Wood Door Finishing Guidelines

Introduction

These guidelines are intended to help builders, contractors, homeowners and dealers more effectively choose finishing materials and finish wood garage door products, including any garage door with exposed wood or wood composite materials. **Please refer to the door manufacturer’s written instructions for specific finishing guidelines.**

**NOTE:** The recommendations in this Technical Data Sheet do not apply to factory finishes.

**IMPORTANT:** Unfinished wood (primed or raw wood) parts should never be left exposed to the natural elements. All six sides (front, back, top, bottom, and left, right) of each section must be finished using one, or a combination, of the coatings recommended below. It’s very important that the inside surface and edges are finished to prevent moisture penetration through the door.

**Recommended Finishing Products**

**Painting a door.** When painting a door, the finish coat must be compatible with the primer or base coat. A latex base coat or primer is typically recommended for use with a acrylic latex finish coat. Alkyd or oil based primers are typically suitable for both latex and oil based finish paints. Always follow the paint manufacturer’s application and refinishing instructions. A minimum of one (1) coat of primer paint and two (2) coats of exterior grade finish paint should be applied to all surfaces of wood parts.

**Staining a door.** Typical stain systems include a stain coat, sealant coat for moisture and UV protection, and a top coat for abrasion, scratch/mar and weathering protection. Some stain systems will combine several or all of these steps. When staining a door or using a stain type finish coat always select a high quality product that is recommended for exterior application on the type of material or wood species used on the door. Stains and stain finish systems vary widely in their recommended application and re-coat methods as well as intervals between re-coat or refinish. Always follow the manufacturer’s instructions for application and re-coating.
“Tannin” content. Some woods such as Western Red Cedar and Redwood have a higher tannin content, which is one of the properties making them resistant to rot and decay. This high tannin content can also cause “tannin bleed”. This is evident by a brownish coloration bleeding through the primer coat. When this occurs, a stain blocking type primer or intermediate coat must be used on the affected areas. If not treated, these areas will typically bleed through the finish coat of paint.

Dark colors. Dark colors are not recommended especially when the door has a direct southern exposure. Dark colors cause excessively high temperatures to develop on the door surface and coating which can lead to shrinking and cracking of the wood surface and rapid deterioration of the finish.

Varnishes and urethanes. Avoid film-forming finishes, such as varnishes and urethanes, which do not penetrate the wood. These types of finishes do not “breathe” (allow moisture vapor to pass) and typically trap moisture under the finish causing premature failure of the finish and discoloration of the wood.

Finishing Process

Caulking. All joints should be caulked with an exterior grade caulk prior to finish painting. In particular, many wood doors have a panel that sits in a slot on the rails. This slot is designed to be larger than the panel width to allow for expansion of the panel. Care should be taken to caulk these slots with a flexible exterior caulk after priming but before the finish coat is applied.

Finish coat. The finish coat must be applied prior to installation. It is much more difficult to adequately finish a wood garage door when hardware is mounted and the edges of the door are much less accessible.

Wood variations. Wood has a lot of natural variety, which may result in variations of color. If a uniform color is desired, care should be taken to achieve a uniform stain application. Wood doors intending to be stained should be specified as “stain grade”. “Paint grade” wood doors may be made of materials that cannot be stained.

Holes in door. When required, nail, staple or screw holes should be filled with an exterior grade wood filler, sanded and finished along with the rest of the door.
Warehousing or storing. When warehousing or storing unfinished wood garage doors prior to installation, caution should be taken to protect the wood parts from direct exposure to moisture conditions or other extreme environmental elements. Please note that moisture conditions can vary greatly, affected by geographical factors such as high humidity, rain, snow. Also, poured concrete, plaster and taped drywall are sources of moisture within a garage space and can be detrimental to an unfinished wood garage door during warehousing or storing. Moisture is typically evident by condensation on windows, floors, or metal fixtures within the garage. If it feels damp, provide ventilation. Always consult the garage door manufacturer’s warranty terms for guidelines on warehousing or storage.

Maintenance. For maintenance guidelines, see DASMA TDS-179.