

G4

BONDA MARINE



SHEATHING A HULL

Sheathing wooden or metal hulled boats reduces maintenance and the Bondaglass system has proven to be a very practical and effective method. G4 is used as a bonding primer between the polyester resin and the wood, metal or ferro cement. The hull should be dry and down to bare wood or metal. The G4 is applied, left until finger tacky (but no longer than four hours) and the G.R.P laminate is applied.

Consumption approximately 200grs/sq.m. on wood and 165grs/sq.m. on metal. Detailed instructions are given in our 'G.R.P Repairs To Boats' leaflet.

G4 PRIMING CAST IRON BALLAST KEELS

When anti-fouling cast iron ballast keels G4 has proved, in practice, to be a first class bonding primer and it also forms a non-porous seal that helps to prevent rusting. G4 can be applied in conditions when it would be impossible to use other systems, down to 0°C and high relative humidity. The keel must be clean and the first coat of the anti-fouling applied whilst the G4 is finger tacky to ensure good chemical adhesion. There can be a reaction between some anti-fouling and G4 and it is therefore advisable to carry out a test before the major application is made.

BONDA MARINE — WOOD SEAL.

Wood seal is formulated from high performance moisture cured resins and provides a clear non-porous seal with excellent non-yellowing properties. Wood seal has good gloss retention and forms a tough flexible coating that can be applied in poor conditions and at low temperatures. Each coat cures quickly and since the next coat can be applied as soon as the first coat is finger tacky three or four coats can be applied easily in a day. This will provide a smooth high gloss surface but if super smooth glass like finishes are required then allow each coat to harden, lightly flat down, remove dust and apply another coat.

Either way Wood Seal gives a super seal to wood.



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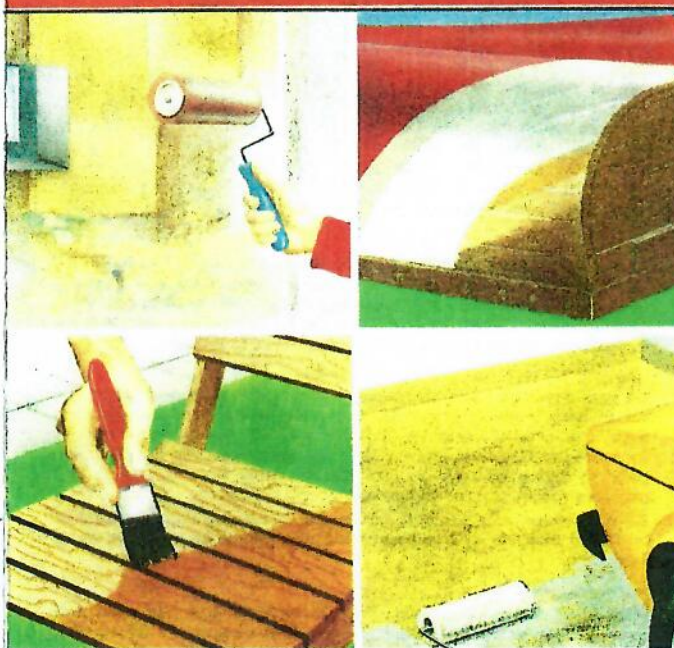
Bondaglass-Voss Ltd is only responsible for replacement of material proven to be defective. Before using the user shall determine the suitability of the product for the intended use.

This information is offered in good faith but without guarantee or liability.

G4

DAMP SEAL

A Moisture Cured Polyurethane



Forms a Non-Porous Seal on
Concrete - Brick - Stone - Plaster -
Metal - Wood

Other Bonda Surface Coatings

BONDASEAL CLEAR
BONDA MARINE WOOD SEAL
BONDA MARINE G4
15 YEAR WHITE PAINT

G4 as a bonding agent for G.R.P laminates

G4 SEAL AND FLOOR COVERINGS

Rising damp beneath floor coverings is a common cause of failure in the adhesive bond between the floor and the floor covering. The result is inevitable, the floor covering becomes loose, distorted, discoloured and curls at the edges. Up-lifting and re-laying is a costly exercise when it is considered that a three coat application of G4 would have prevented it happening in the first place.

G4 is applied in the same way as for sealing damp floors but there are several other important considerations. Therefore ask for our leaflet - Floor Coverings and G4 Seal. G4 makes an ideal hard wearing tough and flexible sealant for both cork and wooden floors. A three coat application is recommended.

G4 FOR WOOD SEALING

G4 can be satisfactorily used for sealing (varnishing) wood and since it is a moisture cured material it does have advantages over more conventional systems. In particular G4 can be applied in conditions unacceptable to other varnishes, at low temperatures and high humidity. However G4 is affected by U.V light which tends to yellow it although in general terms G4 will perform better than most other varnishes.

