

MasterEmaco[®] 820

Cementitious spray applied repair mortar

DESCRIPTION

MasterEmaco 820 is a ready-to-use, cement based shotcrete mix with reduced rebound. It is specially designed for civil and mining applications using either the wet or dry shotcreting systems.

RECOMMENDED USES

- Repairs to the underside of bridge decks, bridge piers and beams, tunnels, drains, sea walls, and culverts.
- Reinstating of eroded concrete in sewers prior to the application of **MasterEmaco S 880**
- Tunnel linings and embankment stabilisation.

FEATURES AND BENEFITS

- **Factory mixed** – No onsite variations
- **Easy to use** – Requires only the addition of potable water for mixing or spraying
- **Economical** – Reduces handling and clean-up costs and speeds up repairs
- **Versatile** – Is easily sprayed using the wet mix shotcrete system or dry mix systems
- **Good working time** – Over one hour at 21°C
- **Polymer Modified** – Improved bonding and impermeability
- **Controlled shrinkage** – Reduced cracking tendency

PERFORMANCE DATA

Age	Compressive Strength MPa	Flexural Strength MPa
1 day	30.0	3.0
3 days	45.0	4.0
7 days	60.0	5.0
28 days	70.0	6.0

* All performance data are determined by testing of actual, in-place shotcrete specimens such as cores and beams taken from test panels.

Reasonable variations from the data shown can be expected, depending on the care taken in evaluating test specimens, and jobsite conditions such as the quality of substrate preparation, level of expertise of the nozzle man, curing procedures and weather.

APPLICATION DIRECTIONS

Prepare the surface to be shotcreted by removing all unsound concrete, dirt, dust, and debris. For structural repairs to existing concrete members, saturate the properly prepared concrete surface for a minimum of 7 hours prior to shotcreting.

Mix **MasterEmaco 820** with approximately 1.8-2.5 liters of water per 20kg bag.

MasterEmaco 820 can be shotcreted in depths ranging from 10 - 150mm in one pass.

CURING

Proper curing is extremely important. Wet curing is recommended for the first 3-5 days after, that time continue curing by the use of a quality curing compound such as **MasterKure 181**.

ESTIMATING DATA

One 20kg bag of **MasterEmaco 820** mixed with water yields approximately 10.2 liters (0.0102m³). Allowance must be made for rebound and cut off for finishing which will reduce the coverage accordingly.

Without allowing for cut-off, an allowance of 5-10% can be made for rebound. This is for an experienced nozzle man and ideal conditions. For overhead spraying the rebound allowance may be increased to 10-50% depending on the admixtures used. Refer to your Master Builders Solutions technical representative for further advice.

PACKAGING

MasterEmaco 820 is available in 20kg bag

SHELF LIFE

MasterEmaco 820 has a shelf life of 12 months. Store out of direct sunlight, clear of the ground on pallets protected from rainfall.

PRECAUTIONS

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

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MAP# MasterEmaco S 820 v2- 12.2020

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