

TECHNICAL DATASHEET

Metal-Kote

Description & Uses

METAL-KOTE is an environmentally friendly, oil based waterproof roof coating. It is specifically formulated for the protective coating or re-coating of metal roofs, including those which may be suffering from the effects of corrosion.

This particularly affects overlaps, in the case of plastic coated varieties (Plastisol), where the corrosion enters through the unprotected edges, causing widespread damage to the roofing panels. It is a well-known fact that metal is one of the most difficult surfaces to coat and seal. Other coating systems are not waterproof, require total rust removal, primers, multiple coats and break down after a short life span. Plastic coated varieties of metal roofing panels (Plastisol) are difficult to overcoat without the use of special primer/sealers.

METAL-KOTE can be applied directly, in a single coat, over these surface types and doesn't need priming - it seals and waterproofs **all** metal roofs in just one coat!

Rust occurs when unprotected metal is exposed to moisture. Once rust attacks, it can quickly spread and may cause serious structural damage. Metal-Kote coats directly over surface rust with a 100% watertight seal and inhibits rust from spreading.

Final dry time is dependent on thickness of application, air movement and weather conditions, but on average will take up to 7 days.

Benefits

- Seals in One Coat
- Coats Rust with No Priming
- 100% Waterproof Formula
- Outstanding Adhesion
- Temperature range for application 5°C-35°C. (Do not apply within 3°C of dew point).

Areas of Use

- Coated and Uncoated Steel
- Galvanised Steel
- Aluminium
- Cast Iron





- Tin
- Copper
- Lead
- Stainless Steel
- Corrugated
- Standing Seam Systems

Coverage

Recommended coverage is 1.7m²/litre at 600 microns wet film thickness.

Surface Preparation

Mix thoroughly before use, either by stirring or mechanical agitator. DO NOT THIN. Temperature range for application 5°C-35°C. (Do not apply within 3°C of dew point).

ALL METAL SURFACES MUST FIRST BE POWER WASHED, TAKING CARE NOT TO CAUSE FURTHER DAMAGE TO AREAS WHERE CORROSION HAS OCCURRED.

Check and tighten or replace loose and rusty metal fasteners. If nails or screws have been used, replace all loose, rusting or failing hardware and use larger fasteners to ensure a tight seal.

Remove loose, flaking rust and rust residue. Loose rust particles that are not removed prior to coating may be trapped in the METAL-KOTE and could migrate through the coating, causing discolouration and stains. Wash rusted areas thoroughly. Ensure any existing coatings are firmly adhered to the roof deck or substrate; remove poorly adhered material before coating. Clean off by sweeping, brushing, blowing or water blasting. Remove all traces of mould or mildew by scrubbing the roof with bleach solution or fungicide and rinse thoroughly with water.

IN THE EVENT OF COATING NON-WEATHERED OR NEW GALVANISED STEEL, COPPER, ALUMINIUM, TIN (OR IF IN DOUBT), THESE SURFACES SHOULD BE SCRUBBED WITH A PROPRIETARY DETERGENT AND RINSED WITH WATER. THIS PROCESS WILL REMOVE THE GREASY FILM THAT MAY BE PRESENT ON THESE SURFACES, AND, IF NOT REMOVED, WOULD PREVENT THE METAL-KOTE FROM ADHERING.

Prior to coating, the surface should be clean, sound and dry. Correct surface preparation is the key to the successful performance of METAL-KOTE.

Overlaps, Splits, Fissures and Roofing Vents

Use an angle grinder to remove all loose and eroded metal to the side and end laps. Supply and fix new tech screws where required. Supply and fix new Bulbrite pop rivets with seal to side and end laps to secure all loose sheets and reduce movement. Prior to application of any coating work, particular attention must be given to roofing vents, as these are a common cause for the ingress of water.

