

PRODUCT DATA SHEET

Edition: 20240801

FSE362

HIGH PERFORMANCE STRUCTURAL ADHESIVE FOR CARBON FIBER PLATE SYSTEM

DESCRIPTION

FSE322 is used for bonding carbon fiber plate to concrete surface.

CHARACTERISTICS / ADVANTAGES

- Long pot life and open time
- Moisture tolerant before, during, and after cure
- High modulus, high strength, structural paste adhesive
- Excellent adhesion to concrete, metals, wood, and most structural materials
- Fully compatible with Fidstrong FSL composite laminates
- Paste consistency ideal for vertical and overhead applications
- High creep resistance under permanent loads
- High abrasion and shock resistance
- Convenient 2:1 weight mix ratio
- Solvent-free
- Color-coded components for proper mixing control

APPROVALS / STANDARDS

• Complies with relevant international standards for carbon fiber strengthening systems.

PRODUCT INFORMATION

| Color | Grey, White. Mixture: light grey. |
|------------|---|
| Packaging | 15kg (component A) and 5kg (component B) per kit. |
| Shelf Life | 18 months in original, unopened packaging. |
| Storage | Store in a dry place and without direct sunlight at a |
| | temperature between 4°C and 32°C |

TECHNICAL INFORMATION

| Mix Ratio | A:B = 3:1 by weight |
|-------------------------|---|
| Service Temperatures | +5 °C min. / +40°C max. |
| Operable time | 150 minutes(10°C); 50 minutes(23°C); 40 minutes(30°C) |
| Consumption | 3-4 kg/sqm |
| Thixotropic Index | 4.0 min. |
| Sagging Mobility (25°C) | 2.0 max. |



| Density after Curing | 1.4 g/cm ³ |
|------------------------------------|--|
| Tensile Strength (ASTM D638) | 47 MPa |
| Tensile Modulus (ASTM D638) | 6100 MPa |
| Elongation at Break (ASTM D638) | 1.92 % |
| Compressive Strength (ASTM D695) | 99 MPa |
| Flexural Strength (ASTM D790) | 100 MPa |
| Shear Strength (ASTM D732) | 56 MPa |
| Bonding Strength (ASTM C882) | 40 MPa |
| Deflection Temperature (ASTM D648) | 65 °C |
| Water Absorption (ASTM D470) | 0.06 % |
| Wet and Heat Ageing | shear strength decrease rate: 12% max. |
| Heat Aging Resistance | same temperature, 10 minutes, |
| | shear strength decrease rate: 5% max., |
| Freezing and Thawing | shear strength decrease rate: 5% max. |
| Fatigue Stress | 2×10 6 times continuous sine wave fatigue loads, |
| | no specimen destroys. |
| Stress Resistance | no steel - steel tensile shear specimens destroy; |
| | creep deformation value: 0.4 mm max. |
| Salt Resistance | no cracks or come unglued; |
| | strength decrease rate: 5% max. |
| Alkaline Resistance | no strength decrease; |
| | as the concrete damage, no cracks or come unglued. |
| Acid Resistance | as the concrete damage, no cracks or degumming. |

HEALTH & SAFETY INFORMATION

• Refer to the most recent Safety Data Sheet for safe handling, storage, and disposal of the product.

LEGAL NOTES

• The Information and recommendations relating to the application and end-use of FIDSTRONG products, are given in good faith based on our current knowledge and experience of the products when properly stored, handled and applied under normal conditions. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request or may be downloaded from our website at: www.fidstrong.com.