

MasterShield CP 816 (formerly MasterProtect 816CP)

A free-flowing fast setting grout, for embedding discrete anodes

Material Description

MasterShield CP 816 is a cementitious grout/mortar that is specifically formulated for embedding discrete anodes used in impressed current cathodic protection installations of reinforced concrete. **MasterShield CP 816** is especially developed for optimum life expectancy of these CP installations. **MasterShield CP 816** is a blend of hydraulic cements, selected silica, modifying agents and special additives for pH buffering. When mixed with potable water, **MasterShield CP 816** forms a long open timed grout with extraordinary flow characteristics.

Areas of Application

Embedding discrete anodes used in impressed current cathodic protection installations.

Characteristics and Benefits

- Improved acid resistance compared to normal grouts against the chemicals created at the anode surface – long life of the anode encasement.
- Low resistivity – enhances current flow through anode.
- Expands during setting - guarantees good filling of the hole and embedding of the anode.
- Long open time – more than 1 hour of working time.

Properties

Supply form	Powder
Grain size (max)	0.4mm
Water added per bag (20kg)	3 – 3.6 litres
Colour	Grey
Density (mixed)	~2.0kg/L
Compressive Strength (@3.6 litres/20kg bag)	
- 1 day	18 MPa
- 7 days	41 MPa
- 28 days	50 MPa

Flexural strength 7 days	7 MPa
Electrical Resistivity (Wenner 4 probe method)	
- 7 days	~2700 Ω.cm
- 28 days	~5300 Ω.cm
- 56 days	~8700 Ω.cm
- 90 days	~12000 Ω.cm

Application

Substrate Preparation

Loose particles in the holes should be removed. Slightly dampen the substrate if possible and remove free standing water.

Mixing

Pot life ± 1 hour

Final set ± 2.5 hours

Approximately 3-3.6 litres of water per 20kg powder is necessary in order to obtain the required flowing consistency. To control set time it is advised to use warm water in cold environments and cold water in warm conditions.

MasterShield CP 816 can be mixed mechanically. Gradually blend the powder into clean water. Mix until lump free consistency is obtained. Do not overmix.

Application

Do not apply **MasterShield CP 816** if ambient temperature is below 5°C or expected to fall below 5°C within 4 hours.

All holes can simply be filled with the material. To assist complete filling of those holes, it can be necessary to move the anodes up and down, in order to release any entrapped air.

Estimating Data

A 20kg bag of **MasterShield CP 816** mixed with 3 litres of water yields 10.5 litres.

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Curing

MasterShield CP 816 is self-curing. In hot, dry or windy environments it can be necessary to cover the material with some wet cloths after the initial set.

Cleaning

MasterShield CP 816 is a cementitious product. Tools should be cleaned with water before the material hardens.

Packaging

MasterShield CP 816 is available in 20kg moisture resistant paper bags.

Storage & Shelf Life

MasterShield CP 816 is can be stored in tightly sealed original bags for 12 months if kept dry and at moderate temperature.

Precautions

For the full health and safety hazard information and how to safely handle and use this product, make sure that you obtain a copy of the Safety Data Sheet (SDS) from our office or website.

Disclaimer

MasterShield CP 816-ANZ-V1-1224

STATEMENT OF RESPONSIBILITY

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