CodeMark

Certificate no: CMNZ10030
Version: 02
Original issue date: 27 March 2024
Version date: 24 April 2024

1. Certificate Holder Details

ITW New Zealand Ltd
t/a Pryda New Zealand
8 Orbit Drive
Albany
Auckland 0632
Tel: 0800 882 244
Email: info@prydaanz.com
Web: http://www.pryda.co.nz

2. Product Certification Body

BRANZ Limited
1222 Moonshine Road
RD1, Porirua 5381
Private Bag 50 908
Porirua 5240
Tel: 04 237 1170
Email: assuranceservices@branz.co.nz
Web: branz.nz

Complaints: The complaints process for this certificate can be found here: https://www.branz.co.nz/codemark-info/complaints-and-appeals/ https://www.branz.co.nz/codemark-info/complaints-and-appeals/

BRANZ

Product Certificate

Pryda Connectors and Engineered Systems - Hangers and Brackets

3. Description of Building Method or Product

Pryda Connectors and Engineered Systems - Hangers and Brackets are a range of metal plate connectors manufactured from galvanised steel coil or sheet, or from stainless steel. For more product details, refer to Section 10.

This Product Certificate covers the following Hangers and Brackets:

- NZ Pryda Framing Bracket
- NZ Variable Skew Angle Bracket
- NZ Pryda Face Mount Hanger
- NZ Heavy Duty Joist Hanger
- NZ Split Joist Hanger
- NZ Tim-Con Bracket

4. Intended use of Building Method or Product

Pryda Connectors and Engineered Systems - Hangers and Brackets are designed and manufactured to mount horizontal timber members to vertical structural elements.

- NZ Pryda Framing Bracket is for fixing timber joists to timber beams, timber jack trusses to timber truncated girder trusses, timber ceiling joists to timber hangers, timber floor trusses to timber beams, timber pergola rafters to timber fasciae, and timber beams to masonry to resist gravity and wind uplift loads with design capacities dependent on the bracket and fixing method used. These are detailed in the Reference Documents for Specific Engineering Design use.
- NZ Variable Skew Angle Bracket is used for supporting timber beams and timber trusses connecting to timber framing members in non-perpendicular arrangements to resist gravity and wind uplift loads with load capacities detailed in the Reference Documents for Specific Engineering Design use.
- NZ Pryda Face Mount Hanger is used for timber joist to timber beam and timber I-joist to timber beam connections to resist gravity loads with a design capacity of 6.2 kN for Specific Engineering Design use.

- NZ Heavy Duty Joist Hanger is used for timber beam to timber beam connections to resist gravity and wind uplift loads with design capacities dependent on the fixing method and the load case which are detailed in the Technical Literature for Specific Engineering Design use.
- NZ Split Joist Hanger is to connect timber single and double joists, trusses and beams to other timber framing members to resist gravity and wind uplift loads with design capacities dependent on the fixing method used and the load case which are detailed in the Reference Documents for Specific Engineering Design use.
- NZ Tim-Con Bracket is to connect timber beams to structural concrete to resist gravity and wind uplift loads with design capacities dependent on the bracket type and load case which are detailed in the Reference Documents for Specific Engineering Design use.

5. New Zealand Building Code Provisions

COMPLIES WITH THE FOLLOWING PROVISIONS OF THE NEW ZEALAND BUILDING CODE (NZBC)

Clause B1 STRUCTURE: Performance B1.3.1, B1.3.2 and B1.3.4. Loads arising from self-weight, imposed gravity loads arising from use, earthquake, snow, and wind. (i.e. B1.3.3 (a), (b), (f), (g), and (h)) (contributes).

Clause B2 DURABILITY: Performance B2.3.1 (a) not less than 50 years and B2.3.2.

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1.

6. Conditions and Limitations of Use

- Applications are limited to timber-framed structures designed in accordance with NZS 3604.
- Pryda Connectors and Engineered Systems - Hangers and Brackets shall be:
  - Used for buildings within the limitations of NZS 3604; and,
  - Product material and corrosion resistance coating shall be as specified in NZS 3604. The fastener material shall match the material of the selected product; and,
  - Used in accordance with the limitations stated in the Reference Documents; and,
  - Installed in accordance with the installation instructions detailed in the Reference Documents, in particular, the number, specification and fixing pattern of the fasteners must be followed; and,
  - Used with minimum JD5 timber as defined in NZS AS 1720.1.
- The following product specific limitation shall apply:
  - NZ Pryda Framing Bracket design capacities are dependent on the size of the bracket, its application and fixing method and are detailed in the Reference Documents.
  - NZ Variable Skew Angle Bracket is only to be used as joist, truss, or double joist support. Its load capacities are detailed in the Reference Documents.

