

IBUILT™ MULTISTRUT FLOOR JOIST SYSTEM

PURPOSE

The IBUILT™ MultiStrut floor joist system comprises IBUILT™ MultiStrut Joists and IBUILT™ MultiStrut Ladder trusses for use as a floor joist system.

EXPLANATION

IBUILT™ MultiStrut joists and ladder trusses are open webbed parallel chord trusses composed of steel webs, timber top and bottom chords, vertical webs and end blocks. The steel webs are Multinail steel webs, manufactured from galvanised Z275 grade G300 steel.

The timber chords and vertical webs are manufactured from Nelson Pine 90 mm x 35 mm and 90 mm x 45 mm LVL 11. The LVL is glueline treated and surface spray-coated with Azotek™ to provide a minimum of H1.2 level treatment. End blocks are manufactured from LVL and treated to either H1.2 glueline treated or H3.1 (LOSP).

IBUILT™ MultiStrut joists are available up to a maximum length of 9600 mm in 150 mm increments. IBUILT™ MultiStrut ladder trusses are supplied in 2835 mm, 4035 mm and 5235 mm lengths.



For further assistance please contact:

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SCOPE AND LIMITATIONS OF USE

Scope	Limitations
Location In wind zones up to and including extra high or a permissible design pressure of 2.1 kPa. In all corrosion zones as defined in NZS 3604:2011.	▶ In accordance with IBUILT™ MultiStrut floor joist system span tables or to the requirements of NZS 3604:2011 as referenced and amended by Acceptable Solution B1/AS1. ▶ Fixing material must be in accordance with section 4 of NZS 3604:2011.
Building In conjunction with timber or lightweight steel framing that complies with the NZ Building Code or for existing buildings where the designer and/or installer have established that the existing structure is suitable for the intended building work. In applications where the IBUILT™ MultiStrut floor joist system is protected from moisture.	▶ Specific engineering design required for live loads that exceed 1.5 kPa. ▶ The IBUILT™ MultiStrut floor joist system should be enclosed within 90 days.



USEFUL INFORMATION

For design, installation and maintenance information, refer to nzwoodproducts.co.nz.

OTHER CERTIFICATIONS AND APPROVALS HELD BY NELSON PINE

- ▶ Forest Stewardship Council (FSC) certified: certificate 0178950 [Intertek SAI Global, 24/06/2024].

PERFORMANCE CLAIMS

If designed, installed and maintained in accordance with all IBUILT™ requirements, IBUILT™ MultiStrut floor joist system will comply with or contribute to compliance with the following performance claims

NZ Building Code clauses	BASIS OF COMPLIANCE	
	Compliance statement	Demonstrated by
B1 STRUCTURE	ACCEPTABLE SOLUTION	<ul style="list-style-type: none"> ➤ Nelson Pine LVL is certified by Engineered Wood Products Association of Australasia (EWPAA) to AS/NZS 4357.0:2005, cited by NZS 3604:2011 [Nelson Pine, 07/2017]. ➤ Paragraph 2.3.9.2 of NZS 3604:2011 requires LVL to be manufactured in accordance with AS/NZS 4357. ➤ NZS 3604:2011 is cited by Acceptable Solution B1/AS1.
B1.3.1	B1/AS1	
B1.3.2		
B1.3.3 (a, b, f, j, m, q)	VERIFICATION METHOD	<ul style="list-style-type: none"> ➤ Multinail steel webs specific design by structural engineer (PS1) [M. Smith, 10/2021].
	B1/VM1	
B2 DURABILITY	ACCEPTABLE SOLUTION	<ul style="list-style-type: none"> ➤ G250 Z275 galvanised steel in accordance with SNZ TS 3404:2018, cited in B2/AS1. ➤ Treated to NZS 3640:2003 cited in B2/AS1. [Nelson Pine, 07/2017].
B2.3.1 (a)	B2/AS1	
B2.3.2 (a)		
F2 HAZARDOUS BUILDING MATERIALS	ALTERNATIVE SOLUTION	<ul style="list-style-type: none"> ➤ Formaldehyde emission class E0 in accordance with Table 1 of AS/NZS 4357 [Nelson Pine, 07/2017]. ➤ Materials as per safety data [Nelson Pine, 25/01/2017].
F2.3.1		

SOURCES OF INFORMATION¹

- Nelson Pine. [25/01/2017] *Safety Data Sheet*. Retrieved from http://www.nelsonpine.co.nz/wp-content/uploads/NelsonPine_LVL_H1.2_2017.pdf. [Accessed on 14/06/2021].
- Nelson Pine. [07/2017] *LVL Framing Technical Data Sheet*. Retrieved from <http://www.nelsonpine.co.nz/wp-content/uploads/NPI-LVL-Framing-Technical-Data-Sheet.pdf>. [Accessed on 14/06/2021].
- NZWOOD Products. [03/06/2021] *IBUILT MultiStrut Installation Guide*.
- NZWOOD Products. [09/2021] *IBUILT MultiStrut Ladder Truss Installation Guide*.
- Smith, M. [10/2021] *Producer Statement PS1-Design*. Standard MultiStrut and Ladder Floor Truss designs.
- Intertek SAI Global. [24/06/2024]. Certificate of registration 0178950 for FSC® Chain of Custody Standard and Controlled Wood.



SCAN OR CLICK THIS QR CODE TO ACCESS OR REQUEST THE RELEVANT SUPPORTING DOCUMENTATION FOR THIS PASS™.

nzwoodproducts.co.nz/products/brand/ibuilt-multistrut/



1. Where a standard is referenced it is to be read as amended by the acceptable solution or verification method as applicable. 2. Sources of information also include the Building Act 2004 and its regulations, including the Building Code (Schedule 1 of the Building Regulations 1992), Acceptable Solutions and Verification Methods, and relevant cited standards. 3. The product is not subject to a warning or ban under section 26 of the Building Act. 4. For overseas manufacturer details, where applicable, refer to the company that is the holder of this pass™. 5. The quality and assurance that the supplied products meet the performance claims stated in this pass™ are the responsibility of the company that is the holder of this pass™. 6. The availability of the information about the supplied products required to be disclosed under s14G(3) is the responsibility of the company that is the holder of this pass™.

NZ Wood Products Ltd (NZWOOD/IBUILT™) confirms that if IBUILT™ MultiStrut floor joist system is used in accordance with the requirements of this pass™ the product will comply with the NZ Building Code and other performance claims set out in this pass™ and the company has met all of its obligations under s14G(2) of the Building Act.

Date of first issue: 29/06/2020

Date of current issue: 20/11/2024

NZBN: 9429034720325

Kevin Brunton

Kevin Brunton, Technical Director, TBB confirms that the process used to prepare this pass™ on behalf of NZ Wood Products Ltd (NZWOOD/IBUILT™) has been undertaken in accordance with MBIE PTS guidelines and in accordance with the TBB pass™ process which is within the scope of TBB's ISO 9001 certification.

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