

GEL-COAT BLISTERING

Also known as: Osmotic Blistering or Gel-coat Chipping or Popping

FORM 65140

CAUSE

The occurrence of gel-coat popping/chipping/blistering is caused by the long-term presence of water to the backside of the fiberglass panel. When the lauan plywood substrate is saturated with water, capillary action moves the water through the fiberglass panel. The movement of the water through the panel continues until it hits the impervious gel-coat outer surface of the panel. Pressure builds behind the gel-coat layer as the trapped water is exposed to various hot and cold cycles. Gel-coat popping/chipping/blistering occurs when the built-up water pressure is greater than the bond of the gel-coat layer to the fiberglass substrate.



RESOLUTION

To eliminate the potential of re-occurrence to the popping/chipping/blistering problem on the panel surface, the source of the water to the backside of the fiberglass panel has to be eliminated. This will require the replacement of the saturated lauan plywood substrate and the correction of how the water is getting to the lauan plywood. Surface repair of the gel-coat popping/chipping/blistering area can be performed once the lauan substrate is dry, and the source of water is eliminated.

SUMMARY

In summary, a suggested repair method for gel-coat popping/chipping/blistering is as follows:

1. The source of water that is saturating the wood substrate must be located and eliminated.
2. The saturated wood substrate must be allowed to dry completely before proceeding to the next step.
3. Surface repair of the gel-coat can be done by utilizing the Crane Composites Repair Guide (form #65000), which can be found on the Crane Composites website at www.cranecomposites.com/pdf/65000.pdf