



Royal MacLumber

Questions and Answers

1. Q: What is it made from?
A: Royal MacLumber Exterior Trim is a co-extruded composite material. The core is a combination of wood and a proprietary blend of thermoplastic resins and additives. The cap is a patented, UV stabilized, ASA acrylic polymer that was developed specifically for Royal MacLumber Exterior Trim for its superior weatherability.
2. Q: How is it made?
A: Royal MacLumber Exterior Trim is made with a unique co-extrusion process, which combines a foamed core with a solid cap. Additionally, the core contains wood fiber (to enhance physical properties) which is also unique in foamed extrusions.
3. Q: Do I have to paint it?
A: Royal MacLumber Exterior Trim does not have to be painted. The surface is designed to be weatherable and paintable. The ASA cap material is known for its superior weatherability, and has logged several thousand hours of accelerated weathering without failure or noticeable appearance changes. However, it may be painted for aesthetic purposes.
4. Q: Will it turn yellow?
A: No! The acrylic component in the ASA cap is known for its color stability, and resistance to yellowing and color change. In fact, Royal MacLumber Trim is guaranteed against noticeable color change for 15 years.
5. Q: Can I paint it?
A: Paint will perform very well on the ASA cap as well as on any cut edge or end where the core is exposed. Unlike many other Trimboards (solid wood, plywood, OSB, MDF, hardboard, etc.), Royal MacLumber Trim has no water absorption in service, and hence, there is no grain raise, end wicking, substrate wetting, cracking or significant thickness change - all of which cause typical paint failures.
6. Q: How do I paint it?
A: For the 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 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.

Other general guidelines to follow for painting include:

- Make sure all surfaces are dry and free of dust, dirt, mildew, oil or other contaminants before finishing.
- Follow the paint manufacturer's instructions.
- Use only top quality paints.

- Stains (solid or semi-transparent), oil/alkyd paints and primers, vinyl latex 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.

7. Q: What colors can I paint it?

A: Any color can be used to paint Royal MacLumber Trim. Royal MacLumber's heat deflection temperature is above 200°F, which is considerably higher than that of other materials, and therefore, can withstand high heat build-up without warping or distorting.

8. Q: How does it cut?

A: Royal MacLumber Trim will cut very similarly to wood since it is of a comparable density. However, without grain direction and knots there is much less chipping and splintering. A combination blade works well for both ripping and cross cutting, however, the best performing blades have a tip of either carbide or steel which is slightly wider than the blade itself. This design reduces heat build-up and avoids any significant melting of the plastic.

9. Q: How about sanding?

A: Sanding is also similar to wood with a couple of distinctions. While hand sanding will be similar, power sanding may be slightly more difficult if one allows too much surface heat build-up resulting in melting the ASA and plugging the sandpaper. Also, keep in mind that it is usually not desirable to sand through the ASA cap.

10. Q: What about routing, drilling and other woodworking operations?

A: Routing, planing, drilling and shaping all work well with normal woodworking tools and equipment. These machining operations will not reduce the water resistance of the Trim, 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.

11. Q: How does it nail?

A: Royal MacLumber Trim nails much like wood with a couple of significant improvements. It can be nailed within 5/16" of an edge or end without splitting, and the nails can be "set" with no fear that water will swell or peel the area around the nail. If you miss the nail, it will dent about the same as wood.

12. Q: What about nailing in very cold weather?

A: As with the other exterior plastic trim, Royal MacLumber will get stiffer and more susceptible to breakage as the temperature drops. However, testing suggests that it has better cold working properties than other plastic trims due to the wood content, the type of materials utilized and the cell structure of the core. It is generally not recommended that the product be applied when the temperature is below 0° F.

13. Q: What kind of nails and fasteners should I use?

A: Either power-driven or hand-driven nails or screws are acceptable, however, in all instances, the fasteners should be corrosion-resistant. The best corrosion resistance is typically achieved with hot dip galvanized or stainless steel fasteners. If Royal MacLumber Trim will not be painted, it is recommended that a painted white nail be utilized, or slightly set the nail and touch up the head with caulk or paint. All nails should be of sufficient length to penetrate the underlying framing a minimum of 1-1/2", while

screws should penetrate at least 1".

14. Q: How many fasteners should I use and does the gauge of the fastener matter?

A: More fasteners and larger diameter fasteners reduce the amount of expansion/contraction. (Also, see Questions 20, 21 and 22.) The number of fasteners, the spacing of the fasteners and the gauge of the fastener varies for each Royal MacLumber product. See the appropriate application instruction sheet for specific recommendations.

15. Q: What about glue?

A: For traditional trim applications, adhesives can be used as a supplemental fastening method, but they cannot replace the required mechanical fastening described in the relevant application instruction sheet. 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.

16. Q: Can I use caulking?

A: Yes, caulking and sealants can be used. When creating an expansion/contraction joint, such as butt joints or where the Trim butts to another material, use OSI (Ohio Sealants, Inc.) Quad Sealant. Also, see Questions 20, 21 and 22. When filling nail sets, damaged areas, etc., a good quality acrylic latex caulking is also acceptable.

17. Q: How do I clean it?

A: 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.

