

FINISHING, CARE & MAINTENANCE

Architectural Windows by B & B Engineering Corporation are manufactured with care and craftsmanship to ensure beauty and durability. Constructed of select pine and hardwoods, they are then treated with a water-repellant preservative. If you choose wood exterior surfaces, occasional painting will be required. B & B Engineering clad wood units feature exterior surfaces made of extruded aluminum with a thick coating of high performance paint.

FINISHING WINDOWS

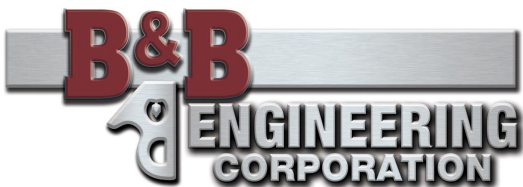
1. Temperature and humidity have a major effect on drying and may affect paint film characteristics. Paint should be applied at product, surface, and air temperatures between 50° F (10° C) and 90° F (32° C) unless product label specifies differently. Relative humidity should be below 85%.
2. Use only high-grade materials and follow manufacturer's instructions carefully to assure a long-lasting beautiful finish.
3. Surfaces to be painted must be thoroughly dry and free from dust or dirt, oil or grease, wax, chalk, or other contaminants. Remove dust or dirt by scrubbing or hosing. Remove oils, grease or waxes with paint thinner. If mildew is present, it must be removed prior to painting. Sand to remove any surface roughness and wipe clean.
4. Be sure that all nail holes, gouges or other surface indentations are filled before coating to ensure the performance of the topcoat.
5. Apply two coats of high quality trim paint to the exterior of primed units within thirty (30) days of installation. Failure to finish the primed surface within a thirty (30) day limit may require a new primer coat and will void the warranty. Again, be sure to apply paint in accordance with the manufacturer's directions.
6. Each coat of paint should be applied evenly. Make certain the surfaces are dry before applying the next coat.
7. Be sure to overlap paint or urethane by 1/16" onto glass to seal glazing and seal joint. Do not break this seal when removing paint from glass surfaces or when cleaning.
8. To the interior of your window units, apply a coat of high quality primer and two or three coats of trim paint. Or, if you desire a natural finish, apply a coat of sanding sealer and two coats of urethane.
9. Cellular PVC units can be painted with high quality acrylic latex. Heat reflective paint must be used for dark colors having an L value of 56 to 0.

CARE OF CLAD EXTERIOR

Occasional cleaning of the exterior aluminum surfaces will help maintain the luster of the original finish. Use a mild soap with water to clean the aluminum surfaces.

GLASS CLEANING

Glass surfaces should be cleaned regularly with a mild, non-abrasive commercial window washing solution in order to maintain visual and aesthetic clarity. Be aware that tempered glass



FINISHING, CARE & MAINTENANCE

surfaces are more prone to scratches when cleaning due to microscopic surface particles. Scraping with metal blades is not recommended for any glass surface since it may cause permanent damage. Read and follow the GANA Glass Information Bulletins: *Proper Procedures for Cleaning Architectural Glass Products*, and *Heat-Treated Surfaces are Different* before cleaning glass. The documents can be downloaded at the GANA website: www.glasswebsite.com or by calling GANA at 785-271-0208.

CONDENSATION

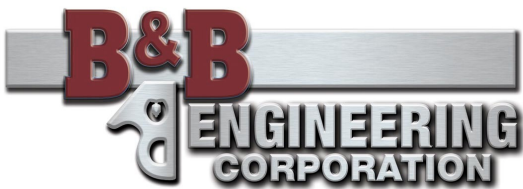
Condensation does not usually indicate a problem with the window. Condensation occurs when humid air meets a cool surface, such as a window. If the surface temperature is below freezing, then frost will form on the glass. Energy efficient homes can have a high humidity level if not properly ventilated.

