

SoundDown Duo System **INSTALLATION GUIDE**

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General and product information

PURPOSE	This guide relates to the installation of the SoundDown Duo System.
IMPORTANT DOCUMENTS	<p>This guide must be read in conjunction with:</p> <ul style="list-style-type: none"> › the SoundDown Duo System pass™ › the SoundDown Duo System Specification Guide › the SoundDown Duo System Details › the SoundDown Duo System Installation Guide › the SoundDown System Care and Maintenance Guide › the SoundDown System Warranty › NASH Standard, Part 2: May 2019 Light Steel Framed Buildings › NZS 3604: Timber-framed buildings.
SKILLS REQUIRED	This guide is suitable for use by a licensed building practitioner licensed to the relevant class or by a practitioner who will be supervised by a licensed building practitioner licensed to the relevant class or deemed LBP.
FOR MORE HELP	<p>Technical assistance is available at www.sounddown.co.nz.</p> <p>While all reasonable efforts have been made to ensure the accuracy of information provided, this guide is a guide only. It may be subject to change.</p>
FOR OUR WARRANTY	Refer to www.sounddown.co.nz .
PRODUCT DESCRIPTION	<p>SoundDown Duo is a two-layer floor/ceiling system that achieves an STC rating of 64 dB, an IIC rating of 62 dB and incorporates a 60/60/60 fire rated ceiling; the floor structure is excluded from the fire cell. SoundDown Duo is installed in conjunction with a timber or lightweight steel structural frame and timber joists.</p> <p>SoundDown Duo comprises:</p> <ul style="list-style-type: none"> › Maglok™ DragonBoard® Flooring - 20 mm, fixed with 8 g x 50 mm class 3 galvanised substrate screw fixing fixed at 300 mm centres. › SoundDown acoustic flooring battens - seated on rubber deckchairs set at 450 mm centres. › Vermiculite lightweight acoustic granules - 70 mm deep. Vermiculite is a phyllosilicate mineral that is an environmentally friendly, low-density granule. It is absorbent and non-combustible, contributing to the acoustic performance. › Maglok™ DragonBoard® - 20 mm, fixed with Maglok™ floor substrate fixing to timber/lightweight steel joists at 200 mm centres. › SG8 timber joist - 190 mm x 45 mm set at 450 mm centres or lightweight steel to an equivalent stiffness set at 450 mm centres. › Rondo STPC ceiling mounts assembled with acoustic clips. › Mammoth™ polyester insulation R1.8/900 gsm. › Rondo 129 Furring Channel steel ceiling battens - 28 mm. › USG Firestop - 2 layers of 13 mm thick board screwed to steel battens, sealed with USG Firesound®.
SCOPE AND LIMITATIONS	For scope of use, limitations, conditions and statement of building code compliance, refer to the SoundDown Duo System pass™.

Pre-installation

- HEALTH AND SAFETY** Take all necessary steps to ensure your safety and the safety of others:
- › ensure adequate ventilation or mechanical dust extraction when cutting or drilling
 - › ensure the timber and steel are well supported when cutting and fixing
 - › wear appropriate safety equipment, clothing and footwear
 - › use all tools in accordance with relevant instruction manuals
 - › plan and monitor a safe approach for working at height; select and use the right equipment
 - › designate a disposal area for all sharp metal off-cuts
 - › clear the work area of any obstruction before work starts.
- For further information refer to:
- › WorkSafe. [July 2018] *Small Construction Sites, the Absolutely Essential Health and Safety Toolkit.*
 - › WorkSafe. [December 2016] *Health and Safety at Work, Quick Reference Guide.*
- These documents are available at www.worksafe.govt.nz.
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HANDLING AND STORAGE

Correct handling and storage of SoundDown Duo components is critical for best performance, ease of use and warranty adherence.

Handling

Handle all component products with care.

Products must be handled in accordance with component product manufacturer or supplier requirements.

Refer to www.maglok.co.nz.

Refer to www.mammoth.co.nz.

Refer to www.rondo.co.nz.

Refer to www.usgboral.com/en_nz.

In general, ensure USG Boral Firestop® and Maglok™ Dragonboard® products are delivered dry, unmarked and undamaged from freight and handling. The boards should be lifted off the truck by hoist or hand. Slings may be used if the sheet products are on a pallet. All sheets should be inspected upon delivery.

Take care handling the boards to avoid damage to edges and surfaces.

Storage

Store products in a dry and sheltered environment. Stack sheets flat, dry and clear of the ground by 100 mm and supported on dry, clean timber bearers at a maximum of 900 mm centres.

