

# 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:

- Jacobsens Tarkett Traffic 250 vinyl - 2.5 mm.
- Maglok™ DragonBoard® - 20 mm thick fixed with galvanised substrate screw fixing - 8 g 50 mm class 3
- SoundDown joist silencer - 6 mm x 45 mm
- Mammoth™ multi polyester insulation - R1.990 mm thick
- SteelHaus EZYJOIST™ - galvanised steel
- 240 mm x 45 mm x 1.55 gauge
- Rondo STPC Acoustic Mounts - fixed with four 8 g x 25 mm screws
- Rondo 129 Furring Channel - 28 mm
- Two layers of 13 mm thick board screwed to steel battens, sealed with the board supplier's recommended acoustic sealant.



For further assistance please contact:

- ☎ 09 373 4744
- ✉ sales@sounddown.co.nz
- 🌐 [www.sounddown.co.nz](http://www.sounddown.co.nz)

## SCOPE AND LIMITATIONS OF USE

Scope	Limitations
<b>Building</b>	
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.	<ul style="list-style-type: none"> <li>➤ Installation to be in accordance with tested assembly.</li> <li>➤ Plasterboard must be manufactured to AS/NZS 2988.</li> <li>➤ The selected plasterboard must be installed in accordance with all manufacturer's requirements, including sealing with the recommended sealant.</li> </ul>
As a fire rated intertenancy mid-floor.	<ul style="list-style-type: none"> <li>➤ Plasterboard must be manufactured to AS/NZS 2988, and achieve a minimum material group number rating of 1-S and achieve a fire resistance rating of 60/60/60.</li> <li>➤ The selected plasterboard must be installed in accordance with all manufacturer's requirements, including sealing with the recommended sealant. SoundDown Solo achieves a maximum fire resistance rating, from below, of 60/60/60.</li> </ul>

## 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. The components must be installed in accordance with all manufacturer and supplier requirements.

## PERFORMANCE CLAIMS

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

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

## USEFUL INFORMATION

For information on the design, installation and maintenance of SoundDown Solo and for our warranty refer to [www.sounddown.co.nz](http://www.sounddown.co.nz).

<b>CONTINUED</b> <b>B2 Durability</b> B2.3.1 (a), B2.3.2 (a)	ALTERNATIVE SOLUTION	<ul style="list-style-type: none"> <li>➤ BRANZ Appraisal No. 802 Mammoth™ Underfloor Insulation. [BRANZ, 2014].</li> <li>➤ SoundDown joist silencer tested for dimension and compression force by SGS [SGS, 2021].</li> <li>➤ Maglok™ DragonBoard® pass™ 19115 [Maglok™ DragonBoard®, 18/03/2022].</li> <li>➤ Jacobsens Tarkett Traffic 250 vinyl CE mark to EN 14041:2004, No. 0131-0022-DoP-2013-07 [Jacobsens, 2016].</li> </ul>
<b>C3 Fire affecting areas beyond the fire source</b> C3.4 (a, b),	ACCEPTABLE SOLUTION C/AS1 C/AS2	<ul style="list-style-type: none"> <li>➤ Fire-rated plasterboard with minimum material group number 1-S.</li> <li>➤ Comparison of properties of plasterboard for material group number [TBB, 03/2024].</li> <li>➤ Jacobsens Tarkett Traffic 250 vinyl ISO 9239.1-2003 [AWTA 08/02/2012].</li> </ul>
<b>C6 Structural stability</b> C6.2 (a, b, d, c, d)		<ul style="list-style-type: none"> <li>➤ Fire-rated plasterboard with FRR 60/60/60.</li> <li>➤ Comparison of properties of fire-rated plasterboard for FRR in system [TBB, 03/2024].</li> </ul>
<b>F2 Hazardous Building Materials</b> F2.3.1	ALTERNATIVE SOLUTION	<ul style="list-style-type: none"> <li>➤ Plasterboard manufactured to AS/NZS 2988.</li> <li>➤ Rondo Channel and Mounts manufactured to AS 1397, manufacturer's claim [Rondo, n.d.].</li> <li>➤ SteelHaus EZYJOIST manufactured from KIWI GALV™ steel, steel manufactured to AS 1397-2011 [Kiwi Steel, n.d.; SteelHaus, 2020].</li> <li>➤ SoundDown joist silencer rubber material is inert.</li> <li>➤ BRANZ Appraisal No. 802 Mammoth™ Underfloor Insulation. [BRANZ, 2020].</li> <li>➤ Maglok™ DragonBoard® pass™ 19115 [Maglok™ DragonBoard®, 18/03/2022].</li> <li>➤ Jacobsens Tarkett Traffic 250 vinyl CE mark to EN 14041:2004, No. 0131-0022-DoP-2013-07 [Jacobsens, 2016].</li> </ul>
<b>G6 Airborne and impact sound</b> G6.3.1	VERIFICATION METHOD G6/VM1	<ul style="list-style-type: none"> <li>➤ Impact Insulation Class, tested to ASTM E989 and Sound Transmission Class, tested to ASTM E413 by Auckland UniServices Acoustic Testing Services [Auckland UniServices, 11/12/2020, 16/12/2020].</li> <li>➤ Comparison of properties of fire-rated plasterboard manufactured to AS/NZS 2588 in system [TBB, 03/2024].</li> </ul>
<b>H1 Energy efficiency</b> H1.3.1 (a), H1.3.2E		<ul style="list-style-type: none"> <li>➤ BRANZ Appraisal No. 802 Mammoth™ Underfloor Insulation. [BRANZ, 2020].</li> </ul>

