



Royal MacLumber

Installation Instructions for Royal MacLumber Trimboards

Product Use

Royal MacLumber Trimboards are intended for non-structural trim applications such as fascia, frieze, corners, rakes, band boards, water tables, soffits, window/door trim, column covers, deck trim, garage door trim, etc. These Trimboards are premium performance products that consist of a unique plastic/wood composite core with a continuous solid outer cap that is pre-finished, or can be field finished in any color. They are available in the nominal thickness of 5/8, 4/4 and 5/4 (actual thickness are 5/8", 3/4" and 1") in standard lumber widths up to 12".

General Application Instructions

Royal MacLumber Trimboards may be installed wherever wood trim can be used. It can be fastened directly to 2X structural members or applied over sheathing or other materials, as long as there is 2X framing underneath to receive the fastener (see "Fastening" section). Framing members or nailing supports should be spaced no greater than 24" o.c. Also, unlike wood based trims, Royal MacLumber Trimboards can be brought down to grade and placed in contact with concrete and other masonry materials without fear of deterioration.

Storage

Trimboards should be stored off the ground to keep them clean and damage free, and on a pallet or over stringers spaced no more than 30" apart (18" from ends) to keep them flat. It is recommended that they be covered to keep them clean.

Cutting

Royal MacLumber Trimboards can be cut with normal woodworking hand and power saws. For handsaws, a fine-tooth version works well, while with power saws, a combination blade is preferred. In addition, the best performing blades have a tip of either carbide or steel which is slightly wider than the blade itself. This type of blade tends to reduce heat build-up, and reduces any tendency for the plastic to melt.

Profiling and Drilling

As with cutting, normal woodworking tools and equipment can be used to route, mill and drill the edges and face of Royal MacLumber Trimboards. These machining operations will not reduce the exterior durability of the Trimboard, however, where the core is exposed, some color change will occur during weathering. When the core is exposed on an end or in a small face area, no additional treatment is necessary; unless an aesthetic touchup is desired. As with most plastic materials, lower RPM head speeds and higher feed rates usually give the best results. To prevent melting plastic, avoid too much heat build-up on the tool.

Fastening

Royal MacLumber Trimboards can be applied with either hand or power driven nails or screws. To avoid building in stresses, always fasten from one end to the other or from the middle out. Never fasten from both ends to the

middle. The underlying base to which the Trimboards are fastened must be a minimum of 2X framing and provide adequate thickness for the fastener. Nails should penetrate the framing or nailing base at least 1-1/2", while screws should penetrate at least 1". The number of fasteners, the fastener spacing and the shank diameter of the fastener can be found in the below table for each Trimboard width.

Number of Fasteners every 16 inches*

Trimboard Width	Gauge of Fastener				
	15 Gauge (.069")	14 Gauge (.077")	13 Gauge (.092")	12 Gauge (.106")	11 Gauge (.120")
4 inches	3	3	2	2	2
6 inches	4	4	3	2	2
8 inches	4	4	4	3	2
10 inches	Don't Use	Don't Use	4	3	3
12 inches	Don't Use	Don't Use	5	4	4

*If framing spacing is 24" o.c., increase the number of fasteners at each location by one.

Spacing of 16"o.c. or less is preferred. More fasteners and larger diameter fasteners reduce thermal movement. Place fasteners no closer to the edges and ends than 5/16". The type of head on the nail will not effect performance. Typical acceptable nail head types would include box, siding or finish, or any type that can be driven flush with the surface. Typical screw types would be wood, finish or deck screws or any type with a counter-sinking head so they can be screwed flush. All fasteners must be corrosion resistant. If the Trimboards will not be painted, a painted white nail is recommended, or drive the nails flush and touch-up the heads.

Adhesives

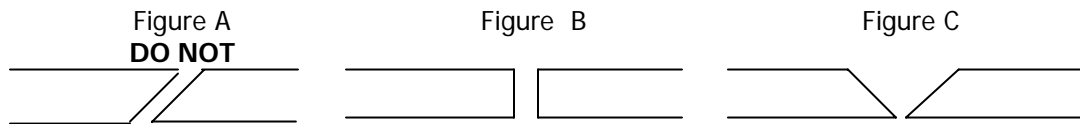
For traditional house trim applications, adhesives can be used as a supplemental fastening method, but they cannot replace the required mechanical fastening described in "Fastening." When using adhesives for this type of application, choose a weatherable exterior construction adhesive that is moisture proof. For best results, use one containing MEK.

For heavy-duty applications, such as furniture, shelving, etc. an adhesive like Christie's Red-Hot (T. Christy Enterprises, Orange, CA. 1-800-BLU-GLUE), Oatey All Purpose Cement (for ABS, PVC, etc.) or equivalent is recommended. For all applications, follow the adhesive manufacturer's recommendations.

