

# ADMIX EA641

## Structural Epoxy Adhesive

**ADMIX EA641** is a two component, high strength, solvent free, non-slumping epoxy adhesive used for adhering concrete elements and installation of bridge or other prefabricated concrete segments in horizontal and vertical application as well as steel or composite bar anchoring.

### Applications

**ADMIX EA641** is a multipurpose thixotropic adhesive which does not shrink while curing and provides excellent bonding to many construction materials. It gives high mechanical properties and excellent chemical resistance, which makes it ideal for a variety of applications. The product can be used in the following applications:

- Bonding concrete elements such as bridge segments.
- Installation of bridge bearing and joint elements.
- Structural bonding of steel plates to concrete, wood and other masonry materials.
- Repairing concrete surface defects and honeycombs.
- Dowel bars anchoring.

### Technical data

Appearance	Gray paste (mixed) Comp. "A": White Comp. "B": Black
Mixing ratio	A: B = 3: 1 by weight
Density	Approx. 1.6 g/cm <sup>3</sup> at 25°C (mixed)
Bonding strength	> 2.5 MPa (Concrete failure)
Compressive strength	> 65 MPa (7 days)
Flexural strength	Approx. 30 MPa (7 days)
Shear strength	18~20 MPa (7 days)
Working Time / Pot life	90 min. (25 °C) 45 min. (40 °C)
Full cure	7 days at 25°C



### White Damavand Corporation

4th Floor, No.13, West 35th St.  
Alvand Ave., Argentina Sqr.,  
Tehran, Iran

Tel: +98 (21) 8867 8880

<http://white-damavand.ir>

[info@white-damavand.ir](mailto:info@white-damavand.ir)

## Properties

- Excellent adhesion to concrete and most construction materials.
- Excellent early and final mechanical strengths.
- Excellent chemical resistance.
- Impact and shock resistance.
- Color coded components to ensure proper mixing control.
- Good wetting properties, no primer or bonding agent is needed on dry substrate.
- Easy to apply.
- Low odor.
- Non-sagging and non-slumping material.
- Can be extended with quartz sand as a repair mortar.
- Will not corrode reinforcement.
- Suitable for use in vertical and overhead applications.

## Application method

### Surface preparation

The substrate must be sound and free of loose particles. Remove dust, laitance, oil, grease, curing compounds, waxes, disintegrated and other bond inhibiting materials from the surface. If necessary, surface can be prepared by blasting methods, grinding, or chipping.

### Mixing:

Mix each component separately. Add component "B" to Component "A" and mix them thoroughly using a low-speed drill (max. 400 rpm) fitted to the suitable paddle for at least 3 minutes or until all striations have disappeared and a uniform color is obtained. For partial mixing, add 1 part of component "B" to 3 parts of component "A" by weight and mix them thoroughly. Mix only required quantity which can be used within the pot life. To produce an epoxy repair mortar, slowly add up to 1 part by loose volume of quartz sand (0.1~2.0 mm) to 2 parts of mixed **ADMIX EA641** and mix until uniform consistency be achieved.

### How to use:

Thoroughly mixed ADMIX EA641 should be applied in a thickness of minimum 2 mm on segment surface using a trowel, spatula or knife. It can be applied on both segment surfaces.



## White Damavand Corporation

4th Floor, No.13, West 35th St.  
Alvand Ave., Argentina Sqr.,  
Tehran, Iran

Tel: +98 (21) 8867 8880

<http://white-damavand.ir>

[info@white-damavand.ir](mailto:info@white-damavand.ir)

Place and fix elements within given open time. Excess materials should be removed. The material will reach designed strengths after 7 days.

### Material consumption

Approximately 1.6 kg/m<sup>2</sup> for 1 mm layer thickness.

### Limitations

- Minimum layer thickness: 0.5 mm
- Maximum layer thickness 5.0 mm
- Do not apply ADMIX EA641 at temperatures less than +5 °C.
- Do not thin ADMIX EA641 by solvent. Solvent will prevent proper curing.
- Minimum age of concrete must be 21~28 days, depending upon curing and drying conditions.

### Cleaning

Tools and equipment should be clean after each application job or before break time. Uncured material can be washed with approved solvent. Cured material can only be removed mechanically.

### Packaging

**ADMIX EA641** is available in 4 and 12 kg sets.

### Storage

This product must be stored in original containers between 5 to 30°C under cover, out of direct sunlight and protect from extremes of temperature. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage condition contact **White Damavand** Technical Services Department.

### Safety awareness

Product may cause skin irritation. Use personal safety devices such as gloves and goggles. If



### White Damavand Corporation

4th Floor, No.13, West 35th St.  
Alvand Ave., Argentina Sqr.,  
Tehran, Iran

Tel: +98 (21) 8867 8880

<http://white-damavand.ir>

[info@white-damavand.ir](mailto:info@white-damavand.ir)

contacted with eyes or mucous membrane, wash immediately with plenty of water and seek medical attention.

**Quality approval**

All materials produced in White Damavand Co. are under strict control of QC department and meet the requirements of international standards.

**Supplementary data**

For any additional information, please contact company's specialists.



**White Damavand Corporation**

4th Floor, No.13, West 35th St.  
Alvand Ave., Argentina Sqr.,  
Tehran, Iran

Tel: +98 (21) 8867 8880

<http://white-damavand.ir>

[info@white-damavand.ir](mailto:info@white-damavand.ir)