

Free Foam Cellular PVC for Trim, Moulding, Profiles and Fabrication



INSTALLATION GUIDE



STORAGE AND HANDLING

- Store Palight Trimboard on a flat and level surface. Because Palight Trimboard products are more flexible than wood, they may conform to uneven surfaces.
- Palight Trimboard has a density comparable to pine and should be handled as pine would be handled to avoid damage.
- Palight Trimboard pallets are shipped from the manufacturer with a protective vinyl cover. If the pallet cover has been removed, take additional care to keep product free of dirt and debris at job site.

CUTTING

Palight Trimboard can be cut with the same tools used to cut lumber. Carbidetipped blades that are designed to cut wood perform well. Avoid using fine-tooth metal cutting blades.

Rough edges from cutting may be caused by excessive friction, inadequate board support, worn blades, or incorrect tools.

Circular Saws Carbide-tipped, triple chip, ground-type circular saws can be used to cut Palight Trimboard. The following settings are recommended:					
Clearance Angle	Cutting Speed	F	Feed	Tooth Pitch	
10-20	4,000 – 8,000 ft. per minute	70 – 90 ft. per minute 0.080'		0.080"-0.040"	
Band Saws High-speed steel blades recommended for wood or plastic can be used for Palight Trimboard based the following guidelines:					
ich 🛛	Cutting Speed		Feed		
	3,000 – 5,000 ft. per minute	Up to 40 ft. per minute			
	iple chip, ground- llowing settings a Clearance Angle 10 – 20 blades recommer the following guic	iple chip, ground-type circular saws illowing settings are recommended: Clearance Angle Cutting Speed 10-20 4,000 - 8,000 ft. per minute blades recommended for wood or p the following guidelines: ch Cutting Speed 3,000 - 5,000	iple chip, ground-type circular saws can be illowing settings are recommended: Clearance Angle Cutting Speed 10 - 20 4,000 - 8,000 ft. per minute 70 ft. per blades recommended for wood or plastic cat the following guidelines: catting Speed ch Cutting Speed 3,000 - 5,000	riple chip, ground-type circular saws can be used to cut illowing settings are recommended:Clearance AngleCutting SpeedFeed $10-20$ 4,000-8,000 ft. per minute $70-90$ ft. per minuteblades recommended for wood or plastic can be used the following guidelines: chCutting SpeedCutting SpeedchCutting SpeedU	

Saber Saws

Rough-cut type blades ground for plastics can be used on Palight Trimboard sheets. Smooth metal-cutting blades are not recommended.

DRILLING

Palight Trimboard can be drilled with carbide-tipped bits using twist drills recommended for metals. The following settings are recommended:

Point Angle	Spiral Angle	Relief Angle	Cutting Speed	Feed Rate
Between 90 – 110	30	10	150 – 1,300 feet per minute	0.01" – 0.02" per rev

The minimum distance from the edge should be 2 times the hole diameter.

In an effort to reduce heat buildup during drilling of thicker Palight material, it may be necessary to periodically remove the drill bit.



MILLING

Palight Trimboard can be milled using standard milling machines of various types, following these guidelines:

Relief Angle	Rake Angle	Cutting Speed	Cutting Feed
5-10	-10-0	3,000 – 3,500 feet per minute	0.12" per rev

ROUTING

Routing Palight Trimboard provides a crisp, clean edge. Palight Trimboard can be easily routed using standard router bits and the same tools used to rout lumber. Adjust feed and speed rates as needed to achieve the best edge finish. Carbide tipped router bits are recommended.

THERMAL EXPANSION & CONTRACTION

As with most plastics, Palight Trimboard will expand and contract with an increase or reduction in temperature. This material property is known as the coefficient of linear thermal expansion (CLTE). By comparison, wood expands and contracts due to changes in moisture content.

Because Palight Trimboard can be used in a wide variety of indoor and outdoor applications, linear thermal expansion and contraction should be considered during the fabrication and installation of the material. That means it is important to take in to account the temperature of both the product and the environment when determining gapping during installation.

When properly fastened, allow 1/8 inch per 18 foot of Palight Trimboard for expansion and contraction. Joints between pieces of Palight should be glued to eliminate joint separation. When gaps are glued on a long run of Palight, allow space for expansion and contraction at each end of the run. *See "Gluing and Bonding" section, page 5*.

Temperature Dictates Gap Requirements				
Ambient Temperature	Joint Gap (A)	End (B)		
100° F (38° C)	Tight	Tight		
50-100° F (10-38° C)	1/8"	1/16"		
>50° F (10° C)	>1/8"	>1/16"		





Palight Trimboard should not be used in applications or climatic conditions that exceed 140° F (60° C) ambient or surface temperature. At this temperature, Palight Trimboard will soften and permanently deform.

For this reason, paint color selection must also be considered, because darker colors absorb heat more than lighter colors and can easily exceed the maximum allowable temperature of 140° F (60° C). *See "Painting" section, page 6*.



