

# Supplementary Acoustic Tests

## Introduction

Acoustic testing was undertaken in the Acoustic Test Facility at the University of Auckland in February 2005 to develop the PRT30SiD, PRTL30SiD, PRT60SiE and PRTL60SiD wall systems.

## Wall Systems

Four different wall systems were developed. Details of these wall systems are given in Table 1. All systems were developed for timber framing having a maximum stud spacing of 600 mm.

**Table 1**  
Details of Wall Systems

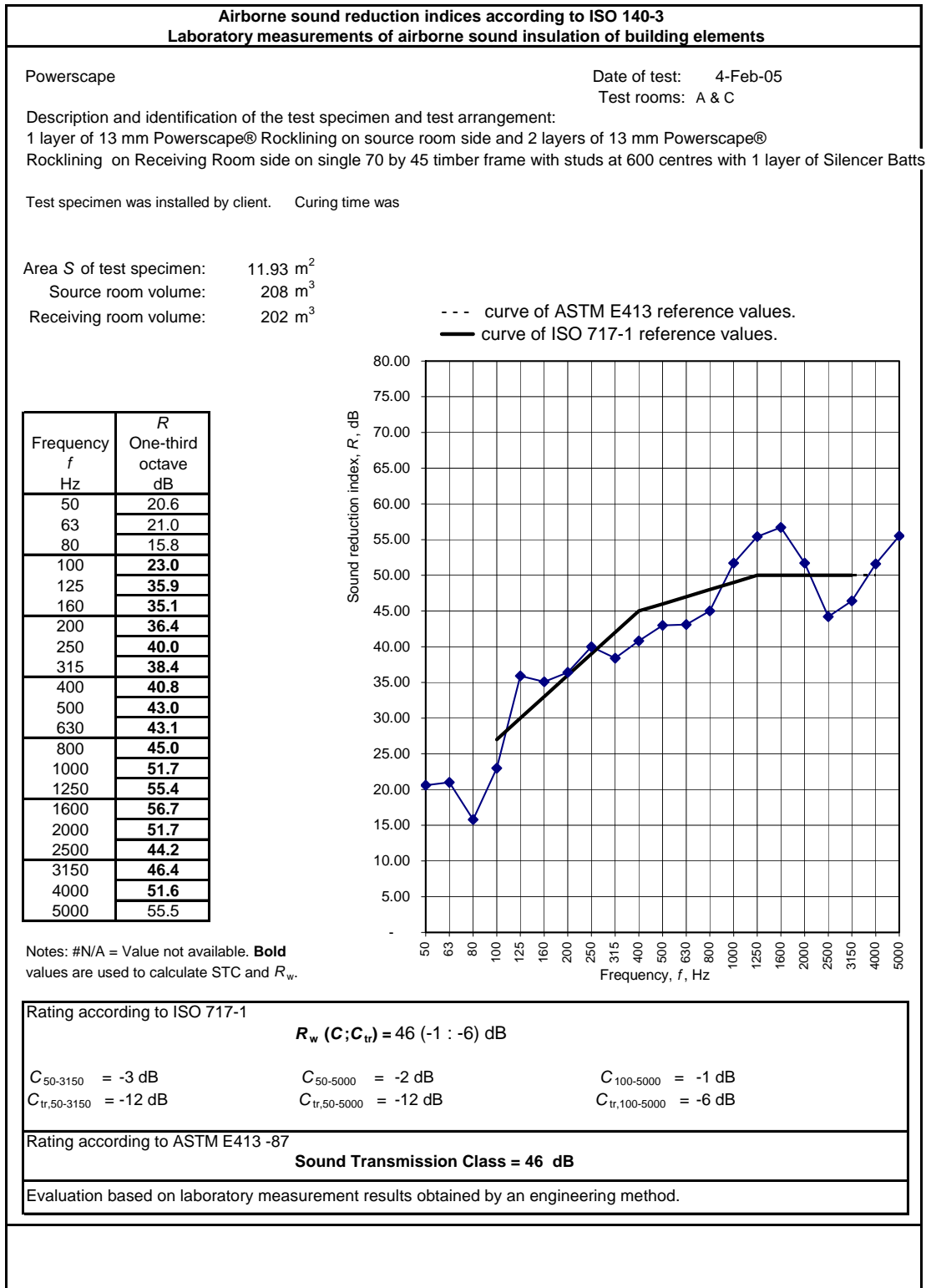
System	Lining Side 1		Lining Side 2	Framing	Insulation	STC	R <sub>w</sub>	R <sub>w</sub> + C <sub>tr</sub>
	Outer	Inner						
PRT30SiD/ PRTL30SiD	13	13	13	70 x 45	R2.5 & 450 rays glasswool or polyester blanket or better	46	46	40
PRT60SiE <sup>1</sup>	13	13	13	90 x 45	Mineral wool with minimum service temperature of 450 °C and minimum thickness of 63 mm	47	46	42
PRTL60SiD <sup>2</sup>	13	16	16	90 x 45	R 1.8 glasswool or polyester blanket or better	46	46	41

<sup>1</sup> The PRT60SiE system was tested with glass with a similar insulation rating to the mineral wool specified.

