



Quality beyond Innovation

Philippine SkyBird Industrial Corp.

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POWERFIX UWE

Underwater Crack Injection Epoxy

DESCRIPTION

PowerFix UWE is a two component, low viscosity, 100% epoxy-amine based curing agent. It is especially formulated for use to cure at high humidity, low temperature (down to 5 °C) and underwater. It has excellent chemical resistance and low water miscibility. It renders excellent adhesion even during damp and cold conditions for crack injection system.

USES

PowerFix UWE can be used for sealing cracks in structural concrete such as columns, beams, foundations, decks, roadways and water retaining structures etc. it forms a permanent seal and can be used to stop active leaks from concrete cracks in basements, water bodies, etc. It can be used to treat cracks of widths between 0.2mm to 10mm and minor cavities.

ADVANTAGES

- Low viscosity ensures deep penetration into fine cracks
- Improves bonding between two concrete surfaces and steel
- Resistant to wide range of chemicals
- Can withstand high hydrostatic pressure
- Cures to form an impermeable seal

TYPICAL PROPERTIES at 25°C

PROPERTY	TEST METHOD	VALUE
Component	–	two components
Mix form	–	Liquid
Pot life	–	60mins
Compressive strength	BS 6319-2	75N/mm ² at 7 days
Flexural strength	BS 6319-7	44 N/mm ² at 7 days
Bond strength	ASTM D4541	>5 N/mm ² at 7 days

SURFACE PREPARATION

Surface should be clean, free of dust, loose particles, greases, oil, curing compounds, and loosely adhering particles. Cement laitance should be removed by mechanical means.

Cracks should be open by using cutting discs with straight edges. Loose particles and dust should be removed from the cracks using suitable tools or equipment.

MIXING

Whole content of hardener is emptied into the base container and mixed thoroughly until a homogeneous mix is obtained. Slow speed drill machine with mixing paddle should be used for mixing. Mix for at least 2-3 minutes.

APPLICATION

Copper tubes are fixed into the pre-drilled holes. Spacing of the copper tubes should depend on the width and depth of the cracks. Copper tubes are placed in intervals to ensure that the materials fill in cracks and cavities completely. **PowerFix UWE** is also used to fix the copper tubes and seal the surface cracks between two injection ports by adding cement or calcium carbonate. Allow **PowerFix UWE** to harden for at least 5 hours before proceeding to injection of **PowerFix UWE**. It can also be filled into horizontal cracks by gravity method. For such applications, make sure that the crack is cut in “V” shaped by using cutting discs pour the material in “V” shaped cut and allow the material to flow inside the cracks. Excess material on the surface can be removed by scrapping.

PACK SIZE

3.8 kgs per set

LIMITATIONS

PowerFix UWE should not be used in cracks which are likely to move. At higher temperatures the pot life of the material will be considerably shorter. It should not be used if there is running water during applications or before setting time of material. Part mixing of material should be avoided

GENERAL INFORMATION

Shelf Life 12 months from date of manufacture when stored under warehouse conditions in original unopened packing. Extreme temperature/humidity may reduce shelf life.

CLEANING

Clean all equipment and tools with water immediately after use.

HEALTH and SAFETY

Gloves, goggles & suitable mask must be worn.

TECHNICAL SERVICE

Philippine SkyBird Industrial Corp. Services are available on request for on-site support to assist in the correct use of its products.