

Comparisons and Perceptions of Noise Reduction

NOISE CONTROL SPECIALIST Standard plasterboard wall Plasterboard wall with 10mm Barrierboard wall, 10mm plasterboard one side, Barrierboard 1016 on opposite side 10mm plasterboard both sides Soundchek plasterboard both sides Rw rating 34dB Rw rating 36 dB Rw rating 43 dB Sounds can be easily heard, normal Change in level over standard wall - 2 dB Change in level over standard wall - 9 dB conversations are easily understood reduction Minor improvement over Walls inadequate to stop sound and standard wall. Any change under This represents a major reduction in 3 decibels barely perceivable perceived sound energy level of 87% home theatre systems. Standard plasterboard wall with Soundchek plasterboard wall with Barrierboard wall with additional TNC fibreglass or polyester insulation fibreglass or polyester insulation polyester insulation Rw rating 40 dB Rw rating 38 dB Rw rating 48 dB Change in level over standard wall - 14 dB Change in level over standard wall - 4 dB Change in level over standard wall - 6 dB Resultant sound has a significant reduction This represents almost 2/3rds Just a perceivable improvement but still insufficient to reduce major sounds reduction in the sound energy level from elevated speech, TV and music and over 90% reduction in perceived systems. levels

For an independent assessment of Decibel reductions and the subjective perception of noise levels, refer to the Multi Residential Timber Framed Construction information contained in Information Bulletin No. 3 www.timber.org.au/mrtfc website.

Performance of the above configurations for plasterboard and Soundchek has been taken from the CSR Red book. Barrierboard information from CSIRO test reports All studs configurations are 90mm timber studs

