

Red Stag SG10 Superior Structural Timber

For Builders who wish to go Above and Beyond

Ever since wood has been used as a building material it has been recognised that a large number of factors contribute to its suitability in a particular application.

Fascia board for example is not reliant on mechanical properties but is more dependent on cosmetic appeal. If it has a smooth surface, is knot free and treated to withstand the elements it will probably do the job.

On the other hand, a load bearing stud relies on stiffness and strength to provide the characteristics needed to support overhead weight, resist wind pressure and to withstand the demands of earthquake, snow loadings and other naturally occurring events.

Choosing a timber that is suitable for these requirements is easy. NZS 3604 shows the stud spacings and spans that various SG grades of timber must achieve to meet the minimum requirements under the standard

Many builders choose to go further than simply meeting the minimum standard.

These builders may consider the following factors to be important:

- **Minimum wastage**
- **Higher performance**
- **Less distortion**
- **Lower incidence of visual defects**
- **Higher density**
- **Less re-work**



We call these the A & B Factors - Above and Beyond

In fact if these factors are quantified, they accumulate to provide a better job for the end customer often at an overall lower cost to the builder.

We can safely claim that Red Stag SG8 Superior Structural Timber is already a step in the right direction when comparing the products available on the market today.

But Red Stag can take you a large step even further towards the construction of a masterpiece for your client.

Why is SG10 Superior to SG8 and even better than alternatives?

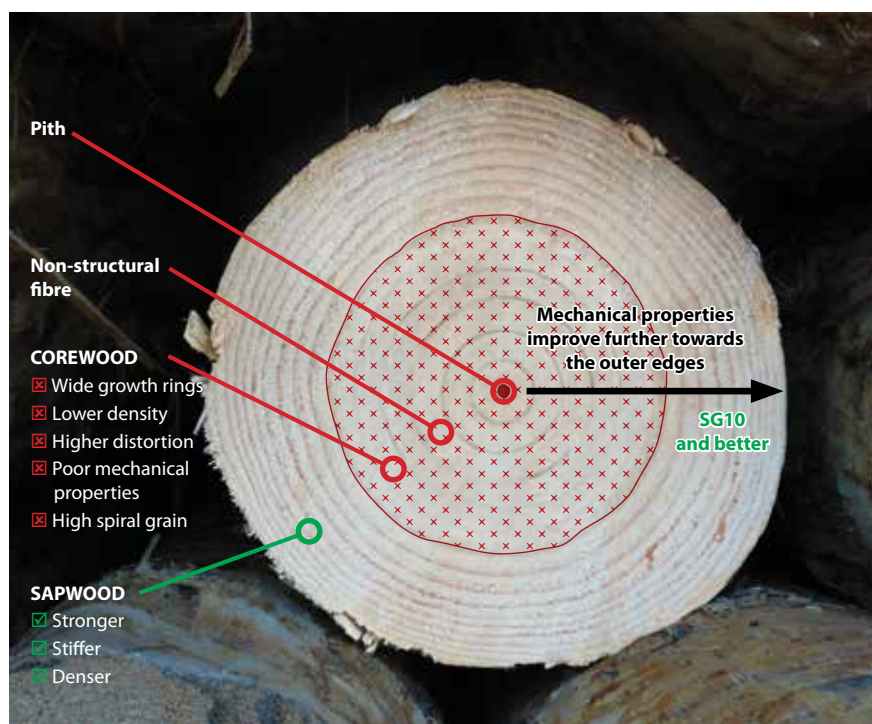
“Solid wood SG10 from Red Stag Timber, is more accurately termed **“SG10 and better”** and must have a minimum average of 10MPa stiffness but may include timber of very high strength with stiffness up to and even exceeding 15MPa. In many cases, the higher SG10 rating allows wider stud spacing, together with higher performance loadings for wind, snow and earthquake than the corresponding SG8 product, be it LVL or solid timber.

These factors often provide superior performance with lower wastage and with material cost savings that can be pocketed by the builder. The end customer also receives a finished project that is in every sense higher quality.”

Dave Joy: Product Development Manager, Red Stag Timber

In the simplest terms, SG10 is recognised by the stress grader as having superior mechanical properties to SG8, it is stiffer and stronger and this is proven through testing of each and every piece.

How does this result in less wastage, smaller defects, straighter timber and lower cost?



The log begins life with the first 8-10 growth rings being low density corewood with pith at the centre. The spiral grain will cause higher distortion as it absorbs and releases moisture. Stiffness is also low in corewood. This part of the log is of overall lower quality and Red Stag do not include pith in any of their structural timber for these good reasons.

As we move towards the outer layers of the log we get a higher proportion of sapwood. Sapwood has less than 1 degree of spiral grain so is much more stable and stays much straighter in varying conditions of moisture. Sapwood is also denser, stronger and stiffer and it is in this region of the tree that we find the higher mechanical properties. This is where SG10 comes from. It is graded at a higher lever so any defects tend to be smaller than in lower grades of timber.

With less defects and less distortion it is highly likely that you will have less wastage and less rework. A small investment in the initial purchase price saves in the overall cost of the job which will often be lower and the quality of the job will undoubtedly be higher.

In short, it is false economy to buy cheap timber!