GENERAL CARE

1. Window components are treated at the factory with a WDMA-approved water-repellent preservative in accordance with industry standard WDMA I.S. 4-05 Water-Repellent Preservative Non-Pressure Treatment for Millwork.
2. Store in a clean, dry, well-ventilated building; not in a damp, moist or extremely humid environments.
3. While in storage, cover to keep clean.
4. Windows should be conditioned to the average prevailing moisture (humidity) of the locality before installing.
5. Do not drop or jar window units; any jar or shock may break the glass or glazing seal or put the window out of square.
6. Be sure frame is square before unit is installed in opening. Use a diagonal brace across corners after frame is squared. A horizontal spacer strip at midpoint of the height of the frame will maintain equal width between jambs from head to sill. Remove brace and spacer strip after frame is anchored into wall opening.
7. Install and fit windows accurately in accordance with good building practice and/or with manufacturer's instructions.

STORAGE & HANDLING

Wood is hydroscopic and dimensionally influenced by changes in moisture content caused by changes within its surrounding environment. To assure uniform moisture exposure and dimensional control all surfaces must be finished equally. Certain species of wood, particularly oak, may contain extractives which react unfavorably with foreign materials in the finishing system. All exposed wood surfaces must be sealed. Water-based coatings on unfinished wood may cause veneer splits, highlight joints and raise wood grain. For further information on general care and maintenance of B & B Engineering Corporation products, please call us at 715-748-2288.



INSTALLATION INSTRUCTIONS

The following instructions are applicable for the following B & B Engineering Corporation windows: Aluminum Clad Wood, Wood and Cellular PVC.

These instructions do not address all the possible installation situations that might exist. For installations other than those referenced in these instructions, refer to *ASTM E2112-01, Standard Practice for Installation of Exterior Windows, Doors and Skylights*. The installer is responsible for consulting with a contractor, structural engineer, architect or consumer for proper installation according to local standard practices or codes and/or ordinances, which may supercede these instructions. Information for ASTM E2112 can be found on the ASTM website, www.astm.org.

To prevent water and air from entering the home, all windows must be properly flashed and /or sealed at the exterior perimeter. Flashing and sealing materials must meet all codes and be compatible with building exterior and window surfaces. Refer to ASTM E2112-01 for details. Perimeter sealant must be Grade NS Class 25 per ASTM C920. Using improper sealant could result in sealant failure causing water and air infiltration. Note: The nailing fin is not designed to be a weatherproof flashing.

1. Check the rough opening to be sure it is plumb, square and level. Check dimensions in both width and height.
2. Apply air barrier to the rough opening per ASTM E2112-01 section 8.1.1.3.3.
3. Apply a self sealing adhesive membrane on the sill of the rough opening. Cut the sill flashing long enough to extend an equal distance beyond the jamb flashing.
4. Before setting the window into the rough opening, apply a 3/8" diameter continuous bead of sealant around the perimeter of the nail fin for aluminum clad wood products or the brickmould for wood or cellular PVC products. Sealant must be Grade NS Class 25 per ASTM C920.
5. Install the window, shimming and adjusting to square, plumb and level. Check the center width to avoid bowing.
6. Fasten through the nail fin on aluminum clad wood products and through the brickmould and sill nose on wood or cellular PVC products with galvanized nails long enough to penetrate the frame by 1" minimum, spaced no closer than 3" from each corner, and 6" to 8" apart thereafter.
7. Lap vertical strips of self sealing adhesive membrane onto the unit or casing and out over the air barrier. Make small cuts at the head jamb to allow the membrane to fit around the corner of the window frame.
8. Lap strips of adhesive membrane at the head jamb or head jamb casing over the air barrier. This flashing should extend past the vertical flashing.
9. Fold the head flap of air barrier down over the head jamb flashing. Apply seam seal tape over the diagonal cut in the air barrier. Make sure the tape laps onto the window frame or casing. Tape and seal any seams and fasteners directly above the unit.
10. Insulate from the home's interior around the edge of the frame. Pack the insulation loosely. Some building codes require foam type insulation to form an infiltration seal. Use only low expansion type foam in combination with fiberglass insulation. Foam and foam application must conform to ASTM E2112-01, sec. 5.9.2. Follow all instructions and warnings from the foam manufacturer.
11. After the siding is installed, apply a continuous bead of sealant around the perimeter of the window that meets Grade NS Class 25 per ASTM C920.