

## PRODUCT DESCRIPTION

ERA™420 is a two-component, high viscosity non-corrosive epoxy resin and polyamine hardener, highly moisture-tolerant structural adhesive for gap filling applications and externally bonding steel plates to concrete (steel jacketing). Steel jacketing method used to increase flexural ductility of existing reinforced concrete members while also increasing the members' shear strength

## PRODUCT FEATURES

- High viscosity
- Excellent durability and flexibility
- Excellent cohesive bond to prepared surfaces
- Good adhesion to concrete
- Non-shrinking
- Moisture tolerant for all year round work
- Able to operate in temperatures from 5°C to 45°C

## PRODUCT USES

- The ERA™420 epoxy adhesive is specifically designed for bonding steel plates to the concrete surface elements. (Steel Jacketing method)

## HOW TO USE

### SURFACE PREPARATION

Surfaces should be solvent-wiped, free of heavy deposits of grease, oil, dirt or other contaminants. Remove any weak surface laitance or deleterious, friable material by grinding or grit blasting. Pull-off tests should be carried out prior to application of the adhesive.

### MIXING:

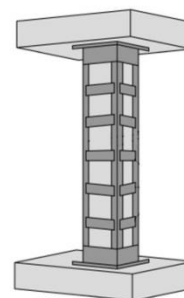
Add the hardener to the resin and mix for 3 to 5 minutes with a low speed drill. Mix until a uniform consistency and colour is obtained. In cold weather, it is advisable to store the product unopened in a warm environment for several hours before mixing.

### APPLICATION:

Coat the steel plates with epoxy resin adhesive to ensure a solid bond between the concrete member and the steel jacket.

### HANDLING

Approved personal protection equipment should be worn at all times. Particle mask is recommended for possible airborne particles. Gloves are recommended when handling mortar to avoid skin irritation. Safety glasses are recommended to prevent eye irritation. Wear chemical resistant clothing/gloves/goggles. Ventilate area. In absence of adequate ventilation, use properly fitted respirator.



Epoxy Resin Adhesive- ERA™420

strength	10°C 7 days	75 N/mm <sup>2</sup>
	20°C 24 hrs	70 N/mm <sup>2</sup>
	20°C 7 days	85 N/mm <sup>2</sup>
Flexural strength		35 N/mm <sup>2</sup>
Tensile strength		17 N/mm <sup>2</sup>
Flexural modulus Em		9.8 kN/mm <sup>2</sup>

## STORAGE

Store in dry, shaded conditions away from sources of heat and ignition. Store at between 5°C and 25°C. In these conditions shelf life is at least 12 months.

## FIRST AID

In case of skin contact, wash thoroughly with soap and water. For eye contact, flush immediately with plenty of water; contact physician immediately. For respiratory problems, remove to fresh air. Wash clothing before reuse.

## DISCLAIMER OF LIABILITY

AFZIR, LLC warrants its products to be free from manufacturing defects. Buyer determines suitability of product for use and assumes all risks. Buyer's sole remedy shall be limited to replacement of product. Any claim for breach of this warranty must be brought within six months of the date of purchase.

AFZIR shall not be liable for any consequential or special damages of any kind, resulting from any claim or breach of warranty, breach of contract, negligence or any legal theory.

The Buyer, by accepting the products described herein, agrees to be responsible for thoroughly testing any application to determine its suitability before committing to production.

## TECHNICAL DATA

Density	1535 kg/m <sup>3</sup>	
Cure temperature	+5°C to 30°C	
Moisture resistance	0.5% water absorption at 1.1 mm	
	0.3% water absorption at 1.6 mm	
Workable life	30 minutes at 20°C	
Compressive	10°C 24 hrs	32 N/mm <sup>2</sup>