New GuardCoatingsGroup

Aglobalreputation to protect.

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by contacting their local New Guard Coatings Group branch prior to using the coating/product.

**Single-component, waterborneanti-corrosion DTMcoating forthe renovation and protection of metal claddings, and suitable for all steel substrates in low to moderate corrosive environments (ISO 12944 C1–C3).**


## DESCRIPTION OF THE PRODUCT

**FEATURES:**

RD-Metal Unicoat is asingle-component, waterborne anti-corrosion coating designed for the protection and renovation of metal sheets and exterior claddings. It is also suitable for the protection of steelstructures in environments classified C1 to C3 according to ISO 12944.

The product functions as a Direct-To-Metal (DTM) primer and/or finish and can be applied over most existing coatings, provided they are sound and properly adhered.

Based on acrylic resins, RD-Metal Unicoat delivers reliable corrosion protection combined with an aesthetic satin finish, making it particularly well suited for the refurbishment of commercial and industrial sidewall claddings. Its fast-drying properties significantly reduce downtime and enhance on-site productivity.

Virtually odor-free and non-flammable, it is ideally suited for application in densely occupied areas and in sites where solvent emissions are restricted or prohibited, including sensitive industrial and commercial environments, ensuring safe use and minimal operational disruption.

RD-Metal Unicoat is part of the SCS – Single Coating System product range. An SCS system means that one single product provides all functions: primer, intermediate coat, and topcoat. One product, multiple layers, full protection.

It may also be applied as a finishing coat over compatible RD Coatings systems, such as RD-Elastometal.

**TYPICAL APPLICATION:**

√ Renovation of metallic claddings and façades
√ Protection of steel structures in low to moderate corrosive environments
√ Industrial and commercial buildings
√ Warehouses, sports halls, rural and urban exterior structures
√ Aesthetic refreshment of previously painted metal surfaces
Application in occupied or sensitive environments

**KEY FEATURES & BENEFITS:**

√ Direct-to-Metal (DTM): primer and finish in one system
√ Water-based formulation, low VOC and environmental impact
√ Non-flammable – no fire risk
√ Fast drying – reduced downtime and site occupancy disruption
√ UV-resistant, satin finish
√ Suitablefor corrosivity categories C1 to C3
REACHcompliant, PFAS, APEO and heavy metals free

**SUBSTRATES:**

√ Carbonsteel
√ Weathered galvanized steel (> 1 year)
Existingpaints & coatings such as epoxies, polyurethanes, alkyds, acrylics…

## RECOMMENDED SYSTEMS

### RENOVATION OF SIDEWALL METAL CLADDINGS
### GENERAL PURPOSE APPLICATION

Application on weathered claddings, ferrous metals and various other substrates.
Typical 2-coat system for general-purpose projects where no specific corrosion protection standard is required.

| Product | Minimum total dry film thickness in µm \| mils | Minimum number of coats (*) | Total theoretical consumption ± (**) | Total theoretical coverage ± (**) |
|---|---|---|---|---|
| RD-Metal Unicoat | 190 µm \| 7.5 mils | 2 | 0.4 L/m² | 2.45 m²/L \| 100 sq-f/gal |

**Special Considerations for Cladding Renovation**

**General**
Prior to any full-scale application on coated panels, an adhesion test must be performed on a representative area of the substrate. Given the wide diversity of sidewall cladding types and surface treatments, this step is mandatory to ensure optimal adhesion and long-term coating performance.

**1. New or Recently Installed Sidewall Claddings**
An adhesion test is mandatory prior to application. New metal sidings are often factory-coated with dirt-repellent or anti-soiling finishes. These surface treatments may significantly reduce the adhesion of subsequently applied coating systems. Over time, the performance of these finishes gradually decreases, which generally improves coating adhesion on claddings older than approximately 10 years.

**2. Corroded Sidewall Claddings or structures located in higher corrosive environments (ISO 12944 C4 or C5)**
It is recommended to apply:
- 1 base coat of RD-Elastometal (min DFT: 175 µm | 7 mils)
- followed by 1 or 2 coats of RD-Metal Unicoat (min DFT: 95 µm | 4 mils)

This system provides enhanced corrosion protection and improved long-term durability.

**3. Plastisol-Coated Claddings**
Measure the remaining thickness of the Plastisol layer prior to application.
- If the remaining thickness exceeds 140 µm | 5.5 mils, apply:
  - 1 base coat of RD-Elastometal
  - followed by 1 or 2 coats of RD-Metal Unicoat (min DFT: 95 µm | 4 mils)
- If the remaining thickness is below 140 µm | 5.5 mils, the degraded Plastisol coating should be completely removed before applying the RD-Metal Unicoat cladding system.

**4. PVDF/PVF2-Coated Claddings**
Light sanding with a nylon scouring pad may be required to create adequate surface roughness.
It is recommended to apply:
- 1 base coat of RD-Multiprim (min DFT: 50 µm | 2 mils)
- followed by 2 coats of RD-Metal Unicoat like for General Purpose

**5. Non-ferrous bare metals: zinc, aluminum, copper, stainless steel**
It is recommended to apply:
- 1basecoat of RD-Elastometaldiluted by 25 % withwater (minDFT:100µm | 4mils)
- followed by 2 coats ofRD-MetalUnicoat like for General Purpose

**Consult our Sidewall Cladding Renovation solution page on our website for detailed technical information and application guidance.**

## SYSTEMS ACCORDING TO ISO 12944 CLASSIFICATION

**C3 High (H) – Durability > 15 years - Moderate industrial environments**
**Indoor:** Buildings with moderate humidity and some air pollution (food processing plants, laundries, breweries).
**Outdoor:** Urban and industrial atmospheres with moderate sulfur dioxide pollution; coastal areas with low salinity.

