

# **PRODUCT DATA SHEET**

Edition: 201912

# FSE302

## HIGH-SOLIDS, MOISTURE-TOLERANT AND ADHESION PROMOTING PRIMER

| APPLICATION SCENE | ◆As a primer to improve the properties of substrates and eliminate outgassing for the application of <i>FSWRAP and FSLAMINATE CFRP</i> System. |
|-------------------|--|
| ADVANTAGE         | <ul> <li>◆Easy to use, 2:1 p.b.w. ratio.</li> <li>◆Moisture tolerant.</li> </ul>   |
|                   | ◆Low viscosity, good liquidity.  |
|                   | Excellent penetration and adhesion.  |
|                   | ◆Low tensile modulus.  |
|                   | ♦Higher tensile elongation.  |
|                   | ◆Low VOC.  |

#### **TECHNICAL DATA**

| Packaging             | 20kg (component A) and 10kg (component B) per kit.      |
|-----------------------|---|
| Color                 | Component A: transparent, Component B: brown            |
| COIDI                 | Component A+B mixed: yellow                             |
| Shelf Life            | 18 months in original, unopened packaging. Store dry at |
| Sheh Life             | temperatures between 4 and 32 °C.                       |
| Mix Ratio             | A:B = 2:1 by weight                                     |
| Service Temperatures  | -5 °C min. / + 40°C max.                                |
| Operable time         | 40 minutes  |
| Tacky Dry Time (25°C) | 2 hours   |
| Viscosity of Mixture  | 600mPa·s max.   |
| Tensile Strength      | 50 MPa  |
| (ASTM D638)           |   |
| Shear Strength        | 45 Mpa  |
| (ASTM D638)           |   |
| Bonding strength with | 20 Mpa min.   |
| concrete (ASTM C882)  |   |

OPERATION PROCEDURE

### Surface Pretreatment

The concrete surface must be clean and sound. Remove any dust, laitance, grease, oil, dirt, curing agents, impregnations, wax, foreign matter, coatings and detritus from the surface by appropriate mechanical means.

### <u>Mixing</u>

Prestir each component separately to ensure uniform color and consistency. Empty Component B (hardener) into Component A (resin) in the correct ratio and mix the combined components for at least three (3) minutes at low speed (300 - 450 rpm) with Jiffy type paddle suited to the volume of the mixing container. For bulk packaging and when not mixing full units, each component must be pre-stirred separately to ensure product uniformity and then accurately measured into a suitably sized and clean mixing container. Keep the mixing paddle in the material to avoid introducing or entrapping air while mixing. Ensure that the mixed components are completely blended to avoid any weak or partially cured spots in the applied material. During the mixing operation, scrape down the sides and bottom of the container with a flat or straight edge trowel at least once to ensure complete mixing. When completely mixed, *FSE302* should be uniform in color and in consistency.

#### **Application**

Prior to application, measure and confirm substrate moisture content, ambient relative humidity, ambient and surface temperature and dew point. During installation, confirm and record above values at least once every three (3) hours, or more frequently whenever conditions change (e.g. ambient temperature rise/fall, relative humidity increase/ decrease, etc.). Apply primer by squeegee at the rate of 0.2 kg/m<sup>2</sup> and back roll to ensure a uniform 8 - 10 mils wet film thickness.

Where a second coat is required, wait until first coat is tack free, which is typically after 12 hours at 20 °C and apply a second coat of the primer using the same technique and at the same coverage as the first. Ensure that the second coating is free of pinholes and holidays and provides uniform and complete coverage of the entire concrete substrate.

#### <u>Clean Up</u>

Clean all tools and equipment with Epoxy Cleaner. Once hardened, product can only be removed mechanically. Wash soiled hands and skin thoroughly in hot soapy water.

#### LIMITATIONS

• Moisture content of concrete substrate must be  $\leq 6\%$  by mass (p.b.w. – part by weight) as measured with a ME/CM Expert type concrete moisture meter on mechanically prepared surface according to this product data sheet.

- Minimum/Maximum ambient and substrates temperatures 10/30 °C.
- Maximum ambient relative humidity 85 % (during application and curing).
- ◆Substrate temperature must be 3 °C above the measured dew point.
- ◆Do not hand mix material; mechanically mix only.
- ◆Do not thin this product with water or solvent.

Do not apply while ambient and substrate temperatures are rising, as pinholes may occur. Ensure there is no vapor drive at the time of application.
 Refer to ASTM D4263 Standard Test Method for visual indication of vapor drive.
 Freshly applied material should be protected from dampness, condensation and water for at least 72 hours.

◆Use of unvented heaters and certain heat sources may result in defects (e.g. blushing, whitening, dFSonding, etc.).

◆Not recommended for exterior slabs on grade where freeze/thaw conditions may exist.

## HEALTH & SAFETY INFORMATION

For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent SAFETY DATA SHEET containing physical, ecological, toxicological and other safety-related data.

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: <u>www.fidstrong.com.</u>