

# YASH EPO MORTAR 102



## YASH EPO MORTAR 102

High strength epoxy concrete.

### Description

YASH EPO MORTAR 102 is a three component, solvent-free, high strength epoxy concrete designed principally for use in construction and renovation work. The graded filler system allows easy placing and compaction with negligible shrinkage.

When used in conjunction with Strong coat Primer produces excellent adhesion to a range of building materials. For damp conditions, YASH EPO COAT 801 is used as a primer. When finished correctly, will provide an impermeable layer with good resistance to abrasion, weathering and chemical attack. YASH EPO MORTAR 102 is supplied in a grey concrete colour to match existing concrete substrates. YASH EPO MORTAR 102 applications include deep section repairs in columns, walls and heavily loaded areas. YASH EPO MORTAR 102 may also be used as an infill mortar by ramming and packing techniques beneath steelwork or beneath concrete beams in underpinning work. YASH EPO MORTAR 102 may also be used as a sub-base for epoxy resin coatings and fine screeds when a greater build is required together with a tighter, smoother finish.

### Method of Use

#### Surface Preparation

The surface must be structurally sound, free from oil, grease and other forms of contamination. Concrete surface should be dry and suitably prepared either by scabbling or grit blasting to remove any undesired surfaces.

Steel surfaces should be grit blasted to remove all rust and scale (see the YASH Guide to Surface Preparation for further details).

#### Priming

Surfaces must be primed with Yash Epoxy Primer 371 prior to application of YASH EPO MORTAR 102. The primer should be applied so that the surface is thoroughly wet, ensuring there is a continuous film of resin over the surface.

Particular attention should be paid to cracks. A nominal 500 microns of resin should be applied to exposed reinforcement. YASH EPO COAT 801 is used as a primer for damp conditions.

### Technical Properties @ 25°C:

Colour	: Grey
Compressive strength @ 25°C:	> 25 MPa @ 1 day > 55 MPa @ 3 days > 65 MPa @ 7 days
BS6319, Part 2:1983	> 65 MPa @ 7 days
Tensile strength @ 25°C	:> 8 MPa
BS6319, Part 7:1985	
Flexural strength @25°C	:> 18 MPa
BS6319, Part 3:1990	
Bond strength	: > 2.0 MPa
Mixed density	: 1.9 ± 0.1
Pot life	: 1 - 2 hr @ 25°C
Hard dry time	: 1 day
Full cure	: 7 days
Application temperature Range	: 8 - 38°C
Service temperature Range	: -20 - 55°C
Top cut aggregate size	: 1 mm

YASH EPO MORTAR 102 should be applied between 15 minutes and 1 hour after application of the primer, whilst the primer is still tacky.

When YASH EPO COAT 801 is used as a primer, YASH EPO MORTAR 102 can be applied after 2 hours, or when the primer becomes tacky.

### Mixing

YASH EPO MORTAR 102 comprises of three components, a resin base, hardener and filler which are pre-weighed to the correct proportions. Under no circumstances should part mixing be carried out.

Ensure that the bottom and sides are thoroughly scraped; transfer the entire contents of the hardener container into the resin container. Using a mixer attached to a slow speed electric drill, mix for approximately 2 minutes until a uniform consistency is obtained. The resin mixture should then be transferred to a separate container or forced

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action mixer such as a creteangle type mixer, and the filler gradually added and mixed for a further 2 minutes or until the filler has thoroughly wetted out and a uniform consistency is obtained.

## Application

YASH EPO MORTAR 102 should be applied by first tamping, followed by troweling before the primer coat has hardened.

The mortar should be applied in successive layers not exceeding 50 mm horizontally and up to 12 mm vertically, each layer being well compacted before each application of subsequent material.

If the mortar has been allowed to harden, the surface should be abraded and a further coat of Strong coat Primer to be applied.

Where necessary, the mortar is shaped to the required profile e.g. to form coving and trowelled to a smooth finish. This operation can be aided by lightly wiping the trowel with YASH EPOXY solvent.

If formwork or shuttering is to be used a suitable release agent should be applied to the formwork to prevent the YASH EPO MORTAR 102 adhering to it.

## Curing

YASH EPO MORTAR 102 should be allowed to cure for 24 hours at 25 °C before being subjected to foot traffic. At the same temperature, full mechanical and chemical properties are achieved after 7 days (please consult our Technical Department for details of curing times at other temperatures).

## Cleaning

Clean uncured material with YASH solvent. Cured material can only be removed mechanically.

## Packaging

YASH EPO MORTAR 102 is available in 10 kg pack size (5.25 litre) comprising resin base, hardener and filler component.

Strong coat Primer is available in 5 kg packs comprising resin base and hardener.

## Specified Thickness Range

**Horizontally:** 5 - 50 mm (maximum refers to one layer at a time to allow full compaction, deeper sections may be applied but built up in successive layers).

**Vertically:** 5 - 12 mm.

## Yield

YASH EPO MORTAR 102: 10 kg (5.25 litre).

Yash EPO Primer 371: 5.0 m<sup>2</sup>/kg.

## Storage

Protect from frost and store under dry warehouse conditions at temperatures between 5°C and 40°C.

If these conditions are exceeded, YASH Technical Department should be contacted for advise.

## Shelf Life

YASH EPO MORTAR 102 has a shelf life of 12 months from date of manufacture if stored in unopened, undamaged, sealed containers and stored under good conditions.

## Cautions

### Health and Safety

Consult the appropriate Material Safety Data Sheet prior to using YASH EPO MORTAR 102.

Yash Crackmate is nonflammable.

## Fire

Yash YASH EPO MORTAR 102. is nonflammable.

### More from YASH CONCHEM Products

A wide range of construction chemical products are manufactured by YASH which include:

- Concrete admixtures.
- Surface treatments
- Grouts and anchors.
- Concrete repair.
- Flooring systems.
- Protective coatings.
- Sealants.
- Waterproofing.
- Adhesives.
- Tile adhesives and grouts.
- Building products.
- Structural strengthening.

Note : We endeavor to ensure that any advice, recommendation or information we may give in product literature is accurate and correct. However, due to the fact that we have no direct or continuous control over where or how the products are applied, Yash cannot accept any liability either directly or indirectly arising from the use of Yash products, whether or not in accordance with any advice, specification, recommendation or information given by us.