



## **GEL-COAT BLISTERING**

## **CAUSE**

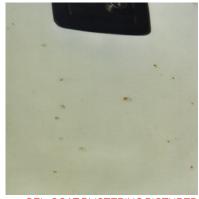
The occurrence of gel-coat blistering also known as Osmotic Blistering, Gel-coat Chipping or Popping is caused by the long-term presence of water to the backside of the fiberglass panel. When the lauan plywood substrate is saturated with water, capillary action, or capillarity which describes the ability of a liquid to flow against gravity in a narrow space, 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.



**GEL-COAT BLISTERING PICTURED** 

## RESOLUTION

To eliminate the reoccurrence 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.



GEL-COAT BLISTERING PICTURED

## **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.
- 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 VALTO RV Repair Guide (Form # 65000), which can be found on the Valto Engineered Materials website at valtoem.com/rvrepair

At Valto, we partner with our customers, and through innovation, deliver advanced materials that enhance everyday environments. We succeed through a culture of collaboration, continuous improvement, and excellence. With integrity at our core, we challenge the status quo and pursue innovative approaches that benefit our customers and associates.

Since 1954, Valto Engineered Materials has provided innovative products and services and is a leading provider of FRP composite panels. Our lightweight composite products deliver unsurpassed strength and durability; and we continue to pioneer next level performance in building materials, recreational vehicles, and transportation.