



BRANZ Appraised

Appraisal No. 1249 [2023]



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Amended 16 August 2023

BRANZ Appraisals

Technical Assessments of products for building and construction.



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Product

- 1.1 Paslode Purlin Nails are bright steel, ring shank RounDrive nails with a red resin coated tip used to fix timber purlins.

Scope

- 2.1 Paslode Purlin Nails have been appraised for use as fixings for timber purlins to timber rafters or the top chord of trusses in buildings designed in accordance with NZS 3604.
- 2.2 Paslode Purlin Nails have been appraised for use as an alternative to fixing type 'T' of NZS 3604, Table 2.2, when fixings purlins to rafters or the top chord of trusses in buildings designed in accordance with NZS 3604.

Building Regulations

New Zealand Building Code (NZBC)

- 3.1 In the opinion of BRANZ, Paslode Purlin Nails, if used, installed and maintained in accordance with the statements of this Appraisal, will meet or contribute to meeting the following provisions of the NZBC:

Clause B1 STRUCTURE: Performance B1.3.1, B1.3.2 and B1.3.4. Paslode Purlin Nails contribute to meeting these requirements for the relevant loads from B1.3.3. See Paragraphs 7.1-7.4.

Clause B2 DURABILITY: Performance B2.3.1 (a) not less than 50 years and B2.3.2. Paslode Purlin Nails meet these requirements. See Paragraph 8.1.

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1. Paslode Purlin Nails meet this requirement.

Technical Specification

General

- 4.1 Paslode Purlin Nails are 80 mm x 3.15 mm in size and have a shank ring height of 36 mm. The tips are dipped in resin from 38 mm to 40 mm from the nail tip.
- 4.2 Paslode Purlin Nails have an offset RounDrive nail head and can be identified by the letter "P" stamped on the centre of the head. The nails are collated with the use of tan coloured Paslode RounDrive Nailing Systems branded packaging.

Accessories

- 4.3 Only Paslode nail guns, supplied by Paslode New Zealand, are to be used to install Paslode Purlin nails. The Paslode nail guns have not been assessed by BRANZ and are outside the scope of this Appraisal.

Handling and Storage

- 5.1 Paslode Purlin Nails must be stored in a clean, dry area until they are used.

Technical Literature

- 6.1 No specific Technical Literature is referenced by this Appraisal.

Design Information

Structure

- 7.1 Paslode Purlin Nails are used as an alternative fixing method for purlins to rafters or to the top chord of trusses in timber-framed buildings designed in accordance with NZS 3604.
- 7.2 Purlins must be SG6, SG8 or SG10 timber and are limited to a maximum thickness of 45 mm.
- 7.3 Three Paslode Purlin Nails are fixed through the purlin into the rafter or truss at each intersecting connection. This joint meets the 2.4 kN alternative fixing capacity requirement of NZS 3604 Table 2.2, fixing type 'T'.
- 7.4 Where a proprietary system manufacturer specifies standard nails, permission must be obtained from the manufacturer before Paslode Purlin Nails are substituted.
- 7.5 Paslode Purlin Nails must be embedded flush to countersunk, diagonally spaced in accordance with the detail on the packaging. Nails must be spaced over the contact area of purlin and rafter to avoid any potential splitting.

Durability

- 8.1 Paslode Purlin Nails are expected to have a serviceable life of at least 50 years.

Maintenance

- 9.1 No maintenance is required for Paslode Purlin Nails. Annual inspections of the roof cladding system must be made to ensure all aspects remain in a weatherproof condition.

Installation Information

Installation Skill Level Requirement

- 10.1 Paslode Purlin Nails are installed with the aid of Paslode nailing guns and can be done so by any competent person.

Health and Safety

- 11.1 Guidelines for the safe use of portable mechanically powered nailers and staplers are available from the Department of Labour, and all aspects of these should be followed when using nail guns.

Basis of Appraisal

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

Tests

- 12.1 The following testing has been completed by BRANZ:
- Testing of joints using Paslode Purlin Nails to determine their structural strength.

Other Investigations

- 13.1 A durability opinion has been provided by BRANZ technical experts.
- 13.2 Observations have been made by BRANZ to assess the practicability of installation, and to examine completed installations.

Quality

- 14.1 The methods of quality control for the manufacture of Paslode Purlin Nails has been examined by BRANZ and found to be satisfactory.
- 14.2 The quality of the nails supplied by Paslode New Zealand is the responsibility of Paslode New Zealand.
- 14.3 Designers are responsible for the design and specification of joints incorporating Paslode Purlin Nails.
- 14.4 Quality of installation on-site of Paslode Purlin Nails is the responsibility of the installer.
- 14.5 Building owners are responsible for the maintenance of their buildings.

Sources of Information

- Guidelines for the safe use of Portable Mechanically Powered Nailers and Staplers, Occupational Safety and Health Service, Department of Labour.
- NZS 3602:2003 Timber and wood-based products for use in building.
- NZS 3604:2011 Timber-framed buildings.
- NZS 3640:2003 Chemical preservation of round and sawn timber.
- Ministry of Business, Innovation and Employment Record of amendments - Acceptable Solutions, Verification Methods and handbooks.
- The Building Regulations 1992.

Amendments

Amendment No. 1, dated 16 August 2023

This Appraisal has been amended to include SG6 and SG10 timber.



In the opinion of BRANZ, **Paslode Purlin Nails** 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 **ITW New Zealand T/A Paslode New Zealand**, 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. **ITW New Zealand T/A Paslode New Zealand**:
 - 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 **ITW New Zealand T/A Paslode New Zealand**.
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 **ITW New Zealand T/A Paslode New Zealand** or any third party.

For BRANZ

Claire Falck
Acting Chief Executive
Date of Issue:
19 May 2023