

EISENGUARD

Single component epoxy protective coating for steel and RCC



Description:

EISENGUARD system comprises of a single component, penetrating silane /silaxone primer and a single component pigmented coating of epoxy, both ready for immediate site use. EISENGUARD is aliphatic acrylate, solvent based protective coating, providing outstanding resistance to aggressive agents, UV light and rain. It is available in a selected range of colors.

Uses:

- To protect atmospherically exposed reinforced concrete structures from attack by acidgases, chloride ions, sulphate, oxygen and water
- Suitable to protect the other cementitious substrate, steel substrate and masonry
- All types of steel & concrete structures, especially those in aggressive marine and coastal environments
- Repair system of concrete reinforcement
- For steel exposed to atmospheric land and marine conditions

Advantages:

- Anti-fungal
- Anti-bacterial
- Eco friendly
- Excellent barrier to carbon dioxide, chloride ions
- Sulphate, oxygen and water
- Allows water vapor to escape from the structure
- Highly UV resistant aliphatic acrylate gives
- Resistance to the effects of long term weathering
- Highly durable in all climatic conditions
- Selected range of decorative colours

- Ease of application - single pack - no mixing of separate component

Company Standard Compliance:



Technical Information:

Properties	Specification
Appearance	Different colors
Permeability	Nil
Chloride ion diffusion coefficient @ 147 days (AS/NZS 4548.5-1999)	1.0 x 10-14m ² /sec
Water vapour transmission resistance (AS/NZS 4548.5-1999) Vapour Transmission Rate: Equivalent thickness of Air (Sd): Vapour Diffusion Coefficient:	21.9g/m ² /24hr 2 metres 2.7x10-05 cm ² /sec
Carbon dioxide diffusion resistance (AS/NZS 4548.5-1999) Equivalent Thickness of air (R): Equivalent Thickness of 30 MPa concrete cover (Sc): CO2 Diffusion Coefficient:	378 metres 940 mm 7.1x10-08 cm ² /sec

Application Procedure:**Preparation:**

All surfaces should be dry and free from contamination such as oil, grease, loose particles, decayed matter, moss, algal growth, laitance, and all traces of mould release oils and curing compounds. This is best achieved by lightly grit-blasting the surface. Where moss, algae or similar growths have occurred, treatment with a proprietary biocide should be carried out after the grit-blasting process.

Where application over existing sound coatings is required, trials should be conducted to ensure compatibility and retention of the bond between the underlying coating and the substrate. For further advice contact Redwop.

Application:

In order to obtain the protective properties of the EISENGUARD system, it is important that the correct rates of application and over coating time are observed.

	PRIMER	EISENGUARD
No. of coats	As per requirement	2
Application rates	0.4lit/m ²	0.35 lit/m ²
Total dry film thickness	NA	150 micron
Over coating time	2 hours @ 20°C 90 min @ 30°C	6 hours @ 20°C 5 hours @ 30°C

- Application should not commence if the temperature of the substrate is below 10°C.
- EISENGUARD PRIMER should be applied in one or more coats until the recommended application rate of 0.4 liter per square meter has been achieved.
- The primer should be allowed to dry for a minimum of 2 hours or dry touch before application of EISENGUARD.
- EISENGUARD may be applied by the use of suitable brushes or rollers.
- All primed substrates should be treated with two coats of EISENGUARD.
- The first coat should be applied to all areas by the use of suitable brushes or rollers to achieve a uniform coating with wet film thickness not less than 175 microns.
- The second coat of EISENGUARD should be applied exactly as detailed above, again achieving a wet film thickness not less than 175 microns.

Cleaning:

Eisenguard should be removed from tools and equipment using Redwop Sol.

Limitations:

The EISENGUARD system is formulated for application to clean, sound concrete or masonry. Where application over existing sound coatings or paints is required, trials should be conducted to ensure compatibility and retention of the bond between the underlying coating and the substrate. When applied over existing coatings or paints, the performance characteristics of EISENGUARD may be impaired. Compatibility and soundness should be assessed on a trial area. For further advice contact Redwop.

Application should not commence if the temperature of the substrate is below 2°C.

EISENGUARD coatings are not designed nor suitable for use on trafficable surfaces

Coverage:

EISENGUARD will give coverage of 0.3 lit /m².

Packaging:

It is supplied in 5 & 20 lit pack.

Storage & Shelf-life:

1 year from the date of manufacturing if stored in cool dry place under shaded area and if unopened sealed pack condition surface after completion of the preparation work.

Health & Safety:

EISENGUARD should not come in contact with the skin and eyes, or be swallowed. Adequate ventilation should be ensured and inhalation of vapours should be avoided.

Some people are sensitive to resins, hardeners and solvents, hence suitable protective clothing, gloves and eye protection should be worn.

If working in confined areas, suitable respiratory protective equipment must be used. The use of barrier creams provide additional skin protection.

In case of contact with skin, should be rinsed immediately with plenty of clean water and medical advice sought.

If swallowed, medical attention sought immediately. Should not induce vomiting.

Fire:

EISENGUARD are flammable, should be kept away from sources of ignition. Smoking not allowed. In the event of fire, extinguish with CO2 or foam, should not use a water jet.



It is the practice of increasing efficiency with which buildings use resources- energy, water and materials-while reducing building impacts on human health and the environment.



ISO 45001 is the world's international standard for occupational health and safety, issued to protect employees and visitors from work-related accidents and diseases.



ISO 9001:2015 is a globally recognized standard for quality management systems (QMS). It helps organizations of all sizes and sectors to: Improve performance, Meet customer expectations, Demonstrate commitment to quality, and Identify and improve processes that lack consistency.



ISO 14001 is the internationally recognized standard for environmental management systems (EMS). It provides a framework for organizations to design and implement an EMS, and continually improve their environmental performance



This symbol is used to identify Redwop products which give off a low level of volatile organic compounds (VOC) as certified by GEV (Gemeinschaft Emissionskontrollierte Verlegewerkstoffe, Klebstoffe und Bauprodukte e.V.), an international organisation for controlling the level of emissions from products used for floors.



Our Commitment To The Environment
Redwop products assist Project Designers and Contractors create innovative LEED (The Leadership in Energy and Environmental Design) certified projects, in compliance with the U.S. Green Building Council.



ISO/IEC 17025 enables laboratories to demonstrate that they operate competently and generate valid results, thereby promoting confidence in their work both nationally and around the world.