

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 (PILKINGTON IGP)

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

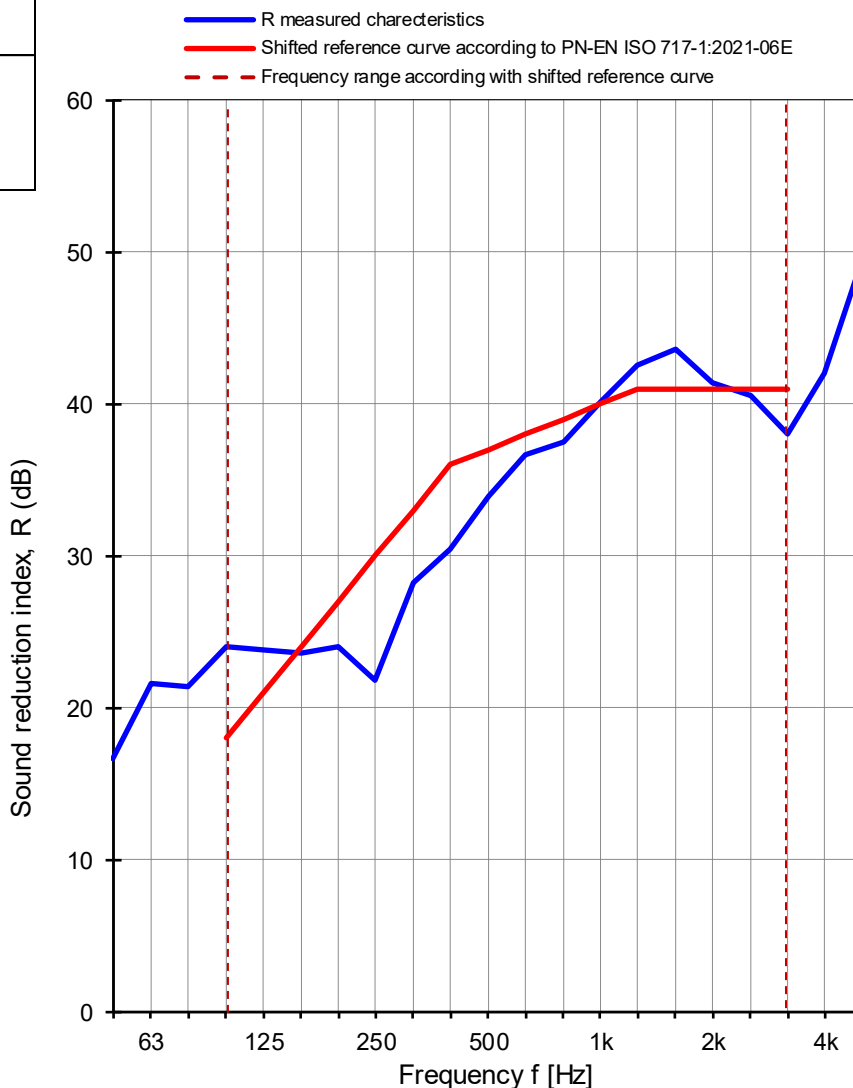
Test specimen mounted by: **NorDan AS & Gryfitlab Sp. z o.o.**

Mass per unit area: **kg/m²**

The surface area of test specimen: **5,29 m²**

Parameter	Receiving room	Source room
Air temp. [°C]	22,3	22,1
Humidity [%]	51	50
Pressure [hPa]	1021	1021
Volume [m ³]	324	372

Frequency [Hz]	Test results with uncertainty	
	R [dB]	U _{CR} [dB]
50	16,6	2,1
63	21,6	3,0
80	21,4	3,3
100	24,0	2,4
125	23,8	1,7
160	23,6	1,8
200	24,0	1,8
250	21,8	1,2
315	28,2	1,1
400	30,4	1,2
500	33,9	1,3
630	36,6	1,2
800	37,5	1,0
1000	40,2	1,1
1250	42,6	1,1
1600	43,6	1,0
2000	41,4	1,0
2500	40,5	1,0
3150	38,1	1,0
4000	42,1	1,0
5000	49,7	1,0



Measurement uncertainty of sound reduction U_{CR}
 Confidence level 95% at coverage factor, k=2

Weighted sound reduction index in accordance with PN-EN ISO 717-1:2021-06E			
R_w (C; C_{tr}) = 37 (-2; -5) dB	C ₅₀₋₃₁₅₀ = -2 dB	C ₅₀₋₅₀₀₀ = -1 dB	C ₁₀₀₋₅₀₀₀ = -1 dB
	C _{tr, 50-3150} = -6 dB	C _{tr, 50-5000} = -6 dB	C _{tr, 100-5000} = -5 dB

GRYFITLAB Sp. z o.o. Laboratory of Acoustics
 No. of test specimen: **GLA-1676.3 / 24**
 Date of analysis: 26.08.2024

Signature: Robert Dybicz