Product Data Sheet Edition 9.9.2014 Identification no. Sika\* Duoflex\* Primer 50/50

## Sika® Duoflex® 5050 Primer

Sika Duoflex 5050 Primer is a two component, low viscosity, adhesion-promoting, epoxy primer for use with Sika

Description	Sika® Duoflex® Primer 5050 is a two-component, low-viscosity, adhesion-promoting epoxy primer for Sika® Duoflex® polysulphide sealants.
Where to Use	To promote adhesion to porous and dense substrates, including concrete and metal, prior to installing Sika® Duoflex® NS/SL.
Advantages	<ul> <li>Two-component 1:1 volume ratio</li> <li>Low viscosity: easy to apply by brush.</li> <li>Fast drying time; allowing earlier sealing.</li> <li>Minimizes downtime; quicker use of joint.</li> <li>Maximizes adhesion; enhances durability</li> <li>Low VOC contents</li> </ul>
Coverage	Yield Concrete: 700 – 800 lin. ft./unit (210 – 240 lin. m/unit) at 3-5 mils/coat
Packaging	1/4 gal. (0.95 L) unit
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### Typical Data (Material and curing conditions @ 73°F and 50% R.H.)

RESULTS MAY DIFFER BASED UPON STATISTICAL VARIATIONS DEPENDING UPON MIXING METHODS AND EQUIPMENT, TEMPERATURE, APPLICATION METHODS, TEST METHODS, ACTUAL SITE CONDITIONS AND CURING CONDITIONS.

Self Life 1 year in original, unopened packaging.

Storage Conditions Store dry between 65 and 80°F (18 and 27°C).

Color Part A: (Resin) Clear

Part B: (Hardener) Amber

Yield:

 Concrete
 700 – 800 lin. ft./unit (210 – 240 lin. m/unit) at 3-5 mils/coat

 Steel
 1100 – 1300 lin. ft./unit (335 – 395 lin. m/unit) as 2-3 mils

coat

**Application Temperature:** 

Ambient 40 to  $95^{\circ}F$  (5 to  $35^{\circ}C$ )
Substrate 41°F ( $5^{\circ}C$ ) above dew point

Mix Ratio 1:1 by volume

Volume Solids 65%
Pot Life 3 hours

Waiting Time before Sealing:

Concrete Min. 2 hours /Max. 36 hours Steel Min. 4 hours /Max. 36 hours

VOC Content 50 g/L

**Note:** Material cures more slowly at cooler temperatures, and wor-

king time will be substantially reduced at higher temperatures. In hot weather, material should be cooled to between 65 and  $80^{\circ}\text{F}~(18~\text{and}~27^{\circ}\text{C})$  prior to mixing and application to improve

workability and avoid shortened pot life.



# How to Use Surface Preparation

**Concrete:** Apply only to clean, dry and sound substrates that are free of all coatings, sealers, curing compounds, oils, greases or any other contaminants which would impede penetration or adhesion. All surface irregularities, including cracks or substrate details, such as expansion joints and control joints, should be properly addressed prior to application. New concrete should be cured a minimum of 28 days with laitance and any weak surface layers removed.

Concrete that has been contaminated with chemicals or other foreign matter must be neutralized or removed.

Concrete should have a minimum surface tensile strength of at least 300 psi (2 MPa) as per ASTM D4541 and a surface profile of CSP 3-5 (a profile equal to 60-grit sandpaper, or coarser) in accordance with the International Concrete Repair Institute (ICRI) standard guideline #03732 for coating concrete. Prepare surface by mechanical means to achieve this desired profile.

Concrete surfaces potentially subject to out-gassing should be primed when the temperature of the substrate is dropping. Alternatively, double priming will greatly reduce the effects of out-gassing by additionally filling the pores in the concrete.

**Steel:** For service in an immersed environment, abrasive blast with an anchor profile of 2 - 4 mils in accordance with Steel Structures Painting Council Specification SP-5-63 or NACE No. 1, to achieve a "White Metal" finish. For splash and spillage exposure, "Near White" SP-10-63 or NACE No. 2 is required.

