

KEY FEATURES AND BENEFITS OF TIMBER WINDOWS AND DOORS

High thermal resistance

Timber has a high thermal resistance compared to other commonly used building products. This reduces heat losses and provides the following benefits:

- Warmer homes with lower energy bills.
- No condensation on timber surfaces, providing a healthier indoor environment.

Long lifespan

With proper maintenance the lifespan of windows and doors can extend to more than 100 years. Evidence of this can be seen in the many older colonial homes still using their original timber windows and doors - and the benefit of this to a homeowner is cost savings over the extended life of a home.

More design flexibility

Timber windows and doors provide you with great design flexibility:

- As well as standard profiles you can also use customised window and door designs.
- Lots of paint colours for the timber and many choices of hardware fittings are available to provide you with the finished look that you want.

You can change the look

If you choose high quality paint and hardware to go with your timber windows and doors you can expect them to remain in good condition for at least ten years. At the end of this time it is relatively easy to repaint the timber and replace the hardware. In doing so you can choose styles and colours to fit in with the latest trends.

Environmentally friendly

Timber is a renewable resource with a low carbon footprint. By choosing timber windows and doors you have the satisfaction of knowing you are helping to protect our environment for future generations of people to enjoy.

NZS 4211 Affiliated

WHY CHOOSE A MASTER JOINER?

Registered Master Joiners provide full consultation and design services for all joinery needs and work closely with other design professionals to ensure that the finished product looks and functions at its best.

A national and regional fellowship of members ensures that all are kept up to date with the latest trends both in craft practice and business developments. Through its members, the New Zealand Joinery Manufacturers' Federation is also a prime mover in the introduction of innovations and standards to the joinery industry.

Master Joiners belong to one of the world's oldest trades, dating back to Europe between the 12th and 15th Centuries. Wooden and kitchen joinery is often what sets one building or home apart from another. It is an area of professionalism and craftsmanship.

Master Joiners ensure high standards of workmanship and guarantee the warranty required under the Consumer Guarantee Act.

Exterior and interior joinery are premium products, which require a level of protection to enhance the properties of the products. It is therefore important that you take your time in selecting who designs, manufactures and advises on care and maintenance.

In New Zealand, joinery is one of the few industries that has retained its apprenticeship tradition. The New Zealand Joinery Manufacturers' Federation and local associations work together with training providers to provide pre-training courses and also sponsor youth skills competitions and events aimed at promoting excellence in trades training.

Registered Master Joiners bring innovation to the joinery industry. They encourage competition and the pursuit of excellence between and from its members, their employees and apprentices.

The annual Master Joiner Awards promote excellence in design and joinery craftsmanship, encourage use of sustainable timber and best practice, and showcase the finest work from the industry.

The Master Joiners Apprentice Awards competition enables apprentices to enter any project manufactured by their company, which has been a minimum of 80% completed entirely by the apprentice. This is a great opportunity for apprentices to impress with their skill and enhance their CV with an exclusive certificate plus have their work featured in magazines.

Whether renovating or rebuilding, don't take a gamble with a major investment in your home – the best kitchens and cabinetry don't just happen. It makes sense to consult a professional for the planning, manufacture and installation in your home.

Registered Master Joiners provide this certainty.

AMENDMENTS TO NZS 4211

Most metal windows and doors are tested to NZS 4211: 2008 to comply with NZBC B1/VM1, NZBC E2/VM1 and NZBC E2/AS1. On the other hand, only some timber windows and doors are tested to NZS 4211, non-tested ones are an alternative solution.

Amendment 1 of NZS 4211: 2008 Specification for Performance of Windows has brought it into line with NZS 3604 in terms of wind zones. What this means is that for non-specific design buildings to NZS 3604 (or NZS 4229), all the specifier has to do is list the wind zone to NZS 3604 from Low (L) to Extra High (EH). The complying manufacturer will usually have had their doors and windows tested to NZS 4211 for those wind zones, and they must mark the frame with the following:



- Manufacturer's name or brand name.
- NZS 4211:2008
- Wind zone or wind pressure rating (ULS pressures for specific design)
- Air infiltration level

The scope of NZS 4211, table 6 includes an "Extreme" wind zone, this allows specific design with wind pressures beyond NZS 3604 to maximum of 2500 Pa (ULS). Be careful, because NZS 4211 only tests the window not the installation into the wall. So a windows performance for wind pressures higher than NZS 3604 may comply with NZBC E2/AS1, but the installation may have to be an Alternative Solution as the installation is subject to the scope of NZBC E2/AS1.

NZS 4211 essentially is a Standard that defines the tests for doors and windows and their relative performance such as:

- Deflection under SLS wind pressures
- Maximum force required to open a sash.
- Air infiltration for air conditioned or non-air condition spaces.
- Water penetration under defined wind pressures.

- Collapse under ULS wind pressures.
- Torsional strength of sashes

Although the Building Code does not yet cite Amendment 1, the amendments alignment with NZS 3604 makes it more consistent with, the Acceptable Solutions and many other Standards. It also makes it less confusing for projects in the Extra High wind zone, as they are now distinct from the Extreme wind zone. As it will make no difference to actual performance, Masterspec have based section changes on the Amendment 1 version.

This amendment has only meant a very small change to most of the Masterspec door and window sections. However, the timber door and window sections have had slightly more changes to take account of the growing number of timber doors and windows being tested to NZS 4211.

LABELLING WINDOWS & DOORS WITH NZS4211 COMPLIANCE

Revision of the New Zealand Building Act 2004 and the New Zealand Building Code has heightened awareness of the importance of installing tested and complying window and door products for the weather tightness and structural performance of the exterior building envelope.

Windows and doors that have been properly selected according to the wind zone, and have been tested to the standard NZS4211:1985 Amendment 3, will automatically comply and be accepted by TA's when labelled accordingly.