

Epo Shield WB

High performance, clear or coloured, water borne epoxy coating

DESCRIPTION

Epo Shield WB is a high performance two component water borne epoxy floor coating, available in clear, white or a selection of colour options. Epo Shield WB is highly recommended for car parking facilities or where durability and good chemical resistance are required. Epo Shield WB can be applied as an R10/R11 anti-slip floor coating with the addition of Conpell CA100.

PRODUCT FEATURES & BENEFITS

- Environmentally friendly, **Meets “Green Star Building” Code** Non-flammable, negligible odour
- Excellent adhesion qualities
- Extended pot life
- Adheres to most substrates including compressed fibre board and timber
- Extended pot life
- Low odour
- Resists mildew, mould and bacteria growth

TYPICAL APPLICATIONS

- As a high performance new or maintenance coating for car park facilities.
- As an cost effective low maintenance cost, abrasion and chemical resistant floor coating.
- As a mould and bacteria resistant floor and wall finish for wash rooms, warehousing, back of house, bulk retail, change rooms, canteens and food preparation areas.
- As a low odour, hard wearing and chemically resistant floor and wall coating for industrial, commercial hygiene areas subjected to rigorous cleaning.

VOC RATING

TVOC’s calculated as the sum total of the VOC’s of each individual raw material component. The total VOC is **48.44 grams/ litre** of ready to use product.

APPLICATION RATES

Commercial & industrial finishes	4 –6m ² /litre/ as a 2 or 3 coat system
Car parking facilities	6 – 8m ² /litre per coat
Pedestrian areas, including retail	6 - 8m ² /litre per coat

COATING THICKNESS	@4sqm/ltr	@5sqm/ltr	@6sqm/ltr	@7sqm/ltr	@8sqm/ltr
Wet film per coat	250	200	166	142	125
Dry film per coat	100	80	66	56	50

PACK SIZES

Epo Shield WB is available in 400ltr, 30ltr, 20ltr and 10ltr containers.

APPLICATION CONDITIONS

Apply Epo Shield WB when	Air temperature is between 10°C - 35°C. Substrate temperature is between 10°C - 35°C. Relative Humidity is below 80% Concrete moisture content is below 10%
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PERFORMANCE PROPERTIES

COLOUR	WHITE OR COLOUR/AMBER WHEN CLEAR IS USED
FINISH	SEMI GLOSS
VOLUME SOLIDS	40%
WEIGHT SOLIDS	50% FOR COLOURED & 45% for CLEAR
SPECIFIC GRAVITY	APPROX 1.25 @ 25°C/ 1.06 FOR CLEAR
RE-COAT TIME	6 – 8 HOURS AT 25°C, 50%RH
POT LIFE	45 MINUTES - 1 HOUR @ 25°C
VISCOSITY	APPROX 2000cps
FULL CURE	7 DAYS @ 25°C/50%RH
MIXING RATIO	1:1 BY VOLUME

RESISTANCE GIUDE

ABRASION: Excellent when fully cured. CS-17 Wheels 56.70mgs/1000 cycles. Taber Abrader 1000gm load.
FIRE RATING: Tested under AS/ISO 9239.1-2003
 CHF Value Non Directional >11 kw/m². Smoke Value No Directional 0% min.
WEATHERABILITY: Will yellow when exposed to UV light. To reduce impact top coat with Poly Shield WB
SOLVENTS: Good resistance to splash and spillage of hydrocarbon solvents and alcohols.
ALKALIS: Good resistance to splash and spillage of most alkalis.
SALTS: Excellent resistance to neutral and alkaline salts.
ACIDS: Good resistance to splash and spillage of diluted acids.
WATER: Excelent resistance to fresh and salt water.

PREPARATION

- All surfaces to be coated must be structurally sound and free of all previous coatings, adhesives, efflorescence or laitance by abrasive blasting or mechanical grinding.
- All surfaces to be coated must be free of all dirt, grease, oil or other surface contaminants.
- All holes, non-structural cracks and surface deformities should be repaired prior to the application of Epo Shield WB.
- Very porous concrete may require a third coat of Epo Shield WB, use Epo Shield WB, diluted by 10-20% or Vapour Shield WB as a primer.
- Ensure re-coat times are adhered to between applications, a minimum of 6 - 8 hours is required between coats at 25°C.

MIXING

1. Mixing should be by means of mechanical forced action mixer with a high speed shear stirrer.
2. First premix each individual component to form a homogeneous paste.
3. Add a colour pack to the Hardener, Part B if required and mix for 1 minute to achieve consistant colour.
4. Join the two components together by equal volume, mixing thoroughly for a minimum of 2-3 minutes until a homogeneous paste is obtained. Fresh water can be added to the mixture for coloured epoxy add 10% by volume, for clear add 15% by volume. The water must only be added after mixing Part A with Part B together. Once water is added mix again for 2-3 minutes.
5. Avoid trapping air during the mixing process as this may cause pin holing in the coating during application.
6. Only mix as much product as can be used within the pot life of the product, temperature will affect the pot life of the product.
7. The unmixed containers should be kept at 20 - 25°C prior to starting the mixing process, overly hot or cold product may affect the working time of the product or cause issues to the finished surface such as amine bloom or blushing.

