

### MONNELI ANCHORTITE EP

*Fast Setting Epoxy Anchoring Grout*

#### Product Description

A two part toughened epoxy adhesive that cures rapidly and will permanently bond together most building substrates found within the construction industry.

#### Uses

ANCHORTITE EP is used as a general purpose adhesive for fixing two or more substrates together. It can be used as follows:

- Patching compound
- Cat's eye adhesive for fixing dowels in highways, roads, bridges, tunnels airports, etc.
- Vertical and horizontal structural bonding

#### Advantage

- Excellent sheer and impact strength
- Resistant to a wide range of chemicals
- Excellent adhesion to a wide variety of substrates
- Fast setting, less down time for traffic
- Resistant to attack by many chemicals
- Easy to apply
- Ecofriendly. 100% solids

#### Instructions for Use

##### Surface Preparation

##### **Concrete Preparation**

Surface should be dry, clean, sound and uncontaminated. Laitance and loose particles must be removed by either sandblasting or mechanical grinding.

##### Steel Preparation

All steel surfaces must be clean, dry, free from rust, oil, grease. Shot blasted to Swedish Standard SA 2 ½ is preferable to achieve a white metal finish prior to application.

##### Mixing

ANCHORTITE EP consists of two components, Part A (resin) and Part B (hardener). Empty entire contents of Part B into Part A and mix thoroughly but quickly over a period of 2-3 minutes. Mixing can be carried out by hand or by electric drill and small paddle attachment. Ensure you reach the bottom and sides of the tin to thoroughly mix together both components. Smaller amounts can be mixed together in correct proportions to avoid unnecessary wastage. Having mixed the two components together, use all within 10 minutes.

##### Application

##### **Fixing Cat Eye**

Fill 2/3 of the hole with ANCHORTITE EP mixture ensuring no air entrapment. Insert the stud lug in a twisting motion. Extra adhesive must be applied on the surface for fixing the stud onto the surface.

##### **Dowel Setting Application**

Application can be made by mechanical, pneumatic dosage equipment, caulking guns or by hand. Force the mixture into the drilled hole then insert the steel bar with a twisting motion to ensure intimate contact and a good bond without air entrapment. Lightly tap the anchor/dowel to ensure complete embedment. Wipe off any excess material from the surface.

##### Curing

The gel time of ANCHORTITE EP at +25°C is approximately 8-10 minutes. Traffic may be opened in 3 hours after mixing and placing (at higher temperature curing would be faster).

## Cleaning

All used tools should be cleaned with SOLVENTE 10 before the product cures. Cured materials should be mechanically removed.

## Recommendations

- Exposure to temperatures exceeding +68.5°C for prolonged period is not recommended
- Do not add other materials to ANCHORTITE EP
- Do not mix more grout than can be applied within the pot life of the material
- At temperature above +40°C, creep of the cured grout may become significant.
- Anchoring strength depends on: strength of substrate, resin embedded length, hole preparation, steel bar type and diameter.

## Packaging

ANCHORTITE EP is supplied in 1 Liter kit (2 components).

## Storage

Keep the product in dry, covered conditions between +10°C to +25°C. In these conditions, product stability is 12 months from date of manufacturing.

## Technical Data

Properties	Results
Density at 25°C	1.48 kg/L
Mix Ratio by Volume	1:1
Pot life at 25°C (60 grams)	8-10 minutes
Shore D hardness	Up to 65%
Compressive strength (ASTM C695)	>40 N / mm <sup>2</sup>
Flexural strength (ASTM C348)	18.3 N / mm <sup>2</sup>
Bond strength to concrete /Slant shear (ASTM C 881)	8.3 N / mm <sup>2</sup>
Bond strength to steel (ASTM C 321)	2.2 N / mm <sup>2</sup>
Bond strength to asphalt (ASTM D4541)	1.04 N / mm <sup>2</sup>
Water absorption (24 hours) (ASTM D570)	0.035%

All values are subject to 5-10 % tolerance

## Rebar (Embedment Depth 8d, Load Factor 0.9)

Bar Size (mm)	Minimum Hole Diameter (mm)	Hole Depth (mm)	Ultimate Loads		Allowable Loads	
			Tension Load (kN)	Shear Load (kN)	Tension Load (kN)	Shear Load (kN)
10	12	90	22.88	17.28	143	14.4
12	16	110	46.40	25.00	29.0	20.7
16	20	145	80.00	44.24	49.4	36.9
20	25	180	107.60	69.12	67.2	57.6
25	32	225	116.56	108.00	72.8	90.0
32	38	290	140.24	129.94	87.6	147.5

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Embedment Depth	Load Factor
8d	0.9
10d	1:1
12d	1.3
15d	1.5

The tensile load capacity data has been based on embedment on 9 times bar diameter. Some design codes require higher embedment depth. Load capacity is dependent on fully bonded depth. The load factors shown on the opposite table maybe fully used when the bars are to be installed at bond lengths other than 9 times bar diameter (d).

## Health & Safety

Wear protective gloves and goggles during application. This product contains chemicals which may be potentially harmful to your health if not used properly. It is strongly recommended to read the material safety data sheets for proper storage and to observe precautions.

If contact with skin or eyes happen, use resin cream to remove it from skin followed by clean water, do not use solvent. In case of contact with eyes, use clean water and seek medical consultation.

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