

# MC-AnchorSolid E1030

High-load pure epoxy anchoring adhesive for cracked and uncracked concrete



## PRODUCT PROPERTIES

- Ready-to-use, 2-component, pure-epoxy anchoring adhesive
- Suitable for dry/wet, cracked and uncracked concrete
- ETA approved for anchoring and post-installed rebar connections
- Suitable for earthquake-prone regions with C1 seismic approval and seismic category F according to ICC-ES
- Fire exposure curve for post-installed rebar connections (upto 150°C)
- A+ classification according to French VOC emission regulations
- Certification for potable water according to ANSI/ INSF61 and WRAS
- Meets requirements of LEED v4.1
- Reduced drilling diameters leads to significant material and labour savings

## AREAS OF APPLICATION

- Anchoring and post-installed rebar connections in horizontal, vertical and overhead areas
- Anchoring of heavy equipment and machinery
- Anchoring of threaded rods and rebars for fixing attachments: e.g. consoles, railings, storage racks, scaffolding, suspended ceilings
- Approved as bonded injection type anchor according to ETA-25/0737 for use in cracked and uncracked concrete with hammer drilling method
- Approved as an injection mortar for post-installed rebar connections according to ETA-25/0738 with hammer drilling and compressed air drilling

## APPLICATION ADVICE

**Intended use:** The preparation and application of anchoring works with MC-AnchorSolid E1030 has to be done in consideration of the European Technical Assessment (ETA-25/0737 and ETA-25/0738) and the noted design and application instructions. The application of MC-AnchorSolid E1030 out of these instructions is not allowed.

**Mixing the components:** Components A and B of MC-AnchorSolid E1030 are automatically mixed as they pass through the static mixer of the cartridge system and can be processed directly. The working time of the resin depends on the ambient temperature. Cooling the cartridges can extend the working time. Heating shortens the working time.

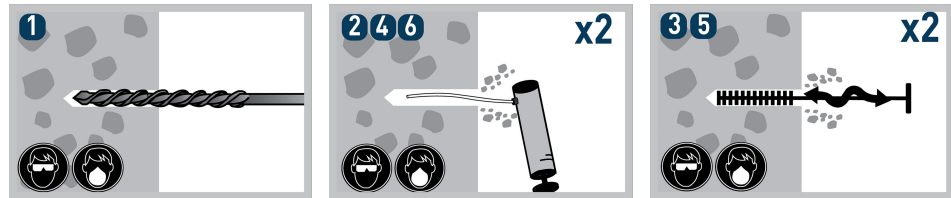
If the work is interrupted longer than the processing time allows, the static mixer must be replaced with a new one. Opened cartridges must be closed with the original cap and can be used again promptly ( $\leq 7$  days). Application work should cease once component/substrate temperatures fall below 5 °C. Ensure compliance with the information given in the specifications and the Safety Data Sheets.

### Working and loading times:

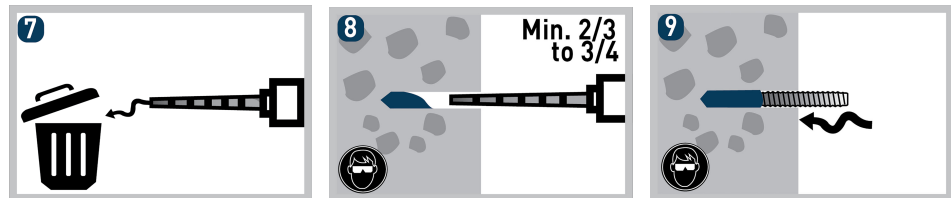
Cartridge temperature	T <sub>work</sub> (Working time)	Substrate temperature	T <sub>load</sub> (Min. loading time)
10°C	20 minutes	5°C to 10°C	24 hours
10°C to 15°C	20 minutes	10°C to 15°C	12 hours
15°C to 20°C	15 minutes	15°C to 20°C	8 hours
20°C to 25°C	11 minutes	20°C to 25°C	7 hours
25°C to 30°C	8 minutes	25°C to 30°C	6 hours
30°C to 35°C	6 minutes	30°C to 35°C	5 hours
35°C to 40°C	4 minutes	35°C to 40°C	4 hours
40°C	3 minutes	40°C	3 hours

T<sub>work</sub> is the typical working time at the highest temperature in the range. T<sub>load</sub> is the minimum set time at the lowest base material temperature in the range until load can be applied.

