Sound reduction index according to ISO 140-3

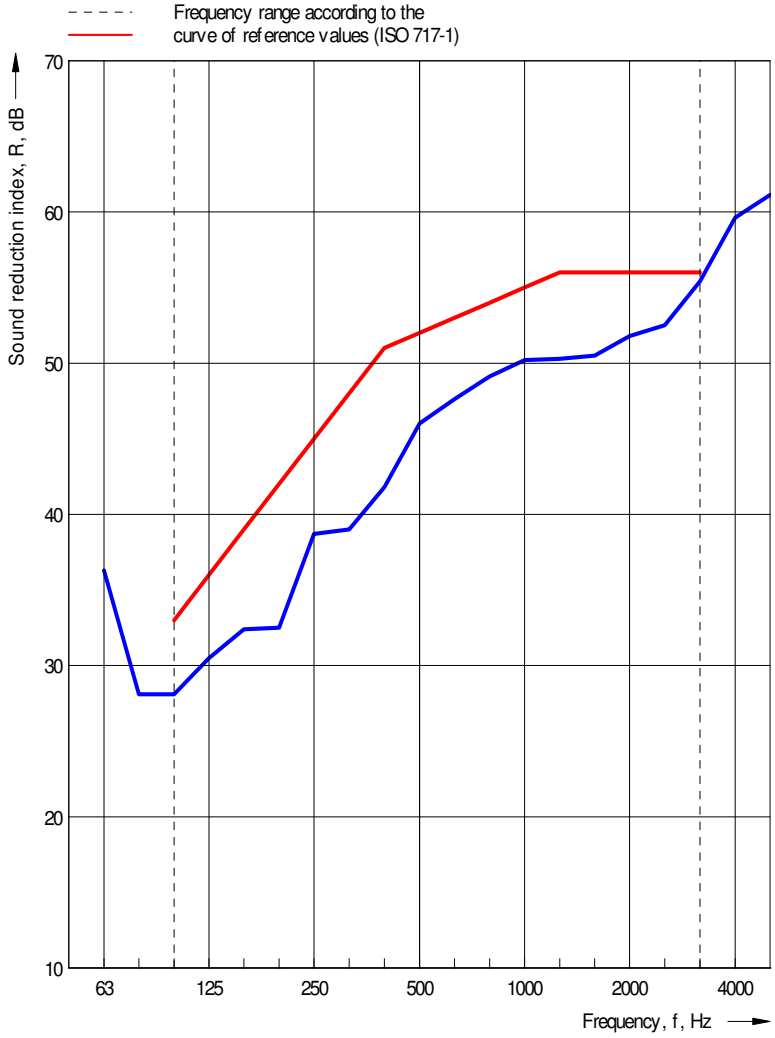
Laboratory measurements of airborne sound insulation of building elements

Client:	Pacific Doors	Date of test:	24 September 2015
Manufacturer:	Pacific Doors		
Test room identification:	PDS Acoustic test lab		
Test specimen mounted by:	EO		
Product identification:	SPAW-48		

Description of the specimen: 1993 H x 984 W timber window. 42 mm pine timber frame. 41.53 mm acoustic double glazed unit. 20 mm planted timber glazing beads both sides with Danco 77 9x3.2 mm tape to glass. Glass sealed to bead and bead to frame. STC 48 (dev. 29)

Barometric pressure:		kPa
Size of test opening:	2.20	m²
Mass per unit area:	50	kg/m²
Temperature:	11.0	°C
Air humidity:	81	%
Source room volume:	62.3	m³
Receiving room volume:	56.0	m³

Frequency f [Hz]	R 1/3 octave [dB]
50	
63	36.3
80	28.1
100	28.1
125	30.5
160	32.4
200	32.5
250	38.7
315	39.0
400	41.8
500	46.0
630	47.6
800	49.1
1,000	50.2
1,250	50.3
1,600	50.5
2,000	51.8
2,500	52.5
3,150	55.4
4,000	59.6
5,000	61.1



Rating according to ISO 717-1

$R_w(C;C_{tr}) = 48\,(-2;-6)$ dB

Evaluation based on laboratory measurement results obtained in one-third-octave bands by an engineering method.

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

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

Company: Pacific Doors

No. of test report: PA003239

Date: 24/09/2015 Signature: Eirik Oijordsbakken

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$C_{100\text{-}5000}$ = -1 dB

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Sum of unfavourable deviations: 31.5 dB

Max. unfavourable deviation: 5.5 dB at 200 Hz

Frequency [Hz]	R [dB]	L2 [dB]	T [s]	Corr. [dB]	u. Dev. [dB]	Background noise	Flanking transmission
50		67.1					
63	36.3	62.7	5.70	1.5			
80	28.1	63.1	0.81	-7.0			
100	28.1	60.6	1.41	-4.6	0.9		
125	30.5	55.5	1.38	-4.7	1.5		
160	32.4	55.1	1.69	-3.8	2.6		
200	32.5	53.3	1.59	-4.1	5.5		
250	38.7	50.2	1.46	-4.5	2.3		
315	39.0	45.2	1.28	-5.0	5.0		
400	41.8	41.8	1.31	-4.9	5.2		
500	46.0	38.7	1.26	-5.1	2.0		
630	47.6	35.0	1.15	-5.5	1.4		
800	49.1	33.2	1.22	-5.2	0.9		
1,000	50.2	31.5	1.15	-5.5	0.8		
1,250	50.3	31.9	1.03	-6.0	1.7		
1,600	50.5	30.1	1.06	-5.8	1.5		
2,000	51.8	28.4	1.03	-6.0	0.2		
2,500	52.5	23.5	1.02	-6.0			
3,150	55.4	19.7	0.98	-6.2			
4,000	59.6	16.3	0.94	-6.4			
5,000	61.1	14.6	0.88	-6.7			

Receiving room volume:	56.0	m³	Temperature:	11.0	°C
Source room volume:	62.3	m³	Mass per unit area:	50	kg/m²
Air humidity:	81	%	Size of test opening:	2.20	m²
Barometric pressure:		kPa			

Remarks:

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Level overview