

ROOF FRAMING

Selection tables

Selection tables have been rationalised and the number reduced. Light and heavy roofs are combined in one table, and the extra-high wind zone is the default requirement with adjustment factors for the other wind zones.

Also, all tables default to the SG8 timber grade. Other grades have been moved to the appendix at the back of the section. This reflects the dominance of SG8 framing timber in the market.

Fixings

The fixings have been rationalised so that the same fixing type is consistent throughout the section. A summary table is provided in NSZ 3604:2011 Table 2.2.

Purlins

The scope of purlins on edge has been greatly increased. This was driven by the increasing use of monopitch roofs with no rafters, and purlins spanning across walls. The deeper members also accommodate the greater insulation thicknesses now required by the Building Code.

In the previous version of NZS 3604, purlin tables provided for extra fixings around roof edges and ridges, reflecting the greater wind uplift in these areas. Very little area was often left as the 'body' of the roof, and it proved unrealistic to expect designers and installers to determine when and where extra fixings were required. The solution has been to provide the requirements for extra fixings over the whole roof in the tables.

Roof bracing

This has been simplified with bracing demand now related only to roof weight and area – roof shape is irrelevant. Options for providing roof bracing are widened and made more flexible and include:

- sarking
- structural ceiling diaphragm directly attached to the underside of the rafters
- combinations of roof plane bracing and roof space bracing.

Note that roof bracing, like wall bracing, is the responsibility of the building designer. ■