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PLACING Smooth finish

1. Apply in a uniform manner using a brush, roller or airless sprayer, ensure application rates are adhered to and ensure all surface voids are filled.
2. Epo Shield WB is a minimum 2 coat system, but 3 coats are recommended.
3. Apply the first coat of Epo Shield WB using a medium nap roller at the coverage rate recommended for your floor, once completed allow the surface to dry for a minimum of 6-8 hours but no more than 48 hours prior to applying the second coat.
4. Apply the second coat of Epo Shield WB using a medium nap roller at the coverage rate recommended for your floor, once completed allow the surface to dry for a minimum of 72 hours before subjecting to pedestrian traffic and 7 days before subjecting to vehicular traffic or cleaning.
5. It is recommended during application that the coating depth be tested at random points with a wet film gauge/comb.

NON-SLIP FINISH

6. Apply the Epo Shield as above, broadcast the required anti-slip aggregate in an even manner onto the first coat while it is still wet and allow the coating to dry for a minimum of 6-8 hours or overnight. During this process spiked shoes are recommended.
7. Once cured, remove excess broadcast material using a broom or industrial strength vacuum.
8. Apply a second coat as above at right angles from the first.
9. Allow the surface to dry for a minimum of 72 hours before subjecting to pedestrian traffic and 7 days before subjecting to vehicular traffic or cleaning.
10. Full cure is in 7 days

AGGREGATE SIZE

CA100	-	100 mesh - R10
CA60	-	60 mesh - R11

CLEAN UP

Wash all equipment in a water/detergent mix immediately on completion of application and mixing. Epo Shield WB will cure under water; hence ensure all equipment is not left soaking.

PRECAUTIONS

- Some individuals may experience a skin reaction to Epo Shield WB. Use appropriate protection equipment. Refer to our Material Safety Data Sheet for further information.
- Do not apply to steel or metal surfaces as corrosion may occur.
- In enclosed areas ventilation should be provided during the coatings curing cycle to allow for adequate evaporation of the coating.
- Epo Shield WB will yellow and/or chalk when exposed to UV light.
- Discard all material that has exceeded the products recommended pot life or working times.
- Epo Shield WB is a coating, not a water proofing membrane.
- Do not apply Epo Shield WB over any existing coating or concrete treatment such as curing compound or release agents. All contaminants must be removed prior to the application of Epo Shield WB.
- Apply Epo Shield WB between 10°C - 35°C.

Contact the manufacturer if one or more of the following conditions exist:

- The substrate is subject to hydro static pressure or rising damp.
- The substrate is chalky or dusting.
- Ambient or substrate temperatures are below 10°C.
- The finished floor will be subject to chemical attack (including hot chicken fats).

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APPLICATION TO COLD SUBSTRATES OR DURING COLD CLIMATES

- Epo Shield WB cure rates are dramatically reduced when applying to a substrate surface or ambient air temperature below 10°C.
- Applying Epo Shield WB to cold substrates or during cold climates can cause amine blush, resulting in an oily residue and/or areas of uncured tacky discolouration.
- If the above occurs or any other surface contamination or discolouration appears on the coating, the Epo Shield WB should be allowed to cure and then washed with fresh clean water, methylated spirits or xylene depending on the severity of the amine blush.
- Ensure total removal of all contamination prior to the application of any further product.
- Any failure to follow the above procedure will result in delamination between coats.
- Strictly follow all mixing instructions.
- Allow mixed product to sit for five minutes to assist in accelerating the drying reaction.
- Do not apply thin coats as rapid moisture loss will arrest or slow the drying reaction.
- Always provide adequate ventilation during the curing cycle.

STORAGE

- Store Epo Shield WB between 10°C and 30°C away from direct sunlight.
- The shelf life is 12 months if stored in the products original unopened container.
- Partly used product must be sealed tight when not in use.

FIRE

Product is non-flammable and poses no fire risk.

SAFETY PRECAUTIONS

- Wear appropriate protective equipment, including clothing, gloves, appropriate respiratory mask and goggles.
- If poisoning occurs, contact doctor or Poisons Information Centre.
- If contact with skin occurs, remove contaminated clothing and thoroughly wash skin.
- If swallowed do not induce vomiting, give a glass of water.
- If in eyes, hold eyes open and flood with water for at least 15 minutes then see doctor immediately.
- For further information refer to the relevant Material Safety Data Sheet.

WARRANTIES

CONPELL offers warranties when their systems are applied by accredited applicators. Please contact manufacturer for further information.

IMPORTANT INFORMATION

The information and recommendations relating to Epo Shield WB are given based on current knowledge and experience. Due to variances in material substrates and site conditions no warranties implied by law or, fit to purpose of the product can be implied. We accept no responsibility for loss or injury due to the incorrect handling or improper use of the product, limiting the cost of our liability to the replacement product cost only. Always refer to current Product Technical Data Sheets.

CONPELL

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