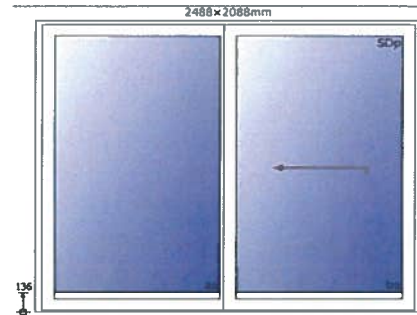


Sound reduction index in accordance with PN - EN ISO 10140-2 (2011)

Laboratory measurements of airborne sound insulation of building elements

Client: **NorDan AS**
 Address: **Stasjonsveien 46, N-4460 Mio, Norway**
 Test specimen: **Wooden Patio Door SD NTech 164 mm**
Glazed: Lam w/Low E WES/Ar 4ES+16G+6,38
(Test 5.1)

Measurement date: **27.02.2017**

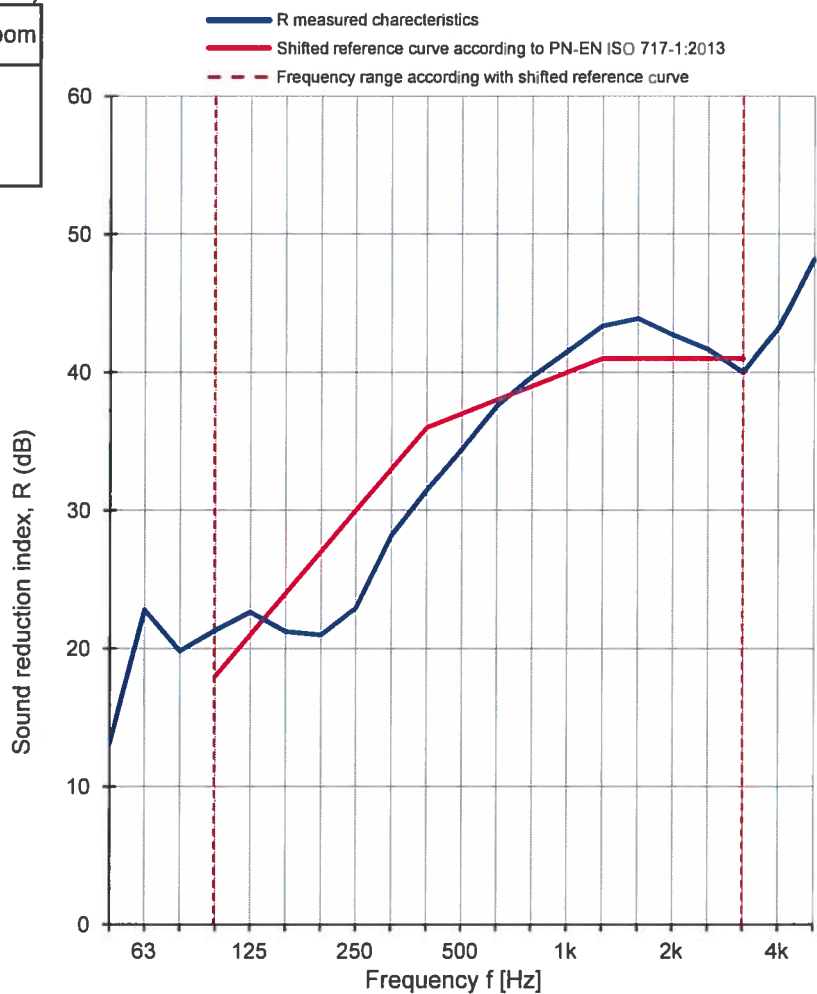


Description of the test facility, test specimen and test arrangement:

Size of test specimen: **2488 x 2088 mm**
 Test specimen mounted by: **Gryfitlab Sp. z o.o.**
 Mass per unit area: **kg/m²**
 The surface area of test specimen: **5,32 m²**

Parameter	Receiving room	Source room
Air temp. [°C]	18,9	18,8
Humidity [%]	68	64
Pressure [hPa]	1004	1004
Volume [m ³]	372	324

Frequency [Hz]	Test results with uncertainty	
	R [dB]	U _{CR} [dB]
50	13,1	4,0
63	22,8	3,8
80	19,8	2,8
100	21,3	3,1
125	22,6	2,3
160	21,2	2,6
200	21,0	2,4
250	22,9	2,4
315	28,2	2,0
400	31,5	2,0
500	34,4	1,9
630	37,6	2,0
800	39,7	1,9
1000	41,5	2,0
1250	43,4	1,9
1600	43,9	1,9
2000	42,7	1,9
2500	41,6	1,9
3150	40,0	1,9
4000	43,2	1,9
5000	48,2	2,0



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 717-1:2013			
R_w (C; C_{tr}) = 37 (-2; -6) dB	C ₅₀₋₃₁₅₀ = -2 dB	C ₅₀₋₅₀₀₀ = -1 dB	C ₁₀₀₋₅₀₀₀ = -1 dB
R_w = 37,3 dB	C _{tr, 50-3150} = -7 dB	C _{tr, 50-5000} = -7 dB	C _{tr, 100-5000} = -6 dB

GRYFITLAB Sp. z o.o. Laboratory of Acoustics
 No. of test specimen: GLA-1305.10/17
 Date: 27.02.2017

Signature: Robert Dybicz