

SOUND REDUCTION INDEX 100 mm ARCHITECTURAL MASONRY BLOCKWORK WALL

MEASUREMENTS

Sound Reduction Index (R) measurements were conducted at the AIRO Acoustics Laboratory in accordance with BS EN ISO 140-3:1995 and BS EN ISO 717-1:1997, using a purpose built sound transmission suite. AIRO is a UKAS accredited testing laboratory No. 0483. The test was performed on 24 September 2003.

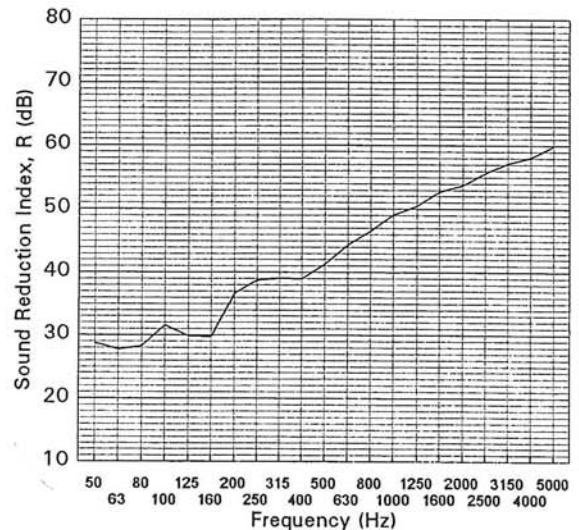
DESCRIPTION

The specimen filled a 2920 mm wide x 3005 mm high test aperture and comprised a single leaf blockwork wall construction from 100 mm thick Architectural Masonry blocks (density 2100 kg/m³ at 3% moisture). The blocks, with 440 mm x 215 mm face dimensions, were laid in stretcher bond using a nominal 5:1 sand cement mortar. The estimated mass of the 100 mm masonry wall is 208 kg/m².

Tested for and supplied by : Plasmor Limited

RESULTS

| Frequency Hz | R dB | Frequency Hz | R dB |
|-----------------|---------|-----------------|---------|
| 50 | 28.8 | 630 | 44.4 |
| 63 | 27.8 | 800 | 46.6 |
| 80 | 28.3 | 1000 | 49.1 |
| 100 | 31.6 | 1250 | 50.5 |
| 125 | 29.9 | 1600 | 52.7 |
| 160 | 29.8 | 2000 | 53.8 |
| 200 | 36.7 | 2500 | 55.7 |
| 250 | 38.8 | 3150 | 57.2 |
| 315 | 39.1 | 4000 | 58.1 |
| 400 | 39.0 | 5000 | 59.9 |
| 500 | 41.3 | | |



Rating according to BS EN ISO 717-1:1997 $R_w (C;C_{tr}) = 47 (-2;-5)$ dB

This Test Certificate summarises Report No. L/2899/1 dated 20 October 2003

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