



#### **PURPOSE**

The SoundDown Flooring System (the system) is a load-bearing, one-way intertenancy flooring system that has acoustic and fire resistant performance qualities.

### **EXPLANATION**

The SoundDown system comprises:

- > 2 layers of GIB® Fyreline® plasterboard (13 mm and 16 mm)
- > suspended metal furring channel and clips
- > R1.8/300gsm Mammoth™ fibreglass insulation
- > 20 mm Maglok™ DragonBoard™ floor substrate
- > SoundDown acoustic battens (post treated J Frame H3.2) seated on rubber deckchairs.
- > 70 mm deep Vermiculite lightweight acoustic granules
- > 20 mm SoundDown floor substrate (Maglok™ DragonBoard™)
- > PSA fire and acoustic sealant.

The system is assembled on site using traditional construction methods. It is installed over a timber or lightweight steel floor structure.

Vermiculite is a phyllosilicate mineral which is an environmentally friendly, low density granule. It is absorbent and non-combustible; contributing to the acoustic performance.

The system has been acoustically tested in two ways. One where the floor cavity is filled with Vermiculite granules and the other where the floor cavity is empty; achieving the following results.

	Sound Transmission Class (STC)	Impact Insulation Class (ICC)
Vermiculite included	65 dB	63 dB
Vermiculite omitted	61 dB	58 dB

Fire Resistance Rating (FRR) of 60/60/60 relies on the  ${\rm GIB}^\circ$  Fire Rated system .



For further assistance please contact:







### **SCOPE AND LIMITATIONS OF USE**

Scope	Limitations
Building	
In conjunction with a timber or lightweight steel structural frame that complies with the NZ Building Code or where the designer and/or installer have established that the existing building is suitable for the intended building work.	
Where a FRR 60/60/60 fire rated intertenancy mid-floor is required.	➤ The plasterboard must be installed in accordance with GIB* Fire Rated system.
Where a minimum acoustic performance of 55 dB is required (STC & ICC).	<ul> <li>The SoundDown system must be installed in accordance with either of the acoustic testing assemblies.</li> <li>Where the system is to be installed in conjunction with lightweight steel</li> </ul>
	framing, contact Trade Supply.

### **PERFORMANCE CLAIMS**

If designed, installed and maintained in accordance with all Trade Supply Limited requirements:

The SoundDown Flooring System will comply with or contribute to compliance with the following performance claims:

NZ Building	BASIS OF COMPLIANCE <sup>1</sup>	
Code clauses	Compliance statement	Demonstrated by
C4 Movement to place of safety	ALTERNATIVE SOLUTION	> BRANZ Appraisal 289. GIB® Fire Rated Systems. [2018].
C4.5		
C 5 Access and safety for firefighting operations	ALTERNATIVE SOLUTION	> BRANZ Appraisal 289. GIB* Fire Rated Systems. [2018].
C5.6 (a, b, c), C5.8		
C6 Structural Stability	ALTERNATIVE SOLUTION	> BRANZ Appraisal 289. GIB* Fire Rated Systems. [2018].
C6.2		
G6 Airborne and Impact Sound	ALTERNATIVE SOLUTION	> Auckland UniServices, Acoustic Testing Services. Report # T1817-7/7i.
G6.3.1		[14/06/2018].
		Auckland UniServices, Acoustic Testing Services. Report # T1817-5a/5i. [14/06/2018].

# **USEFUL INFORMATION**

For information on the design, installation and maintenance of the SoundDown Flooring System and for our warranty refer to <a href="https://www.sounddown.co.nz">www.sounddown.co.nz</a>.

# **VERSION:**



### PERFORMANCE CLAIMS (CONTINUED)

The building elements used in the SoundDown Flooring System will comply with or contribute to compliance with the following performance claims:

<b>Building Element</b>	NZ Building Code Clauses	Documents relied on to establish compliance
Maglok™ DragonBoard™	B1.3.1, B1.3.2, B1.3.3 (a, b, c, e, f, I, j, m), B2.3.1 (a), B2.3.2 (a) C3.4 (a, b), C3.7 (a), C6.2 F2.3.1 G6.3.1.	> DragonBoard™ Technologies. pass™ no:19115 (v1.1). [06/05/2020].
Mammoth™	B2.3.1 (a) E3.3.1, F2.3.1 H1.3.1 (a), H1.3.2E.	> BRANZ Appraisal 802. Mammoth™ Underfloor Insulation. [2014].
GIB* Fyreline*	B1.3.1, B1.3.2, B1.3.3 (a, b, j), B1.3.4 (a, b, c, d, e), B2.3.1 (a) C3.4 (a), C3.6, C3.7 F2.3.1 G6.3.1.	<ul> <li>BRANZ Appraisal 289. GIB* Fire Rated Systems. [2018].</li> <li>BRANZ Appraisal 940. GIB* Intertenancy Barrier System for Terraced Homes. [2018].</li> <li>GIB* Plasterboard Alternatives. [January 2018].</li> </ul>
Vermiculite	B1.3.1, B1.3.2, B1.3.3 (a), B2.3.1 C3.7 (a) F2.3.1 G6.3.1.	<ul> <li>Vermiculite Association. Vermiculite Health, Safety and Environmental Aspects [n.d.].</li> <li>Vermiculite Association. Vermiculite Data [n.d.].</li> <li>Ausperl. Material Safety Data Sheet. [01/06/2026].</li> <li>Ausperl. Technical Data Sheet Exfoliated Vermiculite. [08/2016].</li> </ul>
Acoustic batten	B1.3.1, B1.3.2, B1.3.3 (a, b, f, g, h, q), B1.3.4 (a, b, c, d, e), B2.3.1 (a) F2.3.1.	> BRANZ Appraisal 646. J-Frame LVL Framing. [2019].
Metal channel and clips	B1.3.1, B1.3.2, B1.3.3 (a, b, j), B1.3.4 (a, b, c, d, e), B2.3.1 (b) F2.3.1.	▶ BRANZ Appraisal 289. GIB* Fire Rated Systems. [2018].

#### SOURCES OF INFORMATION<sup>2</sup>

- Auckland Uniservices. [14/06/2018]. ISO-10140:2. Acoustics Laboratory measure of sound insulation of building elements measurement of airborne sound insulation. Report # T1817-7/7i.
- Auckland Uniservices. [14/06/2018]. ISO-10140:2. Acoustics Laboratory measure of sound insulation of building elements measurement of airborne sound insulation. Report # T1817-5a/5i.
- > Ausperl. [08/2016]. Technical Data Sheet Exfoliated Vermiculite.
- DragonBoard<sup>™</sup> Technologies. [06/05/2020]. Maglok<sup>™</sup> DragonBoard<sup>™</sup> Magnesium Sulphate Board pass<sup>™</sup> v1.1. http://www.thebuildingbusiness.co.nz/maglok-pass-landing. [Accessed 19/05/2020].
- BRANZ. [2018]. Appraisal No. 289[2018] GIB\* Fire Rated Systems. https://www.branz.co.nz/Appraisal/289. [accessed 19/05/2020].
- BRANZ. [2016]. Appraisal No. 940[2016] GIB\* Intertenancy Barrier Systems for Terraced Homes. https://www.branz.co.nz/Appraisal/940. [accessed 19/05/2020].
- BRANZ. [2019]. Appraisal No. 646[2019]. J-Frame LVL Framing. https://www.branz.co.nz/Appraisal/646. [accessed 19/05/2020].
- BRANZ. [2014]. Appraisal No. 802[2014]. Mammoth™ Underfloor insulation. https://www.branz.co.nz/Appraisal/646. [accessed 19/05/2020].
- SGS. [31/03/2015]. Load Bearing Test; Deckchair System. Report # QDIN1503000933PS.
- The Vermiculite Association. [n.d]. Vermiculate Health, Safety and Environmental Aspects.
- The Vermiculite Association. [n.d]. Vermiculite Data.
- > Ausperl. [01/06/2016]. Material Safety Data Sheet.
- > GIB® Plasterboard. [01/2018]. GIB® Plasterboard Alternatives.
- 1. The Compliance Statement is the pass holder's statement that they have met their obligations under s14G(2) of the Building Act 2004.
- Sources of information also include the Building Act 2004 and its regulations, including the Building Code (Schedule 1 of the Building Regulations 1992), Acceptable Solutions and Verification Methods, and relevant cited standards.

Scan or click this QR code for a full download of Compliance Documentation for this pass™.

www.sounddown.co.nz/downloads-access



VERSION:  Note: Uncontrolled in printed format.	DATE:	Signed on behalf of Trade Supply Limited:	
NAME:	Tim Haycock	By signing this pass™ the signatory confirms that, in respect of the subject of this pass™, the company has met their s14G obligations under the Building Act 2004.	1
POSITION:	Director		pass