

TDS FFE-200 FAIRING & BONDING EPOXY

"The Professional's Choice"



TDS FFE-200 1:1 Fairing & Bonding Epoxy is a customblended epoxy mastic of high quality resins, activators and engineered fillers to yield a blush-free, light weight, flexible and easily-sanded system used for both leveling and the final bonding of teak panels or planks. TDS FFE-200 weighs only 0,85 kg per litre when cured and its celllike structure makes it an excellent sound and thermal insulator. The viscosity of the TDS FFE-200 is formulated to be high enough to remain in place when used for deck fairing, but low enough to provide excellent wet-out for bonding. The TDS FFE-200 Fairing & Bonding Epoxy will cure in temperatures as low as 7° C. Developed to be userfriendly, the simplified 1:1 mix ratio allows a batch of any size to be easily measured and mixed. Once thoroughly mixed, the material can be spread immediately, requiring no induction time. See Properties Chart at the end of this document for cure specifications. TDS FFE-200 Fairing & Bonding Epoxy is D.O.T. non-corrosive so it does not require hazardous labeling for shipment.

Advantages:

- Good bond strength
- Excellent fairing material
- Excellent wet-out of bonding surfaces
- Best for vacuum bagging
- Medium viscosity for ease of spreading and leveling
- Flexible strength resists shock and twist
- Light weight fillers for reduced weight and sand-ability
- Good low temperature cure down to 45°F, 7°C
- 1:1 mix ratio for easy mixing
- Non-blushing

Surface Preparation:

All surfaces must be clean, dry, and free of any dirt, grease, oil, etc. before beginning any surface preparation.

Steel should be sandblasted or ground to clean white metal per SSPC-SP63 to a 0,07-0,10 mm profile. Vacuum surface to remove grit and dust. Wipe with acetone. Apply 2-3 coats of a commercially-approved epoxy primer such as Alexseal Epoxy Primer, Devoe 235 Epoxy Primer, Awl-Grip Hull Guard, or equivalent, following the primer manufacturer's instructions accordingly.

Aluminum should be sandblasted or ground with 24 grit disc pads to a 0,07-0,10 mm profile. Vacuum surface to remove grit and dust. Then follow with a vinyl wash primer or AlumaPrep followed by a mil/spec zinc or strontium chromate corrosion-inhibiting primer, then Alexseal Epoxy Primer, Devoe Epoxy Primer, AwlGrip Hull Guard or equivalent, following the primer manufacturer's instructions accordingly.

Fiberglass/Gelcoat should be ground with 36 grit paper until no shiny surface is present, then wiped down with acetone.

Wood should be scuffed with 36 grit paper, then wiped down with acetone. Do not use polyester resin or wood sealers that contain oils.

Mixing Instructions:

Stir both A & B components before combining, especially

if less than a full container is being used. Mix by volume 1:1 One/1 part base resin to one/1 part activator using a Milwaukee 1675-1 dual speed drill or equivalent and an EM120 Ribbon Mixer blade or equivalent operating at 300-1200 RPM or for larger projects, a Myers Engineering Catalyzing Mixer Model 501-1-5. Always mix at the lowest possible speed to avoid excess air entrapment. TDS FFE-200 is supplied as a red base and an off-white activator which must be mixed thoroughly to achieve a uniform pink color with no streaking. Mixing MUST be thorough to ensure a proper cure. Application is not recommended below 7° C. Keep from freezing!

Fairing:

For fairing, flow out and level the TDS FFE-200 as a uniform coating on the clean, dry substrate and allow to cure for at least 24 hours. It is not recommended to cast more than 20mm of TDS FFE-200 in a single pour due to the possibility of heat distortion but a second layer may be poured within 24 hours without abrading the first layer as long as it is clean, dry and wiped down with acetone. When hard and dry to the touch (at least 24 hours), aggressively grind the TDS FFE-200 using a 36 grit abrasive pad. If sanded fairing is to be left exposed to contamination, coat with an epoxy primer to protect the open pores.

Bonding:

Regardless of the substrate, it is mandatory that a sample adhesion test be performed to the primed/sealed surface at least 24 hours prior to the final glue-down.

Before **bonding** deck panels or planks, grind the surface or epoxy primer using a 36 grit abrasive pad and apply the TDS FFE-200 in a uniform layer using a 3-6mm notched trowel. Panels or planks should then be set into the TDS FFE-200 within 45-60 minutes, sooner if temperatures are above 25° C or if surface is in direct sunlight. To ensure a proper installation be sure that the panels or planks are completely embedded in the TDS FFE-200, leaving no voids. Panels will be adequately bonded for secondary operations after 12- 24 hours.

Storage:

TDS FFE-200 will be usable for up to 24 months under proper storage conditions 10-35°C in a sealed container. Prolonged storage may cause the hardener to darken. After prolonged storage, it is advisable to test a small mix to make sure it is viable. Be sure to pre-mix the individual containers before testing. Freezing may cause crystallization in the resin side. If this occurs, warm to 55-70° C and stir to melt crystals. The resin's properties will be unaffected.

Packaging:

TDS FFE-200 1:1 fairing & bonding epoxy comes in a container with either a 1,5gal / 5,68L kit or a 3gal / 11,36L kit, all in easy-to-mix bags.

Attention:

Teakdecking Systems Epoxies can cause skin and eye irritation upon frequent or prolonged exposure. Avoid contact with skin and eyes by the use of gloves, goggles, impervious clothing and barrier creams. In case of accidental contact, wash skin thoroughly with soap and water. In the event of eye contact, flush eyes with water for 15 minutes and seek medical attention. See MSDS for further information and first aid measures.

Warranty:

In connection with the sale of this product, Teakdecking Systems (TDS) makes no warranty of suitability for any specific purpose. In lieu of all warranties, expressed or implied, TDS will refund the purchase price of any defective material. In no case will TDS be liable for incidental or consequential damages.

| PROPERTY | VALUE |
|---|-------------------|
| Specific Gravity-Base A | 0.82 |
| Specific Gravity-Activator B | 0.88 |
| Flash Point | >200° F / 93° C |
| Gel Time (8-oz Mix) | 75-80 Minutes |
| Open Time – 3/16" / 4,5mm | 150 Minutes |
| Film Set Time – 3/16" / 4,5mm @77° F / 25° C | 4 Hours |
| Film Set Time – 3/16" / 4,5mm @40° F / 4,4° C | 10 Hours |
| Heat Distortion Temperature | 136° F / 58° C |
| Peak Exotherm – 100g Mass | 205° F / 96° C |
| Adhesion To Teak | Substrate Failure |
| Adhesion To Fiberglass | Gelcoat Failure |
| Compressive Strength | 12,900 psi |
| Compressive Modulus | 310,000 psi |
| Tensile Strength | 2,090 psi |
| Tensile Modulus | 126,000 psi |
| Tensile Elongation | 4.5% |
| Flexural Strength | 5,400 psi |
| Flexural Modulus | 420,000 psi |
| Hardness – Shore D | 55-60 |
| Adhesion To Aluminum | >300 psi |
| Adhesion To Steel | >350 psi |