18. Q: Do field cut ends need special treatment?

A: The core of Royal MacLumber Trim is a woody tan color, and will fade and change color if exposed directly to sunlight. This will not effect its performance - only its appearance. For aesthetics, it is suggested that any exposed end be touched up with paint or caulk. (See question 10)

19. Q: How do I store it?

A: Royal MacLumber Trim should be stored off the ground to keep it clean and damage free. It should be kept flat either on a pallet or over stringers no more than 30" apart (18" from ends). It is recommended that the trim be covered to keep it clean and ready for installation.

20. Q: What about expansion?

A: As with all composites and plastic building materials, Royal MacLumber Trim expands and contracts with

temperature changes. This results in the butt joints opening and closing. The below recommendations in Questions 21 and 22, along with the fastening recommendations in the application sheets will help minimize the amount of movement, and create expansion/contraction joints at certain butt joints.

21. Q: How do I treat the butt joints for Tongue-and-Groove Panels?

A: For Tongue & Groove Panels, visible, random butt joints are not recommended. See the T&G application sheet for specific recommendations.

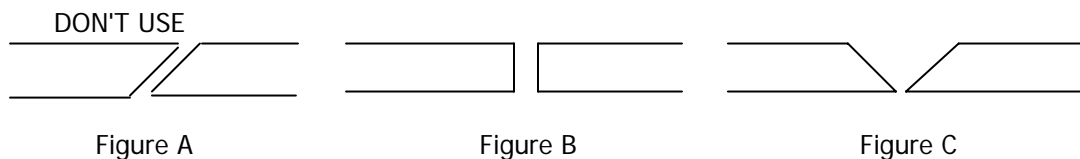
22. Q: How do I treat the butt joints for Trimboards and Moldings?

A: For Trimboards and Moldings, the following recommendations apply:

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 Trim 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 Corner Butt Joints: Where two pieces of Trim meet at an outside corner, miter the joint, apply Quad sealant in the joint, and tightly cross nail the two Trim pieces together.

5) Butt Joints with Another Material: Where Trim butts 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.

23. Q: Is it toxic?

A: During normal construction use, the precautions that are commonly used around wood dust should be observed.

24. Q: What about burning?

A: Like all organic materials, plastics and wood are combustible and will burn.

25. Q: What sizes does it come in?

A: Royal MacLumber Trimboards are available in 16' lengths, three thicknesses (5/8", 3/4" and 1") and several standard widths.

Brick mold comes in 17' lengths.

Tongue and Groove panels are 5/8" x 4" or 6" x 16'.

Inside and Outside Corner Posts are 5/4" thick x 10' or 20' lengths.

26. Q: What are the grade specifications for Trimboards?

A:

- Royal MacLumber Trimboards have four good faces.
- Minor surface imperfections are allowed on both faces, but no voids.
- The faces will be flat within 1/64 " on narrow boards and 1/32" on wide boards.
- The length tolerance is minus zero, plus 2".
- The width tolerance is plus or minus 1/32".
- The thickness tolerance is -.010", + .030".
- The color shall be plus or minus 1.2 Delta E.

27. Q: What are the potential uses?

A: Royal MacLumber Exterior Trim is intended as exterior trim for single family, multifamily and light commercial buildings and can be used for both remodeling and new construction. The typical uses will be fascia, frieze, comers, rakes, band boards, window/door trim, soffits, porch ceilings, etc.

28. Q: Will water affect it?

A: In 24-hour submersion tests, there are no weight and dimensional changes.

29. Q: What is the warranty?

A: The warranty on Royal MacLumber Exterior Trim is a limited lifetime guarantee against rot, delamination, swelling, warping, splitting, checking, moisture absorption and termite infestation. Additionally, the product is warranted against significant color change for 15 years.

30. Q: How much does it cost?

A: Royal MacLumber Trim is usually less costly than select grades of redwood, cedar and pine, but comparable to other plastic or composite trim. Of course, lower grades of spruce, pine and fir boards are less expensive, however, when you consider the initial cost of painting wood trim, plus the repainting and replacement (rot, checks, cracks) costs every 3 to 5 years, Royal MacLumber becomes very cost effective.

31. Q: What is the difference between Royal MacLumber and its Trim board competitors PermaTrim, Synboard, Celtec and Azek?

A.

- Royal MacLumber is a co-extruded composite with an ASA cap and a wood/plastic core, while all of these competitive products are straight PVC without a cap and without wood additives.
- Royal MacLumber has four useable sides, while PermaTrim has two usable sides.
- Royal MacLumber and PermaTrim are profile extruded to width and thickness, Synboard, Celtec and

Azek are made into wide sheets and ripped to width giving rough edges.

- Royal MacLumber, PerrnaTrim and Azek/Celtic are prefinished Trimboards that can be painted, while Synboard, is not prefinished and must be painted.
- Royal MacLumber can be painted any color, even dark colors, whereas the competitors can only be painted lighter, pastel colors.
- Royal MacLumber will not yellow or change noticeably in color over time, while PVC tends to yellow from exposure to UV light.

32. Q: Where can I get complete application instructions, warranty information, and other technical data?

A: Call or write to the below address or ask your local supplier.

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

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