

general finishing

Dakota Burl® and the BIOFIBER™ Wheat

Dakota Burl® and the BIOFIBER™ Wheat must be finished to enhance the full natural color/pattern and to provide proper product performance. The product is highly water resistant, but not waterproof or stain-proof in the raw, unfinished form.

Dakota Burl™ and BIOFIBER™ Wheat were designed as durable, decorative materials and will accept a variety of finishes that are designed for use with wood. Both of these decorative fiber panel products have a grain or porosity similar to an open grain hardwood. All finishes must be tested on an actual product sample and evaluated with the final application in mind

Dakota Burl™ and BIOFIBER™ Wheat samples are supplied with a high solid Ultra-Violet (UV) cured finish. UV finishes offer a level, ultra-smooth surface on Dakota Burl™ and BIOFIBER™ Wheat. This look will take several coats to achieve with conventional finishing methods. The manufacturer recommends spray applied catalyzed systems for most horizontal surface applications (see "Transaction Surface" section). These finishes are designed for their ability to resist scratching, achieve good adhesion, and have a high solids content. Our testing on Dakota Burl™ and BIOFIBER™ Wheat indicates that some lacquers and varnishes will achieve acceptable adhesion levels required provided a good quality sealer (sanding or vinyl) is used to seal and fill the surfaces prior to top coating.

preparation for finishing

Dakota Burl™, and BIOFIBER™ Wheat are open-grained materials with a porosity consistent with its' appearance. The sheet stock leaves the factory straight line sanded to 120 grit on both faces. Before finishing, sand with a random orbital sander to remove straight line sanding marks. Begin with lower grits (100 to 120) for removal of sanding marks, or blending of seams. Move up in sanding grit as needed until the desired smoothness and adhesion is achieved.

balanced construction & finishing

Dakota Burl™, and BIOFIBER™ Wheat, like wood, expands and contracts with changes in the atmosphere. Balanced construction (similar finishing on both faces of the panel) of the Dakota Burl™, and BIOFIBER™ Wheat is necessary to prevent warping.

colors and matching

Because Dakota Burl™, and BIOFIBER™ Wheat are comprised of natural rapidly renewable products; there will be some variation in color and pattern.

Before fabrication and final installation, the fabricator and end user should verify color/pattern coordination developed from an actual sample. When seam matching; inspect pattern and color prior to joining to ensure best match.

warranty

Using non-approved fabrication techniques or storage and handling methods will void product warranty unless approved in writing by the Environ Technical Service Department.

gluing

Most wood adhesives will adhere to Dakota Burl™ and BIOFIBER™ Wheat, but satisfactory performance depends on careful consideration of physical and chemical compatibility of the adhesive and the adherents, processing requirements, mechanical properties, durability, ease of use, color and cost. Other factors in adhesion performance are: quality of adhesive, surface quality and preparation, bonding process, type of joint, and service environment.

Adhesives typically used in the wood industry may be used to bond Dakota Burl™ to Dakota Burl™, BIOFIBER™ Wheat to BIOFIBER™ Wheat or Dakota Burl™ and/or BIOFIBER™ Wheat to wood. The following classes of adhesives are recommended for edge builds and seams:

PREFERRED - Polyurethane (such as Gorilla Glue or Franklin International Titebond Polyurethane Glue) - Amber liquid resin having great versatility. Excellent adhesion to Dakota Burl™ and/or BIOFIBER™ Wheat and wood. These types of adhesives are highly resistant to moisture and elevated temperatures and have excellent chemical aging resistance.

ACCEPTABLE - Crosslinkable PVA emulsions - similar to PVA's, but improved performance in moisture and elevated temperatures. Better performance than standard PVA glues.

ACCEPTABLE - PVA - Poly vinyl acetates "white glues" are easy to use, high in dry strength, have low resistance to moisture and high temperatures, and joints tend to yield under continued stress.

The above three types of glues are highly recommended when bonding Dakota Burl™ and/or BIOFIBER™ Wheat.

Testing of all glues, using an actual material sample piece, is recommended before final fabrication.

applications

The following represent standard edge gluing applications. Dakota Burl™ and BIOFIBER™ Wheat have the unique ability to be bonded to various wood species.

In edge-to-edge bonding, it is recommended to use dowels or biscuit techniques for improved mechanical strength of the bond and overall part strength. Edge gluing pieces that are greater than 3 inches in width requires dowels or biscuits.

dowel or biscuit insert

Follow manufacturer's application instructions.



DOWEL OR BISCUIT INSERT

edge building techniques

The following represents standard edge building techniques for transaction ledges, furniture, and other table top applications.

edge build