

# CONGUARD WRE

Epoxy resin based, non-toxic, high build solvent free coating

## DESCRIPTION

**CONGUARD WRE** is a 100% solid, solvent free, two component, high build epoxy coating, specially formulated to provide excellent abrasion and chemical resistance to steel or concrete, particularly on vertical surfaces including areas subject to permanent immersion. It is normally applied to a nominal dry film thickness of 400-500 microns in 2 coats.

## USAGES

- Coating of steel & concrete substrates
- Applied in areas subject to abrasion and chemical attacks
- Water treatment plant, manholes, food production & process areas
- Industrial and commercial kitchens

## STANDARDS

**CONGUARD WRE** is formulated to comply with all requirements of ASTM D16.

## ADVANTAGES

- Good chemical resistance
- Good abrasion resistance
- Surface anti-slip roughness control by adding or broadcasting silica-sand if needed
- Hygienic, anti-bacterial & fungus growth
- Non-toxic
- Waterproof and dustproofing
- Easy to clean
- Cost effective
- Trafficable

## TECHNICAL DATA

### CONGUARD WRE

### Typical values

<i>Solid Content</i>	100 %
<i>Specific Gravity @25°C</i> <small>(ASTM D1475)</small>	1.32 kg/lit
<i>Pot Life @25°C</i> <small>(ASTM D2471)</small>	30 – 60 min
<i>Touch Dry @25°C</i> <small>(ASTM D2471)</small>	3 – 6 hours
<i>Full Cure Time @25°C</i> <small>(ASTM D1640)</small>	7 days
<i>Overcoating Interval @35°C</i>	16 – 48 hours
<i>Thickness WFT</i>	200 – 250 μ
<i>Bond Strength</i> <small>(ASTM D4541:02)</small>	2 N/mm <sup>2</sup>

## USAGE INSTRUCTIONS

### 1. Surface preparation

#### Concrete

All substrates shall be sound, clean, free from dust, grease & oil, dirt, wet substrates should be sponge-dried to remove all free surface water.

Concrete floors should have compressive strength not less than 25 MPa. and if new concrete floor, it must be over 28 days old before applying any resin-based product.

Any cracks or grooves should be filled using **PIOMORTAR FC** before priming.

#### Steel

Mechanically prepare steel surfaces to SA21/2. NACE No2 or SSPC-SP 10 prior to applying **CONGUARD WRE**.

A 50-75 microns profile to steel surfaces is desirable to ensure a good mechanical key.

### 2. Priming

Apply one coat of **PIOPRIME 38** or **PIOPRIME 62** depending on concrete porosity, ensure that the surface

to be primed is clean, dry and free from oil, grease or other contamination.

CONGUARD WRE	Coverage
PIOPRIME 38	9 m <sup>2</sup> /liter
CONGUARD WRE	4-5 m <sup>2</sup> /liter/200-250μ

All coverage rates given are theoretical and subject to actual site conditions. We recommend trial areas are done to establish a practical estimation to material consumption.

### 3. Mixing

Stir component A only separately, then the entire content of component B could be poured into the Component A container, both should be mixed at least for 1-2 minutes using mechanical mixer (drill mixer). Insufficient mixing may lead to color variation and bubble formation.

### 4. Application

Transfer the mixed material into a suitable container for application, apply material using a short pile roller to achieve the required film thickness, it is recommended to apply two coats within 24 hours.

### 5. Cleaning

Clean all tools and application equipment with a suitable thinner immediately after use.

Hardened or cured material can only be removed mechanically.

## PACKAGING

CONGUARD WRE is supplied in 20 liters set, component A & B.

## LIMITATION

Don't apply CONGUARD WRE if;

- The temperature of the surface is below 5 °C or over 40 °C
- The flooring concrete compressive strength is less than 25 MPa
- The flooring concrete moisture content must be less than 4%
- Color fading may occur in areas subjected to prolonged UV exposure however the performance of the material will not be affected

## HEALTH & SAFETY

Before applying CONGUARD WRE, all safety protections should be worn during application, such as safety goggles and rubber gloves to avoid any harmful accidents.

If CONGUARD WRE is splashed to skin, it must be washed off by water and soap at once, and if to the eyes seek medical attention immediately.

## STORAGE & SHELF LIFE

CONGUARD WRE shall be stored in its sealed container under dry and shaded place in a temperature from 5°C - 35 °C, shelf life of the material is 12-months.

## CHEMICAL RESISTANCE

CONGUARD WRE	Concentration
Chlorine	100%
Kerosene	100%
Gasoline	100%
Nitric Acid	40%
Sulphuric acid	30%
Ammonia (Salt Water)	30%
Acetic acid	30%
Detergents	100%
Alum	100%
Formic acid	40%
Hydrochloric acid	50%
Phosphoric acid	20%
Sodium Hydroxide	50%
Soda SolutionX	100%

## TECHNICAL SERVICE

The technical service department of Arkaz is available to assist in the correct and best use of our products, these resources and advice are at your disposal entirely without obligation.

Please contact:  
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13-March-2020