Roof vents are usually fitted after the main roof has been installed and often come with a flat cover sheet, with a different profile to the main installation. The seals to the roof vents should be given extra attention to ensure a watertight finish. Ensure that any redundant fixing holes, splits or fissures and smooth flat are filled prior to applying Metal-Kote

Application



Apply one coat of Metal-Kote by brush or heavy duty sprayer (best results will be achieved by spraying where possible). Avoid uneven application, especially on corrugated surfaces. If using a brush, be sure the coating is applied uniformly to avoid pooling or puddling in the low spots and/or thin areas on the tops of the corrugation ridges.

Recommended coverage is 1.7m²/litre at 600 microns wet film thickness. Owing to the fact that the Metal-Kote resin is formulated for immediate bonding, the product sets up quickly, forms an instant watertight barrier and skins over in ½ – 2 hours. Final dry time is dependent on thickness of application, air movement and weather conditions, but on average will take up to 7 days.

Spray Application

PLEASE NOTE METAL-KOTE IS A HEAVY DUTY COATING – NOT A PAINT.

Petrol Unit be changed and cleaned every 5 drums (approximately 150m²) to prevent blocking in the tip. It can take approximately 30-60 seconds to change the filter and a spare filter is recommended to avoid delay.

Description: Oil based roof coating. Application equipment: Graco G Max 11 5900 HD petrol Unit, plus spare filters to clean. Pressure ratio: 56:1, 63:1 or Premier 74.1. Suction hose: Avoid using suction hose – direct immerse only.

Hose size: 15 MX 3/8" Hose. Airless gun: 510 High Volume. Tip Size: 531 thou GHD reversible spray tip (Tips may block on occasions – reverse tip to clear).

Atomising pressure: Pressure should be set as per equipment manufacturer's instructions, i.e. just enough pressure to eliminate "tails" or "fingers" (this will vary depending on size and condition of spray tip and temperature). Make allowances for pressure drop in fluid hose. Pressure drop: Due to the high viscosity of the product, pressure loss in paint hoses will need to be allowed for. For pressure drop calculation purposes, the above material has been calculated at 50 poise.

Temperature: Temperature will have great effect on viscosity and increase the pressure loss in the paint hose. In cold conditions, the paint may need warming before application. Compressed air: Pressure – 100 psi. Cubic feet per minute – 150 cfm.

Air hose - ¾" bore.

Re-Coating Metal-Kote

Metal-Kote has excellent adhesion to all metal surfaces and will also stick to itself if the need occurs in the future. All that is required is power washing to remove the contamination that a weathered surface will have endured.

Patch Test

Acrypol Products strongly recommend doing a test patch if you have any doubts or questions about the stability of the roof, compatibility of the coating, adhesion or feasibility of repair.

Apply the coating to a small representative section of the roof approximately 30cm². Check for signs of bubbling or blistering immediately after application. Wait until the patch has thoroughly cured, approximately 3-4 weeks. If there are any signs of bubbling, blistering, lifting, curling or separation, do not use METAL-KOTE on that particular application.



Cleaning

CLEAN TOOLS AND EQUIPMENT WITH ACRYPOL CLEANER OR WHITE SPIRIT

Storage Conditions

Store between 5°C and 25°C in a dry, well ventilated area, away from sources of heat, ignition and sunlight. No smoking.

Shelf Life

12 months minimum for unopened containers.

Limitations

- METAL-KOTE should not be used over bituminous or asphalt coated surfaces.
- Air conditioning vents should be sealed for a minimum of 24 hours during and after the application of METAL-KOTE.
- It is the user's responsibility to ensure suitability for use. Safety Data available on request.
- Read the label carefully for essential health and safety information prior to use.

Further Information:

In the event of further queries or problems concerning the use of this product, please contact the address below, e-mail info@cromar.uk.com.

All products should be sold in accordance with the manufacturer's instructions. The manufacturer cannot be held responsible where conditions of use are beyond our control. Cromar Building Products Limited products' are available for sale in accordance with Cromar Building Products Limited standard conditions of sale, which is available upon request. Whilst any information contained herein is to the best of our knowledge true and accurate, no warranty is given or implied in connection with any recommendations, agents, or distributors, as the conditions of use and any labour involved are beyond our control. Our warranty is therefore limited to the quality of supplied product.