

# 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:**  
**6,38 / 16 Ar / 4 FL / 20 Ar / 4 (PILKINGTON IGP)**

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

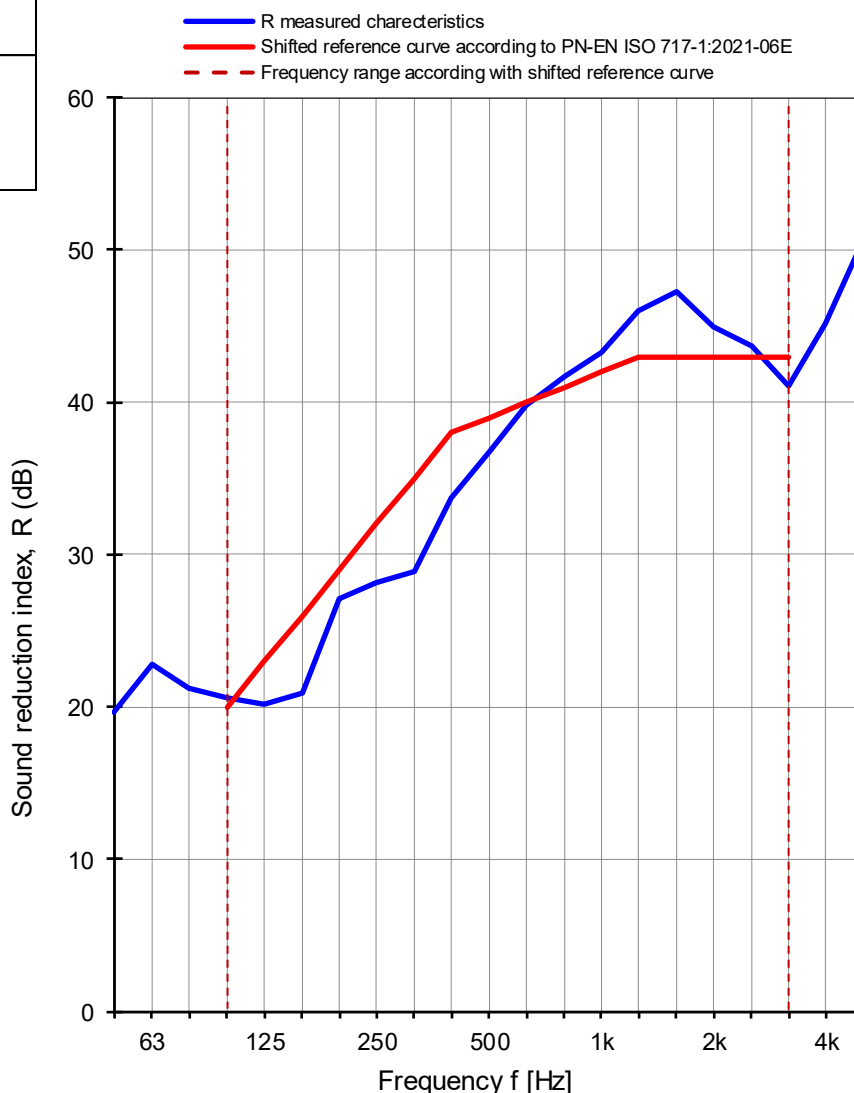
Test specimen mounted by: **NorDan AS & Gryfitlab Sp. z o.o.**

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]	22,3	22,2
Humidity [%]	51	51
Pressure [hPa]	1021	1021
Volume [m <sup>3</sup> ]	324	372

Frequency [Hz]	Test results with uncertainty	
	R [dB]	U <sub>CR</sub> [dB]
50	19,6	2,3
63	22,8	3,3
80	21,2	3,4
100	20,6	2,7
125	20,2	1,8
160	20,9	1,9
200	27,2	1,7
250	28,2	1,4
315	28,9	1,1
400	33,7	1,3
500	36,8	1,1
630	39,8	1,2
800	41,7	1,1
1000	43,3	1,0
1250	46,0	1,1
1600	47,3	1,0
2000	45,0	1,1
2500	43,7	1,0
3150	41,1	1,0
4000	45,2	1,0
5000	50,7	1,1



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>) = 39 (-2; -6) dB</b>	C <sub>50-3150</sub> = -2 dB	C <sub>50-5000</sub> = -1 dB	C <sub>100-5000</sub> = -1 dB
	C <sub>tr, 50-3150</sub> = -7 dB	C <sub>tr, 50-5000</sub> = -7 dB	C <sub>tr, 100-5000</sub> = -6 dB

**GRYFITLAB Sp. z o.o. Laboratory of Acoustics**  
 No. of test specimen: **GLA-1676.4 / 24**  
 Date of analysis: 26.08.2024

Signature: Robert Dybicz