

CCW PROCEDURES FOR DELIVERY, STORAGE AND HANDLING OF FREEZE-SENSITIVE PRODUCTS

Part 1 –How CCW Ships the Products

CCW water-based products covered by this bulletin include: Barriseal, Barricoat, Barritech NP, Barritech NP-LT, Barritech VP, 702 WB Primer, AWP Primer and GreenBOND WB Mastic.

Although some of the products can be applied below freezing, the material in the pail, drum, or spray rig must always be protected from freezing. That’s because they will solidify if frozen for a prolonged amount of time or experience repeated freeze/thaw cycles. Freeze-damaged product cannot be installed.

This poses wintertime logistical challenges for product shipping, storing, and handling products. CCW takes several steps during winter months to assist customers including printing a penguin logo on the price list, which indicates that the item is freeze sensitive. CCW also places a highly visible penguin sticker with the words “DO NOT FREEZE” on each pail and drum of product. In addition, a freeze indicator is attached to each drum and to each full pallet of pails. For partial pail pallets, CCW puts a freeze indicator on each pail.



Freeze indicator on drum



Freeze indicator on pail pallet



The freeze indicator changes color after approximately 30 minutes of continuous exposure to sub-freezing temperatures. A frozen indicator is “broken,” because the fluid breaks the bulb upon freezing and causes the color change.



Freeze indicator bulb is clear and hasn't been exposed to freezing temperatures.



Freeze indicator bulb is violet in color indicating it has been exposed to freezing temperatures.

Freeze Indicator, Un-Broken (Clear), Broken (Violet)

As an added precaution, CCW ships products freeze-protected. CCW checks that all products loaded out for shipping have a clear freeze indicator bulb. CCW also arranges the shipments so that truck will not sit overnight during transit. Customers should note that these policies affect ship-out days and the availability of LTL versus truckload options. CCW Customer Service presents the customer with shipping options for each order.

CCW's execution of these measures requires diligence and adds cost. Our goal is to ensure that all products arrive at the customer's facility in optimal shape, with no broken freeze indicators.



Part 2 – Directions for Product Receipt

Customers should inspect the product for damage or broken freeze indicators before unloading. If all looks good, promptly unload the shipment, and move it to a conditioned space, protected from freezing temperatures.

If any of the freeze indicators break during shipment, follow these steps:

- Accept the shipment.
- As the driver witnesses, note on the shipping paperwork that the product arrived frozen.
- Indicate how much of the shipment was frozen (if not the entire shipment)
- Photograph the product before unloading.
- Promptly unload and place the product in a conditioned space.
- Post a sign on the product to quarantine it until next steps are decided.

Having observed broken indicators, customers have two options:

1. Call CCW Customer Service and arrange for return of the affected product
2. Inspect the product for freeze damage per Part 3.

Please note. Freeze indicators monitor temperature exposure, not product quality. The indicators signal that a product has been exposed to unacceptable temperatures and customers should perform a product quality check.

CCW Technical Service and local CCW Sales Representatives can assist customers with product inspection. Inspection and product acceptance will significantly reduce delays in getting product to the end user. For this reason, CCW highly recommends following the inspection option 2.

If product is bad per inspection protocol, please contact CCW Customer Service to arrange for return. If product is good, it can be installed per instructions in the product's literature. CCW will warrant products that can be installed as stated in the product literature.



Part 3 – Procedure for Visual Determination of Freeze Damage of Water-Based Products

This is written based on the assumption that the customer has received freeze-sensitive products and the freeze indicators are broken indicating product has been exposed to sub-freezing temperatures. The following inspection can be performed by any interested party.

- Carefully remove the lid and/or protective film to ensure any thin skin is removed with it and not left in the product (skin does not re-disperse and could lead to spray issues).
 - *Please note: Every effort is made to ensure water-based product is packaged in the factory without skins. Some skin formation is still possible and will generally be directly attached to the pail lid or to the film covering the product in the drum.*
- Freeze damage is not subtle or difficult to verify. Freeze damage will make the product solid. Freeze damaged product cannot be applied.
- Partial freeze damage can occur. When this happens, the lid, walls and bottom will be covered with a solid layer of product that will vary depending on how long it was exposed to below freezing conditions. Material that can be hand mixed and is fluid can still be applied and will work as advertised.

Contact CCW if you have any questions regarding inspection. Please have the following information available:

- ✓ Job site conditions and temperatures (if the product is on a job site)
- ✓ Warehouse conditions and temperatures (if the product is in a warehouse)
- ✓ Shipping information
- ✓ Product lot number(s)
- ✓ Quantity Affected

CCW recommends that the customer document the product inspection, capturing the following:

- Person(s) performing inspection
- Affiliation of inspector(s)
- Date product arrived from CCW
- Date of inspection
- Products inspected
- Packaging
- Lot number(s)
- Quantity
- Observations
- Recommendations
- Installer and project (if known).