BUILDING TRUST

PRODUCT DATA SHEET

Sika® Galvashield T2

SELF-POWERED DUAL PHASE HYBRID ANODE SERIES

PRODUCT DESCRIPTION

Sika® Galvashield T2 is a second generation hybrid anode system used to control corrosion in reinforced concrete structures. Sika® Galvashield T2 is a Type 2 anode for embedment within drilled holes in sound concrete.
Sika® Galvashield T2 combines the high level performance of an impressed current electrochemical treatment system with the longterm maintenance-free capabilities of an alkali-activated galvanic cathodic prevention system. The single-unit system does not require complex wiring or an external DC power supply (temporary or permanent).
When installed, the inbuilt impressed current component provides an initial phase of high charge density that passivates active corrosion (Phase 1). Then, the anode automatically switches to a cathodic prevention phase, which maintains steel passivity and provides longterm, maintenance-free corrosion protection (Phase 2).
The anode spacing and parameters of pre-treatment are customised by Vector Corrosion Technologies based upon the specific condition of the structure and are in conformance with the principals of ISO BS EN 12696:2016.

USES

- Multi-story Carparks
- Bridge Decks, Columns & Beams
- Marine Piers and Wharfs
- Balconies

CHARACTERISTICS / ADVANTAGES

• **Proven Technology** - ICCP electrochemical treatment and alkali-activated galvanic anode technologies fused together into a single unit.
• **Simple Installation** - Sika® Galvashield T2 is a single unit hybrid system with no external power requirements.
• **Fit & Forget** - Sika® Galvashield T2 operates automatically once installed, reducing access requirements and therefore time and cost.
• **Long Lasting** - Provides corrosion protection for up to 30+ years without the need for maintenance.*
Phase 1 can be designed to be repeated at any time if desired.
• **Measurable Performance** - While not critical for the long term operation of the system, the site performance can be measured and validated if required.

PRODUCT INFORMATION

Packaging	20 units per box
Shelf Life	12 months
Storage Conditions	Store in dry conditions in the original unopened box. Avoid extremes of temperatures and humidity.

Dimensions	Unit	Description	Unit Size Diameter x Length	Minimum Hole Size Diameter x Depth
	Sika® Galvashield T2-100	2nd Generation Hybrid System	46 x 100 mm	50 x 130 mm
	Sika® Galvashield T2-135	2nd Generation Hybrid System	29 x 135 mm	32 x 165 mm
	Sika® Galvashield T2-C	2nd Generation Hybrid System	Custom	Custom

TECHNICAL INFORMATION

Design Considerations

Level of Protection

Level of Protection	Description	Sika Galvashield® Fusion T2
Corrosion Prevention	Mitigates initiation of new corrosion activity	Yes
Corrosion Control	Reduces on-going corrosion activity	Yes
Cathodic Protection	Reduce or eliminate ongoing corrosion activity	Yes

APPLICATION INSTRUCTIONS

APPLICATION

Summary Installation Procedure

Sika® Galvashield T2 anodes shall be installed on a grid pattern as specified in the design document. Using a rebar locator, locate existing steel and mark areas to drill anode installation holes to avoid cutting steel. When possible, anodes should be installed in the centre of a reinforcing grid or a minimum of 100 mm away from steel. Verify continuity of steel with a multi-meter.

Drill holes as per the design to accommodate the anodes. Pre-wet the holes and the anodes to a saturated surface dry condition, then install with Sika® Galvashield Embedding Mortar. Mix one 20 kg bag of mortar with 3.2 to 3.7 litres of potable water. Add the powder to the water and mix with a drum or paddle mixer until a smooth consistency is achieved. Do not use partial bags.

Place the mixed Sika® Galvashield Embedding Mortar into the bottom 2⁄3 of each hole and slowly press the anode into the mortar, allowing the mortar to fill the annular space ensuring there are no air voids between the anode and the parent concrete. The minimum cover depth over the anodes shall be 20 mm.

Anodes may be individually connected to the steel reinforcement or may be connected in a circuit as per the design. Saw cut a groove approximately 5 mm wide by 12 mm deep into the concrete to interconnect the rebar connection holes and anode holes.

Connect the anodes to the interconnecting header wire with the supplied connectors (wire and connectors are available as the Vector Anode Connection Kit). Verify continuity between anode locations and rebar connections with a multi-meter. Connect each end of the circuit to the steel at the rebar connection points.

Place wires into grooves and top off anode holes and saw cuts flush to the concrete surface with Sika® Galvashield Embedding Mortar.

Sika® Galvashield Embedding Mortar should be wet cured or cured with a curing compound and protected from traffic for 24 hours.

LIMITATIONS

Sika® Galvashield T2 anodes are not intended to address or repair structural damage. Where structural damage exists, consult a structural engineer. Any discontinuous steel should be either electrically connected or isolated. Complete concrete repairs prior to the installation of Sika® Galvashield T2 anodes.

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.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safetyrelated data.

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. 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.

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