

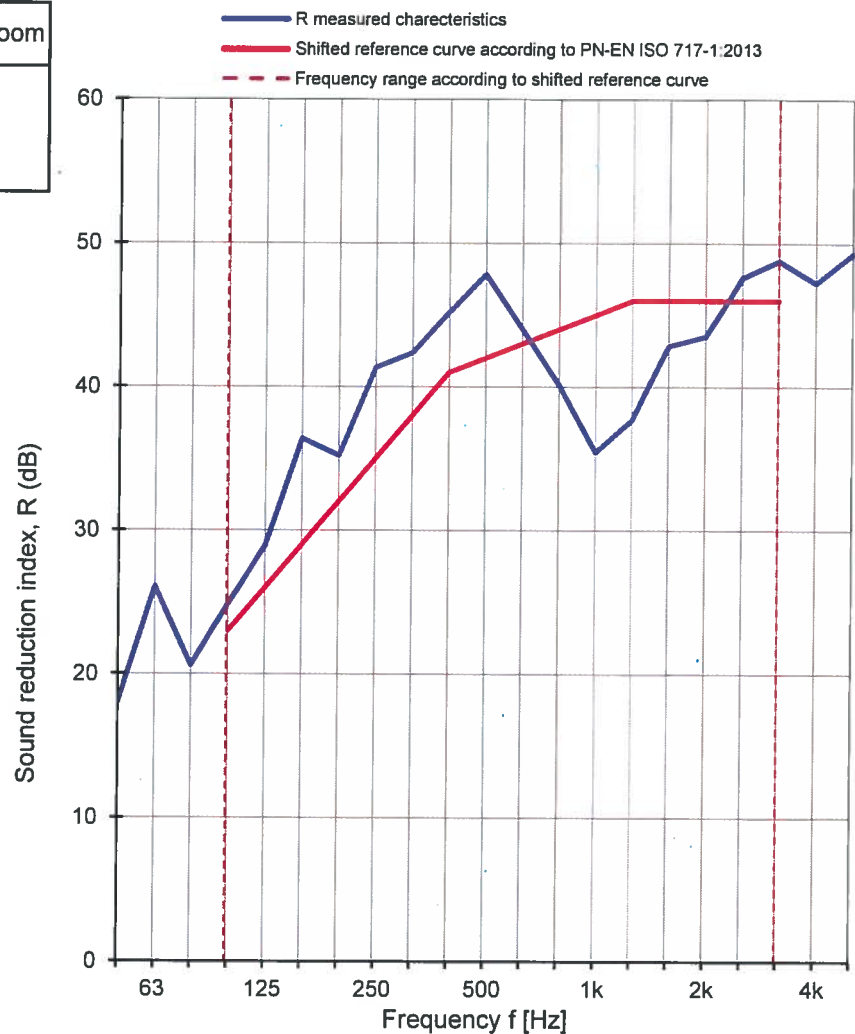
Sound reduction index in accordance with PN - EN ISO 10140-2 (2011)

Laboratory measurements of airborne sound insulation of building elements

Client: **NorDan AS**Measurement date: **26.04.2018**Address: **Stasjonsveien 46, N-4460 Moi Norway**Test specimen: **Window TEST no. 3****Wooden window, system Tilt and Turn, frame thickness: 105 mm****Glazed with glass: 12,76 aku- 24 Ar- 8,76 aku**Size of test specimen: **1230 x 1480 mm**Test specimen mounted by: **Gryfitlab Sp. z o.o.**Mass per unit area: **kg/m²**The surface area of test specimen: **1,87 m²**

Parameter	Receiving room	Source room
Air temp. [°C]	20,6	21,5
Humidity [%]	60	60
Pressure [hPa]	1009	1009
Volume [m ³]	372	324

Frequency [Hz]	Test results with uncertainty	
	R [dB]	U _{CR} [dB]
50	18,0	4,6
63	26,1	2,8
80	20,6	3,4
100	24,8	3,9
125	28,9	2,6
160	36,4	2,5
200	35,2	2,1
250	41,3	2,0
315	42,4	2,2
400	45,2	2,0
500	47,8	1,9
630	44,0	1,9
800	40,2	2,0
1000	35,4	1,9
1250	37,7	2,0
1600	42,9	1,9
2000	43,5	1,9
2500	47,6	1,9
3150	48,8	1,9
4000	47,2	1,9
5000	49,3	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 (-2; -4) dBC₅₀₋₃₁₅₀ = -2 dBC₅₀₋₅₀₀₀ = -1 dBC₁₀₀₋₅₀₀₀ = -1 dBC_{tr, 50-3150} = -7 dBC_{tr, 50-5000} = -7 dBC_{tr, 100-5000} = -4 dB**R_w = 42,9 dB**

GRYFITLAB Sp. z o.o. Laboratory of Acoustics

No. of test specimen: GLA-1372.18/18

Date: 26.04.2018

Signature: Krzysztof Mech