

WAIPAPA PINE H4, H5 AND H6 RS/MG SG8 FRAMING TIMBER DESIGN AND INSTALLATION GUIDE



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General

- This guide covers installing and maintaining Waipapa Pine H4, H5 and H6 RS/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 H4, H5 and H6 RS/MG SG8 Framing Timber is for use in close proximity to ground and in-ground. H4 can be used in landscaping and fencing, H5 for foundations, retaining walls, and deck support and H6 in coastal and marine environments.
- Available sizes (mm) (*by special request):

H4

- Rough sawn (RS) 75 x 50, 100 x 50, 150 x 50, 200 x 50, 250 x 50, 300 x 50, 150 x 40, 100 x 100, 100 x 25
- Machine gauged (MG) 70 x 45, 90 x 45, 140 x 45, 190 x 45, 240 x 45, 290 x 45, 140 x 35, 90 x 90

H5

- Rough sawn (RS) 75 x 50*, 100 x 50*, 150 x 50*, 200 x 50*, 100 x 100
- Machine gauged (MG) 140 x 45, 90 x 90

H6

- Rough sawn (RS) 75 x 50, 100 x 50, 100 x 25.

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 selection tables and general requirements in sections 6 and 9 of NZS 3604:2011 *Timber-framed buildings* to specify the timber, where NZS 3604:2011 applies.
- For uses outside the scope of NZS 3604:2011 *Timber-framed buildings*, where the use relates to a building, for example, retaining walls and deck support, the Waipapa Pine H4, H5 and H6 RS/MG SG8 Framing Timber must be specifically designed. Refer to AS/NZS 1170.1 *Structural design actions - Part 1: Permanent, imposed and other actions*.
- Adhere to size and spacing requirements and account for vertical and horizontal loads.
- Select fastenings in accordance with Table 2.2 NZS 3604:2011 *Timber-framed buildings* and Table 4.3 of NZS 3604:2011 for durability requirements. Fastenings must be hot dipped galvanised steel fasteners at a minimum. Stainless steel is recommended for difficult-to-access areas, for replacement fixings, or in Exposure Zone D as described in section 2.2 and Table 4.3 of NZS 3604:2011. For coastal and marine environments consider additional protection to fasteners such as anticorrosive coatings. Specific proprietary fastening can be specified if it is established fastenings are NZ Building Code compliant, e.g., proprietary cast-in structural post support brackets.



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.
- Timber can be purchased wet or dry. Store appropriately for the intended use of the timber. Place timber on wood dunnage or laid flat on bearers and store covered if possible.

- Do not expose timber to rapid changes in moisture or temperature, such as may occur from temporary heating units.
- Cover with a waterproof cover when not in use to limit possible leaching, twisting and cupping.

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 timber 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*.
- Post installation must be in accordance with NZS 3604:2011 *Timber-framed buildings*.
- 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. Hot dipped galvanised steel fasteners must be used as a minimum requirement. Stainless steel is recommended for difficult-to-access areas, for replacement fixings, or in Exposure zone D. Refer to Table 2.2 and Table 4.3 of NZS 3604 for durability requirements. For coastal and marine environments consider additional protection to fasteners such as anticorrosive coatings. Suitable connectors include hand or power-driven nails. Proprietary fasteners (e.g., proprietary cast-in structural post support brackets) may be used if they meet NZ Building Code requirements. Confirm compliance with the manufacturer's technical literature.

Maintenance

- Timber does not require specific care and maintenance to maintain its performance.
- Fixings can corrode over time. Check fixings regularly and replace if necessary.