

TECH TALK: *White Frit*



Perimeter painted frit is a colored band on glass applied during the manufacturing process that serves as a barrier against UV radiation to protect the adhesive. It also provides a cosmetic benefit by concealing the adhesive when viewed from the outside. Typically, the frit is black, but white can also be an option.

Design Factors to Consider:

Black frit is very forgiving and slight variations in color are not noticeable. White frit, on the other hand, has more factors to consider that affect the final look. These include the type of glass and the application process, as well as considerations that can affect overall appearance.



Type of glass

Standard clear glass has a slight greenish appearance. The thicker the glass, the greener it will appear. When the frit is applied on the inside surface of standard clear glass, the greenish tint may be visible against the white paint. To avoid a greenish appearance, low iron glass is recommended.



Application Process

Ideally white frit will be fired on and become a permanent part of the glass. However, there are times when the paint cannot be fired on and it must air dry on the inside or outside surface. This is not recommended because the paint can be scratched off during installation or by normal use of the boat.

Appearance

When looking at white paint through glass it will be off-white and most likely a creamy color. For flat glass, the paint can be applied on any surface. For bent glass, the limitations depend on the complexity of the bend. When the frit is on the inside surface the glass color will show against the white paint. If the frit is on the outside surface, the white will look crisp and clean but will not have a glossy appearance.

The number of frit coats applied can also affect the appearance. To get the true color of the paint, multiple applications may be needed. More coats increase the chance of covering all the microscopic areas that are missed when only one layer of frit is applied.

Final Thoughts

While black sealant is typically required by most shipyards, white paint can be an acceptable alternative. We highly recommend making and evaluating samples prior to ordering.