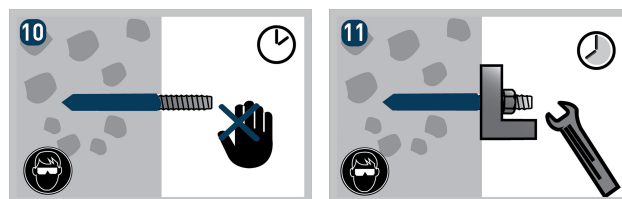
## Application:



1. Drill the hole to the specified hole diameter and depth, using a suitable drill bit of the appropriate size.
2. Using a suitable compressed air pump, insert the lance until the end of the hole, and blow air for 2 seconds. The compressed air must be clean and free from water and oil, with a pressure of minimum 6 bars.
3. Select a cleaning brush with an appropriate size for the hole. Ensure that the brush is in good condition and correct diameter such that there is a positive contact and brushing between the bristles of the brush and the sides of the drilled hole. Insert the brush to the bottom of the hole, use an extension for deeper holes if required. Slowly remove brush using a twisting motion. Perform the brushing operation twice.
4. Repeat Step 2
5. Repeat Step 3
6. Repeat Step 2



7. Select the appropriate MC-AnchorSolid mixer nozzle and check that the dispensing tool/ gun is in proper working condition. Do not modify the mixer. Attach the mixer nozzle to the cartridge and insert the cartridge into the dispensing tool/ gun. Extrude some resin to waste until an evenly coloured mixture can be seen. The cartridge is now ready to use.
8. Insert the mixing nozzle such that the tip reaches the bottom of the hole. Extrude the resin while slowly withdrawing the nozzle from the hole. Ensure no air voids are created in this process. Approximately 2/3 to 3/4 of the hole should be full of resin before the nozzle is removed from the hole.
9. Select the correct steel anchor element and ensure it is free from oil and other contaminants which may impede adhesion. Mark the required embedment depth before insertion. Slowly insert the steel anchor into the hole using a back and forth twisting motion until it reaches the bottom of the hole. Excess resin will emerge from the hole evenly and there should be no gaps between the anchor and the wall of the drilled hole. Clean any excess resin around the mouth of the hole.



10. Leave the anchor undisturbed for the required curing time and refer to the technical data sheet for the temperature-dependant working and loading times.
11. Position the fixture correctly and tighten the anchor using the appropriate installation torque. Do not use more torque than required, as this may adversely affect its performance.

**Load Data:** All given load data is based on a correct application and in compliance to all values and conditions in accordance with ETA-25/0737 and ETA-25/0738

## TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Density	g/cm <sup>3</sup>	1.5	ASTM D 1875
Mixing ratio	p.b.w.	1 : 1	cartridges
Reaction time, pot life <sup>1)</sup>	minutes	11	at 20°C
Curing time (T <sub>load</sub> ) <sup>1)</sup>	hours	approx. 7	at 20° C
Dowel diameter	mm	10 - 30	
Compressive strength 7 d	N/mm <sup>2</sup>	74	ASTM D 695
Flexural strength 7 d	N/mm <sup>2</sup>	15	ASTM D 790
Tensile strength 7 d	N/mm <sup>2</sup>	25	ASTM D 638
Elongation at break 7 d	%	0.4	ASTM D 638

All technical values are laboratory results determined at 20°C.

1) Please refer to table 'Working and loading times'

Delivery form	Single Piston: 250 ml with 1 MC-AnchorSolid Quadro Mixer Side-by-side: 650 ml with 1 MC-AnchorSolid Quadro Mixer 1 Carton contains 12 cartridges and 12 mixers
Colour	Brown
Storage	Can be stored in original sealed packages at temperatures between 5°C and 25°C in dry conditions for at least 24 months.
Packaging disposal	Make sure single-use containers are completely empty.

### Safety instructions

Please note the safety information and advice given on the packaging labels and safety data sheets.

**Note:** The information in this data sheet must be adapted by the installer, specialist planner, and/or building inspector to the respective construction project, intended use, and specific local conditions. Any non-standard local conditions must be taken into account, and application-specific conditions must be reviewed in advance by the planner/specifier. Deviations from the specified standard conditions require individual approval. Technical advice provided by MC's specialist consultants does not replace the need for a planning review by the client or its agents in respect of the history of the building or structure. Subject to this prerequisite, we are liable for the correctness of this information within the framework of our terms and conditions of sale and delivery. Recommendations of our employees deviating from the information given in our data sheets are only binding for us if they are confirmed in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be observed. The information given in this technical data sheet is valid for the product supplied by the country company listed in the footer. It should be noted that data in other countries may differ. The product data sheets valid for the relevant foreign country must be observed. The latest technical data sheet shall apply to the exclusion of previous, duly superseded versions; the date of issue in the footer must be observed. The latest version is available from us on request or may be downloaded from our website. [2600030908]