SoundDown Solo System

DESIGN GUIDE

August 2021 V1.0

SoundDown™

SOUND + FIRE RATED CASSETTE SYSTEMS

General and product information

PURPOSE

This guide relates to the design of the SoundDown Solo System.

IMPORTANT DOCUMENTS

This guide must be read in conjunction with:

- the SoundDown Solo System pass™
- the SoundDown Solo System specification guide
- the SoundDown Solo System details
- the SoundDown Solo System Installation guide
- the SoundDown Solo System care and maintenance guide
- the SoundDown Solo System warranty
- NASH Standard Part 2: May 2019 Light Steel Framed Buildings
- AS/NZS 1170 Structural Design Actions
- NZS 3604: Timber-framed buildings
- NZS 3404 Parts 1 and 2:1997 Steel Structures Standard.

SKILLS REQUIRED

This guide is suitable for use by a designer who is a licensed building practitioner licensed to the relevant class or deemed LBP.

FOR MORE HELP

Technical assistance is available at www.sounddown.co.nz.

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.

PRODUCT DESCRIPTION

SoundDown Solo is a floor/ceiling system that provides STC rating of 65 dB and an IIC rating of 56 dB and incorporates a FRR 60/60/60 (USG Boral CT60.1B) fire rated ceiling, so the floor structure is excluded from the fire cell. SoundDown Solo is installed over a timber or lightweight steel floor structure.

SoundDown Solo comprises:

- 2 layers of 13 mm thick USG Boral Firestop®, fixed with Gypsum bugle head screws and sealed with Firesound® sealant
- 28 mm Rondo 129 Furring Channel
- Rondo STPC Acoustic Mounts fixed with four 8 g x 25 mm screws
- 240 mm x 45 mm x 1.55 gauge, galvanised steel SteelHaus EZYJOIST
- R1.9 90 mm thick ™ multi polyester insulation
- 6 mm x 45 mm SoundDown joist silencer
- 20 mm thick Maglok™ DragonBoard®
- 8 g 50 mm class 3 galvanised substrate screw fixing
- 2.5 mm Jacobsens Tarkett Traffic 250 vinyl.

SCOPE AND LIMITATIONS

For scope of use, limitations, conditions and statement of building code compliance, refer to the SoundDown Solo Flooring System pass™.

pass

MORE INFO

SoundDown™
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Design

Design the system using the following steps.

STEP 1: CONFIRM SCOPE

Confirm the proposed use is within the scope and limitations of the pass™.

STEP 2: CONFIRM RELATED BUILDING WORK

Confirm the framing substrate:

- for new building work, complies with the NZ Building Code and is designed in accordance with:
- section 6 and 11 of NZS 3604:2011; or
- NASH Standard Part 2: May 2019 Light Steel Framed Buildings; or
- AS/NZS 1170 Structural Design Actions; or
- NZS 3404 Parts 1 and 2:1997 Steel Structures Standard.
- for an existing building, that it is suitable for the intended building work.

STEP 3: DESIGN JOISTS

Establish spacings and spans required for the building design for the joists in the SoundDown Solo Flooring System in accordance with:

- NASH Standard Part 2:May 2019 Light Steel Framed Buildings; or
- AS/NZS 1170 Structural Design Actions; or
- NZS 3404 Parts 1 and 2:1997 Steel Structures Standard.

STEP 4: DETAIL USE OF THE SYSTEM

Access the SoundDown Solo Flooring System detail. [link]

The SoundDown Solo Flooring System can be inserted on plan sheets for the building consent application and used during installation.

Confirm that the detail is consistent with USG Boral Systems+ CT60.1B.
Refer to detail www.usgboral.com/en_nz.

STEP 5: QUALITY CHECK

Check all required documentation for the building consent application is collated and that the building consent plans clearly define and include:

- framing requirements
- joist spacings and spans.

Complete the SoundDown Solo Flooring System Specification form, ensuring all relevant information is included.

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