Painting Fiberglass Doors

Technical Bulletin TB-12

BENEFITS OF FIBERGLASS

Fiberglass is a commonly used, lightweight, low-maintenance material for doors. It creates a wood-like appearance without the pitfalls of natural wood: rot, warping, or expansion/contraction with temperature changes.

Fiberglass doors can come prefinished, stain grade, or paint grade. Stain-grade doors will use a gel stain followed by a clear finish to protect the stain color and the door. Paint-grade doors need to be coated with an appropriate primer and finish. Oil-based coatings are not recommended for use on fiberglass doors. Florida Paints recommends using a 100% acrylic enamel product in either a satin or semi-gloss finish.





Smooth Prefinished





Textured Paint/Stain Grade



Page 1 of 4 TB-12 2212



PAINTING FIBERGLASS DOORS

Fiberglass doors and sidelights can be smooth or textured with a wood-grain finish. This material usually does not need to be primed, but painting is required. Wait for a good dry day without too much sunlight shining on the door if you're painting with the door in place or prepare a well-ventilated dry space to work in if you're removing the door. (Pella, n.d.)

For best results, do not paint in direct sunlight and paint when the temperature is 50° F, and 90° F and humidity is between 65% and 70%. The substrate temperature cannot exceed 120° F. Florida Paints recommends a low sheen acrylic coating is that will breath better and have a higher rate of permeability, allowing the out-gassing vapors to pass through the coating rather than form blisters.

Out-gassing is the release of a gas that was dissolved, trapped, frozen, or absorbed in some material. Some materials out-gas because they absorb moisture or vapor and then gradually release that vapor. "Fiberglass and other thermoplastics out-gas as a byproduct of an exothermic chemical reaction. Some of manufactured materials will out-gas within days or weeks. Other substances take longer. Fiberglass, for example, can continue to out-gas for years." (Hingst's, 2013).



Severe out-gassing blisters on previously painted door.



Page 2 of 4 TB-12 2212

NEW / UNPAINTED FIBERGLASS DOORS

Clean the door thoroughly before painting. Hydrocarbon-based solvents; (derived from crude oil such as xylene, toluene, or white spirits) should not be used to clean fiberglass. Mild dish soap or denatured alcohol is best. Follow manufacturer's recommendation for painting and surface preparation as some do not recommend sanding before painting. Do not sand wood grain or textured doors. (Jeld-Wen, n.d.)

If possible, paint the door before installation or remove the door from the frame and paint horizontally to help prevent runs and over-accumulation in panel grooves if present. If the door cannot be removed, paint when there is no direct sunlight on the doors or shade during and after application.

If the door manufacturer requires priming, apply a thin coat of Florida Paints 5350 Aquatra Industrial Acrylic Primer. Apply at no greater than 400-450 square feet per gallon at 3.6-4.0 mils wet to achieve 1.6-1.8 mils DFT. Allow the primer to dry 2-3 hours before recoating.

The finish paint should be a quality 100% acrylic resin satin or semi-gloss finish paint recommended for doors. Legacy Premium Exterior Acrylic Wall & Trim and Glades 100% Acrylic Wall & Trim paints are both excellent choices. Some colors will require multiple coats to achieve uniform opacity. If so, wait the manufacturer's recommended recoat time before recoating.

PREVIOUSLY PAINTED FIBERGLASS DOORS

Clean the door thoroughly before painting as per new door instructions, avoid pressure washing with greater than 2000 psi as it can damage the fiberglass, and inject moisture into the substrate that can later cause blistering. Remove any loose or peeling paint via scraping and feather sand the edges to reduce any profile ridges. Clean sanding dust and residue with low pressure (<2000 PSI) or a clean, damp cloth. For the best result, allow the surface to dry for 4-8 hours. Spot prime if needed and follow new construction coating recommendations.

If possible, allow the doors to dry for 3-5 days before installation or re-hanging. If these time frames are not possible and the doors must be hung and shut, we recommend applying a very thin layer of petroleum jelly to help prevent blocking. Blocking is when the newly painted surfaces stick to each other and, in extreme cases, can chip or peel. Apply to the door frame and along the edge of the door where it meets the frame. After a week, the layer of petroleum jelly can be removed with a clean, soft cloth followed by a subsequent cleaning with a mild dish washing solution. Do not use harsh chemical cleaners such as Pine Sol®, Formula 409, Fantastik®, etc. (see Florida Paints technical bulletin TB-05: Washing Latex Paints).

FOR MORE INFORMATION

If you need answers to questions about paint-related problems, please visit our website www.floridapaints.com or call our corporate office at (407) 986.1000.



Page 3 of 4 TB-12 2212

REFERENCES:

Hingst, J (2013, July 6). Testing for Outgassing. *Hingst's Sign Post.* https://hingstssignpost.blogspot.com/2013/07/testing-for-outgassing.html#:~:text=Fiberglass%20and%20other%20thermoplastics%20outgas,continue%20to%20outgas%20for%20years

Pella Corporation. (n.d.). *How to paint an entry door,* pellabranch.com, https://www.pellabranch.com/blog/global-blogs/how-to-paint-an-entry-door/

Jeld Wen Inc. (n.d.). *Finishing and Refinishing Instructions*. Jeld-wen.com. https://www.jeld-wen.com/en-us/documents?Document%20Type=Installation%20%20Finishing&query=finishing%20and%20refinishing



Page 4 of 4 TB-12 2212