



MULTIPURPOSE EPOXY 2-PART HIGH STRENGTH ADHESIVE

DESCRIPTION:

AfteK Multipurpose Epoxy Adhesive is a 2-part, non sag, high strength adhesive. It is intended for bonding of a variety of common building materials to vertical and horizontal surfaces. Common applications include fireplace surrounds, stairs, feature stone walls, tiles, rockeries and indoor garden displays.

RECOMMENDED USES:

- Bonding of Masonry, precast concrete, stone panels marble, granite, slate, ceramic tiles on walls or overhead in interior or exterior applications
- Feature walls
- Fireplace surrounds & Facades
- Insitu formed concrete
- Precast concrete
- Grouting/fixing anchor bolts
- Bonding to metals
- Concrete structures
- Outdoor entertaining areas
- Fabrication of head stones and other decorative stone items
- Statues and fountains
- Pipe and crack repair

FEATURES AND BENEFITS:

- Permanent bond 5 – 6 hours
- Cure time 12 hrs at 25°C
- Non staining on all stone types
- Non sag up to 30 mm thick
- Mix ratio 1:1
- Solvent free
- Permanent bond – no performance decrease over time
- High performance properties
- High tensile and compressive strength
- Excellent chemical resistance

APPLICATION

SUBSTRATE PREPARATION:

Clean the surface and remove any dust, unsound material, plaster, oil, paint, grease, corrosion deposits or algae. Roughen the surface and remove any laitance and expose aggregate by light scabbling or grit-blasting. For painted surfaces: remove all paint or coatings using paint stripper or mechanically abrade surface.

MIXING

The mix ratio is 1:1 by volume, 1 parts Part A and 1 part Part B. Care should be taken to ensure that Aftek Multipurpose Epoxy is thoroughly mixed. The entire contents of the hardener (Part B) tin should be poured into the base (Part A) tin and the two materials thoroughly mixed using a suitable slow-speed drill and high shear mixing paddle.

Mix for 2 minutes until a fully uniform grey colour is obtained; the sides of the tins should be scraped, mixing should continue for a further 2 minutes.

DO NOT OVER MIX AS THIS MAY INCORPORATE AIR BUBBLES.

To facilitate mixing and application at temperatures below 10°C, the separate components should be warmed in hot water bath or conditions to room temp up to a maximum temperature of 25°C before beginning to mix. If heated to 25°C, the subsequently mixed material will have a pot life that will be reduced to 45 minutes. Alternatively, the material should be stored in an environment controlled to 20°C and only removed immediately before use.

ONLY MIX MATERIAL THAT CAN BE USED WITHIN THE SETTING TIME.

Working time up to 45min @ 25°C.



Aftek

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Application-

Aftek Multipurpose Epoxy should be applied as soon as the mixing process has been completed

PROPERTIES

| TYPICAL PROPERTIES | |
|-----------------------------|---|
| Mixed consistency | Thixotropic paste with no sag or slump |
| Appearance | Part A: White Part B: Black Grey when mixed |
| Specific Gravity | 1.45/Lt |
| Solid Content | 100% |
| Chemical Resistance | Excellent (see chart) |
| Heat Distortion Temp | 90°C |
| Pot Life | 50-60 min @ 25°C |
| Compressive Strength | 100MPa |
| Flexural Strength | 22MPa approx.. |
| Modulus of Elasticity | Approx. 11x10 ³ MPa |
| Hardness | >80 shore D |
| Service Temp | -20°C to +70°C |
| Cure time @ 25°C | 12hours |
| Full cure @ 25°C | 3 days |
| Min application temperature | 7°C |
| Working time | Approx 45min @ 25°C |
| Bond Strength | >15MPa |

*Tested to ASTM D570

| CHEMICAL RESISTANCE* | |
|----------------------|------------|
| Chemical | Resistance |
| Citric Acid 100% | Excellent |
| Acetic Acid 5% | Excellent |
| Sodium Hydroxide 30% | Excellent |
| Diesel fuel/petrol | Excellent |
| Sugar Solutions | Very good |
| Tartaric Acid 100% | Very good |
| Hydrocarbons | Very good |
| Phosphoric Acid | Very good |

*Resistant to spillage. Surface staining may result from exposure to some aggressive chemicals. All spills should be quickly removed and washed. Over exposure may result in surface degradation.

IMPORTANT NOTES

Aftek Multipurpose Epoxy when mixed in large volumes, greater than 10 litres is highly likely to cure faster reducing the pot life of the mixed material in the tin. **Low temperature working:** the minimum application temperature is 5°C. In temperatures below 10°C, the separate components should be heated in warm water (up to 25°C) or stored in a temperature controlled environment for 12 hours before use.

High temperature working: at ambient temperatures above 30°C, the material should be stored in the shade or in an air-conditioned environment for 12 hours before use DO NOT dilute Aftek Multipurpose Epoxy with solvents as this will severely affect the ultimate performance of the product. Only mix as much Aftek Multipurpose Epoxy that can be used within the Pot Life (45-60 minutes @ 25°C). Surfaces must be rigid. Not suitable for blueboard, cement sheeting or any other compressed material – may cause substrate to internally delaminate under stress. Not recommended for sandstone and other fissile stones – these stones can be porous or veneered which will cause the bond to fail by delamination of the stone surface. Consult Aftek Technical department for additional information.

PACKAGING:

Item 14509:
1 lt Kit :
Part A 1x 0.5 lt (White)
Pt B 1x 0.5 lt (Black)

Item 14506:
2 lt Kit :
Part A 1x 1.0 lt (White)
Part B 1x 1.0 lt (Black)

Item 14504:
4 lt Kit :
Part A 1x 2 lt (White)
Part B 1 x 2 lt (Black)

Item 14505:
20 lt Kit:
Part A 1x 10 lt (White)
Part B 1x 10 litre Part B (Black)

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CLEAN UP:

Clean up should be done as soon as possible after mixing using warm water with soap or detergent.

COVERAGE

Average coverage : 20 litres covers 20m2 @1mm thick when applied as per the table below.

SHELF LIFE

Product will remain usable for a period of 2 years if stored between 5°C and 35°C in an unopened container.

SAFETY & FIRST AID:

Avoid contact with skin and eyes and avoid breathing the vapors. Store under cover, out of direct sunlight and in a well ventilated area. Keep away from all sources of ignition – no smoking.

If poisoning occurs contact a doctor or Poisons Information Centre. If swallowed, DO NOT induce vomiting. Give a glass of water. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor. Refer to Material Safety Data Sheet for further information.

BONDING OF TILES

Apply mixed Aftek Multipurpose Epoxy in dabs at each corner and centre of panel (minimum) to be bonded – dabs must be equivalent to 20% coverage tile area

| Minimum dab sizes per tile to achieve 10% coverage with 5 dabs @ 20mm thick | |
|--|--------------|
| Tile Size | Dab Diameter |
| 300 x 300mm | 35mm |
| 600 x 600mm | 70mm |
| 900 x 900mm | 70mm |

| Minimum dab sizes per tile to achieve 10% coverage with 3 dabs | |
|--|----------------------------|
| Stack Stone Size | Dabs & Diameter |
| 400 x 100mm | 3 dabs min @ 100mm in size |
| 400 x 125mm | 3 dabs min @ 100mm in size |

Product: Aftek Multipurpose Epoxy adhesive
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