

# Tunncliffe's

Tunncliffe Timber Company Limited

## Handling Tanalised® Ecowood™ Treated Wet Beehive Box Components

Wet Tanalised® Ecowood™ (Tan®E) is a water-based bee friendly treatment process. When customers order our Wet Tan®E beehive box components, we manufacture kiln dried untreated products which are then sent for treatment at a facility in Rotorua. Our customers either collect from Rotorua, or choose onward delivery to their premises. Our wet treated products are supplied in a drip-free, wet condition and need some work before they can be used.

When kiln dried timber is subjected to pressurised water-based treatment, the timber swells, causing the dimensions to change by as much 5%. The swelling reduces as timber is re-dried; however, there is a risk that the timber may split, warp or cup. Due to variations in timber density and the difference between initial and final moisture content, it is unlikely that all components will return to their original dimensions, causing some inconsistency in sizing.

The distortions can be kept to a minimum by assembling the boxes while still wet, thereby physically restraining the timber components, as well as by ensuring even re-drying. Tunncliffe's recommend the following method, in order to obtain the best result from our products:

It is important that the components are not allowed to dry while they are still on the pallet. Top layers and exposed ends will dry out faster than the rest, causing the timber to distort. If you are unable to assemble the boxes within two weeks after treatment, wrap the pallets in plastic to keep the timber wet.

Assemble the boxes wet, aligning the top (frame rebate side). Stack the boxes either 'chimney-style', as they fit, or "cross-style" out of direct sunlight and rain in a well ventilated space. The bottom box should be raised off the floor, sitting on blocks of at least 50mm thick, allowing gaps for airflow.

To determine when the boxes are ready for use, weight is a good indicator. Wet, full depth boxes will weigh approx. 8.0 Kgs each,  $\frac{3}{4}$  boxes 6.0 Kgs. Once a full depth box is between **4.5 – 4.8 Kgs** and a  $\frac{3}{4}$  box is between **3.5 – 3.7 Kgs** they are ready for the next step.

After drying, in most cases, the bottom of the boxes may need to be adjusted by running them over a saw bench or using a hand held planer. Adjustments made too early can result in boxes that are too shallow, causing problems such as frames not fitting correctly.●