

MORTAR 303ICP

High Strength Epoxy Grout

GENERAL DESCRIPTION

AXEL MORTAR 303ICP is a 2 component ultra-high strength epoxy grout mortar paste formulated as a patching grout to concrete structures as used in the areas of repairs to honeycomb concrete, spalling, pot holes at walls or industrial floors.

AXEL MORTAR 303ICP is designed for use in concrete pile repairs as well as in metal-cap jointing between piles or bridge bearing pads.

RECOMMENDED USES

- * Concrete piles
- * Machine bases
- * Similar grouting applications as in concrete structures
- * Column bases (steel & pre-cast concrete) anchor bolts
- * Bridge bearing pads
- * Column bases
- * Crack lines

CHARACTERISTICS & ADVANTAGES

- * High compressive > 80 MPa in 1 day & bond strength
- * Chemical resistant properties
- * Reduce maintenance cost
- * No corrosive effect caused by metallic residue
- * Re-coat able with most solvent epoxy system
- * Seamless joints
- * Anti dust and easy to clean
- * Very hard & durable
- * No rusting or staining on exposed edges
- * Controlled expansion, ensuring positive surface contact

COVERAGE

Depending on site situation

COLOURS

Concrete grey

PACKING

14.25 kg per set

Part A: 9.5 kg per pail

Part B: 4.75 kg per pail

STORAGE

Store in a dry, cool and shaded place



SURFACE PREPARATIONS

The substrates shall be clean, dry and free from oil, grease or contaminations. Remove any loose or honeycomb concrete until a firm base is achieved.

METHOD OF APPLICATION

- * Use either hand mixing or mechanical mortar mixers. For mechanical mortar mixer, preferably of the paddle or revolving drum type.
- * Allow approximately 5 minutes mixing. Thorough mixing is essential for achieving maximum results.
- * **AXEL MORTAR 303ICP** grout should be placed within 20 minutes of mixing. During that time keep material in mixer well agitated. Discard any grout mix that shows signs of stiffening.

For concrete repair:

Mix Part A and B at 2:1 ratio preferably with a mixer tool. However, if hand mix is used care must be taken to ensure that it is mixed evenly. Place the freshly mix **AXEL MORTAR 303ICP** onto the substrate. Discard any balance materials before it begins to set.

Bonding plates:

Mix **AXEL MORTAR 303ICP** at a ratio of 2:1 homogeneously places the mix evenly over the substrate and compact it with a trowel. Place the bonding plate or capping over the **AXEL MORTAR 303ICP**. Discard any balance materials.

CLEANING OF TOOLS

Clean all tools and application equipment with solvent immediately after use. Hardened or cured material can only be mechanically removed.

TECHNICAL SPECIFICATIONS

No. of component		Two
Mixing ratio		2:1 (A:B)
Density (25°C)		Approximately 2 kg/l
Pot life (28°C)		Approximately 40 minutes
Compressive strength	BS EN12390	>80 MPa (1 day) >95 MPa (3 days) >100 MPa (7 days)
Flexural strength	ASTM C-580	30 MPa
Tensile strength	ASTM C-307	10.5 MPa
Bond strength : excellent - 100% concrete failure		> 5 MPa
Full cure		7 days
Water absorption		< 0.5%

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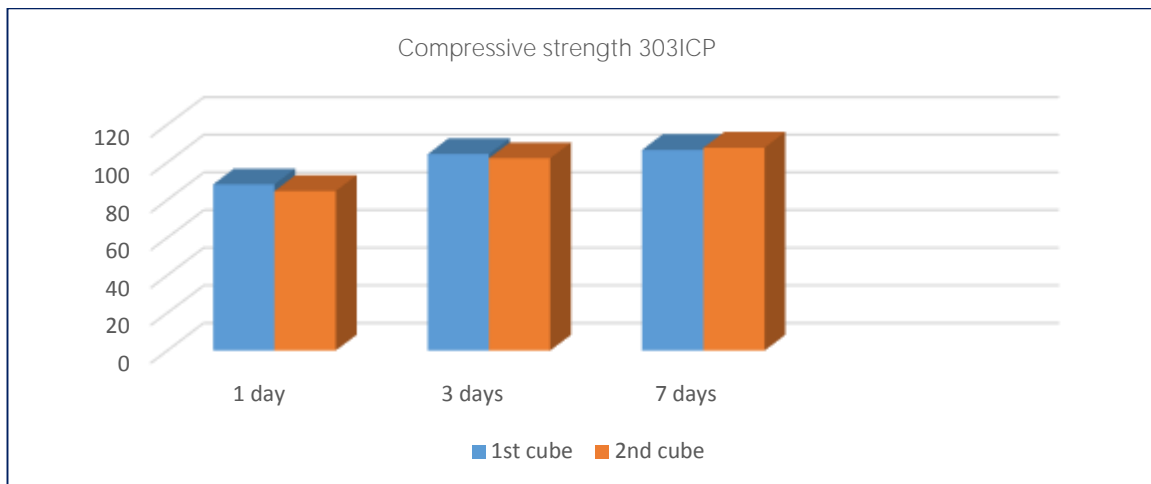
TEST DATA

Compressive strength of 50mm grout cube

Test method: BS EN 12390 - Part 3: 2009 conducted by Setsco Service (M) Sdn Bhd

Lab's marking	Dimension (mm)			Date cast	Date test	Age at Test	Mass (kg)	Density (kg/m ³)	Maximum load (kN)	Compressive Strength (N/mm ²)	Mode of Failure
	x	y	z								
1	50	50	50	22/09/2020	23/09/2020	1	0.26	2080	220.7	88.3	Satisfactory
2	50	50	50				0.26	2080	212.1	84.8	Satisfactory
3	50	50	50		25/09/2020	3	0.24	1920	261.1	104.4	Satisfactory
4	50	50	50				0.26	2080	255.5	102.2	Satisfactory
5	50	50	50		29/09/2020	7	0.26	2080	266.5	106.6	Satisfactory
6	50	50	50				0.26	2080	269.5	107.8	Satisfactory

Notes: The Mode of Failure is based on the assessment of type of failure shown in figure 1 and figure 2 of BS EN 12390-3: 2009



SHELF LIFE

12 months from the date of production if stored properly in original, unopened and undamaged sealed packaging in dry conditions.

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