BRANZ Appraised

Appraisal No. 1143 (2026)

THE STEELFORMERS CEILING BATTEN SYSTEM

Appraisal No. 1143 (2026)

This Appraisal replaces BRANZ Appraisal No. 1143 (2020)

BRANZ Appraisals

Technical Assessments of products for building and construction.

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Product

1.1 The Steelformers Ceiling Batten System is a light-gauge steel ceiling batten system for use in residential and commercial buildings. The ceiling battens are top-hat steel channel sections formed from galvanised coil steel. The Steelformers Ceiling Batten System also includes a roll-formed perimeter channel and batten clips. The components are screw-fixed to timber or steel ceiling framing.

Scope

2.1 The Steelformers Ceiling Batten System is appraised for use as ceiling battens directly supporting ceiling linings in buildings within the following scope:

- on framed ceilings within the scope limitations of NZS 3604; and,
- on framed ceilings within the scope limitations of NASH Standard Part Two; and,
- on timber and light gauge steel-framed ceilings subject to specific design.

2.2 The use of the Steelformers Ceiling Batten System in structural applications such as part of a ceiling diaphragm or as a part of fire resistance rated construction has not been assessed and is outside the scope of this Appraisal.

Building Regulations

New Zealand Building Code (NZBC)

3.1 **In the opinion of BRANZ, the Steelformers Ceiling Batten System, if designed, used, installed and maintained in accordance with the statements and conditions of this Appraisal, will meet the following provisions of the NZBC:**

Clause B1 STRUCTURE: Performance B1.3.1, B1.3.2 and B1.3.4. The Steelformers Ceiling Batten System meets the requirements for loads arising from self-weight and imposed gravity loads arising from use [i.e. B1.3.3 (a) and (b)]. See Paragraphs 9.1 and 9.2.

Clause B2 DURABILITY: Performance B2.3.1 (b) 15 years and B2.3.2. The Steelformers Ceiling Batten System meets these requirements. See Paragraph 10.1.

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1. The Steelformers Ceiling Batten System meets this requirement.

Technical Specification

4.1 The Steelformers Ceiling Batten System components supplied by Taranaki Steelformers Limited are as follows:

- **Steelformers Ceiling Batten** - a 35 mm deep, trapezoidal top-hat steel channel section with the flanges folded to double thickness, formed from galvanised coil steel (G550 grade, 0.55BMT, Z275) supplied by New Zealand Steel. The Steelformers Ceiling Batten features uniform indentations to the face to aid easy installation of self-drilling plasterboard screws. Ceiling battens are cut to order, to a maximum length of 10 m. The building contractor provides Taranaki Steelformers Limited with the quantities of each length required for the order and the installation locations within the building. Ceiling battens are supplied to exact lengths and pre-labelled for easy, on-site identification.
- **Steelformers Perimeter Channel** - a roll-formed steel C-section formed from the same material as the Steelformers Ceiling Batten, available in 6 m lengths.
- **Steelformers Batten Clip** - a pressed-metal tab, stamped from galvanised coil steel (G300 grade, 0.95BMT, Z275) supplied by New Zealand Steel. It is screw-fixed to the side of the supporting framing and readily facilitates the levelling and alignment of the Steelformers Ceiling Battens to allow for construction tolerances in timber framing prior to the fixing of ceiling linings. The batten clip is able to accommodate a drop of 25 mm from the underside of the ceiling joist.

4.2 Accessories used with the Steelformers Ceiling Batten System which are supplied by the building contractor are:

Fasteners:

- Fasteners for fixing the Steelformers Ceiling Batten System components to timber are 32 x 8 g wafer head, gold-passivated, coarse thread screws.
- Fasteners for fixing the Steelformers Ceiling Batten System components to light steel framing are Konnect ST12 - 14 tpi x 20 mm CLS5 Steeltite self-drilling screws.

Linings and Finishes:

- Installation of ceiling linings and other finishes over the Steelformers Ceiling Batten System have not been assessed and are outside the scope of this Appraisal.

Handling and Storage

5.1 The Steelformers Ceiling Batten System components and accessories must be stacked flat, off the ground and supported on a level platform. They must be kept dry at all times and care must be taken to avoid damage to the profiles.

Technical Literature

6.1 This Appraisal must be read in conjunction with:

- Steelformers Ceiling Batten System, Version 3, December 2025.

