

CP-EPOXY11 : two part adhesive and repair mortar, based on a combination of epoxy resins and special fillers

Advantages

- The high adhesion
- indigestion
- High initial and ultimate mechanical strength
- Good adhesion to concrete and steel.
- Good abrasion resistance
- Different coloured components (for mixing control)

Uses

- Concrete elements
- Steel, Iron, Aluminium
- Use an external reinforcement
- Joint and crack arris / edge repair
- Good abrasion resistance
- Vertical and overhead use Joint filling and crack sealing

Mixing

PART A : RESIN

PART B : HARDENER

Colours Part A: white Part B: dark grey Parts A+B mixed: concrete grey

The chemical resistance

Organic acids	: Good
Alkalis	: Good
Brine	: Excellent
Detergents	: Excellent
Fats	: Excellent
Mineral Oils	: Excellent
Salts	: Excellent
Soaps	: Excellent
Sugar Solutions	: Good

PULL OUT STRENGTHS IN CONCRETE

Steel diameter (mm)	Hole Diameter (mm)	Hole Depth (mm)	Concrete Strength (Mpa)	Ultimate tensile load	Ultimate shear load
12	17	120	30	60	58
16	21	180	30	75	82
20	25	200	32	118	86
25	30	240	40	230	145

CONSUMPTION CALCULATION FORMULA

$$\text{Consumption (cc)} = (r^2 \text{ Hole} - r^2 \text{ Steel}) \times L \times 1.2 \times 1.0 \times 10^{-3}$$

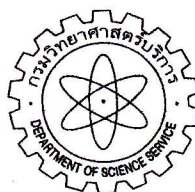
Note : L = Hole Depth

1.2 = 20% Loss

R = D/2

Recommended Spacing : The minimum distance between anchor or edge distance should not be less than the recommend hole depth

Steel Diameter (mm)	Hole Diameter (mm)	Hole Depth (mm)	Consumption (CC) with 20% loss
6	11	60	5
9	14	90	10
12	17	120	16
16	21	160	28
20	25	200	43
25	30	240	82



TEST REPORT

Sample's name

CP Epoxy-11

Mark / Brand

-

Laboratory No.

L52/02221.1

Test Results

	No.1	No.2
Tensile force, kgf	2,070	2,010

Customer's name CP. Conpro Co., Ltd.

Customer's address 558/30 Moo 12 Bangna-Trad Road, Bangna, Bangkok 10260

Sample's description Part A : white gel Part B : black gel

Test date 4 - 27 May 2009.

Test method Tested by Universal Testing Machine Shimadzu : Model UMH - 50 by tensile force between deformed steel bar and cube concrete with rate 20 kgf/sec at temperature $30 \pm 1^\circ\text{C}$.

Remark

1. Sample mixed, Part A : Part B = 1 : 1 by weight.
2. Concrete mixed, portland cement type I : sand : stone = 65 : 162 : 218 by weight, water/cement = 0.51, curing time 12 days.
3. Specimen, made circular hole diameter of 12 mm and depth of 87 mm on cube concrete dimension of 150 x 150 x 150 mm . Put CP Epoxy-11 and deformed steel bar diameter of 12 mm in the hole, keep 24 hours.
4. Concrete was failed.

Approved by

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