

**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.**  
 Address: **Powodowo 54, 64-200 Wolsztyn**

Measurement date: **05.11.2021**

Test specimen: **Wooden window**  
**Construction: OD, ND NTech One Tilt and Turn**  
**Frame thickness: 105 mm**  
**Glazed by: 44.2 PVB / 16 Ar / 6**

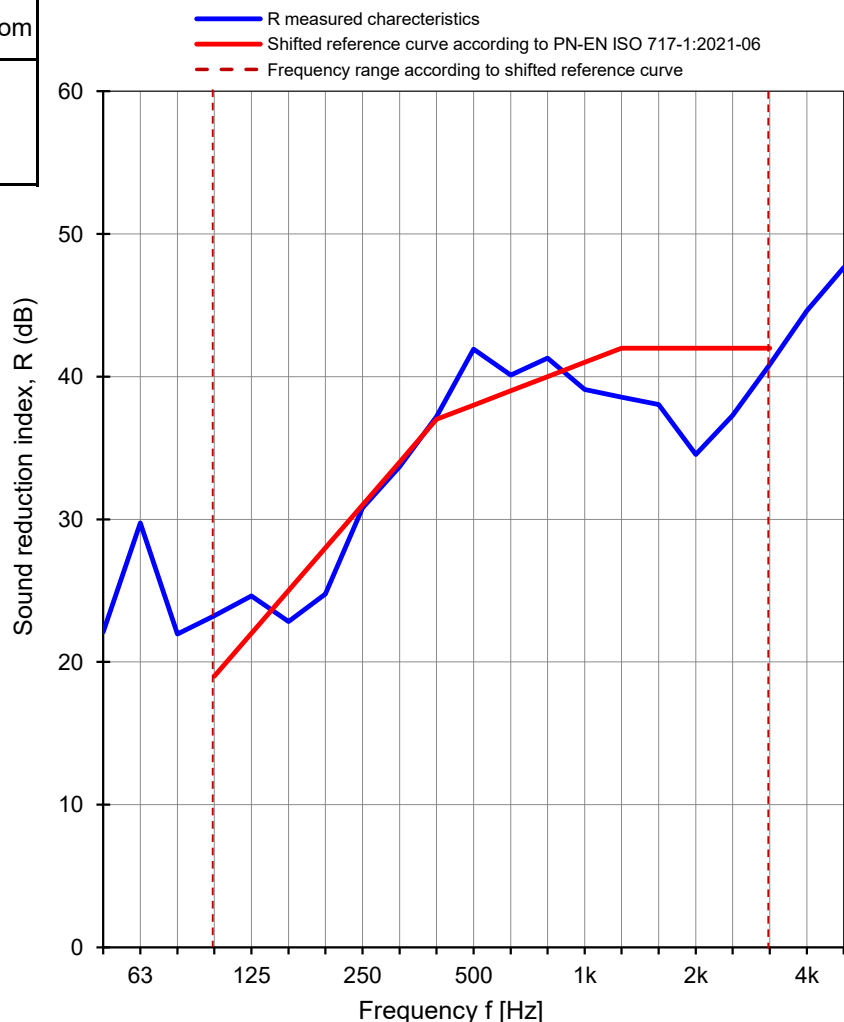
**Pi LNR: 100**  
**Additional**

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]	20,9	21,1
Humidity [%]	55	54
Pressure [hPa]	1015	1015
Volume [m <sup>3</sup> ]	372	324

Frequency [Hz]	Test results with uncertainty	
	R [dB]	U <sub>CR</sub> [dB]
50	22,1	3,3
63	29,7	1,9
80	22,0	2,3
100	23,2	2,5
125	24,6	1,7
160	22,8	1,3
200	24,8	1,0
250	30,8	1,2
315	33,7	0,8
400	37,2	1,2
500	41,9	0,9
630	40,1	0,9
800	41,3	0,8
1000	39,1	1,0
1250	38,6	0,7
1600	38,0	0,7
2000	34,5	0,7
2500	37,3	0,8
3150	40,9	1,1
4000	44,6	0,9
5000	47,6	1,0

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>) = 38 (-2; -4) 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> = -5 dBC<sub>tr, 50-5000</sub> = -5 dBC<sub>tr, 100-5000</sub> = -4 dB**R<sub>w</sub> = 38,3 dB**

GRYFITLAB Sp. z o.o. Laboratory of Acoustics

No. of test specimen: GLA-1559.50 / 21

Date: 05.11.2021

Signature: Robert Dybicz