

EXTERIOR WOOD VARNISH

PRODUCT DESCRIPTION

A waterproof, microporous, UV resistant clear protection for exterior wood. The unique polymer system gives a silky satin finish and highlights the natural grain of the wood. It is suitable for exterior softwood and hardwood timber applications, giving a high level of UV resistance, waterproofing and preservation.

A clear acrylic hybrid coating specially formulated to protect exterior wood against ultra violet light and rain damage, with a durable satin finish.

Water-resistant, stain resistant, heat resistant, and vapour permeable.

Available in satin and dead flat. To achieve a dead flat finish, apply 3 coats of satin before a final coat of dead flat.

SURFACE PREPARATION

Ensure the surface to be coated is clean and free from grease, wax or polish

Exterior timber surfaces should always have a 9-degree slope to allow water to flow away and not gather in joints. This helps to prevent water gathering on horizontal surfaces

It is important oil is removed from the surface prior to coating (oily timbers e.g., Teak, Iroko, Rosewood, otherwise that could cause a problem with adhesion, so put some methylated spirits onto a cloth and then give the surface a good wipe down. The important thing is to rotate the cloth around. Polyvine does not recommend using white spirit, when using water-based systems, it can leave a greasy residue on timber, so methylated spirits is better. For very oily, durable timbers like Iroko cellulose thinners may be necessary.

APPLICATION

General details for preparation of surfaces

New wood should be allowed to dry thoroughly before assembly begins. If the wood is green or has been pressure treated allow to dry before coating (below 18% moisture content).

New and weathered wood

New wood can be contaminated during preparation, or in the machine shop. Weathered wood can already have contaminants on the surface.

All contaminants and millwork must be removed from the surface by sanding, 80/120 grit for vertical, 60/80 grit for horizontal surfaces.

Fungus, pollen or spores not removed and trapped below the clear varnish will discolour the surface of the timber when exposed to moisture. If contamination is suspected treat timber with a proprietary preservative treatment as recommended by the manufacturer.

Previously painted wood

Completely remove old coating with 60/80 grit sandpaper.

Ensure surface is dry clean and free from dust, follow new and weathered wood instructions.

Precoating

Fill all joints, Cracks, and nail holes with a good quality Polyurethane or acrylic filler prior to coating.

Coating

Apply Exterior Wood Varnish liberally with a good quality synthetic brush, apply in the direction of the grain, maintain a wet coat.

Allow 4 hrs between coats

Best application temperature 10C/50F to 30C/90F. Do not apply in direct sunlight or when rain is imminent.

Saturate all end grains.

Exterior Wood Clear Coat contains a sophisticated UV filter system, this system will protect to the maximum when the dry film thickness reaches 100 microns. 3 generous coats / 4 standard coats.

Windows, doors and exterior furniture, contain a lot of joints and end grain, to ensure maximum life and to avoid coating delamination, the following procedures should be carried out.

Coat on all surfaces, inside and outside and all edges. Holes, joints and end grain, saturate liberally with the clear coat, fill with good quality filler as required.

Caution:

Always apply to a test area before starting work. Care must be taken when applying in high temperature or direct sunlight as this will affect drying time. Do not apply when rain is imminent. Coating life will be reduced on horizontal surfaces and where the coating is in contact with the ground or pooled water

Further information may be obtained from:

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Caution

Oak

The open grain texture of Oak will cause **film failure**.

Varnishes are prone to failure when applied to Oak externally.

It is **imperative** therefore that the grain is filled with coating before further coats are applied.

Oak is not as resistant to weathering as oily hardwoods and, therefore, needs better protection when used outdoors. The large open pores make the problem worse providing a route for water-ingress. Blue-stain mould spores are likely to be present on any piece of timber and will be activated by moisture. Another problem with Oak is the high tannin content, if not properly sealed water (rain) can wash the tannin out of the wood leaving a patchy colour and staining to the surrounding areas (bricks, patio, etc.).

Pre-conditioning to the correct moisture content is very important. If the Oak is outside the moisture content range of 12-20% there will be excessive movement as it comes to equilibrium. The wood can become split, and the coating film may also split exposing bare wood, providing a route for water-ingress and rapid deterioration of the coating.