FASTENING

- For best results, use Cortex[®] fasteners and plugs. See below.
- Standard nail guns also work with Palight Trimboard products. Use a highly durable fastener such as hot dipped galvanized or stainless steel.
- Staples, small brads and wire nails must not be used.
- ▶ Fasteners should be long enough to penetrate the solid wood substrate a minimum of 1½".
- Palight should be fastened to a flat, solid substrate. Fastening Palight into hollow or uneven areas must be avoided.
- Pre-drilling is not required when using Cortex fasteners or nails, unless the product is installed in low temperatures – typically 40°F (5° C) or lower.
- 3/8" and 1/2" sheet products are not intended to be ripped into trim pieces. These profiles must be glued to a substrate and mechanically fastened.



As with wood, use two fasteners per every framing member for trimboard applications. Trimboards 12" or wider, as well as sheets, will require additional fasteners.



Fasteners must be installed no closer than 2" from the end of each board.

SPANNING

Palight Trimboard must not be used in load-bearing applications, but may be used in spanned applications such as soffits and ceilings.

Soffit installations

- ▶ For spans of 16" 24", use a 1" Palight product.
- When using Palight bead board, fasten every 12" or less.
- Install Palight bead board perpendicular to structure.

Ceiling installations

- ▶ For spans of 16" 24", use a 1" product.
- With Palight bead board or thinner (<1/2") Palight product, fasten every 12" or less.
- ▶ 16" spans are acceptable with Palight bead board with nailing strip.
- Never span Palight products more than 24".



Customized for Palight Trimboard Profiles, Sheets and Accessories

The Cortex Hidden Fastening System combines the strength of a face-fastened connection with the beauty of a hidden fastener. It's the fastest, easiest way to hide fastener heads when installing Palight Trimboard.

- Available in smooth or woodgrain finish
- Available with matching plugs for white, clay and sand color Palight Trimboard
- Fast and easy to install
- Preset bit included
- Limited lifetime warranty
- Made in the USA

GLUING AND BONDING

Palight material can readily be bonded to itself or other materials. Commercially available adhesives that are suitable for bonding rigid PVC materials can be used for this purpose. **See "Adhesives" section below**.

There are several considerations when choosing an adhesive:

- The material to be bonded with Palight
- Strength required structural vs. nonstructural
- Cost effectiveness

curing times

Ease of application methods and

(flammability, fumes, odors)

Environmental & safety considerations

- Temperature range expected
- Expansion/contraction accommodation

General Gluing / Bonding Tips

- Always "glue & screw" joints together. Mechanical fastening is always required — do not rely on adhesives alone to secure Palight Trimboard to a substrate.
- Glue Palight-to-Palight joints (window surrounds, long fascia runs, etc.) with adhesive approved for use with PVC trimboard.
- The glue joint should be secured with a fastener and/or fastened on each side of the joint to allow adequate bonding time.
- Some adhesives have a very limited working time, so read the manufacturer's instructions carefully before use.
- ▶ For best results, surfaces to be glued should be smooth, clean and in complete contact with each other.
- To attain the optimum bond, the Palight material surfaces must be cleaned and degreased using a clean white cloth soaked in isopropyl alcohol.
- When using PVC solvent (such as pipe cement) over a large area, spread with notched trowel and work rapidly.
- To bond Palight to other substrates, various adhesives may be used. When in doubt, always consult the adhesive manufacturer to determine suitability. See "Adhesives" section below.

ADHESIVES

The adhesives listed here are not comprehensive, but do represent popular products. Please perform the appropriate tests to ensure that the materials will produce desired results. Always consult the adhesive manufacturer if you have any doubts or questions.

Bonding Palight Trimboard				
Bonding to Palight	Bonding to Wood	Bonding to Metal	Bonding to Concrete or Brick	
Weld-On 705	Liquid Nails Subfloor or	PVC TrimWelder	PVC TrimWelder	
Trim Tight	Heavy Duty Construction	Two Component Methacrylate	NPC Solar Seal 900	
Christy's Red Hot	NPC Solar Seal			
PVC TrimWelder	900			
	Polyure- thane-based Adhesives			





PAINTING

"Moisture cycling" is a main reason for paint failure on wood. But because Palight Trimboard absorbs no moisture, paints last 3 to 4 times longer on Palight than on wood. However, paint takes longer to cure than it does on wood – up to 30 days, depending on outdoor temperatures and humidity.

- To reduce the need for painting, Palight Trimboard is available in three colors: white, sand and clay.
- Palight Trimboard does not require paint for protection, but it can be painted to achieve a desired color. See "Selecting the Right Paint," below.
- Use paints that are 100% acrylic latex or acrylic latex with a urethane additive.
- Use only stock colors that are compatible with PVC trim. If you have a custom color mixed, it is possible that incompatible materials may be added to the paint during the custom blending process.
- Follow the paint manufacturer's recommended procedures for preparation and application.
- No special surface preparations are required prior to painting. Just ensure the Palight surfaces are clean, dry and free of dust.
- Fine dust can collect on the surface of Palight due to static. To ensure a dust-free surface that will promote good paint adhesion, leave the EverClean Protective Film in place and remove just prior to painting.
- If EverClean Protective Film has been removed, wipe trimboards with a rag moistened with isopropyl alcohol prior to painting, or mild detergent and water.
- Palram is not liable for paint used on Palight Trimboard and/or the results of its use.



