

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

Laboratory measurements of airborne sound insulation of building elements

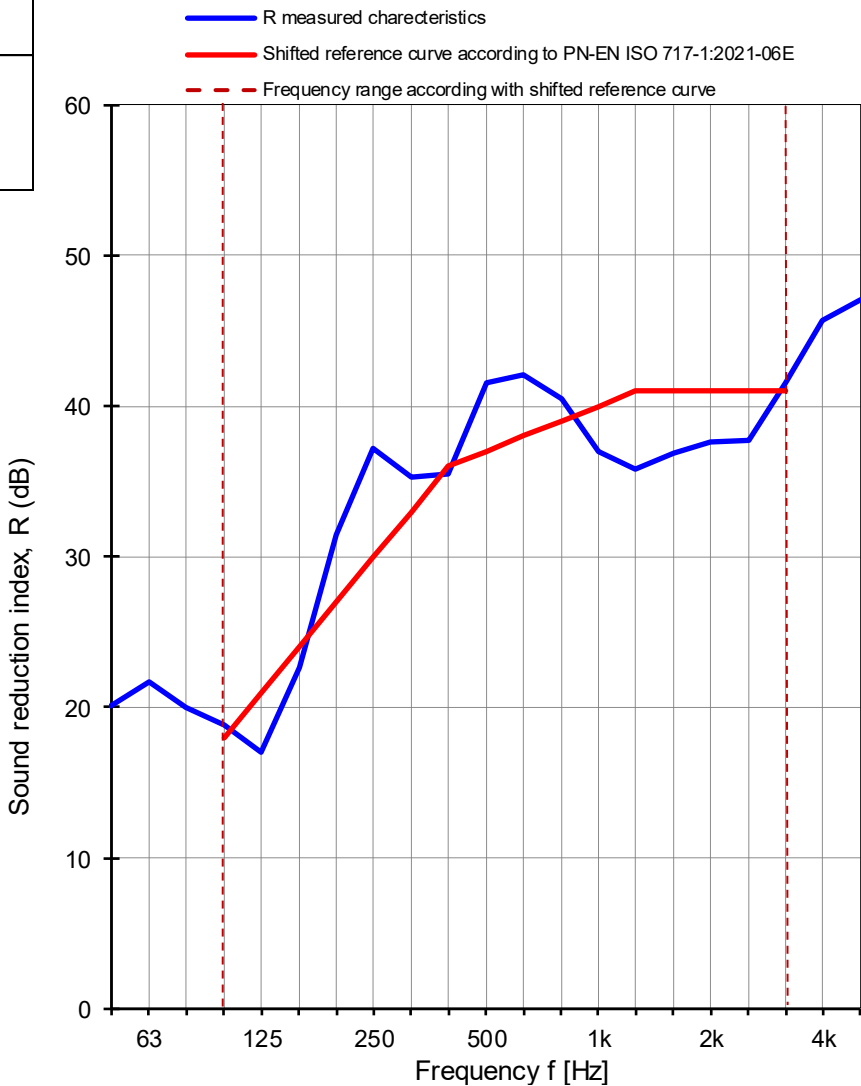
Client: **NorDan AS**
 Address: **Stasjonsveien 46, N-4460 Moi, Norway**
 Test specimen: **ND NTech Villa double balcony door – wooden door, 2l system**
 Inward-opening
 One active and one passive leaf, door leaf with movable post.
 The same glazing in both door leaves. Glazing:
 6,38 / 16 Ar / 4 FL / 16 Ar / 6,38 (GLASSOLUTIONS)

Measurement date: **28.08.2024**

Size of door: **1588 x 2088 x 80 mm** (width x height x door leaf frame thickness)
 Test specimen mounted by: **Gryfitlab Sp. z o.o.**
 Mass per unit area: **kg/m²**
 The surface area of test specimen: **3,43 m²**

Parameter	Receiving room	Source room
Air temp. [°C]	22,5	22,5
Humidity [%]	56	55
Pressure [hPa]	1023	1023
Volume [m ³]	324	372

Frequency [Hz]	Test results with uncertainty	
	R [dB]	U _{CR} [dB]
50	20,1	3,1
63	21,6	3,5
80	20,0	3,9
100	18,8	2,1
125	17,0	2,1
160	22,6	1,9
200	31,5	1,6
250	37,2	1,2
315	35,3	1,2
400	35,5	1,3
500	41,6	1,3
630	42,1	1,2
800	40,5	1,1
1000	37,0	1,1
1250	35,8	1,1
1600	36,9	1,0
2000	37,6	1,0
2500	37,7	1,0
3150	41,6	1,0
4000	45,7	1,0
5000	47,1	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 (-1; -5) dB	C ₅₀₋₃₁₅₀ = -1 dB	C ₅₀₋₅₀₀₀ = 0 dB	C ₁₀₀₋₅₀₀₀ = 0 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-1676.9 / 24**
 Date of analysis: 28.08.2024

Signature: Robert Dybicz