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SAFETY ON THE ROAD

SURFACE TREATMENT

Kinnegrip offers several systems of surface treatment.
-**ED coating** - Provexa Earth® and Provexa Pluto® - a high alloy zinc in combination with a graphene reinforced polyurethane electrocoat.
Ready for overpaint/customization with wet paint or powder paint
-**Galvanized**- Hot dip galvanizing thermal process
-**Aluminium** - the material is anodized

ED coating

Provexa Earth® Provexa Pluto®

Property	Test method	Performance
Electrical conductivity	IEC 60093 DC bulk conductivity test	Conductive>20 ± 4 and >24V Resistance <200Ω
Electrical protection	IEC 61000-4-5 Surge protection test	2000V no visible damage to surface
Friction	Friction test ISO 16047:2005	0.14 +/- 0.02
Stone chip	ISO 20567-1:2017	OK
Corrosion system resistance - steel	NSS ISO 10289:2001 ACT1 equivalent to SS EN ISO 16701:2008	> 1500h* > 6 weeks
Tropical test	Hot water >50°CHPWT, < 5 mm delamination	No delamination
Gloss	ASTM G523	50-70 GU
UV resistance	ASTM G53	>2500h
Coat thickness	ISO 2178 magnetic induction	EARTH layer 8 ± 4 µm PLUTO 2nd layer 10 ± 4 µm

* Tested by RISE of Sweden in clinical tests

Provexa Earth® and Provexa PLUTO® is a surface technology system for STEEL. A world class anti corrosion system which is globally patented and environmental friendly. Nickel free. The system applied with phosphating coat in combination with graphene based Pluto combined in double layers.

Provexa Earth® is a ground breaking patented innovation that substantially prolongs the life cycle of major industrial products. It is environmental friendly as it contains no grey or black listed materials and is 100% Nickel free.

Provexa Pluto is a ground breaking innovation by Provexa technology. It consist of a functional coat, based on Graphene technology combined with Provexa EARTH, a world class anti corrosion product for aggressive environments and complex geometry. The system solution Provexa Pluto shows extraordinary properties on the most challenging requirements. High UV resistance, polyurethane based, excellent mechanical properties, friction control, surface protection from over voltage discharge, no need for masking in process, envirolmental friendly and low in volatile organic compounds.

More information:
https://provexa.com

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Instructions for top coating of ED primed articles

Ensure the surface is dry and free of dust, grease and dirt. It is possible to use alkaline degreasers, isopropanol or similar. The surface can withstand mechanical cleaning with high-pressure washing, rags, brushes, etc.

The surface can withstand drying / curing temperature up to 200 ° C

The surface does not withstand blasting or grinding.

A clean and damage-free surface gives long life. Regular rinsing / washing to remove salts, dirt and particles prolongs the life of the layer. Damage that passes through the layer down to the substrate should be repainted with, for example, wet paint.

Avoiding dirt and liquid standing for a long time, for example inside a structure, prolongs the life of your product.

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Galvanized

ZINQ®

System*	**MicroZINQ® 5** **ZnAl-Treatment (5 % Al)**
Neutral salt-spray test* (ISO 9227)	Layer thickness ≥ 5 µm ZnAl5 480 h
Stone chip resistance* (nach ISO 20567-1, replaced DIN 55996-1)	Value 1,5 (a value of 0,5 – 2,5 is permissible)
Adhesion strength* (ISO 4624)	19-30 N/mm2
Wear and tear resistance* (DIN EN ISO 438-2)	0,01 - 0,025 µm/circulation
Post treatment in areas* **Without coating**	in consultation with the client (Recommendation: zinc flake spray….)

* Clinically tested

Hot-dip galvanizing is a thermal process, in which, through an interaction between steel and zinc, the two metals merge or amalgamate inseperably.

As a binary alloy technology, microZINQ is based on the use of an aluminum-containing zinc alloy that achieves a uniform surface with defined functional and aesthetic properties. Due to the higher passivity of the surface, microZINQ is particularly suitable for increased microclimatic requirements.

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Aluminium

Coated with a natural colored anodizing.

The aluminium has a thickness of 15µm in 1 layer.

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Accessories

	Thickness	Salt Spray test
GEOMET® grade A	l5-8 µm *	600 hours

* The specified thickness is an average value (see ISO 10 683 or EN 13 858). Individual measuring points are not significant, especially not when parts are mass-coated in large batches.

GEOMET® 500

GEOMET® 500 is applied to fasteners and many type of metallic parts to protect from corrosion, and it is used in many industries.

-Thin dry-film, non-electrolytic, self-lubricated
-Water-based chemistry
-Passivated zinc and aluminium flakes in a binder, patented chemistry
-Metallic silver appareance

Should not be topcoated, risk for flaking

More information:
https://provexa.com/process/zinkflake-geomet/

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Suitable for topcoated

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Environmental impact and recycling

Kinnegrip AB is environmentally certified to ISO 14001. This means that we have control of our routines, conduct active environmental work and constantly strive to minimize our impact on the environment.

Kinnegrip's products are manufactured from steel and aluminium, which means that they can be recycled completely. Of course, we choose materials based on IMDS*, a system that allows us to comply with international standards, laws and regulations.

* International Material Data System