

MASTERBRACE ADH 1406 (CONCRESE 1406)

Epoxy based, repair and anchorage mortar.

**Description of the Product:**

MASTERBRACE ADH 1406 is epoxy based repair, anchorage and adhesive mortar with two components.

Fields of Application:

- Chemical anchoring in concrete and brick walls,
- Repair and insulating of wide cracks,
- Bonding of various types of construction materials such as steel, concrete, brick to each other,
- Cap seal and entry ports installation in epoxyurethane injection works,
- Fixing the guard bars and seismic isolators to the bridges and viaducts,
- Anchoring the rods and deformed bars to the concrete, stone or brick.

Features and Benefits

- Pasty consistency, easy to apply and non-sag properties in over-head applications.
- Perfect adhesion to the concrete and steel.
- Resists to chemicals.
- Water and gas impermeable.
- Perfect adhesion to the damp surfaces on concrete.

- Solvent free.

Application Procedure**Preparation of Substrate**

The concrete surfaces must be sound, clean and dry. It shouldn't be weakened by over-troweling and lack of curing. The concrete should be free of frost, curing membranes, waterproofing treatments, oil stains, laitance, friable material and dust. If there is a water leakage it must be drained or properly plugged. Steel surfaces should be cleaned from rust by sand blasting and if needed new reinforcement should be installed. The edges of the broken surfaces should be saw cut.

Mixing

MASTERBRACE ADH 1406 has two components in pails, produced according to right mixing ratio. Material temperature should be between 15-25°C before mixing. Component B should be added into the Component A without any remaining material in the pail. It should be mixed with using a proper mixer (~300rpm) for polymer mixing. Mix the components at least 3 minutes to have a homogenous mixture.

Mixing Ratio

MASTERBRACE ADH 1406	Part A	Part B
Quantity	3.75 kg	1.25 kg
Mixed density	1.70 kg/litre	

Application Method

MASTERBRACE ADH 1406 should be applied to the prepared surface by using a steel spatula or steel trowel. Application thickness should be between 2-30 mm. For anchoring the anchor holes should be drilled 6 mm wide than anchor bar's diameter and in designed depth. The holes

should be cleaned by using steel brush and air guns. Mixed material should be put in a mortar gun with a proper nozzle and start to fill the holes into half depth. Install the anchor bar into the hole slowly by screwing and do not drive the bars.

Coverage

1.7 kg/m² for obtaining 1 mm thick layer.

Watch Points:

During the application the substrate and ambient temperature should be between 5-30°C.

Packaging

Component A: 3.75 kg pail

Component B: 1.25 kg pail

Storage

Store in original container in cool (+5°C - +25°C) and dry indoor conditions.

Technical data

Product chemistry: MASTERBRACE ADH 1406 Comp A MASTERBRACE ADH 1406 Comp B	Epoxy resin Epoxy hardener
Colour	Grey
Mixed density	1.70 ± 0.05 kg/litre
Compressive strength (20°C) EN 196 (1 day) (7 days)	30 N/mm ² 75 N/mm ²
Flexural strength (20°C) EN 196 (1 day) (7 days)	17 N/mm ² 25 N/mm ²
Bonding strength (7 days) to concrete (EN 1542) to steel	> 3.0 N/mm ² > 3.5 N/mm ²
Application thickness	Min - 2 mm, Max - 30 mm
Application temperature	+5°C - +30°C
Pot life (20°C)	40 minutes
Recoat after (20°C)	18-24 hours
Service temperature	-15°C - + 90°C
Fully cured at 20°C	7 days