

# MasterEmaco<sup>®</sup> S 880

Cementitious spray applied repair mortar for aggressive environments

## DESCRIPTION

**MasterEmaco S 880** is a ready-to-use, high Alumina cement based shotcrete mix with reduced rebound. It is specially designed for sewer repair applications or where acid resistance is required using dry shotcreting systems.

## RECOMMENDED USES

- Repairs to brick, cast in place concrete and precast concrete sewers.
- Reinstating of linings of sewers after repair with **MasterEmaco S 820 CI**
- Tunnel linings or other places where resistance to acidic waters is required.

## FEATURES AND BENEFITS

- **Factory mixed** – No onsite variations
- **High Alumina clinker and cement** – All ingredients reactive and form an acid resistant matrix
- **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
- **Self-healing** – Long term reactivity of matrix heals surface cracks increasing life of repair.
- **Good working time** – Over one hour at 21°C
- **Controlled shrinkage** – Reduced cracking tendency.

## PERFORMANCE DATA

Bond Strength (substrate failure)	>2.5Mpa
Compressive Strength*	
At 1 D	~70 MPa
At 28 D	~100MPa
Flexural Strength*	
At 1D	~9.0MPa
At 28D	~12.0MPa
Coeff. of Thermal Expansion	8.5 X 10 <sup>-6</sup> /°C
Taber abrasion CS17 wheel	58g

*\*Performance data is determined by testing of actual, in-place shotcreted 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. If applying over recently sprayed **MasterEmaco S 820 CI** ensure that the surface has been cleaned and that the surface has not been troweled smooth. For Brick lined sewers ensure that all loose mortar in the joints has been removed and that the face of the bricks is clean.

Mix **MasterEmaco S 880** with approximately 1.8-2.5 liters of water per 20kg bag.

**MasterEmaco S 880** can be shotcreted in depths ranging from 10 - 150mm in one pass.

## CURING

Proper curing is extremely important however given the environment (moist and humid) that this product is placed in the use of curing compounds or other forms of curing are not necessary

## ESTIMATING DATA

One 20kg bag of **MasterEmaco S 880** mixed with water yields approximately 10.2 liters (0.0102m<sup>3</sup>).

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 S 880** is available in 20Kg bag

## SHELF LIFE

**MasterEmaco S 880** has a shelf life of 12 months. Store out of direct sunlight, clear of the ground on pallets protected from rainfall.

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## 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 880 v2-12.2020**

### STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this Master Builders Solutions publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability, or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

### NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by Master Builders Solutions either orally or in writing may be followed, modified, or rejected by the owner, engineer or contractor since they, and not Master Builders Solutions, are responsible for carrying out procedures appropriate to a specific application.

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