

## Information Data Sheet

### BLISTERING

One of the most common problems especially during warmer months is blistering of acrylic paint on exterior wooden surfaces.

A common scenario is when a painter decides to paint a dull but usually sound surface, he/she sands the surface and applies 2 coats (weather shield gloss), within days large blisters have begun to appear on the new paintwork - rising with the sun and diminishing at night. From a customer's point of view, it's easy to see why they blame the new coating for their problems. The painter has prepared the surface, properly followed the label instructions and now the customer has unsightly blisters all over their timber (what a disaster).

Let's go back a few steps and look at why this may occur. At some stage, the house was more than likely painted with enamel. Over the years this has become very hard and brittle and its lack of flexibility does two things:

1. Boards expand and contract, the paint doesn't. This movement literally shears the paint away from the wood.
2. Enamel develops millions of tiny cracks (usually not visible to the naked eye) – these allow excessive moisture to enter the board. When this board is painted and sealed with two fresh coats of paint, it traps moisture in the wood as soon as the sun and heat play on the surface. The trapped moisture expands (like a boiling kettle) and escapes to the surface of the wood wherever the paint has lost adhesion caused by being sheared off due to movement in the timber as explained in point one. The expanding water vapours force the paint out into a blister when the heat is removed from the surface. (i.e., at night the gas returns to moisture and dissipates into the wood).

Two questions now remain:

- A. **How do I fix it?**
- B. **How do I avoid it?**

The answer to this problem is that all blistered areas need to be stripped back to bare wood and treated as a new, fresh wooden surface, i.e. primed etc.

In general, if the surface has been painted with enamel and is more than 15 years old, chances are you'll get blistering. The only way to totally avoid these problems is to strip off all enamel and start again. This is usually the problem the painter/contractor faces. The consumer never wants to pay for this, it usually becomes too expensive and labour intensive. In 90% of cases, the stripping of old exterior paint is highly recommended