However because of this it is advisable for external varnishing to use Bonda-Seal Clear.

BONDA-SEAL CLEAR

Clear Seal is formulated from high performance moisture cured resins and provides a non-porous seal with excellent non-yellowing properties. It has good gloss retention and forms a tough hard flexible coating that can be applied in poor conditions and at low temperatures. Each coat cures quickly and since the next coat can be applied as soon as the first coat is finger tacky three or four coats can be applied easily in a day. This will provide a smooth high gloss surface but if super smooth glass like finishes are required then allow each coat to harden, lightly flat down, remove dust and apply another coat.

Either way Clear Seal gives a super seal to wood enhancing the grain and appearance.

Both G4 and Bonda-Seal Clear can be used for coating cork or lino floors and gives a new gloss and sparkle to old and worn floors.

G4 AS A BONDING AGENT FOR G.R.P. LAMINATES AND POLYESTER RESINS

G4 is probably the best primer for ensuring a good bond between polyester resin (G.R.P.) and surfaces such as metal, wood and concrete. It is recommended by several leading manufacturers of polyester resins for this purpose. G4 should always be used when applying a G.R.P. coating to a wooden hulled boat. On a clean bare substrate brush on the G4. As soon as it becomes finger tacky but within four hours apply the polyester resin and glassfibre (G.R.P) laminate.

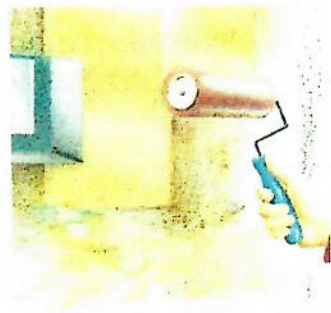
15 YEAR WHITE PAINT

A one component, moisture cured, white gloss paint. Using highly U.V. light stable resins and premium quality white pigment 15 Year White gives a long term non-chalking and high gloss protection to wood and metal. It is possible to paint with 15 Year White when it would be impossible with other coatings, at low temperatures down to 0°C and at high relative humidity.

Florida U.V. light stability tests have shown that paints based on these systems will last and outlast more conventional finishes.

G4 seals damp walls and floors

G4 is a one component moisture cured polyurethane. A continuous surface coating provides a highly durable non-permeable seal on porous materials, sealing out damp. Cured by moisture it can be applied onto damp, but not wet, surfaces without the cure being inhibited. G4 can be used in poor application conditions with temperatures down to 0°C and in areas with high relative humidity.



G4 seals damp out of concrete, brick, stone and wood. The coating is hard wearing but flexible and resistant to many acids and alkalis in normal concentrations. It withstands boiling water. Sealing with G4 is easy and quick, three or more coats can be applied in a day. G4 is for internal use unless topcoated to protect it from U.V. light.

WHERE TO USE G4

G4 was developed as a damp proof coating for walls and floors. Its tough hard wearing properties also make it ideal for consolidating dusting and worn concrete floors as well as coating new floors in factories, warehouses and garages. G4 seals concrete floor screeds prior to laying of cork or vinyl tiles or other floor coverings and prevents moisture from destroying flooring adhesives.

G4 seals water into concrete garden ponds making them waterproof and easy to clean as well as preventing contamination of the water from lime.

G4 - DAMP WALLS AND FLOORS

Preventing damp penetrating through brick or concrete walls and floors is difficult when the brick and concrete are porous. G4 makes it possible to seal the porous materials from the inside with a non-porous plastic film. Because it is a thin liquid it penetrates into the substrate obtaining a strong mechanical bond and sealing the open pores ensuring a permanent water tight seal.

SURFACE PREPARATION

For maximum effectiveness G4 should be applied onto the bare substrate. All existing coatings, paint or other treatments should be removed. In practice this may prove impossible but it must be understood, in such cases, that the sealing ability and bonding strength will be between the existing coating and the G4. Any loose pointing in brick walls should be repaired before application. Cracks or worn areas in floors should be repaired.

G4 can be applied on top of plaster or cement renderings providing they are securely bonded to the primary substrate. Whilst G4 is cured by moisture it is necessary for the substrate to be as dry as possible to enable maximum penetration. If the surface is too wet the G4 cannot bond into it and can de-laminate or blister. It may be necessary to reduce the moisture content by artificial means before the G4 is applied. Should there be any doubts test a small area to establish whether adhesion is impaired.

A similar test should also be made if it is suspected that the floor is too dense and non-porous for the G4 to obtain a proper bond even though the floor itself may be dry, for example quarry tiles, granolithic or other similar dense floor finishes. G4 cannot be applied onto surfaces that have been treated with bitumen.

