



ARDEX CE 231

Anchoring Adhesive

Fast anchoring

Superior bond strength to most substrates

High loading capacity

Outstanding fatigue resistance

High durability

Low shrinkage

Thixotropic and no sagging property

Can be used in moist conditions even underwater



ISO9001: 2015
CC 125



ISO14001: 2015
EC 060

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DESCRIPTION

ARDEX CE 231 is a thixotropic anchoring adhesive with high loading capacity, high bond strength, moisture tolerant, modified epoxy resin for rebar and bolt post-installation. It is in cartridge packing and can be applied with our dedicated dispenser gun.

ARDEX CE 231 conforms to the requirements for rebar installation and anchoring design in accordance with EN 1992-1-1.

RECOMMENDED USES

- Rebar post-installation or bolt anchoring for structural strengthening
- Equipment installation
- Curtain wall installation
- Suitable for use at rock, concrete or masonry substrates

ADVANTAGES

- High loading capacity,
- high tensile strength,
- High electric resistance and fatigue resistance
- Low shrinkage
- Faster anchoring
- Moisture tolerant
- Compatible with many types of substrates

APPLICATION

1. Locating and drilling

Identify and drill appropriate holes required for bolts and rebar installation. Ensure all dust and contaminants are thoroughly removed from the holes using mechanical cleaning methods, such as compressed air.

2. Surface preparation

Remove any rust and clean the rebar prior to marking the specified anchoring depth for each piece.

3. Injection with dispenser gun

Mixed and applied with injection equipment like caulking guns or dispenser guns. Discard any unevenly mixed material at the initial stage of injection. Commence grouting from the deepest point of the hole using a dispenser gun.

4. Rebar installation

Insert the rebar into the bottom of the hole to the specified anchoring depth, rotating it to get rid of any air bubbles on the rebar's surface as far as possible. Proper extrusion of the newly mixed material and complete filling of the drill holes indicates successful installation.

5. Curing

Allow the system to cure for 1–3 days subject to ambient temperature, ensuring that no external disturbances occur during this period.

ATTENTION:

- Anchorage capacity is determined by many factors including rebar surface treatment, diameter of the drill hole, diameter of rebar, anchoring depth, concrete strength grade and construction method. Anchorage capacity determined on site test prevent the drill holes from water or dry up the hole, if necessary, when apply ARDEX CE 231 in moist condition. Adjust the anchoring depth to gain more anchorage capacity because the capacity may be lower under moist condition.
- Keep welding line 500 mm above the surface of anchorage and cover the surface when welding is needed.
- Perform on site test and determination of anchorage capacity test prior to extensive application to ensure the actual performance of ARDEX CE 231 fulfilling design requirements.

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TECHNICAL DATA

Property	Test conditions	Technical requirements (GB50728)	Test Results
Appearance	Visual inspection	-	Thixotropic paste, no impurity
Sag flow	Application temperature	≤ 2.0	0 mm
Pot life	Application temperature	-	25 – 120 mins
Density	A + B	-	1.2 / 1.7 g/cm ³
Splitting tensile strength	23 ± 2°C, 7d	≥ 8.6	16.0 MPa
Flexural strength	23 ± 2°C, 7d	≥ 50	70 MPa
Compress strength	23 ± 2°C, 7d	≥ 60	90 MPa
Standard value of shear bond strength for steel to steel	23 ± 2°C, 7d	≥ 10	20 MPa
Bond Strength for adhesive agglutinate steel bar and concrete substrate in pull out constraint condition	C30 concrete, 150mm anchoring depth	≥ 11	15 MPa
	C60 concrete, 125mm anchoring depth	≥ 17	20 MPa
T impact peeling length for steel to steel	23 ± 2°C, 7d	≤ 25	0 mm
Tensile bond strength for steel and C45 concrete	23 ± 2°C, 7d	≥ 2.5 , concrete fails	4.0 MPa, concrete fails
Non-volatile materials content	105 ± 2°C	≥ 99	99.7 %
Damp-heat aging resistance ability	90d (50°C, 95%RH)	≤ 12	2.1 %

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Typical data of ARDEX CE 230 for rebar installation

Diameter of steel (mm)	Diameter of drill hole (mm)
8	12
10	14
12	16
14	20
16	22
18	25
20	28
22	30
25	32
28	35
32	40
40	48

Note: Anchoring depth determined by design or related technical specifications

Typical data of ARDEX CE 230 for bolt anchoring

Bolt size	Diameter of drill hole (mm)
M10	12
M12	14
M16	18
M20	25
M24	28
M30	35

Note: Anchoring depth determined by design or related technical specifications

PACKAGING

A 2-component cartridge system with a standard caulking gun is available, 400ml in total for the cartridge.

STORAGE AND SHELF LIFE

ARDEX CE 231 has a shelf life of 12 months when stored in the original, unopened packaging in a dry place between at 5 – 40°C. Can be transported normally when placed up and protected against direct sunlight and rain.

SAFETY PRECAUTIONS

ARDEX CE 231 should not come into contact with the skin and eyes or to be swallowed. Ensure adequate ventilation and avoid inhalation of vapors. Wear suitable gloves, goggles and other protective clothing. The use of barrier creams can provide additional skin protection. When working in confined areas suitable respiratory equipment must be used. In case of contact with skin, rinse with plenty of clean water then wash with soap and water. Do not use solvent. In case of contact with eyes, rinse immediately with plenty of clean water, and then seek medical attention without delay. If swallowed, seek medical attention straight away, do not induce vomiting.

DISPOSAL/SPILLAGE

Please refer to the Safety Data Sheet for the safe handling, storage and disposal of chemical products.

DISCLAIMER:

The technical datasheets are based on the latest information and given in good faith and represent the best of our knowledge and experience at the time of printing. They are primarily offered for user's consideration and evaluation. It is the responsibility of the user to conduct their own tests to validate the suitability of the products. It is also the responsibility of the user to ensure that the products are used and handled correctly and in accordance with any applicable standards, the product instructions and recommendations and only for the uses they are intended. As we have no control over site conditions and the execution of the work, we accept no liability for any loss or damage which may rise as a result thereof. We also reserve the right to update the information at any time without prior notice to you to reflect our ongoing research and development program.

26th January 2026