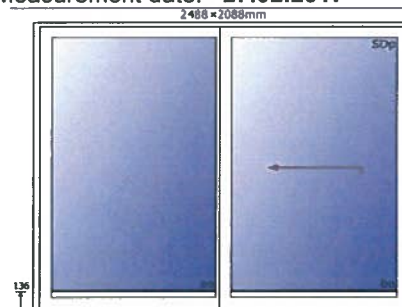


Sound reduction index in accordance with PN - EN ISO 10140-2 (2011)

Laboratory measurements of airborne sound insulation of building elements

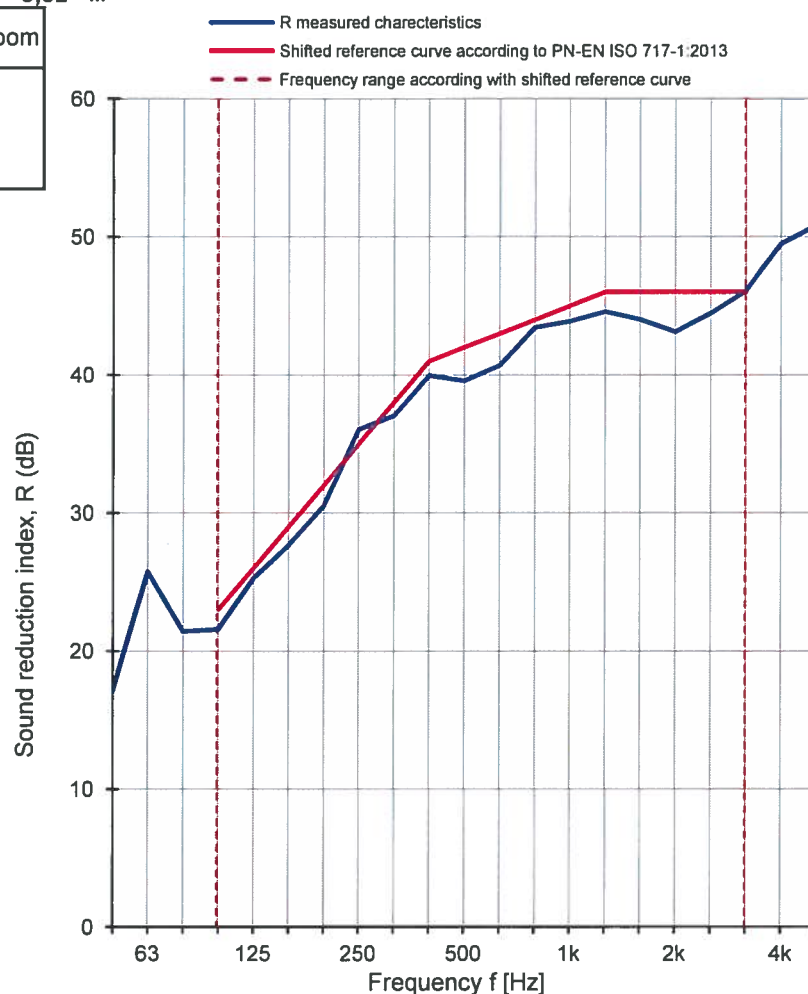
Client: **NorDan AS**Address: **Stasjonsveien 46, N-4460 Mio, Norway**Test specimen: **Wooden Patio Door SD NTech 164mm****Glazed: Sound reduction 44.1 w/Low E WES/Ar
8ES+20G+8,38****(Test 5.2)**Measurement date: **27.02.2017**

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]	18,8	19,0
Humidity [%]	67	65
Pressure [hPa]	1004	1004
Volume [m ³]	372	324

Frequency [Hz]	Test results with uncertainty	
	R [dB]	U _{CR} [dB]
50	17,1	4,4
63	25,7	3,6
80	21,4	3,0
100	21,5	3,0
125	25,3	2,3
160	27,6	2,5
200	30,5	2,0
250	36,0	2,3
315	37,0	2,1
400	40,0	2,2
500	39,6	1,9
630	40,7	1,9
800	43,4	1,9
1000	43,9	1,9
1250	44,6	2,0
1600	44,0	1,9
2000	43,1	1,9
2500	44,5	1,9
3150	46,1	1,9
4000	49,5	1,9
5000	50,9	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}) = 42 (-1; -5) dBC₅₀₋₃₁₅₀ = -2 dBC₅₀₋₅₀₀₀ = -1 dBC₁₀₀₋₅₀₀₀ = 0 dBC_{tr, 50-3150} = -7 dBC_{tr, 50-5000} = -7 dBC_{tr, 100-5000} = -5 dB**R_w = 42,7 dB**

GRYFITLAB Sp. z o.o. Laboratory of Acoustics

No. of test specimen: GLA-1305.11/17

Date: 27.02.2017

Signature: Robert Dybicz