. AB 818

No. of test specimen: GLA-1176.2/14

Date: 17.09.2014

Signature: Krzysztof Mech