



**Airborne sound reduction indices according to ISO 140-3  
Laboratory measurements of airborne sound insulation of building elements**

Date of test: 11-Jul-05

Description and identification of the test specimen and test arrangement:

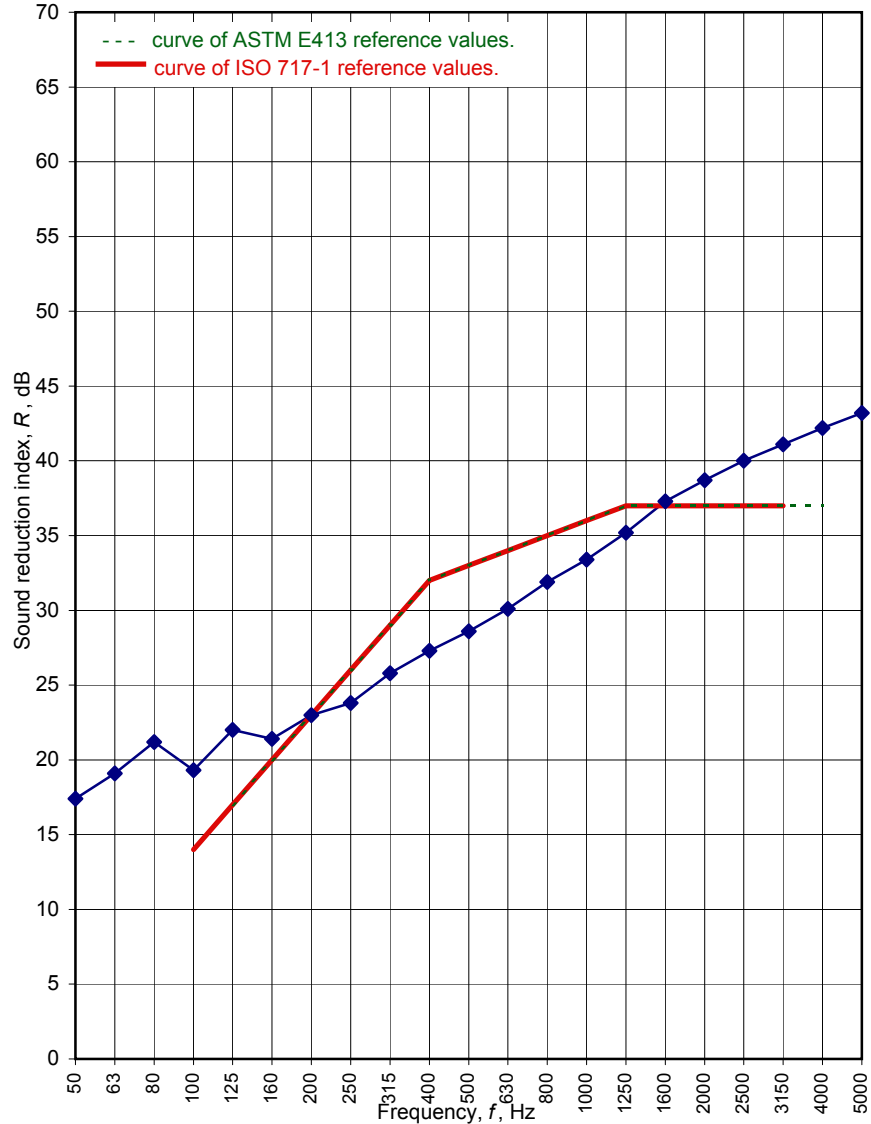
Client: Pyrotek

A single panel wall comprising: 1 lining of ***SUBDUE M 4/4/4***, a 4mm Ply / 4mm 8Kg barrier core / 4mm ply screwed to 25mm x 50mm studs at 600mm centres

Source chamber: Chamber C, Receiving chamber: Chamber A . Test specimen installed by client. Curing time:

Computer files: Lsrc: Lrec: Rtrc:

Area S of test specimen: 11.93 m<sup>2</sup>  
 Mass per unit area: 15.26 kg/m<sup>2</sup>  
 Air temp in the test rooms: 15 °C  
 Air humidity in test rooms: 65 %  
 Source room volume: 208 m<sup>3</sup>  
 Receiving room volume: 202 m<sup>3</sup>



Frequency <i>f</i> Hz	<i>R</i> One-third octave dB
50	17.4
63	19.1
80	21.2
100	<b>19.3</b>
125	<b>22.0</b>
160	<b>21.4</b>
200	<b>23.0</b>
250	<b>23.8</b>
315	<b>25.8</b>
400	<b>27.3</b>
500	<b>28.6</b>
630	<b>30.1</b>
800	<b>31.9</b>
1000	<b>33.4</b>
1250	<b>35.2</b>
1600	<b>37.3</b>
2000	<b>38.7</b>
2500	<b>40.0</b>
3150	<b>41.1</b>
4000	<b>42.2</b>
5000	<b>43.2</b>

- Notes: 1. #N/A = Value not available.  
 2. **Bold** values are used to calculate STC and R<sub>w</sub>.  
 3. Words in ***Bold Italic*** in the description are manufacturers brand names.

Rating according to ISO 717-1	<b><math>R_w (C; C_{tr}) = 33 (-1; -4) \text{ dB}</math></b>	
$C_{50-3150} = -1 \text{ dB}$	$C_{50-5000} = 0 \text{ dB}$	$C_{100-5000} = 0 \text{ dB}$
$C_{tr,50-3150} = -4 \text{ dB}$	$C_{tr,50-5000} = -4 \text{ dB}$	$C_{tr,100-5000} = -4 \text{ dB}$
Rating according to ASTM E413 -87	<b>Sound Transmission Class = 33 dB</b>	

No. of test report: **T0414-2**  
 Date:

Name of test institute: University of Auckland Acoustics Testing Service.  
 Signature: