

SOUNDDOWN SOLO SYSTEM

PURPOSE

SoundDown Solo is a load-bearing, acoustic and fire rated intertenancy floor/ceiling system.

EXPLANATION

SoundDown Solo is a floor/ceiling system that provides an STC rating of 65 dB, an IIC rating of 56 dB and incorporates a 60/60/60 fire rated ceiling; the floor structure is excluded from the fire cell. SoundDown Solo is installed over a timber or lightweight steel floor structure.

SoundDown Solo comprises:

- USG Boral Firestop® - 2 layers of 13 mm thick, fixed with Gypsum bugle head screws and sealed with Firesound™ sealant
- Rondo 129 Furring Channel - 28 mm
- Rondo STPC Acoustic Mounts - fixed with four 8 g x 25 mm screws
- SteelHaus EZYJOIST™ - galvanised steel 240 mm x 45 mm x 1.55 gauge
- Mammoth™ multi polyester insulation - R1.990 mm thick
- SoundDown joist silencer - 6 mm x 45 mm
- Maglok™ DragonBoard® - 20 mm thick
- galvanised substrate screw fixing - 8 g 50 mm class 3
- Jacobsens Tarkett Traffic 250 vinyl - 2.5 mm.



For further assistance please contact:

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🌐 www.sounddown.co.nz



SCOPE AND LIMITATIONS OF USE

Scope	Limitations
Building	
In conjunction with timber or lightweight steel floor framing that complies with the NZ Building Code or where the designer and/or installer have established that the existing framing is suitable for the intended building work.	
As an acoustic intertenancy mid-floor.	➤ Installation to be in accordance with tested assembly.
As a fire rated intertenancy mid-floor.	➤ SoundDown Solo achieves a maximum fire resistance rating, from below, of 60/60/60.

CONDITIONS OF USE

Where substitutions to the SoundDown Solo system are proposed, the design must be subject to review by an Acoustic Engineer, to ensure that the acoustic performance is not diminished.

PERFORMANCE CLAIMS

If designed, installed and maintained in accordance with all SoundDown requirements, the SoundDown Solo will comply with or contribute to compliance with the following performance claims:

BASIS OF COMPLIANCE		
NZ Building Code clauses	Compliance statement	Demonstrated by
B1 Structure B1.3.1, B1.3.2, B1.3.3 (a, b, c, e, f, i, j, l, m, o, r) B1.3.4 (a, b, c, d, e)	ALTERNATIVE SOLUTION Components	<ul style="list-style-type: none"> ➤ USG Boral Firestop® manufactured to AS/NZS 2588; tested to ASTM E695-75 and ASTM E720-80 for impact and static pressure [USG Boral, n.d.]. ➤ Rondo Channel and Mounts manufactured to AS 1397-2011, manufacturer's claim [Rondo, n.d.]. ➤ SteelHaus EZYJOIST™ manufactured from KIWI GALV™ steel, steel manufactured to AS 1397-2011 [Kiwi Steel, n.d.; SteelHaus, 2020]. ➤ SoundDown joist silencer tested for dimension and compression force by SGS [SGS, 2021]. ➤ Maglok™ DragonBoard® pass™ 19115 [Maglok™ DragonBoard® 18/03/2022]. ➤ Jacobsens Tarkett Traffic 250 vinyl CE mark to EN 14041:2004, No. 0131-0022-DoP-2013-07 [Jacobsens, 2016].
B2 Durability B2.3.1 (a), B2.3.2 (a)	ALTERNATIVE SOLUTION Components	<ul style="list-style-type: none"> ➤ USG Boral Firestop® manufactured to AS/NZS 2588 [USG Boral, n.d.]. ➤ Rondo Channel and Mounts manufactured to AS 1397, manufacturer's claim [Rondo, n.d.]. ➤ SteelHaus EZYJOIST™ manufactured from KIWI GALV™ steel, steel manufactured to AS 1397-2011 [Kiwi Steel, n.d.; SteelHaus, 2020].

USEFUL INFORMATION

For information on the design, installation and maintenance of SoundDown Solo and for our warranty refer to www.sounddown.co.nz.