- NZ Pryda Face Mount Hanger
  - has a design capacity of 6.2 kN when used and installed as detailed in the Reference Documents; and,
  - shall not be installed with a gap between supported and supporting beam of more than 3 mm.
- NZ Heavy Duty Joist Hanger is available as a single hanger or split hangers. The split hangers shall be used in pairs. The design capacities are dependent on the load case, the fixing method and the NZ Heavy Duty Joist Hanger used and are detailed in the Reference Documents.
- NZ Split Joist Hangers shall be used in pairs. The design capacities are dependent on the load case and the fixing method and are detailed in the Reference Documents.
- NZ Tim-Con Brackets can be used as a single bracket or in pairs and the design capacities for shear and tension are detailed in the Reference Documents.

REFERENCE DOCUMENTS:

This Product Certificate must be read in conjunction with:

- Pryda Product Data Sheet, NZ Pryda Framing Bracket, December 2023 – V1.02.
- Pryda Product Data Sheet, NZ Variable Skew Angle Bracket, December 2023 – V1.02.
- Pryda Product Data Sheet, NZ Pryda Face Mount Hanger, December 2023 – V1.02.
- Pryda Product Data Sheet, NZ Heavy Duty Joist Hanger, December 2023 – V1.02.
- Pryda Product Data Sheet, NZ Split Joist Hangers, December 2023 – V1.02.
- Pryda Product Data Sheet, NZ Tim-Con Brackets, December 2023 – V1.02.
- Pryda Product Data Sheet, NZ Pryda Connector Screws and Nail, December 2023 – V1.02.

7. Health and Safety Information

Pryda Connectors and Engineered Systems - Hangers and Brackets are manufactured from galvanised steel or stainless steel. Manufacturer's instructions and typical practices for working with, handling and maintaining these materials should be observed.

8. Basis for Certification

The following evaluations have been carried out on Pryda Connectors and Engineered Systems - Hangers and Brackets to determine compliance with the NZBC:

- Compliance with NZBC B1 Structure performance requirements was determined by a BRANZ SME through assessing independent test reports of the products against NZS 3604 requirements and claims made within the Reference Documents.

- Compliance with NZBC B2 Durability performance requirements was determined by a BRANZ SME through assessing the scope limitations of the individual components against the material requirements of NZS 3604.
- Compliance with NZBC F2 Hazardous Building Materials performance requirements was determined by a BRANZ SME through assessing the different grades of materials and their uses.
- The Reference Documents have been examined by BRANZ and found to be satisfactory.
- The quality of supply to market is the responsibility of ITW New Zealand Ltd (t/a Pryda New Zealand).
- Building designers are responsible for the design of the building, and for the incorporation of the Pryda Connectors and Engineered Systems - Hangers and Brackets into their design in accordance with this Product Certificate and the Reference Documents.
- Quality of installation is the responsibility of the installer in accordance with the Reference Documents of ITW New Zealand Ltd (t/a Pryda New Zealand).

9. Supporting Documentation for Certification

- Acceptable Solutions and Verification Methods for New Zealand Building Code Clause B1 Structure, 1st Edition, Amendment 21, 2 November 2023.
- Acceptable Solutions and Verification Methods for New Zealand Building Code Clause B2 Durability, 2nd Edition, Amendment 12, 28 November 2019.
- Acceptable Solutions and Verification Methods for New Zealand Building Code Clause F2 Hazardous Building Materials, 1st Edition, Amendment 3, 1 January 2017.
- BRANZ Ltd Structures Test Report TP17360-C-01, Pryda Connection Testing Group C, dated 23 February 2024.
- Ministry of Business, Innovation and Employment Record of amendments – Acceptable Solutions, Verifications Methods and handbooks.
- NZS 3604:2011 Timber-framed buildings.
- NZS AS 1720.1:2022 Timber structures.
- The Building Regulations 1992.

10. Supporting Information About Description

PRODUCT SPECIFICATION

- **NZ Pryda Framing Bracket** is used to connect two timber members at 90° and is manufactured from G300 Z275 steel or Grade 304 stainless steel with a BMT of 1 mm. The galvanised steel product is available in the following dimensions (width x height): 46 x 77 mm (product code MPFBK4590), 46 x 110 mm (product code MPFBK45120), 46 x 176 mm (product code MPFBK45180), 52 x 74 mm (product code MPFB5274), 52 x 124 mm (product code MPFB52124), 52 x 177 mm (product code MPFB52174), 65 x 167 mm (product code

FB65170), 72 x 163 mm (product code FB72163) and 94 x 152 mm (product code FB94152). The stainless steel product is available in the following dimensions: 45 x 77 mm (product code MPFB4590/S), 45 x 110 mm (product code MPFB45120/S), 45 x 176 mm (product code MPFB45180/S), 52 x 124 mm (product code MPFB52124/S) and 94 x 152 mm (product code FB94152/S). It is fastened using NZ Pryda Timber Connector Nails or NZ Pryda Connector Screws. The product is identified on the product packaging label by the product code and product name.