If this occurs remedial action must be taken immediately to prevent the wood becoming weather-stained. Clean the surface and reapply sufficient coats of the same coating product to fill the cracks/splits.

The coating integrity cannot be guaranteed on green oak.

Protection of Oak

Polyvine Recommend Exterior Interior Wood Oil.

Iroko

Often known as 'African Teak', Iroko is a West African timber.

It shares many of the same great characteristics of oak and teak which makes it a popular alternative to those woods. It's naturally resistant to decay over time and the ravages of insects – meaning that it lasts longer than other woods with little maintenance needed.

The heartwood is golden-orange to brown in colour. Lighter vessel lines are conspicuous on flat sawn surfaces.

Large deposits of calcium carbonate, with darker coloured surrounding material are usually present. Yellow bands of soft tissue are reported to form a zig-zag pattern on all surfaces.

Iroko has a medium to coarse texture, with open pores and an interlocking grain.

Endgrain. Diffuse and porous; large to very large pores.

A wood that is sometimes resistant to wood finishing products. Iroko contains a non-saturated phenolic compound, which is a powerful anti-oxidant. It is necessary to use oil varnishes without free siccative oils.

Oils in the surface of the timber must always be removed before coating application.

As you know Iroko is a timber that moves with temperature fluctuations.

Protection of Iroko

Polyvine Recommend Exterior Interior Wood Oil.

Caution

Intense exposure to sunlight will cause gradual fading of the timber colour. A pretreatment of Polyvine Wood Colour is recommended in these areas to enhance the timber colour and prevent fading.

Application to softwood, knots and resin pockets will bleed through the coating.

Maintenance

Inspect yearly for signs of wear or damage.

Clean surface thoroughly and wash of all cleaning solution.

A maintenance coat should be applied every 1 / 3 years on exposed areas, 3 / 4 years on less exposed or sheltered areas.

COVERAGE

Approx. 10-20 sq. m per litre. 108-215 sq. ft per US qt.

CLEAN UP

Any equipment used can be cleaned using soap and water before the clear coat dries. Wipe any excess off surfaces with a damp cloth. Any dried deposits will need a paint stripper to remove them.

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FILM PROPERTIES

DRY FILM: Satin, Dead Flat
DRYING TIME: 1 to 2 Hours @ 20°C / 70°F
Low temperature/high humidity increases drying time.
CURE TIME: Up to 5 days @ 20°C / 70°F
RECOAT TIME: Up to 4 Hours @ 20°C / 70°F
HARDNESS: Durable
NON YELLOWING
NO FIRE HAZARD Before or during use, or in the cured state.
RESISTANT TO: Water and abrasion.

PACKAGING

500ml, 1L, 4L. US pint, US Quart, US gal. plastic containers

STORAGE

Store in unopened containers in a cool dry place away from direct sunlight.

HEALTH SAFETY AND THE ENVIRONMENT

Non-hazardous. Ensure good ventilation. Keep out of reach of children. Contact with eyes-wash immediately with warm water. Remove excess from tools and mixing vessels before washing in warm soapy water. Do not empty containers into drains or watercourses.

APPLICATION GUIDE

General

Timber surface must be suitably prepared, clean and dry, with dust, dirt, wax and grease removed. The timber should be allowed to acclimatise to its end-use environment. The moisture content should not exceed 18% prior to coating. Degrease any exposed bare timber surface by wiping with a cloth dampened with methylated spirits. Certain timber species contain high levels of natural wood extractives or exudates and some softwood can be highly resinous. Resinous deposits should be removed with a scraper. Any remaining residues should be removed using a lint-free cloth dampened with methylated spirits, frequently changing the face of the cloth. Allow solvent to evaporate fully before overcoating. The use of both eye and hand protection is strongly advised. We do not recommend the use of "knotting agents" as they are not always fully effective in "sealing in" resin. In addition, the presence of knots is often highlighted, and adhesion of coatings can be impaired. When filling, be sure to use fillers specifically designed for use with timber. General or all purpose fillers are not suitable, particularly on external areas, as they cannot cope with timber movement and work loose. Stains and paints are much like Band-Aids, you can cover up those contaminants, but the Band-Aid won't stick long and neither will your finish adhere or last if applied to an improperly or poorly prepared surface. The contaminants must be removed! It is said that 75-95% of the effort to obtain long service life of a coating is in the preparation. Quality surface preparation, quality finish, quality tools, and quality application are the four keys to long service life of paints and finishes.

