

Sound Reduction Index according to ISO 140-3

Laboratory measurements of airborne sound insulation between rooms

Client: Brickworks Building Products

Date of test: 02/10/2014

Description and identification of the building construction and test arrangement, direction of measurement:

60 mm thick Pronto Panel with:

- 13 mm thick fire rated plasterboard direct fixed to one side
- 64 mm steel studs built 35 mm from the Panel
- 75 mm thick Earthwool insulation, 11kg/m³
- 13 mm thick fire rated plasterboard fixed to the outside of the studs

Area S of separating element: 10.19 m²

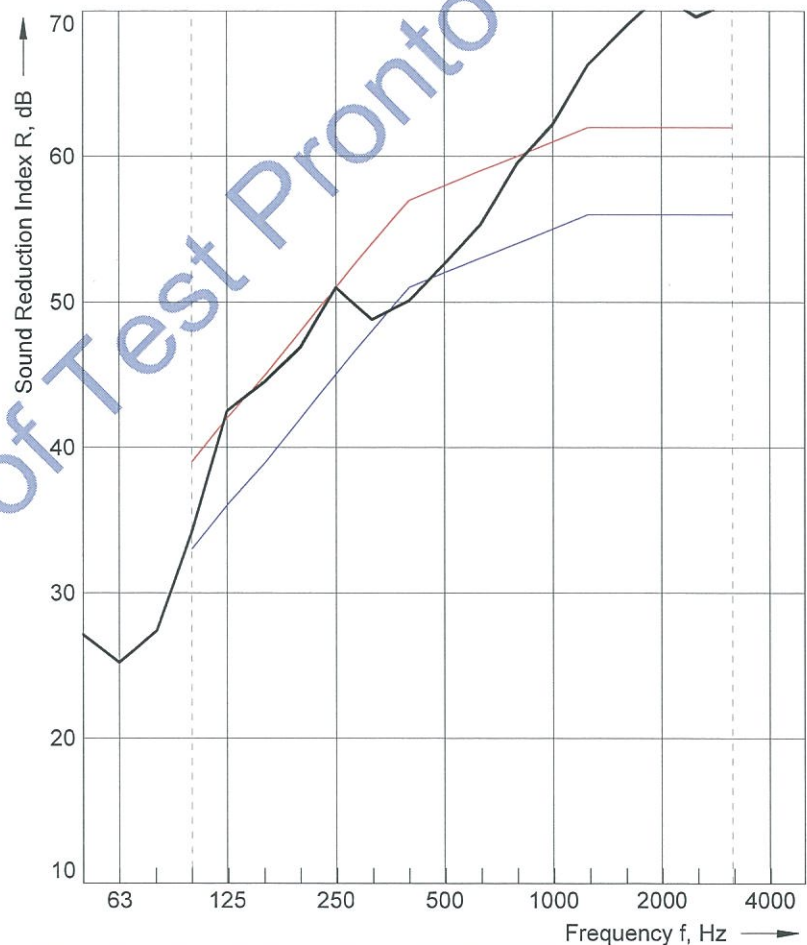
Source room volume: 90 m³

Receiving room volume V: 313.00 m³

Frequency range according to the curve of reference values (ISO 717-1)

Frequency f Hz	R 1/3 Octave dB
50	27.1 B
63	25.2
80	27.4
100	34.2
125	42.5
160	44.6
200	46.9
250	51.0
315	48.8
400	50.1
500	52.6
630	55.3
800	59.6
1000	62.2
1250	66.3
1600	69.0
2000	71.2
2500	69.6
3150	70.7
4000	71.2 B
5000	71.5 B

B: R >= value shown



Rating according to ISO 717-1

$$R_w (C; C_{tr}) = 58 (-2; -7) \text{ dB}$$

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

$$C_{50-3150} = -4 \text{ dB}; C_{50-5000} = -3 \text{ dB}; C_{100-5000} = -1 \text{ dB};$$

$$C_{tr,50-3150} = -14 \text{ dB}; C_{tr,50-5000} = -14 \text{ dB}; C_{tr,100-5000} = -7 \text{ dB};$$

No. of test report: 5518-1D

Name of test institute: Day Design Pty Ltd

Date: 08/12/2014

Signature: