



## Arina-adhesive TEG 227

### Thixotropic epoxy gel for adhering and saturating normal-weight fabrics

#### Introduction:

**Arina-adhesive TEG 227** is high modulus, high strength, and thixotropic impregnating epoxy based gel which provides excellent bonding to many construction materials. It is two-component solvent free, epoxy adhesive and is used for adhering and saturating normal-weight fabrics in FRP applications.

#### Where to use:

**Arina-adhesive TEG 227** is specially designed for *dry lay-up* FRP fabric installation where pre-saturation method is not the aim or installation of saturated fabrics is difficult. It is fast curing with excellent mechanical and chemical properties and is a suitable product for following applications:

- Installing all wraps and fabric type fibers.
- Sealing concrete surfaces.
- General purpose adhesive for a variety of applications.

#### Technical information:

Appearance	Light gray gel (mixed) Comp. "A": White Comp. "B": Dark gray
Mixing ratio	A : B = 3 : 1 by weight
Density (at 25 °C)	1.250 kg/l (mixed)
Tack free	3.0 hours (at 25°C)
Bonding strength	2.5 MPa (Concrete failed)
Tensile strength (ASTM D638)	30 MPa (after 5 days)
Service temperature	-35 to +65 °C
Full cured	After 7 days (at 25 °C)
Working Time / Pot life	60 min. (25 °C)

#### Advantages:

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

#### 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. Surface can be prepared by blasting methods, grinding, or wire brushing. Substrate should be dried before application. For wet surfaces use **Arina-primer LEP 231** as primer.

Honeycombs and gaps have to be repaired by **Arina-patch GSP 245** as repair mortar.



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#### **Mixing:**

Mix each component separately. Add component "B" to Component "A" and mix them thoroughly using a low speed drill (max. 400 rpm) and suitable paddle at least for 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

#### **Application method:**

1. Cut fiber sheets into desired size using a scissors or knife.
2. Apply the mixed *Arina-adhesive TEG 227* to the prepared substrate using a trowel or brush.
3. Place the prepared fabric onto the gel coated surfaces in required direction. Carefully install the fabric onto the gel and force it with a plastic roller until the resin is squeezed out between the roving of the fabric. Final surface has to be smoothened to homogeneous.
4. If more than one layer of fabric is required to be installed, this must be done within 45 minutes (at 25°C) after the application of previous layer. If this is not possible, a waiting time up to 12 hours can be observed before the next layer be applied.
5. Apply a final layer of *Arina-adhesive TEG 227* onto the exposed surfaces at a rate of 0.5 kg/m<sup>2</sup> as a covering layer.

#### **Priming:**

Primer is not required for dry concrete surfaces. When the surface is porous, applying one coat of *Arina-adhesive SEA 225* as sealer is recommended. For wet surfaces with no standing water, use *Arina-primer LEP 231* as primer.

#### **Application limits:**

Do not apply *Arina-adhesive TEG 227* at temperatures less than +5 °C.  
Age of concrete must be 21~28 days, depending upon curing and drying conditions.

#### **Material consumption:**

400 to 650 g/m<sup>2</sup>, depending on fiber sheets.

#### **Cleaning:**

Application tools and equipment should be cleaned after completion of each job or before break time. Uncured material can be washed with approved solvent. Cured material can only be removed mechanically.

#### **Storage / Shelf life:**

Store out of direct sunlight, and protect from extreme heat and rain fall. The shelf life for originally unopened package is 12 months from date of production.

#### **Packaging:**

*Arina-adhesive TEG 227* is available in 3.0 or 10.0 kg. Pails.

#### **Safety precautions:**

Product may cause skin irritation. Use personal safety devices such as gloves and goggles. If contacted with eyes or mucous membrane, wash immediately with plenty of warm water and seek medical attention.