TOOLS AND EQUIPMENT REQUIRED

Install SoundDown Duo using standard carpentry tools and equipment.

Use tools in accordance with good trade practice and supplier's instructions.

Use a skill saw with a fine-tooth tungsten carbide blade for accurate cutting of the Maglock™ Dragonboard®.

Installation

PREPARATION

Step 1

Building consent documentation

Access and view the building consent documentation.

Ensure NZS 3604:2011 and NASH Standard Part 2: May 2019 Light Steel Framed Buildings are available for reference.

Step 2

Framing substrate

Ensure the framing is straight and true and within framing tolerances as described in section 2 and Table 2.1 of NZS 3604:2011, or section 2.5 and Appendix A of NASH Standard Part 2: May 2019 Light Steel Framed Buildings.

Ensure the moisture content of any timber framing is less than 20 % at the time of the SoundDown Duo installation.

INSTALLATION

Step 1

Details

Access and view the SoundDown Duo System details in the building consent documentation or from SoundDown www.sounddown.co.nz.

Step 2

Install joists

Joists must be set at 450 mm centres and fixed in accordance with the building consent, or NZS 3604:2011 or NASH Standard if not specified in the building consent. Fix joists using an impact drill. Ensure all joists are fixed on all support walls with the connections specified in the building consent.

Glue end-joists prior to installation of the boards and vermiculite.

Step 3

Install flooring

Install boards

Install Maglok™ Dragonboard® board:

- › lay sheets perpendicular to joists with the shiplap edge spanning across the joist, ensuring 1200 mm ends of sheets are joined on the centre of the joist
- › glue shiplaps using expanding polyurethane glue
- › fix at 200 mm centres with Maglok™ Floor substrate screw fixings.

Refer to www.maglok.co.nz.

Install SoundDown acoustic battens & vermiculite

Seat SoundDown acoustic battens on rubber deckchairs on the Maglok™ board at 450 mm centres and around the perimeter. Install additional cross battens around penetrations >65 mm.

Insert vermiculite acoustic granules between battens in each 70 mm cavity.

Install flooring boards

Install Maglok™ Dragonboard® board:

- › lay sheets perpendicular to battens with the shiplap edge spanning across the batten, ensuring 1200 mm ends of sheets are joined on the centre of the batten
- › glue shiplaps using expanding polyurethane glue
- › fix with 8 g x 50 mm class 3 galvanised substrate screws at 300 mm centres.

Refer to www.maglok.co.nz.

Step 4

Install insulation

Install Mammoth™ R1.9 Polyester insulation snugly between the joists. A wire support to the underside of the insulation may be required to ensure it remains in position in accordance with Mammoth™ technical information.

Refer to www.mammoth.co.nz.

Step 5

Install ceiling

Install acoustic mounts

Fix Rondo STPC Acoustic Mount to the joists using four 8 g x 25 mm screws at a maximum spacing of 900 mm in accordance with Rondo technical information. Refer to www.rondo.co.nz.

Using a laser level, adjust the Rondo STPC Acoustic Mounts to the required ceiling height and plane.

Install furring channels

Install Rondo 28 mm 129 Furring Channel steel ceiling battens onto the clip system of the Rondo STPC Acoustic Mount at maximum spacing of 600 mm centres.

Install Rondo wall trims to all wall/ceiling junctions in the same plane as the Rondo ceiling battens.

Refer to www.rondo.co.nz.

Install plasterboard

Fix USG Boral Firestop® in accordance with USG Boral technical information as follows:

- › install USG Boral Firestop® at right angles to the Rondo 310 battens
- › ensure sheet ends are supported over a Rondo member
- › offset the second layer of Firestop® sheet joints by a minimum of 200 mm
- › seal the perimeter of the board with Firesound® sealant
- › use 6 g x 25 mm (min) steel screws to first layer of 13 mm Firestop®
- › use 6 g x 40 mm (min) steel screws to second layer of 13 mm Firestop®
- › plasterboard fasteners are to be at 200 mm max centres in field and 150 mm max centres at sheet ends and butt joints
- › all penetrations must be sealed
- › for installation of lighting systems refer to the building consent
- › stop all joints (face layer only) with a 3-coat plaster jointing system.

Ensure that all jointing and plaster finishes are in accordance with USG Boral requirements.

Refer to www.usgboral.com/en_nz.

COMPLETION

Check to ensure all components are installed correctly and in accordance with SoundDown Duo System requirements.

Complete the SoundDown System Installation Record.

Ensure all information is available for the building owner to maintain the SoundDown Duo System.

This document is uncontrolled in printed form.

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