

Technical bulletin corrosion protection re-bar R18

Corrosivity category C4 (high) / Durability range very high (VH)
acc. to ISO 12944-5: 2018(E)



In advance at the factory

R18 end anchorage/deflection support

1. Surface preparation abrasive blast-cleaning:

The steel surface is prepared with a grade of Sa 2 ½ according to ISO 12944-4. Reusable blast-cleaning abrasives corundum (silicosis-free) can be used. A post-cleaning of the surface is necessary (no oil, grease, dirt, and corrosive materials).

Roughness (ISO 8503-4): The average roughness depth must be 60-100 µm, the increase of the surface area ≥ 18%.

2. Coating:

2-pack priming coat SikaCor® EG Phosphat 80 µm and the 2-pack intermediate coat SikaCor® EG-1 80 µm are applied.

re-bar R18 rods

Attention: The rolled-up threads must be covered and protected in advance

1. Surface preparation sweep blast-cleaning:

The surface is jetted with low pressure and fine-grained, mineral, ferrit-free blasting abrasives (sweep blast-cleaning) according to ISO 12944-4. A post-cleaning of the surface is necessary (no oil, grease, dirt, and corrosive materials).

Roughness (ISO 8503-4): According to a roughness reference sample (Grit), segment 1 to 2. The roughness depth must be 25-60 µm.

2. Coating:

Applying 1-pack coating SikaCor® Zinc ZS 40 µm. The layer thickness must not exceed this value.

Application on site

1. Cleaning and first coating

All parts are cleaned and degreased after the installation, heating/activation, and cooling (no oil, grease, dirt, and corrosive materials). The 2-pack coating SikaCor® EG-1 80 µm is applied by hand on the R18 end anchorage, the deflection support, and the re-bar R18 immediately after the cleaning.

2. Second coating (incl. screws and imperfections)

After hardening, a 2-pack PUR coating material SikaCor® EG-4 (metallic grey) or EG-5 (in RAL- and NCS color shades) 60 µm is applied by hand on the R18 end anchorage, the deflection support, and the re-bar R18.

The galvanised high-strength screws and any imperfections are painted over with the complete coating procedure «**Application on site**» after appropriate cleaning.

3. Final gouging

All gaps and joints (base plate to steel girder, screws, R18 C couplings, nuts, etc.) are grouted with Sikaflex® PRO-3.



Tested Sika system products:

SikaCor® EG Phosphat	Priming coat	2-pack, low-solvent high-solid epoxy zinc phosphate primer coat
SikaCor® Zinc ZS	Priming coat	2-pack, low-solvent epoxy zinc-rich primer coat
SikaCor® EG-1	Intermediate coat	2-pack, low-solvent, micaceous iron oxide epoxy intermediate coat
SikaCor® EG-4	Cover coat (in DB colour shades)	2-pack acrylic polyurethane topcoat containing micaceous iron oxide pigments
SikaCor® EG-5	Cover coat (RAL- and NCS color shades)	Visually appealing 2-pack acrylic polyurethane topcoat
Sikaflex® PRO-3	Joint sealant	Though polyurethane sealant with high mechanical and chemical resistance

Note:

The corresponding Sika product data sheets and requirements specific to standards must be complied. The information in this technical bulletin is valid for the corresponding product delivered by re-fer AG Switzerland, or re-fer GmbH Germany and Austria. Please note that the data may differ in other countries and please refer to the local product data sheet abroad. The information and data in this technical data sheet are intended to ensure that the product is considered for normal use and is based on our knowledge and experience. However, they do not release the user from the obligation to check the suitability and use of the product on his own responsibility.

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