New and weathered wood

New wood can be contaminated during preparation, or in the machine shop. Weathered wood can already have contaminants on the surface. All contaminants and millwork must be removed from the surface by sanding, 80/120 grit for vertical, 60/80 grit for horizontal surfaces. Fungus, pollen or spores not removed and trapped below the clear varnish will discolour the surface of the timber when exposed to moisture. All timber should be treated with a proprietary preservative treatment as recommended by the manufacturer.

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Where a superficial application of preservative to softwoods and hardwoods is deemed necessary, such as timbers in Durability Classes 4 or 5 (reference BS EN 350-2 : 1994), apply two coats of a proprietary preservative treatment to saturation, paying particular attention to end grains, allowing 24 hours drying time between coats, and before overcoating. Preservative pre-treatments must be fully dry before the application of **Polyvine Exterior Wood Varnish**.

Do not use **Polyvine Exterior Wood Varnish** on substrates which have had water-repellent preservative pre-treatments applied. Where possible, the first coat should be applied all round prior to fixing. Only use non-rusting screws, nails and fixings.

Previously painted wood

Completely remove old coating with 60/80 grit sandpaper.

Ensure surface is dry clean and free from dust, follow New and weathered wood instructions.

Precoating

Water penetration into the timber will produce water staining and promote fungal growth.

This will produce unsightly marking beneath the clear varnish

Fill all joints, cracks, and nail holes with a good quality polyurethane or acrylic filler prior to coating. Take special care to ensure the sealing of glazing beads and gaps around frames, with mastic or silicone to the sealant manufacturer's instructions.

Avoid creating areas where water can pool, this will encourage a breakdown of any sealant barrier.

Expansion and contraction of the wood or incorrect preparation may allow water to enter the wood. The water will travel along the wood discolouring the wood and lifting the varnish. Damaged areas should be sanded back to new wood and recoated.

Coating

Apply **Polyvine Exterior Wood Varnish** liberally with a good quality synthetic brush, apply in the direction of the grain, and maintain a wet coat.

Allow 4 hrs between coats

Best application temperature 10C/50F to 30C/90F. Do not apply in direct sunlight or when rain is imminent.

Saturate all end grains.

Glazing

The backs of beads, end grains and rebates should receive at least one coat of **Polyvine Exterior Wood Varnish**. Joinery to be coated with **Polyvine Exterior Wood Varnish** should be glazed using a suitable sealant in accordance with section 4.2 of the Glass and Glazing Federation manual together with BS 8000-7 : 1990 and BS 6262 : 1982.

We do not recommend the use of linseed oil putty or modified non-setting compounds in conjunction with our wood protection systems, as the long-term performance of these compounds are inferior.

To confirm compatibility, please consult the manufacturer of the relevant glazing material. Silicone glazing materials should only be applied upon completion of the finishing coats.

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Windows, doors and exterior furniture, contain a lot of joints and end grain, to ensure maximum life and to avoid water ingress and subsequent coating delamination, the following procedures should be carried out. Coat on all surfaces, inside and outside and all edges. Holes, joints and end grain, saturate liberally with the clear coat, fill with good quality filler as required.

Caution

Intense exposure to sunlight will cause gradual fading of the timber colour. A pre-treatment of Polyvine Wood Colour is recommended in these areas to enhance the timber colour and prevent fading.

Application to softwood, knots and resin pockets will bleed through the coating.

Maintenance

Inspect yearly for signs of wear or damage. Special care to be taken to ensure that all sealant is intact and does not allow water to enter the timber.

Clean surface thoroughly and wash off all cleaning solution.

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A maintenance coat should be applied every 1 / 3 years on exposed areas, 3 / 4 years on less exposed or sheltered areas.

The information supplied herein is accurate to the best of our knowledge. Since conditions and methods are beyond our control, no warranty is expressed or implied. You are advised to assess the suitability of the product on a test area before application

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