

# Sound reduction index in accordance with PN - EN ISO 10140-2:2021-10E

Laboratory measurements of airborne sound insulation of building elements

Client: **NorDan AS**  
 Address: **Stasjonsveien 46, N-4460 Moi, Norway**

Measurement date: **26.08.2024**

Test specimen: **NTech Patio door**  
 Sliding wooden doors, 2P/SD system.  
 One part is fixed and one is sliding leaf, the same glazing in both.

**Glazing:**  
**8,76 Phon / 18 Ar / 4 FL / 12 Ar / 6 (PILKINGTON IGP)**

Size of door: **2488 x 2088 x 80 mm** (width x height x doors leaf frame thickness)

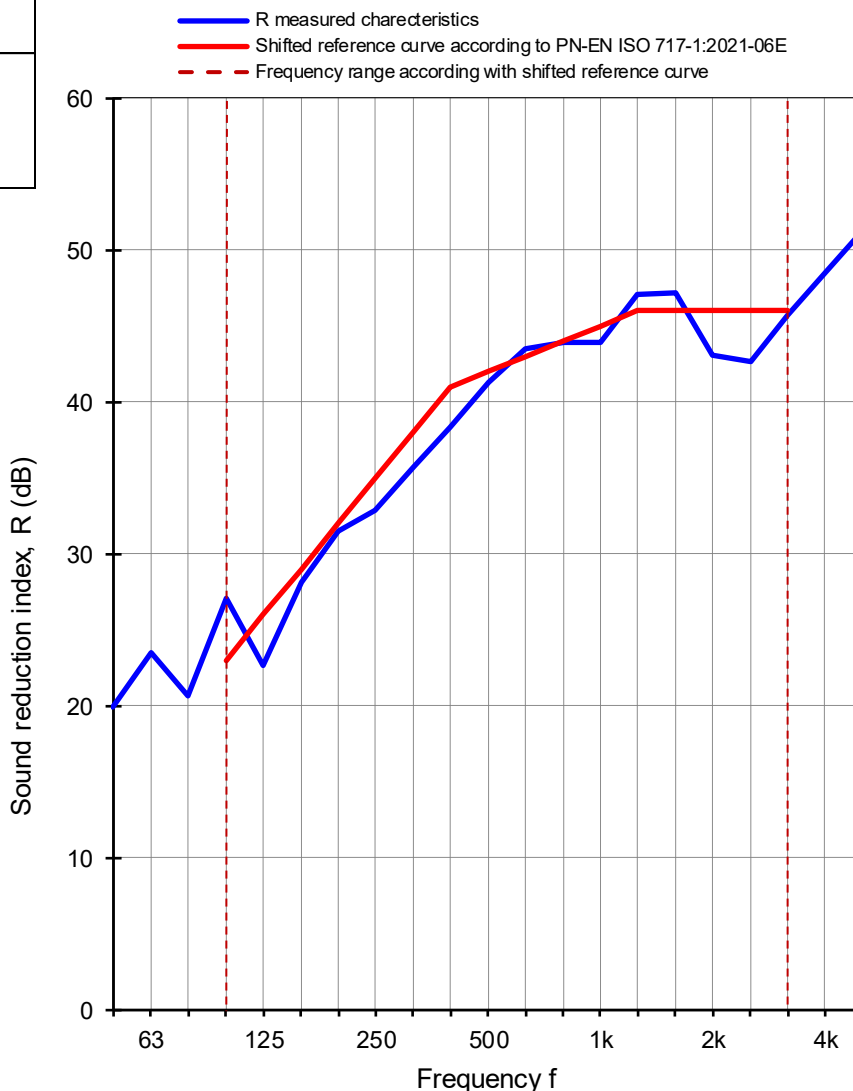
Test specimen mounted by: **NorDan AS & Gryfitlab Sp. z o.o.**

Mass per unit area: **kg/m<sup>2</sup>**

The surface area of test specimen: **5,29 m<sup>2</sup>**

Parameter	Receiving room	Source room
Air temp. [°C]	22,1	22,0
Humidity [%]	50	50
Pressure [hPa]	1022	1022
Volume [m <sup>3</sup> ]	324	372

Frequency [Hz]	Test results with uncertainty	
	R [dB]	U <sub>CR</sub> [dB]
50	19,9	2,4
63	23,5	3,3
80	20,6	3,3
100	27,1	2,3
125	22,6	1,9
160	28,1	1,7
200	31,5	1,8
250	32,9	1,6
315	35,7	1,0
400	38,3	1,3
500	41,3	1,3
630	43,5	1,1
800	43,9	1,0
1000	43,9	1,0
1250	47,1	1,1
1600	47,2	0,9
2000	43,1	1,0
2500	42,7	1,0
3150	45,7	1,0
4000	48,4	1,0
5000	51,3	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 717-1:2021-06E			
<b>R<sub>w</sub> (C; C<sub>tr</sub>) = 42 (-1; -5) dB</b>	C <sub>50-3150</sub> = -1 dB	C <sub>50-5000</sub> = -1 dB	C <sub>100-5000</sub> = 0 dB
	C <sub>tr, 50-3150</sub> = -7 dB	C <sub>tr, 50-5000</sub> = -7 dB	C <sub>tr, 100-5000</sub> = -5 dB

**GRYFITLAB Sp. z o.o. Laboratory of Acoustics**  
 No. of test specimen: **GLA-1676.2 / 24**  
 Date of analysis: 26.08.2024

Signature: Robert Dybicz