



ABN: 78 077 703 416

### **THE DIFFERENCES BETWEEN TRANSPARENT AND OPAQUE FINISHES**

It should be noted the difference in the life cycle between clear / transparent coatings compared to solid or opaque coatings. With the solid colour opaque coating (Aquaoil Opaques) the U.V. Block is 100% and no U.V. reaches the wood to break down the bond between the substrate and the coating. Even if the bond is not 100% no deterioration will take place and the coating will stay on for an acceptable time until it chemically fails.

Whereas a clear / transparent or semi opaque finish (Timbre Plus, EcoDex, Aquaoil Gold or the Aquaoil Haze range) would have a life of 20% - 30% of solid finishes, ie if in a given situation a solid finish is expected to last 8-10 years, a transparent coating in the same situation can be expected to last 2-3 years. Quantum coatings are designed to be oxidising coatings and gradually erode away. They are very simple to renew and recoat.

This is however dependent upon the adhesion to the substrate, if the initial adhesion is poor then early failure will result. There are a number of causes of poor adhesion and early failure.

1. Insufficient coating build or insufficient absorption of first coat.
2. Pre weathering of the wood, oxidation and U.V. degrading of the lignin that holds the wood cells together (usually noticed as the coating becomes very light).  
Thorough cleaning of the timber with Sap-Strip is essential to rid the surface of extractives and millglaze; if the timber is weathered and grey, cleaning with Dex Prep is recommended.
3. Microbiological infections in the timber leading to decay and mould (noticed by the substrate going dark under the coating).
4. Factory applied pre coats or construction coats being incompatible to the coating system or partly/completely degraded resulting in poor adhesion.
5. Acids and other materials used by brick cleaners damaging the wood.
6. All Australian and Asian hardwoods contain a high level of oil, waxes and other chemical extractives that are detrimental to the adhesion of all coatings especially low VOC water reducible finishes. If these are not treated appropriately **the coating system will fail prematurely.**

Western Australian "Karri" which "does not have a good reputation in regard to paint holding"

Black Butt "a poor base for paint because of its tendency to surface check".

Spotted Gum "high extractives very dense, can be difficult to impregnate with stain".

Merbau "high extractives"

Tallowwood "greasy timber"

Note: Hardwoods from the northern states, especially Spotted Gum have been treated for Lyctid Borer with ACQ or Boron based treatments which tend to form a surface contaminant on hardwood.

This treatment needs to be removed from the surface or else drying problems will occur when coating.

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