# HAMMERITE DIRECT TO RUST METAL PAINT



Hammerite Direct To Rust Metal Paint is a single pack air-drying coating which delivers a decorative, corrosion resistant finish. Hammerite is fast drying and can be recoated after 4 hours. The specially selected resins impart a gloss or satin finish which resists dirt pick up. Hammerite has excellent wetting properties making it tolerant to poorly prepared ferrous surfaces. It is available in Smooth gloss, Hammered gloss and a Satin finish in a brushing formulation and in an aerosol.

## USE

As a corrosion-resistant and decorative coating for ferrous metals and certain plastics.

## **APPEARANCE**

Hammerite Smooth - a smooth gloss. Note: Gold, Silver and Copper are metallic sheen finishes.

Hammerite Hammered - a smooth gloss incorporating a hammered pattern.

Note: Pattern will vary depending on temperature, colour, substrate and method of application.

Hammerite Satin - a satin finish (less shiny than the Smooth & Hammered finishes).

## **COLOUR RANGE**

See Hammerite Colour & Product Guide or page 13 of this guide. Hammerite Hammered, Smooth and Satin finishes are produced to the in-house colour standards of the AkzoNobel group and are not matched to BS 4800 or RAL standards.



## **SURFACE PREPARATION**

#### FOR RUSTED METAL SURFACES

- Abrade the surface using coarse emery paper. Treatments such as sanding, burning off etc. of paint films may generate hazardous dust and/or fumes. Wet sanding/flatting should be used wherever possible. Work in well ventilated areas. Use suitable personal protection equipment
- All surfaces must be dry and free from loose rust, dirt, dust, grease and salt

#### **BARE METAL SURFACES**

• Degrease with Hammerite Brush Cleaner & Thinners

#### **PAINTED METAL SURFACES**

- · Abrade the painted surface to remove contaminants/gloss
- · Wash down thoroughly with diluted detergent
- · Rinse with clean water
- · Allow to dry
- Test for compatibility with existing paint by painting a small test area first. Any compatibility problems will be evident within the first hour after application

#### SHINY, SMOOTH METAL SURFACES

- · Extra abrasion is required to ensure maximum adhesion
- Degrease with Hammerite Brush Cleaner & Thinners

#### UNPAINTED GALVANISED/ALUMINIUM/ NON-FERROUS METAL SURFACES

 To ensure maximum adhesion on aluminum and non-ferrous metals, surfaces should be weathered until dull before applying Hammerite Direct to Galvanised Metal Paint. Alternatively, use Hammerite Special Metals Primer\* to ensure maximum adhesion on new surfaces

#### **Notes:**

- In many areas (industrial and coastal districts in particular) soluble salts may contaminate the substrate. It is essential to scrub and rinse repeatedly with clean water to remove this contamination
- Extremely rough or pitted ferrous metals will benefit from the application of Hammerite No1 Rust Beater\* before using Hammerite paint

#### **RECOMMENDED FILM THICKNESS**

- Minimum 200 microns wet
- Minimum 100 microns dry

Note: The number of coats required to achieve this will vary depending on substrate and method of application.

## **COVERING CAPACITY**

Up to 5 m<sup>2</sup>/L for two coats at recommended dry film thickness (brushing).

#### **APPLICATION CONDITIONS**

Normal system is to apply at least 2 coats leaving at least 4 hours between coats. However, if applying over a previously painted surface which is in a good condition then 1 coat may be sufficient.

- **Application temperature:** 10-35°C (50-95°F) Actual drying times might vary depending on applied layer thickness and weather conditions owing to environment temperature and humidity.
- Maximum relative humidity: 85%

## **APPLICATION METHODS**

## **BRUSH** - Suitable for small flat areas and intricate wrought ironwork.

- Stir before use
- At least two coats must be applied to bare or rusty metal to achieve the film thickness required for corrosion resistance. If Hammerite paint is applied too thickly it can sag and will take longer to dry. Therefore, one thick coat should not be applied
- Ensure edges and corners are adequately coated as these are at greatest risk of premature rusting

#### **ROLLER - Suitable for larger flat areas.**

- Hammerite is designed to be ready for use, however Hammerite Direct To Rust Metal Paint can be thinned to ease roller application. Use Hammerite Brush Cleaner & Thinners at a ratio of 9 parts paint to 1 part Hammerite Brush Cleaner & Thinners
- The edges should be brushed in first and the remaining areas quickly filled in with the roller
- For best results apply liberally using short, quick strokes

## **APPLICATION METHODS continued**

#### SPRAY - Suitable for large, flat and uneven surfaces.

#### For both conventional spray and airless spray

- Shake spray gun before and during use to ensure an even colour
- For best results use Hammerite Brush Cleaner & Thinners to thin the paint

