

WAIPAPA PINE H1.2 MG SG8 FRAMING TIMBER DESIGN AND INSTALLATION GUIDE



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General

- This guide covers installing and maintaining Waipapa Pine H1.2 MG SG8 Framing Timber.
- This guide is suitable for use by people with basic carpentry skills.
- Where applicable, those specifying or installing the timber must meet all Restricted Building Work provisions.
- Technical assistance is available at waipapapine.co.nz.
- While all reasonable efforts have been made to ensure the accuracy of the information provided, please note that it is subject to change, and this document should be considered a guide only.

Design

USE

- Confirm use is within the scope of the pass™.
- Waipapa Pine H1.2 MG SG8 Framing Timber is not for external/exposed use.
- Available in sizes (mm): 70 x 45, 90 x 45, 140 x 45, 190 x 45, 240 x 45, 290 x 45, and 90 x 35 and 140 x 35 for ceiling strapping.

PRIMARY STRUCTURE COMPLIANCE

- Ensure the balance of the primary structure complies with the NZ Building Code and is suitable for the intended work.

SELECTION AND FASTENINGS

- Use the appropriate selection tables and general requirements in section 8 of NZS 3604:2011 *Timber-framed buildings* to specify the timber.
- For uses outside the scope of NZS 3604:2011 *Timber-framed buildings*, including roof trusses, Waipapa Pine H1.2 MG SG8 Framing Timber must be specifically designed. Refer to AS/NZS 1170.1:2002 Structural design actions - Part 1: Permanent, imposed and other actions.
- Adhere to size and spacing requirements and account for vertical and horizontal loads.
- For bracing demands to meet section 5 of NZS 3604:2011 *Timber-framed buildings*, refer to specific framing requirements in accordance with the bracing element selection and manufacturer's technical information.



- Select fastenings in accordance with Table 2.2 of NZS 3604:2011 *Timber-framed buildings* and Table 4.3 of NZS 3604:2011 for durability requirements. Specific proprietary fastening can be specified if it is established fastenings are NZ Building Code compliant, e.g., proprietary bottom-plate wall-bracing brackets and/or roof uplift connectors.

Install

HEALTH AND SAFETY

- Prioritise safety for yourself and others.
- Ensure proper ventilation or dust extraction during cutting or drilling.
- Ensure the timber is well supported when cutting and nailing.
- Wear appropriate safety equipment, clothing, footwear and eye protection.
- Use all tools in accordance with relevant instruction manuals and ensure all tools are sharp.
- Plan and monitor a safe approach for working at height; select and use the right equipment.
- Clear the work area of any obstruction before work starts.
- Refer to:
 - The absolutely essential health and safety toolkit for small construction sites by WorkSafe. Download at worksafe.govt.nz/topic-and-industry/building-and-construction/absolutely-essential-toolkit
 - *Health and safety at work - quick reference guide* by WorkSafe. Download at worksafe.govt.nz/managing-health-and-safety/getting-started/health-and-safety-at-work-quick-reference-guide.

HANDLING AND STORAGE

- › Care must be taken during loading, unloading and transporting in the yard and on-site to protect the timber from pre-installation damage.
- › Store timber flat on a hard, dry surface, laid flat on bearers that extend across the member's full width. Timber stored near the ground will absorb moisture. To prevent this, place a layer of plastic underneath the bearers.
- › Do not expose timber to rapid changes in moisture or temperature, such as from temporary heating units.
- › When storage inside is not possible, remove any wrap, place spacers between each layer of timber, and then re-wrap or cover with a waterproof cover.

TOOLS AND EQUIPMENT

- › Use standard carpentry tools for installation.
- › Use tools in accordance with good trade practice and supplier's instructions.

BUILDING CONSENT DOCUMENTATION

- › Consult building consent documents if applicable.
- › Otherwise, refer to NZS 3604:2011 *Timber-framed buildings* or design specification.

INSTALL

- › Ensure end cuts are plumb and true.
- › Any framing that is ripped parallel with the grain shall not be regarded as structural or load-bearing.
- › Ensure use is within the tolerances in Section 2.2 of NZS 3604:2011 *Timber-framed buildings*.
- › Ensure a damp-proof course separation layer is installed when the timber is fixed to concrete or steel.
- › Where used for structural framing, studs must be at a maximum 600 mm centres (unless varied by design).
- › Horizontal framing requires a minimum 35 mm seating over and under studs.
- › Ensure services penetrations and notches are within the tolerances of NZS 3604:2011 *Timber-framed buildings*. Refer to Figure 7.8 and Figure 8.4.
- › Fixings are to be in accordance with building consent documentation, if applicable, or NZS 3604:2011 *Timber-framed buildings*. Refer to Table 2.2 of NZS 3604:2011 and Table 4.3 of NZS 3604:2011 for durability requirements. Suitable connectors include hand or power-driven nails. Proprietary fasteners (e.g., bottom-plate wall-bracing brackets and/or roof uplift connectors) may be used if they meet NZ Building Code requirements. Confirm compliance with the manufacturer's technical literature.

EXPOSURE AND ENCLOSING

- › Do not expose timber for more than three months under construction conditions.
- › Wetting during construction may lead to temporary elevated moisture content and dimensional changes.
- › Once enclosed, timber will dry and equilibrate to the humidity conditions. Some expansion or swelling may remain after drying.
- › Do not install linings on timber with moisture content $\geq 18\%$.

Maintenance

- › Timber does not require specific care and maintenance to maintain its performance once enclosed.
- › Ensure the balance of the wall linings and claddings is maintained to protect the timber.
- › Where internal or external moisture has damaged the timber framing, engage the services of a licensed building practitioner for advice.