6.2 All aspects of design, use, installation and maintenance contained in the Technical Literature and within the scope of this Appraisal must be followed.

Design Information

General

7.1 The Steelformers Ceiling Batten System is designed to be either directly screw-fixed to the underside of rafters, ceiling joists, truss chords or floor joists through the double thickness flanges, or connected by way of Steelformers Batten Clips.

7.2 The Steelformers Perimeter Channel shall be screw-fixed to supporting framing at the perimeter of the room at 1,200 mm maximum centres.

7.3 Steelformers Batten Clips shall be fixed to the side of timber ceiling joists, truss chords, or floor joists with three 32 x 8 g gold-passivated, wafer head, coarse thread screws.

7.4 Steelformers Batten Clips shall be fixed to the side of light steel ceiling joists, truss chords, or floor joists with three Konnect ST12 - 14 tpi x 20 mm CLS5 Steeltite self-drilling screws.

7.5 Steelformers Ceiling Battens can be fixed directly to the underside of timber ceiling joists, truss chords, or floor joists with two 32 x 8 g gold-passivated, wafer head, coarse thread screws.

7.6 Steelformers Ceiling Battens can be fixed directly to the underside of light steel ceiling joists, truss chords, or floor joists with two Konnect ST12 - 14 tpi x 20 mm CLS5 Steeltite self-drilling screws.

7.7 The Steelformers Ceiling Batten System provides a dimensionally stable support frame for ceiling linings in non-structural or non-fire resistance rated situations.

7.8 The Steelformers Ceiling Batten System is suitable for use in enclosed, dry environments. The use in other situations is outside the scope of this Appraisal.

Framing

8.1 Timber framing behind the Steelformers Ceiling Batten System must be treated as required by NZBC Acceptable Solution B2/AS1.

8.2 Timber framing must be designed and constructed in accordance with NZS 3604, or to a specific design using NZS 3603 and AS/NZS 1170.

8.3 Steel framing must be to NASH Standard Part Two, or be to a specific engineering design meeting the requirements of the NZBC, allowing for a maximum ceiling batten span of 1,200 mm.

8.4 Timber framing supporting the Steelformers Ceiling Batten System must remain dry in service. Refer to Paragraph 16.1 for information on moisture content.

Structure

Load

9.1 The Steelformers Ceiling Batten System is suitable to support single-layered ceiling linings up to a maximum weight of 25 kg/m² (13 mm plasterboard is nominally 12 kg/m²). Steelformers Ceiling Battens shall be spaced at either 600 mm maximum or the maximum permissible span of the ceiling lining as specified by the proprietor, whichever is less. Steelformers Ceiling Battens shall span a maximum of 1,200 mm between supporting framing for a continuous span, and 900 mm maximum for a single span. Multi-layered ceilings have not been assessed and are outside the scope of this Appraisal.

9.2 The Steelformers Ceiling Batten System can support the weight of small, lightweight items with a maximum mass of 7.5 kg, fixed to the ceiling lining with not more that one item per 1 m². Heavy items such as range hoods, garage door openers, large luminaires and the like must be fixed to truss chords, ceiling joists or floor joists or blocking fixed between these elements.

Durability

Serviceable Life

10.1 The Steelformers Ceiling Batten System, when used in enclosed, dry environments, is expected to have a serviceable life in excess of 50 years.

Maintenance

11.1 There are no maintenance requirements for the Steelformers Ceiling Batten System components.

Prevention of Fire Occurring

12.1 Separation or protection must be provided to the Steelformers Ceiling Batten System from heat sources such as fireplaces, heating appliances and chimneys. NZBC Acceptable Solutions C/AS1 and C/AS2 provide methods for separation and protection of combustible materials from heat sources. The Steelformers Ceiling Batten System itself is non-combustible, but separation from heat sources is required to prevent heat transfer to associated combustible elements such as timber or plasterboard.

Electricity

13.1 Separation or protection to the Steelformers Ceiling Batten System from electricity sources must be provided to avoid the risk of electric shock.

Installation Information

Installation Skill Level Requirement

14.1 Installation of the Steelformers Ceiling Batten System must be completed by, or under the supervision of, a Licensed Building Practitioner (LBP) with the relevant Licence Class, in accordance with the Technical Literature and this Appraisal.