#### Mixing

Individually stir the contents of each component of Sika® Duoflex Primer 5050 until a uniform consistency and colour has been produced in each. Pour contents of Component B into the container in which Component A is held and thoroughly mix using a low speed drill and jiffy paddle for a minimum of 2 minutes until the blended liquid is of a consistent color (no streaking) and uniform consistency. Mix no longer than 3 minutes. **Note:** When initially pouring Component B into Component A, ensure all hardener is emptied from the container into the resin. While mixing, use a suitable tool to scrape the side and bottom of the container in which the blended components are held to ensure the entire product has been properly mixed. Any unmixed material will not cure and will potentially cause the subsequent installation of Sika® Duoflex NS/SL sealants to fail

#### Application

Apply Sika® Duoflex® Primer 5050 by brush at approximately 700 - 800 lin. ft./unit (210 - 240 lin. m/unit) as 3-5 mils coat onto concrete and 1100 - 1300 lin. ft./unit (335 - 395 lin. m/unit) as 2-3 mils coat onto steel. Sika® Duoflex® Primer 5050 must be dry to the touch, following a drying time of typically 2 hours at 73°F (25°C) on concrete and 4 hours at 73°F (25°C) on steel. Do not allow the waiting time to exceed 36 hours before proceeding with the installation of Sika® Duoflex® NS/SL sealants. Where the maximum waiting time is exceeded, do not seal but contact Sika Corp, Technical Services for guidance **Note:** Observe the above waiting times after priming and before installation of the sealant. Installation of the sealant too soon or too late will jeopardize the adhesion and performance of Sika® Duoflex® NS/SL.

#### Limitations

- Do not thin with solvents
- Confirm with Sika Corp. that the product is suitable for specific chemical environments, prior to use.
- Prepare substrate according to "Surface Preparation" portion of this document.
- Minimum application temperature of 40°F (5°C) above dew point must be observed; do not apply onto damp surfaces.
- Moisture content of substrates must be < 4% (Tramex meter reading) and vapor transmission should be 3 pounds or less per 1000 square feet over 24 hours as confirmed through appropriate ASTM testing and quantitative relative humidity (RH) testing should confirm concrete RH results of < 75%.</p>
- For industrial and commercial use only; to be handled by experienced or trained personnel only.
- For use only with Sika® Duoflex® sealants, as supplied by Sika Corporation

PRIOR TO EACH USE OF ANY SIKA PRODUCT, THE USER MUST ALWAYS READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS ON THE PRODUCT'S MOST CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET WHICH ARE AVAILABLE ONLINE AT HTTP://USA.SIKA.COM/ OR BY CALLING SIKA'S TECHNICAL SERVICE DEPARTMENT AT 800.933.7452 NOTHING CONTAINED IN ANY SIKA MATERIALS RELIEVES THE USER OF THE OBLIGATION TO READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS FOR EACH SIKA PRODUCT AS SET FORTH IN THE CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET PRIOR TO PRODUCT USE.

KEEP CONTAINER TIGHTLY CLOSED. KEEP OUT OF REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. FOR INDUSTRIAL USE ONLY. FOR PROFESSIONAL USE ONLY.

For further information and advice regarding transportation, handling, storage and disposal of chemical products, users should refer to the actual Safety Data Sheets containing physical, ecological, toxicological and other safety related data. Read the current actual Safety Data Sheet before using the product. In case of emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Product Data Sheet, product label and Safety Data Sheet which are available online at http://usa.sika.com/ or by calling Sika's Technical Service Department at 800-933-7452. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Product Data Sheet, product label and Safety Data Sheet prior to product use.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS. SALE OF SIKA PRODUCTS ARE SUBJECT SIKA'S TERMS AND CONDITIONS OF SALE AVAILABLE AT HTTP://USA.SIKA.COM/ OR BY CALLING 201-933-8800.

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Regional Information and Sales Centers. For the location of your nearest Sika sales office, contact your regional center.

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