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: **24.04.2018**

Address: **Stasjonsveien 46, N-4460 Moi Norway**

Test specimen: **TEST no. 3**

Wooden door with glass 66.2 Silence / 24 / 44.2 Silence (PressGlass)
From the outside on the frame and door leaf the aluminum cllading
Additional anti-dust seal on the side edges of the frame

Size of test specimen: **988 x 2088 mm**

Test specimen mounted by: **Gryfitlab Sp. z o.o.**

Mass per unit area: **kg/m²**

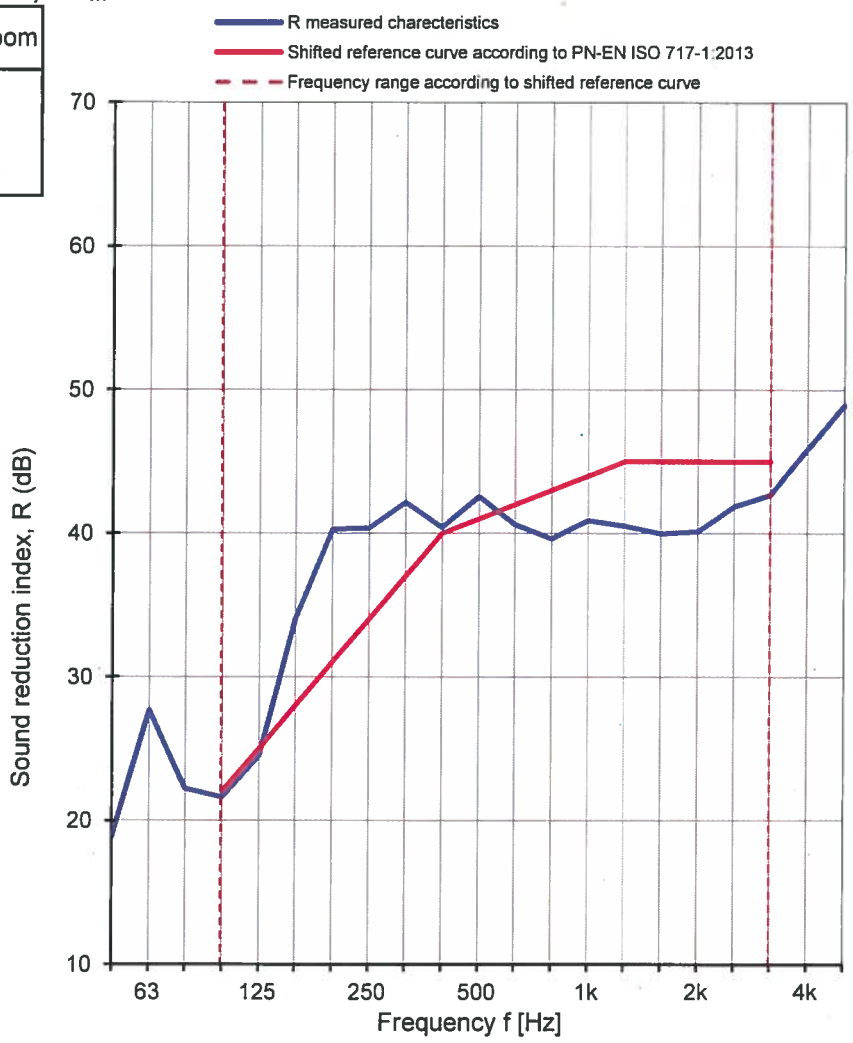
The surface area of test specimen: **2,19 m²**

Parameter	Receiving room	Source room
Air temp. [°C]	19,2	19,4
Humidity [%]	55	56
Pressure [hPa]	1014	1014
Volume [m³]	324	372

Frequency [Hz]	Test results with uncertainty R [dB]	U_{CR} [dB]
50	18,9	4,1
63	27,7	3,4
80	22,2	2,3
100	21,6	2,6
125	24,5	2,7
160	34,0	2,6
200	40,3	2,5
250	40,4	2,0
315	42,2	2,0
400	40,4	2,1
500	42,6	2,0
630	40,6	2,0
800	39,6	1,9
1000	40,9	1,9
1250	40,5	1,9
1600	40,0	1,9
2000	40,1	1,9
2500	41,9	1,9
3150	42,7	1,9
4000	45,9	1,9
5000	48,9	2,1

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

$R_w (C; C_{tr})$= **41 (-1; -3) dB**

$C_{50\text{-}3150}$= **-1** dB $C_{50\text{-}5000}$= **0** dB $C_{100\text{-}5000}$= **0** dB

$C_{tr,\ 50\text{-}3150}$= **-6** dB $C_{tr,\ 50\text{-}5000}$= **-6** dB $C_{tr,\ 100\text{-}5000}$= **-4** dB

Rw = 41,3 dB

GRYFITLAB Sp. z o.o. Laboratory of Acoustics

No. of test specimen: GLA-1372.2/18

Date: 24.04.2018 Signature: Robert Dybicz