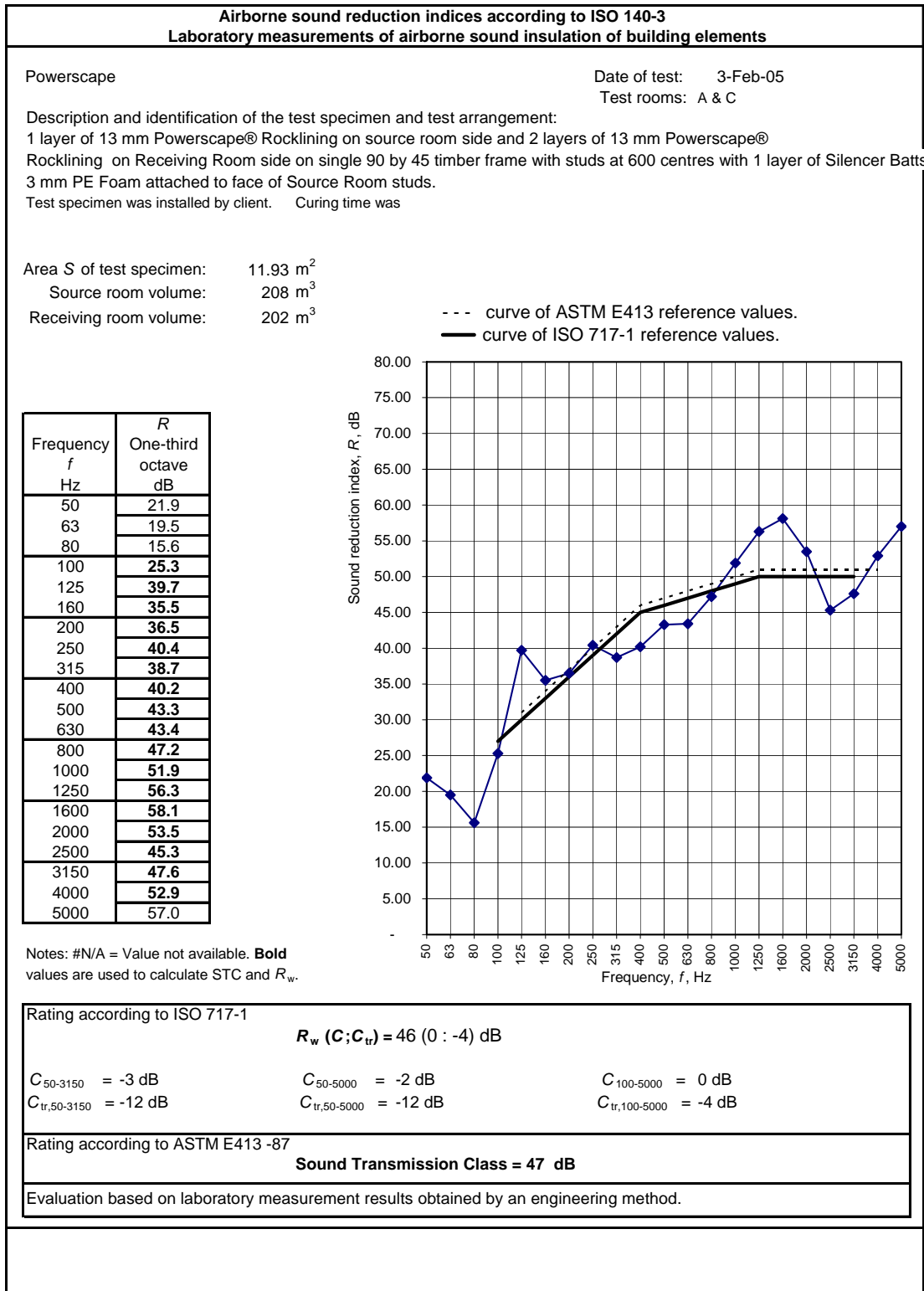
<sup>2</sup> The PRT60SiD system was tested with a 13 mm Powerscape® Rocklining on side 2 instead of a 16 mm Rocklining. Acoustic performance with a 16 mm Rocklining is expected to be enhanced.

Detailed acoustic performance of the various wall systems is shown on the following pages.

## Detailed Acoustic Performance – PRT30SiD / PRTL30SiD



## Detailed Acoustic Performance – PRT60SiE



## Detailed Acoustic Performance – PRT60SiD

