

# INFO DATA SHEET

## Primers for Sika® fire protection coatings

Primers and surface testing for Sika® steel fire protection systems

Prior to the application of Sika® fire protection coatings for internal or external steel constructions, it is essential to apply an anti-corrosive primer. The primer surface must provide excellent adhesion and compatibility with the Sika® fire protection coating to be used and should not soften, flow or flake off in a fire.

Please note: Zinc rich paints are able to react with the fire protection coating and have to be treated using an interface primer prior to application of Sika® fire protection coats. Unknown anticorrosive primers and previously coated steelwork with dry film thickness above 150 microns should be thoroughly tested for compatibility and adhesion in case of fire.

For Sika® fire protection coatings on steelwork we recommend particularly suitable primers:

### FOR INTERNAL AND EXTERNAL STEEL

Blast-cleaning to Sa 2 ½ according to EN ISO 12944, Part 4

**e.g. Sika Permacor-1705 AK-Zinc phosphate primer redbrown:**

- Fast drying, 1-pack alkyd resin primer with anticorrosive properties
- Corrosion protection primer for blasted steel
- Lead and chromate free pigmentation

### GALVANISED STEEL

Surface pre-treatment with high pressure water cleaning or blasting. Galvanised steel surfaces must not be coated directly with Sika® fire protection systems.

We recommend as interface

**Sika Permacor-2706 EG EP-special micaceous iron oxide primer**

- Micaceous 2-pack epoxy resin coating
  - Excellent adhesion properties
  - High physical strength
  - Intermediate coat for primed mild steel
- For application on galvanised steel and other nonferrous metal surfaces

### PRIMED SURFACES

Where steel structures have been previously primed with an unknown primer, it is important that compatibility and adhesion test is performed to ensure that the primer will remain intact in a fire situation because the Sika® fire protection coatings rely on the primer for adhesion at all times.

#### 1. Evaluation of appearance:

Visual examination of corrosion, blisters, cracks or other damages.

## PRIMED SURFACES (Continuation)

The adhesion of the dry primer has to be controlled by a cross-cut test. Any damage must be eliminated before the Sika® fire protection coating is applied.

### 2. Behaviour of the primer coat in case of exposure to fire \*:

Direct a flame on to the surface and edge zone of the specimen (e.g. with propane gas burner - no cutting burner) for a period of approx. 5 minutes. During this test period primers and old coatings must neither run nor flake off.

### 3. Suitability test of Sika Unitherm fire protection with unknown primer coats\*:

Apply on approx. 500 g of the Sika® fire protection system you want to use to 0.25 m<sup>2</sup> of the surface area and allow to dry for approx. 1 hour. Neither cracks, nor bubbles or wrinkles must be seen.

The adhesion of the dry intumescent coating on the primer has to be controlled by a cross-cut test.

Further, a fire test on the Sika® fire protection coating surface (e.g. with propane gas burner - no cutting burner) for a period of approx. 5 minutes has to be conducted. During this test period the Sika® fire protection coating must foam up regularly and show a good adhesion to the substrate.

Note: Due to the short drying time and depending on the selected coating system, solvents may still be present in Sika® fire protection coating, which burn with a flame during the fire test. This is of no significance for the suitability test.

\* The tests described in 2. and 3. must lead to clearly positive results. In case of doubt please consult our application technology department. If a negative result has been observed, the existing primer coat has to be removed completely and must be replaced by a suitable primer (see above).

## IMPORTANT NOTICE

### VALUE BASE

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

### LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. 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 written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. The most recent info data sheet applies. This can be requested from us or is available to download at [www.sika.de](http://www.sika.de). Please check availability of local product data sheet at your local website. In cases of doubt the German text is valid.

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