

BEADBOARD CEILINGS AND SOFFITS

Always isolate beadboard from framing members and soffit/attic spaces. Moisture and humidity and any liquid water intrusion will alter the moisture content of beadboard and could radically affect the installation. Provide adequate ventilation for all beadboard installations, and use best building practices to provide for normal swelling and shrinkage. Break up long spans with beams or other decorative trim.

FIELD CUTS

Prior to installation, all trim board surfaces exposed by jobsite field cuts must be re-primed. Coat all exposed surfaces including the bottom edge. In wet climates, also treat field cuts with a water repellent preservative.

Re-priming End-Grain

100% acrylic-latex primer is acceptable as long as it is able to properly cure according to the primer manufacturer's instructions. However, where temperatures drop below 50 degrees Fahrenheit either during application or within the curing period, use an alkyd oil wood primer to coat end grain exposed by jobsite cuts. Trim boards with end cuts coated with alkyd oil primer can be installed before drying without compromising the coating's effectiveness. Always follow the coating manufacturer's recommendations.

Re-priming Other Exposed Surfaces

Exposed trim wood surfaces other than end-grain must be re-primed with high quality 100% acrylic-latex primer. In temperatures above 50 degrees Fahrenheit, re-prime these other exposed surfaces with high quality 100% acrylic-latex paint. For temperatures between 35 and 50 degrees, use a low-temperature acrylic-latex primer. The curing temperature must remain above 35 degrees until the coating is cured according to manufacturer's instructions.

Below 35 degrees pre-cut the trim and take it into a heated building where the temperature is maintained above 50 degrees Fahrenheit. Ensure the trim is dry and then prime the cuts with a 100% acrylic-latex primer. Allow the re-primed trim to dry overnight and then proceed with installation.

FINISHING

Paint WindsorONE+ trimboards with two coats of high-quality, 100% acrylic-latex paint as soon as possible after installation, preferably within 90 days but no later than 1 year after installation, according to industry best practices. The surface must be free of dust, dirt or mildew before painting. Wash away any foreign material with water and a mild detergent, and allow the surface to dry before painting. Apply paint according to manufacturer's specifications and recommended spread rates and number of coats. Do not use paints with vinyl-based resin combinations. Brush application of primers and top-coats ensures best coverage and protection.

CAUTION: Wood dust produced by sawing, sanding, or machining wood and wood products can be hazardous.

- Wood dust is flammable and a possible explosion hazard.
- Wood dust may cause respiratory, eye, and skin irritation.
- Wood dust may cause dermatitis or allergic response.
- The IARC classifies wood dust as a nasal carcinogen in humans.
- The NTP classifies wood dust as a human carcinogen

LIMITED AND CONDITIONAL WARRANTY

For warranty information visit: www.WindsorONE.com/protected



WindsorONE+™ Exterior Trim Installation Guide

WindsorONE+™ is approved for interior applications.

WindsorONE+ trimboards are manufactured to give years of satisfaction and beauty to owners of elegant homes. The best service will result from installation according to traditional "best practices" for wood construction. These instructions are intended to give installers of WindsorONE+ trimboards a reference to ensure they recall these best practices.

If this is your first time using WindsorONE+ trimboards, be sure to read the complete "WindsorONE+ Exterior Installation and Maintenance Manual and Limited Warranty" before starting. Available at www.WindsorONE.com/protected or at your WindsorONE+ dealer.



IMPORTANT: Failure to install or maintain WindsorONE+ Protected wood trimboards in accordance with applicable building codes and these instructions may affect its performance and void the limited warranty.

DESIGN AND CONSTRUCTION CONSIDERATIONS

Every building structure should be designed and constructed to minimize any possible infiltration of moisture. Moisture infiltration can be reduced and controlled by incorporating construction practices that:

- Do not allow moisture to accumulate for extended periods without runoff;
- Minimize moisture penetration by sealing and flashing; and
- Allow water that has penetrated the exterior envelope to easily drain away from the structure.

The use of flashing around wall penetrations, such as around window and door openings, can reduce moisture, but the performance of any building system depends on how its entire design and construction addresses local environment and climate conditions, building codes, and product and material limitations. Design and installation of flashing and sealing systems are the responsibility of the architect, contractor and installer, not that of the manufacturer of the building materials.

BEFORE YOU BEGIN

- Ensure window and doors are installed in accordance with the manufacturer's instructions and local building code.
- Ensure flashing is installed at all windows, doors, bandboards, fascia, skirts, posts, and other areas where moisture must be directed away from the building.
- Ensure housewrap/building paper is installed in accordance with the manufacturer's instructions and local building code.
- Ensure that WindsorONE+ trimboards are not installed directly over rigid foam insulation. Use furring strips to create an air space and a building wrap directly against foam insulation.
- Before installation, protect WindsorONE+ trimboards from exposure to direct sunlight, water saturation, and dirt. Do not allow it to come in contact with the ground.
- Ensure that the WindsorONE+ trimboards are dry. Do not install trim that has a moisture content above 18%.
- During cutting and handling, avoid marring and scuffing WindsorONE+ trimboards.
- After cutting, re-coat all exposed surfaces with 2 coats of high quality exterior paint to 3 mils of dry finish.
- Rainscreen wall construction is strongly recommended.

MOISTURE CONTENT

Do not install trim with moisture content higher than 18%, and ensure this by use of a moisture meter to gauge moisture content levels for all installations. WindsorONE+ trimboards are shipped with an average moisture content of 10% to 14%. Storing material in humid environments or near concrete or dirt will increase the moisture content. Storing material in unheated or unconditioned environments during wet winter or summer months will also increase moisture content, resulting in expansion and potential joint failure. Condition the trimboards on the jobsite by allowing it to adjust to equilibrium moisture condition.