IMPORTANT: SELECTING THE RIGHT PAINT

Any PVC trimboard can become warped or distorted as a result of heat absorption that is beyond the product's tolerance. To prevent this, be sure to ask for paint colors with a Light Reflectance Value (LRV) of 55 or higher. If you use a color with an LRV of less than 55, it must be formulated as "siding safe" for use on vinyl/PVC products.

For example, some colors within Sherwin-Williams' VinylSafe[™] paints line have an LRV less than 55, but they are designed to reduce excessive heat gain. Other PVC-specific paint manufacturers include Blue River Coatings, PPG and Glidden, among others.



Palight Trimboard features EverClean[™] Protective Film. EverClean helps prevent fine dust from adhering to the material surface, which can inhibit paint adhesion. EverClean is designed to be left on the trimboard until it's ready to be painted (up to 90 days after installation).

Palight Trimboard

Express Transferable 30 Year Limited Warranty

PALRAM Americas ("PALRAM") hereby warrants that the PALIGHT Trimboard Product ("Product") will be free from manufacturing defects that cause the Product to delaminate, corrode, rot, or excessively swell for thirty (30) years from the date of original purchase.



PALRAM's liability under this express Limited Warranty ("Warranty") is limited to replacement of the defective Product or, if PALRAM so chooses, a refund of what you paid for the Product, as verified by the applicable receipt. This is your SOLE AND EXCLUSIVE REMEDY for claims under this Warranty.

This Warranty is subject to the following limitations and conditions:

(1) You must be the owner of the property where and when the Product is first installed, but this Warranty will transfer automatically from owner to owner of the property when legal title to the property is transferred within the Warranty period provided above. When that happens, the term "you" as used in this Warranty means the new owner. This Warranty will be void if the Product is moved to a different property.

(2) The Product must have been purchased from an authorized PALRAM dealer.

- (3) This warranty does not cover damage to the Product as a result of:
 - (a) intentional or accidental misuse, abuse or other damage, including vandalism, impact of foreign objects, improper maintenance, use of incompatible accessories or application of harmful chemicals;
 - (b) installation of the Product or its structural supports in violation of PALRAM's instructions and guidelines, including use of the Product to bear excessive loads;
 - (c) damage to the structural supports or accessories used with the structural supports (including, but not limited to, settlement, movement, distortion, warping or cracking);
 - (d) ordinary and expected weathering due to exposure to the elements (which may include fading, darkening or chalking);
 - (e) weather events and other Acts of God (including, but not limited to, earthquakes, hurricanes, floods, tornadoes, ice, snow, hailstorms, fire, windstorm and lightning); or
 - (f) acid rain, industrial emissions, air pollution or other harsh atmospheric or environmental conditions.

(4) This warranty does not cover any paint or other coatings applied by you or anyone else. Failure to follow PALRAM's recommendations regarding paints and other coatings may void this Warranty.

(5) This Warranty is the only warranty made by PALRAM to you or anybody, including subsequent owners with regard to the Product. ALL IMPLIED WARRANTIES, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE LENGTH OF THE WARRANTY PERIOD PROVIDED ABOVE OR ON THE APPLICABLE WARRANTY CERTIFICATE. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU. You are solely responsible for determining whether this Product is suitable, effective or safe for your intended use(s) or application(s) and whether your use(s) or application(s) comply with local governmental codes or restrictions.

(6) PALRAM will not be responsible for the cost of any labor, installation, re-installation, loss of time, inconvenience, damage to other property or persons, loss of use of the property, freight, taxes, shipping or any other costs related to the defective Product.

(7) PALRAM ALSO WILL NOT BE RESPONSIBLE FOR ANY SPECIAL, DIRECT, INDIRECT, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES UNDER ANY THEORY OF RECOVERY, WHETHER BASED IN CONTRACT OR TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY), UNDER THIS WARRANTY OR OTHERWISE. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Making a Warranty Claim

To make a claim under this Warranty, within ninety (90) days from your discovery of the defective Product, you must send: (1) your proof of purchase; (2) photo(s) of the defective Product; and (3) a written description of the defects to:

PALRAM Americas, 9735 Commerce Circle, Kutztown, PA 19530

The defective Product must remain installed until PALRAM makes a determination regarding the defective Product. PALRAM may investigate any claim made by you under this Warranty and test the defective Product. Your failure to keep the defective Product installed and/or to permit such investigation and testing may void PALRAM's Warranty.

No representative, agent or dealer has any authority to change the terms of this Warranty, give any other warranties, or make any statements or representations regarding the Product except for those specifically contained in this Warranty or PALRAM's Product documents. This Warranty may not be amended or altered except by a written statement signed by PALRAM's authorized representative and you. PALRAM will not be bound by any statements or representations made to you that go beyond the terms of this Warranty.

Some states may not permit the limitations stated above. This warranty gives you specific legal rights. You may also have other rights which vary from state to state.





PALRAM AMERICAS

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