G4 seals dusty concrete easily and rapidly

G4 seals concrete ponds

APPLICATION OF G4

Applying G4 is quick, simple and easy by brush or roller. For most damp proofing a three coat application is recommended to build up a continuous surface film. Each coat may be applied as soon as the previous coat is finger tacky (similar to the surface of cello tape) but each coat must be applied within four hours of the previous coat to ensure good intercoat adhesion. If the walls are to be re-plastered or screeded then it is advised that the last coat of G4 is 'blinded' with dry sharp sand whilst the G4 is wet so as to provide a mechanical key. In the case of floor coatings the G4 has to be sufficiently dry to walk carefully upon.



PAINT AND WALLPAPER

Enamel, emulsion and other synthetic paints can be applied to G4 as soon as it is dry. Wallpaper adhesives will take longer to dry since the moisture is only able to evaporate in one direction, when applying a vinyl or heavily embossed wallpaper it is necessary to apply a lining paper first to provide initial grip for the wallpaper adhesive. With it's sealing abilities G4 can be used to seal out soot and other wall stains.

G4 REPAIR MORTAR

G4 mixed with dry sand makes a hard tough mortar for repairing worn patches on floors. Remove any loose material and prime the area with G4. When the G4 is finger tacky make up the following mix of 6 parts dry sand and 1 part G4 (by volume) keeping the mix as lean as possible. Do not mix more mortar than can be used in 20 minutes. When filling deep cavities the mortar should not be applied in layers thicker than 10mm allowing each to harden before applying the next.

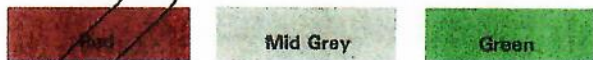
G4 SEALS DUSTY CONCRETE — EASILY AND RAPIDLY

Concrete floor surfaces are subjected to constant wear which grinds the surface to dust. If not checked the wearing action forms holes and broken joints that are dangerous particularly in industrial locations. In addition to the safety consideration dust is the number one enemy of machinery, mixing with oil and grease and acting as an abrasive. In warehouses and stores dust contaminates and covers finished products.

G4 penetrates into the surface, coating the floor with a hard but flexible plastic skin resistant to wear. It is very easy and quick to apply by brush, roller or fine broom and this keeps application costs and time down to a minimum. The new dust free surface is ready to walk on the next morning. Providing the concrete is clean and dry the surface preparation is minimal a good sweep with a broom or vacuum cleaner is all that is required. Oil or grease will have to be removed either chemically or mechanically otherwise it will act as a release coat for the G4. G4 is not suitable for dense surfaces such as quarry tiles or granolithic floors since it cannot obtain a mechanical bond nor for floors coated with bitumen.

G4 IN COLOURS

G4 is brown translucent but it is also available in mid-grey, green and red. When pigmented G4 is used the first coat should always be G4 standard followed by two coats of the pigmented G4



G4 - NON-SLIP SURFACES

With industrial floors it may be necessary for areas such as gangways or where fork lift trucks are being used to have a non-slip surface. This is simple to apply with fine carborundum grit evenly scattered into the wet second coat then sealed with a third coat. Alternatively Bonda V.P 81/31 anti-slip additive can be well stirred into the final coat just before it is brushed on.



G4 SEALS CONCRETE PONDS

Leaking concrete fish ponds are easily and economically sealed with a three coat application of G4. It gives the concrete a non-porous, durable, deep bonding plastic coating. In a single day a three or four coat application can be applied, on the following day the pool can be thoroughly washed out with fresh water and put into use. Prevents cement lime contamination of the water.



COVERAGE AND CURE TIMES

The coverage and cure time will vary according to the porosity of the substrate. The chart below is for the use of G4 both as an anti-damp and floor coating seal.

Consumption (standard)	Consumption (pigmented)	Tack Time
1st Coat = 215grms/sq.m.	Standard G4	30-60 mins.
2nd Coat = 195grms/sq.m.	320grms/sq.m.	90-120 mins.
3rd Coat = 130grms/sq.m.	215grms/sq.m.	6 hours. walkable.
TOTAL = 540grms/sq.m.	Pigmented 535grms/sq.m. + 215grms/sq.m. G4	

Full mechanical cure is achieved in 24 hours and full chemical cure in 72 hours. On non-porous surfaces the third coat figures can be taken as an approximate guide to coverage.

CLEANING

Brushes and rollers should be cleaned immediately after use with Bondacleaner, acetone or cellulose thinners and then thoroughly washed out in detergent and hot water and dried.