FASTENERS AND FASTENING REQUIREMENTS

Nails should be driven with care. Heavy nailing distorts the wood and may cause splitting. Like all wood products, WindsorONE+ trimboards should be hand-nailed. The use of pneumatic fasteners is discouraged for exterior use; but, if used, they must employ stainless steel nails and a flush nailing device to ensure that nails are driven snug with the surface. Overdriven nails that are not filled with exterior putty will void the limited warranty.

For fascia application, WindsorONE+ trimboards must be double nailed and fastened at a maximum of 24 inches on center. For all other applications, fasten trim 24 inches apart using a staggered nail pattern or double nail 16 inches on center. Double nail all joints and do not nail any closer than 2 inches from the edge of material without drilling pilot holes. Stagger nails on either side of trim. Nails must penetrate 1 ¼ inch into the solid wood framing.

BUTT JOINTS

All joints where two pieces meet end to end must occur over framing. Butt joints are recommended for both horizontal and vertical trim. In runs of 16 feet or less, the ends should lightly touch. Runs over 16 feet require a gap of 1/8 inch, which should be sealed with exterior caulk. Attach to the framing members with two nails on each side of the joint. Drill pilot holes first to avoid splitting.

CORNER BOARDS

Always ensure that fasteners penetrate solid framing members. To create a tight joint between the two corner boards, increase the nailing frequency along the outer side of the corner boards. Nail into strapping every 24" and pre-drill and fasten along the edge every 16" by pre-drilling holes and inserting stainless steel wood screws. Stainless steel trim-head screws will reduce the possibility of splitting and joint failure. Joints should be glued. Use high-quality, exterior polyurethane adhesives specifically designed for wood and wood substrates. Caulk wherever siding or other material is in contact with the corner boards

FASCIA AND RAKE BOARDS AT CORNERS

When framing members (rafters, outlookers, etc.) are not located where WindsorONE+ trimboard pieces join, install solid blocking first and then nail the trim to it. Fasten from the face of one trim member into the edge of another by pre-drilling pilot holes and inserting stainless steel wood screws. All joints should be glued.

CLEARANCE

Trim that extends down to a roof (dormers, second floors, etc.) and decks requires a minimum 2-inch gap to avoid wicking. Water table or skirt boards and corner boards must be a minimum of 8 inches above the grade.

HORIZONTAL UNFLASHED PROFILES

All horizontal unflushed profiles must be sloped to ensure drainage. These profiles should be pitched 15 degrees.

FLASHING

Flashing is an important line of defense against moisture in wall assemblies. Use flashing to intercept and direct the flow of water away from the building to designed drainage paths. Install horizontal flashing extending from the top of all windows and doors and where there is any change in material or direction. The flashing should tilt downward to allow water to drain away from the wall. Do not caulk where the flashing and trim or other materials meet. Caulking in lieu of flashing is not acceptable.

Use fascia flashing to support the shingle edge and to provide a drip edge to prevent water from running back underneath the roofing shingles and down along the fascia and soffit. Preformed eaves flashing/drip edge should be installed under the starter course of the shingle roofing. If eavestroughs (rain gutters) are used, the flashing edge also helps to direct the water into troughs. Fascia flashing protects both the soffit and the fascia board, and provides a drip edge at the bottom edge to direct water away from the building. The use of rain gutters/eavestroughs is highly recommended to catch and redirect the flow of water down and away from walls.

Flash window and door headers to intercept water from behind the siding and direct it to the outside, and to redirect water flowing down the face of the wall to flow away from the wall opening. Some of the moisture will drain through the weepholes or gaps at the bottom of each siding panel. An additional head trim flashing is required at the head of the window/door to direct water further outward, beyond the thickness of the window or door frame that protrudes from the face of the wall.

CAULKING

Use exterior grade high-performance acrylic-latex, silicone, acrylic, or urethane caulks and sealants to seal gaps around windows, doors, corners, and other exterior joints that are exposed to potential water intrusion. Caulking is not a permanent solution and as such requires regular maintenance. If not inspected and maintained, caulking may fail and trap water, creating severe moisture problems. Do not rely on it as the only barrier to moisture penetration. Do not caulk areas that will prevent moisture from escaping the wall cavity (e.g., under windows and around flashing). Avoid three-sided adhesion. The caulk should only adhere to the two surfaces that create the opening in the surface plane, not to any rigid substrate behind. For gaps wider than ¼ inch, insert a backer rod into gaps where caulk seals are to be made, and then caulk over. In all cases, follow the caulking manufacturer's recommendations.

DECORATIVE COLUMN WRAPS

Columns wrapped in WindsorONE+ trimboards must be constructed to incorporate an air cavity between the WindsorONE+ trimboards and the underlying core. Ventilation and drain holes must be included at the top and bottom to ensure proper airflow.

SUBSTRATE CONTACT

When using WindsorONE+ trim to face building materials such as treated lumber, structural beams and posts, or any framing material, always apply housewrap before installing any finishing material. Where WindsorONE+ trimboard is used to finish rim joists, protect the top edge from water intrusion by applying a strip of self adhesive membrane over the rough rim joist and WindsorONE+ trimboard. To prolong the life of exterior trim and exterior paint, use rainscreen technology (i.e., rainscreen walls and rainscreen housewrap products).