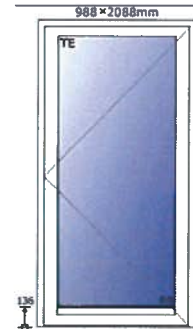


Sound reduction index in accordance with PN - EN ISO 10140-2 (2011)

Laboratory measurements of airborne sound insulation of building elements

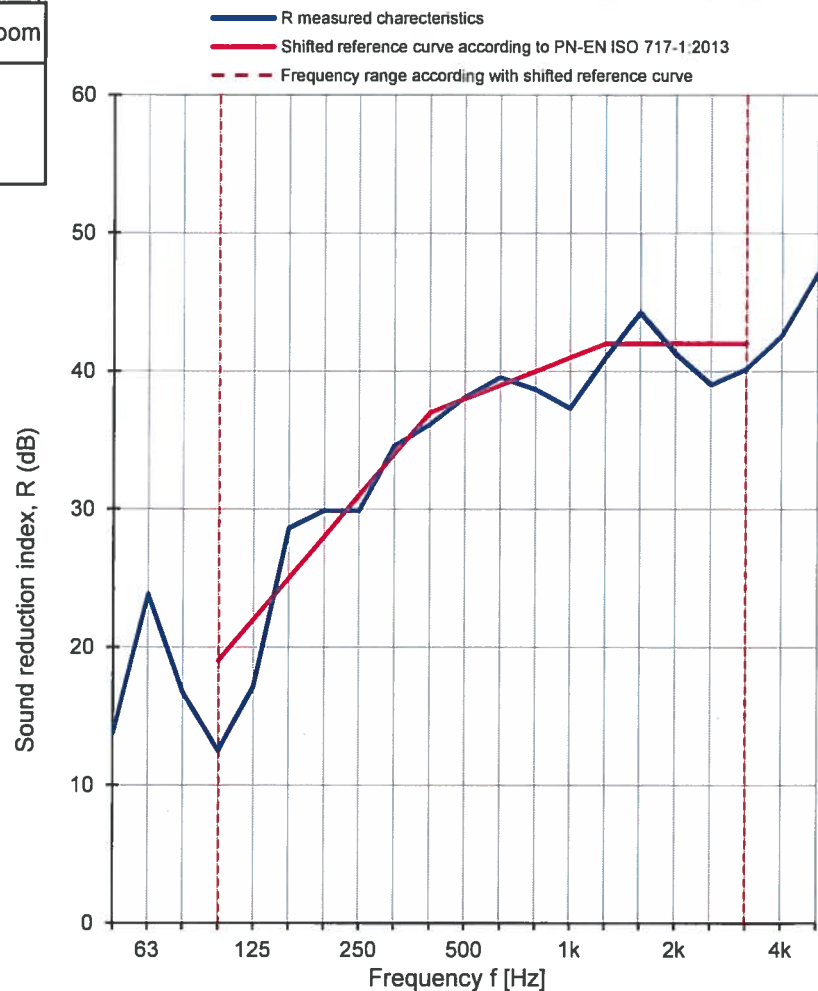
Client: **NorDan AS**Measurement date: **01.03.2017**Address: **Stasjonsveien 46, N-4460 Mio, Norway**Test specimen: **Wooden Balcony Door TE NTech Villa (security) 105/80mm****Glazed: Lam Low E (LE) 2s WES/Ar****6,38E+16G+4+16G+E6,38****(Test 3.2)**

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

Size of test specimen: **988 x 2088 mm**Test specimen mounted by: **Gryfitlab Sp. z o.o.**Mass per unit area: **kg/m²**The surface area of test specimen: **2,16 m²**

Parameter	Receiving room	Source room
Air temp. [°C]	21,5	21,8
Humidity [%]	50	48
Pressure [hPa]	990	990
Volume [m ³]	372	324

Frequency [Hz]	Test results with uncertainty	
	R [dB]	U _{CR} [dB]
50	13,7	3,6
63	23,8	3,1
80	16,7	2,4
100	12,5	4,2
125	17,1	2,8
160	28,6	2,2
200	29,9	2,7
250	29,9	2,1
315	34,6	2,1
400	36,2	2,0
500	38,1	2,0
630	39,5	2,0
800	38,7	2,0
1000	37,3	2,0
1250	41,0	1,9
1600	44,2	1,9
2000	41,3	1,9
2500	39,0	1,9
3150	40,1	2,0
4000	42,6	1,9
5000	47,1	1,9

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}) = 38 (-2; -8) dBC₅₀₋₃₁₅₀ = -2 dBC₅₀₋₅₀₀₀ = -2 dBC₁₀₀₋₅₀₀₀ = -1 dBC_{tr, 50-3150} = -9 dBC_{tr, 50-5000} = -9 dBC_{tr, 100-5000} = -8 dB**R_w = 38,6 dB**

GRYFITLAB Sp. z o.o. Laboratory of Acoustics

No. of test specimen: GLA-1305.18/17

Date: 01.03.2017

Signature: Robert Dybicz