Butt Joints

As with all composites and plastic building materials, Royal MacLumber Trimboards expand and contract with temperature changes. This results in the butt joints opening and closing. The below recommendations, along with the those under "Fastening," will help minimize the amount of movement, and create expansion/contraction joints at certain butt joints.

- 1) Butt Joint Configuration: DO NOT scarf or bevel butt joints as shown in Figure A to prevent over-ride. Butt joints should be square cut (Figure B) or reverse beveled at 5 to 10° to create a triangular gap with the top of the triangle at the face (Figure C).



- 2) Expansion/Contraction Joints: Any run over 12 foot with butt joints should have an expansion joint as follows; leave 1/4" gap if applying below 45°F; leave 1/8" gap if applying above 45°F.
- 3) Joint Sealant: The recommended joint sealant for the expansion/contraction joint is Ohio Sealants' Quad brand (800-624-7767). It is recommended that the Quad be applied to the end of the one Trimboard before the other one is butted to it. Apply the sealant to the front 1/3 to 1/2 of the joint to allow the sealant to fold into the vacant area during expansion. Make sure both sides of the joint have good contact with the sealant. Touch up irregular areas in the joint with more sealant and tool normally.
- 4) Outside Comer Butt Joints: Where two Trimboards meet at an outside comer, miter the joint, apply Quad sealant in the joint, and tightly cross nail the two Trimboards together.
- 5) Butt Joints with Another Material: Where Trimboards butt into another material, leave a gap as in 3) above and fill the joint with Quad.
- 6) Nailing at Butt Joints: All butt joints should be nailed on both sides of the joint and nail no closer than 5/16" to any edge or end.

Caulking

For expansion/contraction joints, as described under "Butt Joints," OSI Quad Sealant (800-624-7767) is recommended. For other applications, such as filling countersunk nails, damaged areas, etc., a good quality acrylic latex caulk is also acceptable.

Field Finishing

Royal MacLumber Trimboards come with a durable prefinished surface that does not require further field finishing. However, the Trimboards can be painted at any time. To paint either new or weathered Trimboards, it is recommended that the surface be dry and free of dirt, dust, mildew, oil or other contaminants. Damaged areas, over-driven nails, etc. should be filled with caulk or an exterior filler.

For best results, first either scuff sand the surface (with 150-200 grit) sandpaper or apply one coat of a fast drying, tenacious primer like Zinsser acrylic latex primer/sealer (or equivalent) or do both. Then apply one or two coats of a compatible acrylic latex paint. The sanding and/or priming step can be skipped, but expect that the paint adhesion will develop slowly, and the new paint coat will be "tender" for several days. When the application is during a cool, damp time period, both the scuff sanding and the primer application are recommended to promote faster drying, and subsequently better adhesion of the top coat.

In all instances, follow the paint manufacturer's directions, especially regarding spread rates, application procedures and weather-related requirements. Use only top quality paint and primers. Stains (solid or semi-transparent), oil/alkyd paints and primers, vinyl-based paints, cement paints or shake and shingle paints **ARE NOT** recommended since they either do not work well on non-porous surfaces, or are of questionable quality.

Repair and Maintenance

Repainting: If Royal MacLumber Trimboards have never been painted, the instructions under "Field Finishing" should be followed. However, if the Trimboards have a previously applied coating, additional surface preparation steps may be required. The degree and type of surface preparation necessary is dependent on the old finish. Loose paint materials should be removed by sanding and scraping. If there are glossy or unweathered areas, scuff sand those areas to create "tooth" for the new coating. Clean the surface as described below and remove any mildew before painting. If the old paint coat is in good condition, repriming may not be necessary. Otherwise, proceed with priming and painting as described in the "Field Finishing" section.

Cleaning: Removal of most dirt and soil can be accomplished with plain water and a garden hose. For more stubborn contaminants and stains, common household cleaners can be used. For really difficult situations, solvents like paint thinner and denatured alcohol can be used. Cleaners containing acid, acetone or MEK are not recommended. Permanent stains can be removed with a very fine sandpaper (220 grit or higher). Mildew can be removed with one of the commercially available mildew washes, or a solution of TSP (2/3 cup), detergent without ammonia (1/3 cup), sodium hypochlorite bleach (1 qt) and warm water (3 qts). Follow all precautions for handling and applying chemicals and cleaners.

Damage: Trimboards can become damaged from a variety of sources both before and during installation, as well as during their service life. While most damage will not affect the product's durability, it may be desirable to improve the aesthetics. Most surface damage (over-driven nails, gouges, etc.) can be filled and touched up with matching caulk, exterior filler and/or paint. Shallow scrapes and scratches (from lawn mowers, weed whackers, etc.) that do not penetrate the cap can be diminished with fine sandpaper or steel wool. "Green scratchers" can be used to remove mars and minor scrapes.

If there are further questions about Royal MacLumber Trimboards, please write or call:

J-Mac Lumber Inc.
4154 Faust Street
Bamberg, SC 29003

Sales@MacLumber.com
803-245-1700
Fax 803-245-1701