| Product | Minimum total dry film thickness in µm \| mils | Minimum number of coats (*) | Total theoretical consumption ± (**) | Total theoretical coverage ± (**) |
|---|---|---|---|---|
| RD-Metal Unicoat | 220 µm \| 9 mils | 2 | 0.47 L/m² | 2.14 m²/L \| 80 sq-f/gal |

**C2 – Low corrosion threat**
**Indoor:** Unheated buildings where condensation can occur, e.g., warehouses or sports halls...
**Outdoor:** Low pollution atmospheres: especially rural areas.

| Product | Minimum total dry film thickness in µm \| mils | Minimum number of coats (*) | Total theoretical consumption ± (**) | Total theoretical coverage ± (**) |
|---|---|---|---|---|
| RD-Metal Unicoat | 180 µm \| 7 mils | 2 | 0.4 L/m² | 2.6 m²/L \| 100 sq-f/gal |

**C1 - Very low corrosion threat**
**Indoor:** heated offices, stores, hotels...

| Product | Minimum total dry film thickness in µm \| mils | Minimum number of coats (*) | Total theoretical consumption ± (**) | Total theoretical coverage ± (**) |
|---|---|---|---|---|
| RD-Metal Unicoat | 95 µm \| 4 mils | 1 | 0.2 L/m² | 3.8 m²/L \| 200 sq-f/gal |

**(*) Number of coats**
**Depends on the application method, tools used and site conditions. Certain application methods may require additional coats. Achieving the specified dry film thickness in fewer coats is not recommended and may not be technically feasible.**

**(**) Theoretical consumption**
**Values are theoretical and may vary depending on surface profile, shape, roughness, porosity, application method and site conditions. Higher consumption should be anticipated.**

**Occasional contact with chemicals and/or intensive surface wear – Anti-graffiti system**
The system can be top coated by one or two additional coats of RD-Hydrograff HP if not already specified in the system.

**For project-specific recommendations, please contact your RD Coatings representative.**

## APPLICATION INSTRUCTIONS

**APPLICATION CONDITIONS:**

Ambient temperature:
- Minimum: 5°C | 41°F – beware on condensation risks and slow drying
- Optimal: 12-25°C | 54-77°F

Relative humidity: **maximum 80 %**
Surface temperature: minimum **3°C | 5°F above dew point**.
Avoid application during winter conditions or periods with high condensation risk.

**APPLICATION METHODS:**

Brush
Roller
Airless spray (recommended):

- Nozzle size: 0.013–0.015
- Pressure: 150-180 bar | 2100-2600 psi

**Note: Additional coats may be required depending on the application method.**

**SURFACE PREPARATION:**

General:
The substrate must be clean, dry, degreased, and free from dust, salts, oil, grease, and all non-adherent materials prior to application.
**RD-Eco PowerClean** is recommended as a pre-cleaning agent. Apply RD-Eco PowerClean, allow to react for 10–15 minutes, then rinse thoroughly using high-pressure water.

Possible preparation methods:

- Manual or mechanical cleaning to ST2 acc. ISO 8501-1 | SSPC SP2–SP3
- High-pressure water jetting to WJ-4 acc. ISO 8501-4 | SSPC SP12
- High-pressure washing (200–500 bar) using an oscillating turbo tip (general-purpose, non-standardized preparation)

Specific substrates:
- Existing paints & coatings: Only apply over sound, clean, and well-adhering coatings. Light to moderate sanding may be required. Perform adhesion test first.

**Note: Surface preparation may affect finish and performance. Contact your RD Coatings representative for guidance.**

**DILUTION:**

Product is ready-for-use.
Dilute with **maximum 3%** water when applying by airless or in warm weather conditions (> 25°C / > 77°F).

**DRYING TIME:** (20°C | 68°F)

Touch dry: ± 2 hours
Recoatable: ± 4 hours – No maximum recoating window.
Drying times also depend on film thickness and ambient humidity.

**CLEANING OF TOOLS:**

Water.

**SPECIFICITIES:**

Mix homogenously with a paddle mixer at low speed.

## TECHNICAL DATA

| | |
|---|---|
| FINISH: | Satin 15% +/- 5 (Gardner 60°), depending on the shade. |
| COLORS: | White.<br>RAL, NCS and bespoke colors available via the RD Coatings tinting system. |
| DENSITY: | 1.3 ± 0.05 Kg/L \| ± 10.85 lb/gal (US) |
| SOLIDS CONTENT: | In weight: 59 % ± 2<br>In volume: 47 % ± 2 |
| VISCOSITY: | 100 - 120 P (Brookfield 20RPM) |
| VOC CONTENT: | < 60 g/L \| 0.5 lb/gal (US) |
| FLASH POINT: | Non-flammable. |
| STORAGE STABILITY: | 24 months: keep away from heatand frost |

## PERFORMANCE STANDARDS & TEST RESULTS

| Standard / Norm | Short description | Result |
|---|---|---|
| ISO 16000-6 | Indoor air VOC emissions | A+ |
| Living Building Challenge v4.0 – Red List | Restricted substances compliance | Compliant |

DoP, EPD and/or performance criteria with more details are available upon request.

## SAFETY DATA

Information relatedto hygiene and safety can be found in the Safety Data Sheet available on request.

## DISCLAIMER

These specifications are given for information. Since the manufacturer is not able to check the application of the products, he cannot accept any responsibility for it. This technical data sheet replaces all previous editions.