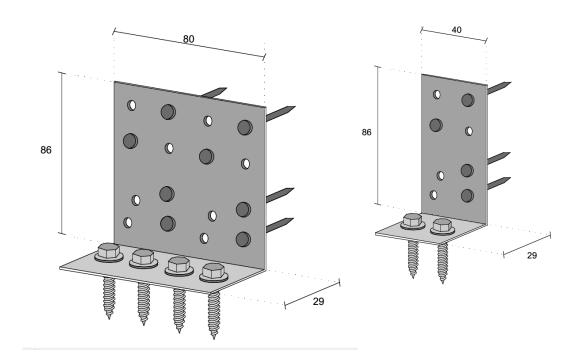


KIWI NAILS CPCS



Appraisal No. 1133 (2020)

BRANZ Appraisals

Technical Assessments of products for building and construction.



Kiwi Nails Fasteners Ltd

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Product

Kiwi Nails CPCs (concealed plate cleats) are an alternative connection used in roof construction to tie a pair of rafters to the ridge board, and an alternative connection for rafter to top plate as described in NZS 3604, for timber-framed structures designed in accordance with NZS 3604. The CPCs are galvanised and come in two sizes.

Scope

2.1 Kiwi Nails CPCs have been appraised as an alternative connection for use in roof construction to tie a pair of rafters to the ridge board and an alternative connection for rafter to top plate for timberframed structures designed within the scope of NZS 3604.

Building Regulations

New Zealand Building Code (NZBC)

In the opinion of BRANZ, Kiwi Nails CPCs 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. Kiwi Nails CPCs will meet the requirements for loads arising from use, earthquake, snow, wind, impact and time dependant effects [i.e. B1.3.3 (b), (f), (g), (h), (i), (j), and (q)]. See Paragraph 8.1.

Clause B2 DURABILITY: Performance B2.3.1 [a] 50 years and B2.3.2. Kiwi Nails CPCs will meet this requirement. See Paragraph 9.1.

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1. Kiwi Nails CPCs meet this requirement.





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Technical Specification

4.1 System components and accessories supplied by Kiwi Nails Fasteners Limited are as follows:

CPC (Material: G300 Z275 Galvanised Steel)

Product Code	Width	Height	Thickness
HGCPC 40	40 mm	86 mm	2 mm
HGCPC 80	80 mm	86 mm	2 mm

4.2 System accessories supplied by the contractor are as follows:

Fixings

- Type 17 12 q x 35 hex head screws.
- 30 x 3.15 nails.

Handling and Storage

5.1 Kiwi Nails CPCs and their fasteners are durable products, but should be stored in covered and dry conditions.

Technical Literature

Refer to the Appraisals listing on the BRANZ website for details for details of the current Technical Literature. The Technical Literature must be read in conjunction with this Appraisal. 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

7.1 Kiwi Nails CPCs are galvanised steel and must be used in locations that are outlined in Table 4.1 of NZS 3604.

Structure

NZS 3604 Structures

8.1 Kiwi Nails CPCs may be used as an alternative to the connection details given in NZS 3604 Paragraph 10.2.1.13.3.

Durability

9.1 Kiwi Nails CPCs and fixings are manufactured from galvanised steel and meet the requirements of NZS 3604, Tables 4.1 and 4.3. They have an expected serviceable life of at least 50 years.

Maintenance

10.1 Kiwi Nails CPCs should not require any maintenance once installed.

Installation Information

Installation Skill Level Requirement

All design and building work must be carried out in accordance with the Kiwi Nails CPCs Technical Literature and this Appraisal by competent and experienced tradespersons conversant with the Kiwi Nails CPCs installation. Where the work involves Restricted Building Work (RBW) this must be completed by, or under the supervision of, a Licensed Building Practitioner (LBP) with the relevant License class.

Health and Safety

12.1 Suitable care must be taken when handling power and hand tools, and when handling treated timber.



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Basis of Appraisal

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

Tests

13.1 Testing was carried out by BRANZ on simulated rafters and top plates to determine their structural strength.

Other Investigations

- 14.1 Structural and durability opinions have been provided by BRANZ technical experts.
- 14.2 Site inspections have been carried out by BRANZ to assess the practicability of installation and to examine completed installations.

Quality

- 15.1 Details regarding the composition of the materials used were obtained by BRANZ and found to be satisfactory.
- 15.2 The quality of materials, components and accessories supplied by Kiwi Nails Fasteners Limited is the responsibility of Kiwi Nails Fasteners Limited.
- 15.3 Quality on site is the responsibility of the installer.
- Designers are responsible for the building design, and building contractors are responsible for the quality of installation of Kiwi Nails CPCs in accordance with the instructions of Kiwi Nails Fasteners Limited.

Sources of Information

- AS/NZS 1170.1:2002 Structural Design actions Part 1: Permanent, imposed and other actions.
- NZS 3604:2011 Timber-framed buildings.
- Ministry of Business, Innovation and Employment Record of amendments Acceptable Solutions, Verification Methods and handbooks.



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In the opinion of BRANZ, Kiwi Nails CPCs are fit for purpose and will comply with the Building Code to the extent specified in this Appraisal provided they are used, designed, installed and maintained as set out in this Appraisal.

The Appraisal is issued only to Kiwi Nails Fasteners Ltd, 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. Kiwi Nails Fasteners Ltd:
 - 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 workmanship;
 - 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 Kiwi Nails Fasteners 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 Kiwi Nails Fasteners Limited or any third party.

For BRANZ

Chelydra Percy Chief Executive

Date of Issue:

15 September 2020