#### **Conventional Spray**

- Thin Hammerite Direct To Rust Metal Paint with 15% Hammerite Brush Cleaner & Thinners
- Set professional spray gun to between 25/35 psi (approximately 2 Bar)
- Use a full fan spray at maximum spray volume
- Apply 3-4 thin coats allowing approximately 30 minutes to 1 hour between coats. Do not leave too long between coats as this could lead to wrinkles forming. The final coat should be sprayed heavily enough to flow to a glossy finish avoiding runs and sags

#### **Airless Spray**

- If necessary thin Hammerite Direct To Rust Metal Paint with 15% Hammerite Brush Cleaner & Thinners
- Fluid pressure: 2500 3000 psi (approximately 170 Bar)

- Nozzle size: 375-500 microns/0.015 0.020"
- Apply 2-3 coats, leaving each coat for approximately 1 hour or until it is touch dry before applying further coats

#### AEROSOL - Suitable for touch up / small applications.

- Store aerosol at room temperature for two hours prior to use
- Shake can vigorously for a full three minutes AFTER the agitator ball is heard. Use a vertical rather than a horizontal motion
- Apply light even coats from a distance of approximately 25-30cm. To avoid runs and sags keep the aerosol moving. Do not concentrate the spray in any one spot
- Several thin coats are recommended, particularly on intricate and vertical surfaces. Allow approximately 15 minutes between coats
- To avoid blockages, invert can and spray for 2 seconds between coats and after final use

Always use suitable protective equipment whenever carrying out spray application.

## HOW TO ENSURE MAXIMUM PERFORMANCE WHEN SPRAY FINISHING

Problem	Potential Cause	Remedy
1. Colour or shade varies	Pigment settling in gun	Shake gun more frequently and apply further coats
2. Rough 'sandpapery' appearance lacking gloss	Paint drying too quickly Gun pressure may be too high	Check for blocked jets or air vents in container. Reduce gun pressure
3. Excessive consumption	Pressure too high causing 'bounce' Conditions too windy	Reduce gun pressure Wait for still conditions
4. Paint runs	Excessive thickness in one coat	If not too severe wait 60 minutes and re-spray If very bad, allow to dry fully, level off with emery and re-spray
Hammered Finish Only		
1. Pattern very small or no pattern at all	Final coat too thin	Apply a thicker coat
2. Surface is uneven with pin-holes or craters	Temperature too low causing pattern drift	Minimum recommended application temperature 10°C (50°F)



## **DRYING TIME**

- Touch/Surface Dry: 2 hours approximately
- Intercoat Period: 4 hours

NOTE: Times may change depending on weather conditions.

#### **CLEANING**

Use Hammerite Brush Cleaner & Thinners.

## **SHELF LIFE AND STORAGE CONDITIONS**

#### Tins

Minimum two years at 21°C (70°F) stored in the original, unopened container. Hammerite paint should be stored in a dry, well-ventilated area. Protect from extreme temperatures and strong sunlight.

#### Aerosol

Minimum two years at 21°C (70°F) in original unopened container. Pressurised container - protect from sunlight and do not expose to temperatures exceeding 50°C (120°F). Do not pierce or burn even after use.

#### For safe disposal

Remove as much product as possible from brushes, rollers and equipment before washing. Some local authorities have special facilities for disposing of waste products. Do not empty into drains and watercourses.

#### **CORROSION RESISTANCE**

Excellent corrosion resistance. Passes 750 hours ASTM G85 Annex A5 at 100 microns dry film thickness ASTM D609, Type 2 A366 steel panels.

## **IMPACT RESISTANCE**

Excellent impact resistance. Passes 20cm (face) ASTM2794, falling ball 1 kg at 7 days at 100 microns dry film thickness.

## **ADHESION**

Excellent adhesion resistance. Passes ISO 2409, 7 days at 100 microns dry film thickness.

## **CHEMICAL RESISTANCE**

Resists splashing by dilute acids/alkalis, petrol and diesel when fully cured.

## **TEMPERATURE RESISTANCE**

#### Limits

Withstands minimum temperatures of -20°C (-4°F). Hammerite Direct To Rust Metal Paint withstands intermittent maximum temperatures of 150°C (300°F) when fully cured.

It can withstand 80°C (180°F) continuous heat once fully cured.

NOTE: Colours may fade after prolonged exposure at temperatures exceeding 50°C (120°F).

#### **UV RESISTANCE**

Hammerite will resist the effects of UV damage. Longevity could be reduced in hot climates or south-facing aspects where extremes of UV levels and temperature are present.

NOTE: All decorative alkyd based paints will fade or chalk when exposed to heat and UV radiation.

## **SERVICE LIMITATIONS**

Not suitable for use on equipment which may operate at  $80^{\circ}$ C ( $180^{\circ}$ F) or above.

Not suitable for use in contact with drinking water or foodstuffs. Not suitable for permanent immersion.

## **VOC LEVEL**

Hammerite conforms to EU Directive 2004/42/CE for VOC. The products shown above are classified as Category A/i 500g/l (2010).

The product contains maximum of 499 g/l.