- **NZ Variable Skew Angle Bracket** is used as a seat support for joists, trusses and double joists and is manufactured from G300 hot-dip galvanised steel with a BMT of 5 mm. The dimensions are 75 x 150 x 50 mm (product code LVSIA). It is fastened using NZ Pryda Timber Connector Screws. The product is identified on the product packaging label by the product code and product name.
- **NZ Pryda Face Mount Hanger** is used to connect two timber members at 90° and is manufactured from G300 Z275 steel with a BMT of 1.2 mm. It is supplied with the fasteners required (NZ Pryda Connector Nails or NZ Pryda Connector Screws). It has a height of 235 mm and a width of 90 mm with a product code of LF235/90. The product is identified on the product packaging label by the product code and product name.
- **NZ Heavy Duty Joist Hanger** is used to connect two timber members at 90° and is manufactured from G300 Z275 steel. The NZ Heavy Duty Joist Hanger is a single component hanger with dimensions of 140 x 95 mm and a BMT of 1.2 mm. The product code is JHH100. It is also available as a split hanger and supplied in pairs where one component of the hanger has the dimensions of 218 x 40 mm (product code JHSS212) or 281 x 40 mm (product code JHSS275). The split hanger has a BMT of 1.8 mm. The hangers are fixed with NZ Pryda Timber Connector Nails or NZ Pryda Connector Screws. The product is identified on the product packaging label by the product code and product name.
- **NZ Split Joist Hangers** are used to connect two timber members at 90° and are manufactured from G300 Z275 steel with a BMT of 1.6 mm. They are supplied in pairs and fastened with NZ Pryda Timber Connector Nails or NZ Pryda Connector Screws (12 g x 35 mm). Each bracket of the pair is 17 mm wide, 62 mm deep and 233 mm high (product code JHHS). The product is identified on the product packaging label by the product code and product name.
- **NZ Tim-Con Brackets** are used to connect concrete to timber and are manufactured from G300 Z275 steel with a BMT of 2 mm. They are available in two sizes: 130 mm high, 45 mm wide and 110 mm deep (product code TCF130), or 190 mm high, 45 mm wide and 110 mm deep (product code TCF190. They are connected to timber using NZ Pryda Connector Nails and to concrete using M12 Bolts with 3 x 37 mm washers. The product is identified on the product packaging label by the product code and product name.

Accessories:

- **NZ Pryda Timber Connector Nails** are 35 x 3.15 mm and are manufactured from galvanised steel or Grade 316 stainless steel. The product codes are OSNGB or OSNBCI/SS. The product is identified on the product packaging label by the product code and product name.
- **NZ Pryda Connector Screws** are available in 12 g x 35 mm (product code TCS12-35) and 12 g x 65 mm (product code TCS12-65). They are zinc galvanised, Class 3. The product is identified on the product packaging label by the product code and product name.
- **M12 Bolts** (including washers) are used for NZ Tim-Con Brackets and are supplied with the bracket.

Product Certificate

Pryda Connectors and Engineered Systems – Hangers and Brackets

Certificate no: CMNZ10030
Version: 02
Original issue date: 27 March 2024
Version date: 24 April 2024

11. Supporting Information About Intended Use

INSTALLATION REQUIREMENTS

Installation must be carried out in accordance with the Reference Documents and NZS 3604.

BUILDING CODE

B1 STRUCTURE

Pryda Connectors and Engineered Systems - Hangers and Brackets will resist structural loads likely to be encountered in normal use.

B2 DURABILITY

Pryda Connectors and Engineered Systems - Hangers and Brackets, when installed in accordance with the details given in the Reference Documents and NZS 3604, meet code compliance with NZBC Clause B2.3.1 (a) not less than 50 years as a building element that provides structural stability to a building.

F2 HAZARDOUS BUILDING MATERIALS

Pryda Connectors and Engineered Systems - Hangers and Brackets meet code compliance with NZBC Clause F2.3.1.

12. Supporting Information About Conditions and Limitations of Use

All conditions and limitations provided as stated in this Product Certificate.

Signatures

Claire Falck
CEO, BRANZ Limited.

All CodeMark certificates that are current much be registered with MBIE. MBIE maintains a register of valid product certificates. Please find the register here.

If the certificate is not listed on this register or it appears as (SUSPENDED), it is not a valid CodeMark certificate and does not have to be accepted by a building consent authority as establishing compliance with the New Zealand Building Code.