General

15.1 The Steelformers Ceiling Batten System must be installed in accordance with the Technical Literature. For inspection, reference must be made to the Technical Literature.

Framing

16.1 To achieve an acceptable decorative finish, the ceilings must not be lined unless the moisture content of timber framing supporting the Steelformers Ceiling Batten System is less than 18%. It is recommended that a moisture content of 8–12% is achieved where buildings are to be air conditioned or centrally heated.

Cutting

17.1 The Steelformers Ceiling Batten System components may be cut to length as required using tin snips or an angle grinder. Abrasive cutting techniques will damage the galvanised coating.

Ceiling Batten Joints

18.1 The Steelformers Ceiling Battens can be end-joined by butt joining where the ceiling battens meet the supporting framing.

Health and Safety

19.1 Personal protective equipment must be used when handling or cutting the Steelformers Ceiling Batten System components such as protective eyewear and gloves. Sharp cut edges should be filed smooth prior to fixing in place.

19.2 Dust resulting from the cutting or smoothing of components of the Steelformers Ceiling Batten System may be a respiratory irritant, and the use of a suitable facemask is recommended.

Basis of Appraisal

The following is a summary of the technical investigations carried out.

Tests

20.1 The Steelformers Ceiling Batten System has been assessed for bending stiffness and maximum loading capability. This assessment has been reviewed by BRANZ and found to be satisfactory.

Investigations

21.1 The Steelformers Ceiling Batten System Technical Literature has been examined by BRANZ and found to be satisfactory.

21.2 Site inspections were carried out by BRANZ to assess the practicability of the installation of the system, and to view completed installations.

21.3 An assessment was made of the durability of the system by BRANZ technical experts and found to be satisfactory.

Quality

22.1 The manufacturing process at Taranaki Steelformers Limited and details of the quality and composition of the materials have been examined by BRANZ and found to be satisfactory.

22.2 Taranaki Steelformers Limited is responsible for the quality of the product supplied.

22.3 The quality of the installation of the Steelformers Ceiling Batten System and subsequent finish of plasterboard linings on-site is the responsibility of the installation, stopping and finishing contractors.

22.4 Designers are responsible for the design of buildings.

22.5 Building owners are responsible for the maintenance in accordance with the instructions of Taranaki Steelformers Limited.

Sources of Information

- AS/NZS 1170:2002 Structural design actions.
- NASH Standard Part Two: 2019 Light Steel Framed Buildings.
- NZS 3603:1993 Timber structures standard.
- NZS 3604:2011 Timber-framed buildings.
- Ministry of Business, Innovation and Employment Record of amendments - Acceptable Solutions, Verification Methods and handbooks.
- The Building Regulations 1992.

BRANZ

In the opinion of BRANZ, the Steelformers Ceiling Batten System is fit for purpose and will comply with the Building Code to the extent specified in this Appraisal provided it is used, designed, installed and maintained as set out in this Appraisal.

The Appraisal is issued only to Taranaki Steelformers Limited, and is valid until further notice, subject to the Conditions of Appraisal.

Conditions of Appraisal

1. This Appraisal:
   a) relates only to the product as described herein;
   b) must be read, considered and used in full together with the Technical Literature;
   c) does not address any Legislation, Regulations, Codes or Standards, not specifically named herein;
   d) is copyright of BRANZ.
2. Taranaki Steelformers Limited:
   a) continues to have the product reviewed by BRANZ;
   b) shall notify BRANZ of any changes in product specification or quality assurance measures prior to the product being marketed;
   c) abides by the BRANZ Appraisals Services Terms and Conditions;
   d) warrants that the product and the manufacturing process for the product are maintained at or above the standards, levels and quality assessed and found satisfactory by BRANZ pursuant to BRANZ's Appraisal of the product.
3. BRANZ makes no representation or warranty as to:
   a) the nature of individual examples of, batches of, or individual installations of the product, including methods and quality of work;
   b) the presence or absence of any patent or similar rights subsisting in the product or any other product;
   c) any guarantee or warranty offered by Taranaki Steelformers Limited.
4. Any reference in this Appraisal to any other publication shall be read as a reference to the version of the publication specified in this Appraisal.
5. BRANZ provides no certification, guarantee, indemnity or warranty, to Taranaki Steelformers Limited or any third party.

For BRANZ

Claire Falck
Chief Executive

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20 January 2026