



DUPOXY 100

SOLVENT FREE, EPOXY RESIN FLOOR COATING

DUPOXY 100 is epoxy solvent free high build pigmented epoxy protective coating for concrete floors. The fully cured film has good abrasion and impact resistance, good adhesion to concrete floors and good resistance to water, mild chemicals and solvents.

USES:

- Industrial Floors (Factories, Stores)
- Soft drinks production facilities
- Chemical manufacturing plants
- Car parks and workshops



SPECIFICATION

The total dry film thickness of the coating shall be a minimum of 400 microns and shall have a compressive strength of 70 N/ mm², flexural strength of 40 N/mm² and tensile strength of 20 N/mm². The floor shall be prepared and the coating mixed and applied in accordance with the manufacturer's current data sheet.

INSTRUCTIONS FOR USE

New Concrete Floors

These should normally have been placed for at least 28 days and have a moisture content of less than 5%. Floors should be sound and free from contamination such as oil and grease, mortar and paint splashes or curing compound residues. Excess laitance deposits are best removed by light mechanical scabbling, grinding or grit/captive blasting followed by vacuum cleaning to remove dust debris.

Old Concrete Floors

A sound, clean substrate is essential to achieve maximum adhesion. As for new concrete floors dry removal of laitance deposits are best removed by light mechanical scabbling, grinding grit/captive blasting. Oil and grease penetration should be removed by the use of a proprietary chemical degreaser or by hot compressed air treatment.

PRIMING

Priming is not normally required provided the substrate is sound, untreated and good quality nonporous concrete. If any doubts exist of the quality of the concrete, or if it is porous it should be primed with PRIMER. PRIMER should be mixed in the proportions supplied. Add the entire contents of the hardener can to the base can. When thoroughly mixed, preferably using a slow speed drill and paddle, the primer should be applied in a thin continuous film, using rollers or stiff brushes. Work the primer well into the surface of the concrete taking care to avoid ponding or over application.

MIXING THE COATING

The base and hardener components of DUPOXY 100 should be thoroughly stirred before the two are mixed together. The entire contents of the hardener container should be poured into the base container and the two materials mixed thoroughly, and mix for at least 3 minutes by the use of a heavy-duty slow speed, flameproof or air driven drill. Mix these components in the quantities supplied taking care to ensure all containers are scraped clean. Do not add solvent thinners at any time.

STANDARD APPLICATION

The first coat of DUPOXY 100 should be applied using a good quality medium haired pile roller, suitable for epoxy application, or squeegee to achieve a continuous coating. Ensure that loose hairs on the roller are removed before use. A minimum film thickness of 200 microns should be applied. This can be increased where specifications demand. When the base coat has reached initial cure (12 hours @ 20°C or 5 hours at 35°C). The top coat can be applied by medium haired roller, at minimum film thickness of 200 microns.

ADVANTAGES

- Solvent free - no odor during application.
- Slip resistant - different textures available to suit conditions to avoid slipping.
- Liquid applied providing complete protection.
- Durable, low maintenance costs.
- Available in a wide range of colors to improve the working environment and identify slip hazard areas.

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ANTISLIP APPLICATION

If a slip resistant texture is required, the base coat shall be applied as per the standard application, but at a minimum film thickness of 200 microns. The base coat should then be dressed with the chosen ANTISLIP GRAINS. This should be done as soon as possible after laying. The recommended procedure is to completely blind the base coat i.e. apply excess dressing aggregate to completely obliterate the base coating. When the base coat has reached initial cure (12 hours at 20°C or 5 hours at 35°C), the excess aggregate should be vacuum cleaned from the surface. The top coat can now be applied by medium haired roller, at a rate of 5.0m²/liter. Care should be taken to ensure that a continuous film is achieved and the rough surface, caused by the aggregate, is completely sealed. This top coat must be applied within 36 hours at 20°C (15 hours at 35°C) of the application of the first coat.

EXPANSION JOINTS

Expansion joints in the existing substrate must be retained and continued through DUPOXY 100 topping. Use FILLER for this crack.

CLEANING:

Tools and equipment should be cleaned immediately after use.

HEALTH AND SAFETY

Protective clothing such as gloves & goggles should be worn. Treat any splashes to the skin or eyes immediately with fresh water. Should any of the products be accidentally swallowed, do not induce vomiting call for medical assistance immediately. Ensure that the container is available for medical attendant to examine any relevant instructions & content details.

SHELF LIFE

DUPOXY 100 has a shelf life of 12 months when stored in warehouse conditions below 35°C in the original, unopened packs.

TECHNICAL SUPPORT

Packaging	
DUPOXY Primer	12 liters/pack
DUPOXY 100	11.5 liters/pack
Antislip Grains	25 kg/bag
Thinner # 1	5 liters/can
Smooth Coat	
Primer	8m ² /liter
DUPOXY 100(base coat)	5m ² /liter @ 200 microns wft
DUPOXY 100(top coat)	5m ² /liter @ 200 microns wft
Texture Coat	
For medium texture	1.5 - 3m ² /kg
Primer	8m ² /liter
DUPOXY100 (base coat)	5m ² /liter @ 200 microns wft
DUPOXY 100 (top coat)	5m ² /liter
Estimated system thickness	1.2 – 1.5mm

Depending on the type of texture size required.

Note: Coverage figures given are theoretical – due to wastage factors and the variety and nature of substrates, practical coverage figures may be reduced, this will vary with site and application conditions.

TYPICAL PROPERTIES

The following values were obtained when tested at 20°C and 30°C.

	@ 20°C	@ 30°C
Pot Life	45 minutes	25 minutes
Cure Time	24 hours	20 hours
Maximum time between coats	36 hours	18 hours
Light traffic use after	24 hours	18 hours
Full traffic use after	48 hours	24 hours

Dry Slip Resistance	Extremely Low
Compressive Strength	70 N/mm ²
Flexural Strength	40 N/mm ²
Tensile strength (ASTM D638-99)	20 N/mm ²
Water Absorption (ASTM D570-98)	<0.1%
Shore D Hardness (ASTM D2240:1996)	77 – 85
Resistance to chemical spillage	7 days

CHEMICAL RESISTANCE

Fully cured DUPOXY 100 samples have been tested in a wide range of aggressive chemicals commonly found in industrial environments. Test were performed in accordance to ASTM D 543 standards over 168 hours (7 days at 23°C ± 2).

Acids	
Citric Acid 10%	Resistant
Acetic Acid 10%	Resistant
Hydrochloric Acid 50%	Resistant
Nitric Acid 25%	Resistant

Alkalis	
Sodium Hydroxide 50%	Resistant
Ammonia (0.880) 10%	Resistant

CTRT By Duproof:



PEERS QUALITY
ASSURANCE LTD



ISO 9001:2015

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