CONTINUED B2 Durability B2.3.1 (a), B2.3.2 (a)	ALTERNATIVE SOLUTION Components	<ul style="list-style-type: none"> ➤ BRANZ Appraisal No. 802 Mammoth™ Underfloor Insulation. [BRANZ, 2014]. ➤ SoundDown joist silencer tested for dimension and compression force by SGS [SGS, 2021]. ➤ Maglok™ DragonBoard® pass™ 19115 [Maglok™ DragonBoard®, 18/03/2022]. ➤ Jacobsens Tarkett Traffic 250 vinyl CE mark to EN 14041:2004, No. 0131-0022-DoP-2013-07 [Jacobsens, 2016].
C3 Fire affecting areas beyond the fire source C3.4 (a, b),	ACCEPTABLE SOLUTION C/AS1 C/AS2 1 st edition, June 2019	<ul style="list-style-type: none"> ➤ USG Boral Firestop® has a material group number 1-S [BRANZ, 2015]. ➤ Jacobsens Tarkett Traffic 250 vinyl ISO 9239.1-2003 [AWTA 08/02/2012].
C6 Structural stability C6.2 (a, b, d, c, d)		<ul style="list-style-type: none"> ➤ USG Boral Firestop® tested to AS 1530.4-1997 by CSIRO, manufacturer's claim [USG Boral, n.d.].
F2 Hazardous Building Materials F2.3.1	ALTERNATIVE SOLUTION	<ul style="list-style-type: none"> ➤ USG Boral Firestop® manufactured to AS/NZS 2588 [USG Boral, n.d.]. ➤ Rondo Channel and Mounts manufactured to AS 1397, manufacturer's claim [Rondo, n.d.]. ➤ SteelHaus EZYJOIST manufactured from KIWI GALV™ steel, steel manufactured to AS 1397-2011 [Kiwi Steel, n.d.; SteelHaus, 2020]. ➤ SoundDown joist silencer rubber material is inert. ➤ BRANZ Appraisal No. 802 Mammoth™ Underfloor Insulation. [BRANZ, 2020]. ➤ Maglok™ DragonBoard® pass™ 19115 [Maglok™ DragonBoard®, 18/03/2022]. ➤ Jacobsens Tarkett Traffic 250 vinyl CE mark to EN 14041:2004, No. 0131-0022-DoP-2013-07 [Jacobsens, 2016].
G6 Airborne and impact sound G6.3.1	VERIFICATION METHOD G6/VM1 (system)	<ul style="list-style-type: none"> ➤ Impact Insulation Class 56 DB, tested to ASTM E989 and Sound Transmission Class 65 DB, tested to ASTM E413 by Auckland UniServices Acoustic Testing Services [Auckland UniServices, 11/12/2020, 16/12/2020].
H1 Energy efficiency H1.3.1 (a), H1.3.2E		<ul style="list-style-type: none"> ➤ BRANZ Appraisal No. 802 Mammoth™ Underfloor Insulation. [BRANZ, 2020].

SOURCES OF INFORMATION²

- Auckland UniServices. [11/12/2020] *Laboratory measurement of airborne and impact insulation of a flooring system*. Test ID: T2041-1.
- Auckland UniServices. [16/12/2020] *Laboratory measurement of the impact insulation of a flooring system*. Test ID: T2041-3.
- BRANZ. [2/09/2020] *Mammoth™ Underfloor Insulation*. Appraisal No. 802 [2020]. Retrieved from <https://www.branz.co.nz/appraisal-codemark-certificates/mammothm-underfloor-insulation/>. [Accessed on 11/06/2021].
- BRANZ. [03/12/2015] *USG Boral Bracing Systems*. Appraisal No. 899 [2015]. Retrieved from <https://www.branz.co.nz/appraisal-codemark-certificates/899-2015-usg-boral-bracing-systems/>. [Accessed on 11/06/2021].
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- Maglok™ Dragonboard®. [18/03/2022] *Maglok™ Dragonboard®*. pass™ no. 19115. Retrieved from <https://www.thebuildingbusiness.co.nz/maglok-pass-landing>. [Accessed on 11/06/2021].
- Rondo. [09/2015] *Rondo Acoustic Wall & Ceiling Systems Manual*. Retrieved from <https://www.rondo.co.nz/resources/installation/product-manuals/>. [Accessed on 11/06/2021].
- Rondo. [n.d.] *Rondo Key-Lock® Concealed Suspended Ceiling System*. Retrieved from <https://www.rondo.co.nz/resources/installation/product-manuals/>. [Accessed on 11/06/2021].
- SteelHaus. [19/03/2020] *SteelHaus Steel framing construction manual*. Retrieved from <https://www.steelhaus.co.nz/steel-buildings-nz/>. [Accessed on 11/06/2021].
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- SGS. [22/03/2021] Test report QDIN2103001214SC.
- AWTA [14/02/2012] *ISO 9239.1-2003. Reaction to Fire Tests for Floorings Determination of the Burning Behaviour using a Radiant Heat Source*. Test number: 7-583462-AN. Retrieved from https://www.flooringxtra.co.nz/content/products/specifications/jcstrda11_tarkett-250-fire-test-iso9239-1.pdf. [Accessed on 21/06/2021].

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

www.sounddown.co.nz



1. Where a standard is referenced it is to be read as amended by the acceptable solution or verification method as applicable.
2. 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.
3. The quality and assurance that the supplied products meet the performance claims stated in this pass™ are the responsibility of the company that is the holder of this pass™.

Trade Supply confirms that if Sound Down Solo System is used in accordance with the requirements of this pass™ the product will comply with the NZ Building Code and other performance claims set out in this pass™ and the company has met all of its obligations under s14 G of the Building Act.

Date of first issue: 18/03/2021

Date of current issue: 28/09/2022

NZBN: 9429046137944

Kevin Brunton

Kevin Brunton, Technical Director, TBB confirms that this pass has been prepared on behalf of Trade Supply and in accordance with MBIE PTS guidelines and in accordance with the TBB pass™ process which is within the scope of TBB's ISO 9001 certification.

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