## SOURCES OF INFORMATION

- 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].
- Jacobsens. [8/02/2016] *Traffic 250 Residential Vinyl*. Retrieved from [https://jacobsens.co.nz/media/386383/technical\\_traffic\\_250.pdf](https://jacobsens.co.nz/media/386383/technical_traffic_250.pdf). [Accessed on 11/06/2021].
- 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].
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- SteelHaus. [19/03/2020] *SteelHaus Steel framing construction manual*. Retrieved from <https://www.steelhaus.co.nz/steel-buildings-nz/>. [Accessed on 11/06/2021].
- SteelHaus. [n.d.] *SteelHaus Steel Ezyjoist steel floor joist system*. Retrieved from <https://www.steelhaus.co.nz/steel-buildings-nz/>. [Accessed on 11/06/2021].
- Kiwi Steel. [2017] *Galvanised Steel – KIWI GALV™ Sheet and coils*. Retrieved from <https://kiwisteel.co.nz/stock/galvanised-steel/>. [Accessed on 11/06/2021].
- 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](https://www.flooringxtra.co.nz/content/products/specifications/jcstrda11_tarkett-250-fire-test-iso9239-1.pdf). [Accessed on 21/06/2021].
- TBB. [04/2024] Comparison of properties of fire-rated plasterboard manufactured to AS/NZS 2988 in SoundDown Solo and SoundDown Duo systems.

SCAN OR CLICK THIS QR CODE TO ACCESS OR REQUEST THE RELEVANT SUPPORTING DOCUMENTATION FOR THIS PASS™.

[sounddown.co.nz](https://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 product is not subject to a warning or ban under section 26 of the Building Act. 4. For overseas manufacturer details, where applicable, refer to the company that is the holder of this pass™. 5. 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™. 6. The availability of the information about the supplied products required to be disclosed under s14G(3) is the responsibility of the company that is the holder of this pass™.

Build Anatomy Limited confirms that if the 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 s14G(2) of the Building Act.

**Date of first issue:** 18/03/2021

**Date of current issue:** 12/04/2024

**NZBN:** 9429046137944

Kevin Brunton

Kevin Brunton, Technical Director, TBB confirms that the process used to prepare this pass™ on behalf of Build Anatomy Limited has been undertaken 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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