## The web site NZWOOD.co.nz

## Reviewed by Andres Katz

NZWOOD's aim is to promote the consumption of wood and promote positive perceptions towards the wood and forestry industry. It is targeted at the New Zealand market, specifically its specifiers, including architects, engineers, builders, DIY, retailers and consumers.

The NZWOOD is made up of three sites: the main site, a corporate site, and a site with the NZ Wood story. The corporate site has information on the NZ Wood programme, including its vision, aims and objectives. The 'NZ Wood Story' site tells us more about forests and wood use and their importance in the fight against climate change.

The main site's home page is attractively laid out with links to all the major areas (Figure 1). Featured prominently in the middle of the page are two building materials carbon calculators, one for dwellings and the other for non residential construction. These allowed me to calculate net carbon emissions depending on the type of material selected for the various components. I found that my wooden house sequestered the equivalent of 14.9 tonnes of  $\mathrm{CO}_2$ , but the same in brick and tile with steel frame produced net emissions of 24.1 tonnes. This was given as being equivalent to a car travelling 120 510 km (Figure 2). These calculators are an effective way for conveying the message that wood can play a major role in reducing carbon emissions.



Figure 2

The main site is organised into four sections headed 'Why Wood', 'What Wood', 'How Wood', and 'Talk Wood', an interactive area for people to exchange information and access recent industry news. 'Why Wood' is divided into a series of topics that identify the benefits of using wood. For example under 'Sustainability' we learn about forestry and



Figure 1

climate change, can access a range of downloadable carbon footprint models and some other topics related mainly to carbon. I missed not seeing any mention of the role plantation forests play in sustaining New Zealand's natural resources, such as our waterways, soil and biota. Forests after all are not just wood factories. 'Cost comparisons research' has a link to a document comparing costs between building with wood, steel, and concrete. This supported my perception that timber construction is more cost effective. However some of the benefits are lost over the life of the building due to higher energy and maintenance costs. Does this mean that timber is less suitable for colder climates?

The 'What Wood' section addresses the issue on the types of products that can be used for different building applications. 'Structural materials' has sections covering an extensive range of products, from sawn timber, plywood, engineered wood products to solid homes. It has an excellent summary that shows how timber can be engineered for a variety of demanding uses in an aesthetically pleasing way, making them particularly attractive for exposed situations.

For each of the products, relevant standards are referenced and information sheets provided, with technical information on manufacturing, their use and performance.

Perhaps it would have been more useful if 'Structural Materials' had been presented from a solution rather product perspective. For example specifiers are more likely to want to know the advantages of finger jointed timber over solid wood rather than about the process of finger jointing as a means of upgrading low grade material.

The 'How Wood' section is the most technical area, and includes topics related to design, fasteners, wood treatment and durability, as well as and thermal performance. It also has sections on how wood can be used, design considerations, and relevant standards. The how to building guides are a useful set of resources for DIYers, and range from how to build fences and screens to internal walls and ceiling linings. Each sheet comes with step by step instructions, diagrams and a reference guide.

'Structural Connections' covers metal fasteners (nails, screws, bolts, etc) and adhesives. Each of these sections comes with one or more information sheets adapted from the NZ Timber Design Guide 2007. But if references to these sheets are required then it is probably advisable to get the proper guide.

The fourth section is titled 'Talk Wood', which includes 'Wood Watch', a regularly updated section with news clippings featuring forestry, wood, construction and architecture, and 'Wood Works'. This section provides magazine style articles on outstanding examples of wood design from around the world.

Another interesting and useful feature in NZWOOD is the 'Case studies index' which accesses over 140 examples of wood use in construction. It show cases wood at its best with examples drawn from both New Zealand and overseas. Selecting the 'Browse' tab allows users to search the database by types (applications), elements and solutions.

NZWOOD is featured in an easy to read format that suits most audiences, also covering specialist topics for the technically minded. The information is attractively presented, with enough images to keep the site lively and interesting. A light tawa coloured veneer frames the site suggesting that this site is more than just about radiata pine. The use of light green and blue colours in headings reminds us that wood use is part of being 'clean and green'.

There is a strong message about the role forestry and wood can play in mitigating the effects of climate change. Clearly research by NZWOOD identified this as the most compelling issue to promote forestry and wood. In a way this is a pity. As an industry I wonder whether we can afford not to continue to promote the wider benefits of forestry, even the need of having more of our land covered in trees for reasons other than carbon storage.

Invariably, many who use NZWOOD will find areas they would have liked to have seen treated in greater depth. Some might find that radiata pine could have been featured more strongly. But most people with an interest in building and wood will find topics of interest and value. With a message to tell, NZWOOD has the potential to become an effective promotional vehicle for the forestry industry.

## New NEFD available

The Ministry of Agriculture and Forestry has recently published the 25th edition of A National Exotic Forest Description (NEFD). The report contains a detailed description of New Zealand's planted forests along with information on forest activities such as planting and harvesting. Much of the report's content consists of detailed tables that show the plantation forests' area by age class and territorial authority. This information is provided for key species. For radiata pine, the area by age class tables is also provided by silviculture regime.

New Zealand's net stocked planted production forests covered an estimated 1.76 million hectares as at 1 April 2008. The stocked area was down 29 000 hectares from the previous year. Taking into account an increase in the area reported as awaiting restocking the total forest area is 17 100 hectares lower than reported in 2007.

The total planted forest stem volume is estimated to be 446 million cubic metres with an average forest stand age (area weighted) of 15.2 years. Radiata pine is the dominant species, making up 89 percent of the planted forest area. Douglas-fir is the next most common species, making up

6 percent. The remainder of the area is planted in cypress species, eucalyptus species, other softwood species and other hardwood species.

It is provisionally estimated that 1000 hectares of afforestation occurred in 2008, the lowest level since 1945. It is estimated that approximately 15 600 hectares of forest was converted to another land use in the year ended 31 March 2008. An estimated 18.9 million cubic metres of roundwood were harvested from New Zealand's planted production forests in the same period. The deforestation estimate is indicative only and has been compiled using a combination of returned 2008 NEFD survey information and input from forestry experts.

The NEFD report is published annually to assist infrastructure and policy planning and is compiled from a survey of forest owners and managers. The report is produced in conjunction with the Forest Owners Association and the Farm Forestry Association. The report can be found on the MAF website at http://www.maf.govt.nz/mafnet/publications/nefd/national-exotic-forest-2008/index.htm