

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

Laboratory measurements of airborne sound insulation of building elements

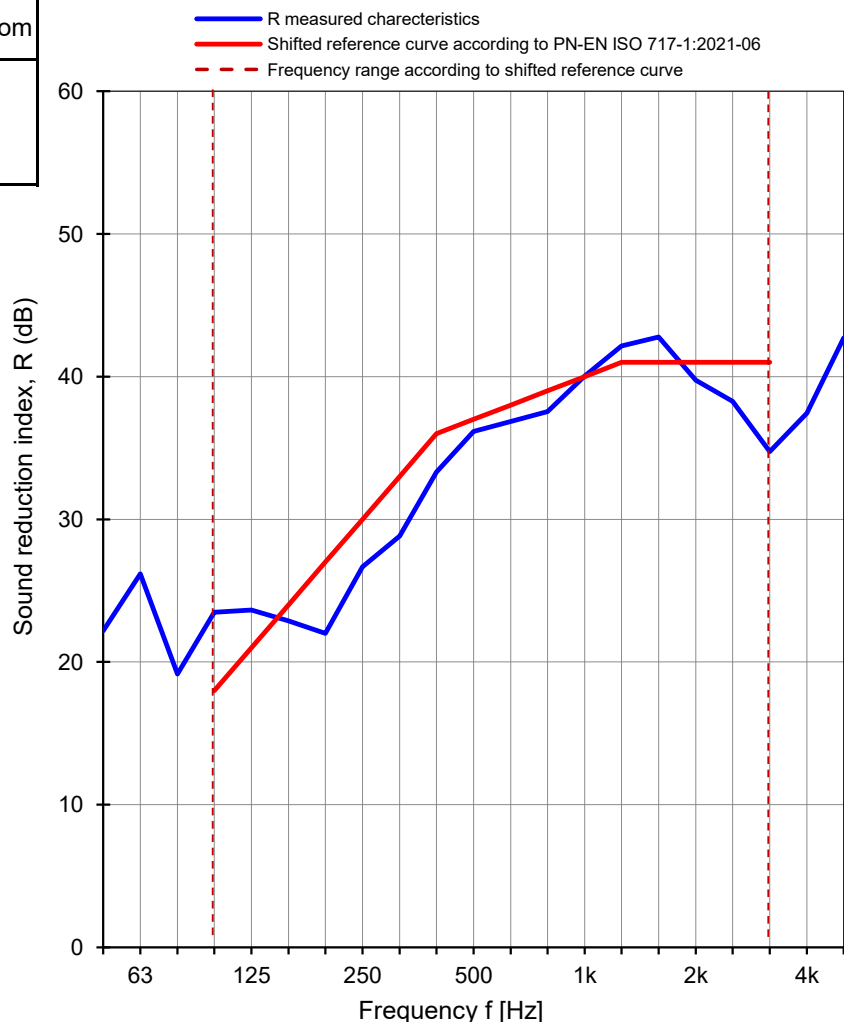
Client: **NorDan Sp. z o.o.**Measurement date: **04.11.2021**Address: **Powodowo 54, 64-200 Wolsztyn**Test specimen: **Wooden window****Pi LNR: 65****Construction: TY, ND NTech Villa Topswing reversible Opus****Frame thickness: 105 mm****Glazed by: 6 / 16 Ar / 4**

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

Size of test specimen: **1230 x 1480 mm**Test specimen mounted by: **NorDan Sp. z o.o.**The surface area of test specimen: **1,87 m<sup>2</sup>**

Parameter	Receiving room	Source room
Air temp. [°C]	21,3	21,2
Humidity [%]	58	57
Pressure [hPa]	993	993
Volume [m <sup>3</sup> ]	372	324

Frequency [Hz]	Test results with uncertainty	
	R [dB]	U <sub>CR</sub> [dB]
50	22,2	3,2
63	26,2	2,4
80	19,2	2,1
100	23,5	2,4
125	23,6	1,4
160	22,9	1,6
200	22,0	1,1
250	26,7	1,3
315	28,8	1,1
400	33,3	1,2
500	36,2	0,8
630	36,9	0,8
800	37,6	0,8
1000	40,0	0,9
1250	42,1	0,7
1600	42,8	0,7
2000	39,8	0,8
2500	38,3	0,8
3150	34,7	1,0
4000	37,4	1,1
5000	42,7	1,3

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 717-1:2021-06

**R<sub>w</sub> (C; C<sub>tr</sub>) = 37 (-2; -5) dB**C<sub>50-3150</sub> = -2 dBC<sub>50-5000</sub> = -1 dBC<sub>100-5000</sub> = -1 dBC<sub>tr, 50-3150</sub> = -6 dBC<sub>tr, 50-5000</sub> = -6 dBC<sub>tr, 100-5000</sub> = -5 dB**R<sub>w</sub> = 37,1 dB**

GRYFITLAB Sp. z o.o. Laboratory of Acoustics

No. of test specimen: GLA-1559.39 / 21

Date: 04.11.2021

Signature: Robert Dybicz