

## Technical sheet : RD-Elastometal

### Description of the product

#### **USE:**

High performance elastomeric coating combining superior anti-corrosion and waterproofing properties.

#### **FEATURES:**

Single component water-based coating based on special resins for the protection of metal surfaces, objects and metallic roofs against corrosion and weathering. RD-Elastometal, often considered as a "Direct-To-Rusty-Metal" coating, can be applied directly to rusty surfaces if loose rust has been removed. As a Dry Fall coating, any overspray can easily be removed after spraying.

RD-Elastometal is water-based, easy to handle, safe and has no fire risks.

It is a fast-drying coating system that greatly reduces downtime during installation.

Virtually odour free, it does not affect neighbouring occupants and can therefore be used in occupied buildings.

RD-Elastometal is UV resistant and is meant to be applied as primer and finishing coat.

Its permanent 200% elasticity enables it to adhere even on flexible surfaces such as metallic roofs, suspension cables, long beams etc. Tested to be used in the most severe environments, RD-Elastometal protects millions of square meters of valuable assets worldwide 24/7 including bridges, telecom towers, gantries, tanks, etc.

RD-Elastometal is part of the SCS – Single Coating System - product group.

#### **SUBSTRATES:**

Steel, weathered galvanized steel > 1 year

## Systems

| Steel located in aggressive marine & industrial environments – C5 |                    | Wet film thickness in microns / mils | Dry film thickness in microns / mils | Consumption per m <sup>2</sup> / ft <sup>2</sup> per gallon | Comments   |
|---|--------------------|--------------------------------------|--------------------------------------|---|--|
| Primer  | RD-Elastometal     | 307 / 12,3                           | 175 / 7                              | 0,39 kg / 133   | High lifespan > 15 years<br>(contact us for durability > 25 years) |
| Finish  | RD-Elastometal (*) | 307 / 12,3                           | 175 / 7                              | 0,39 kg / 133   |  |
| TOTAL   |                    |                                      | 350 / 14                             | 0,78 kg / 67  |  |

(\*) On objects for which aesthetics are highly important, the second coat of RD-Elastometal can be replaced by one coat of RD-Monoguard which offers a semi-gloss enamel type of finish:

|               |                |            |           |               |                          |
|---------------|----------------|------------|-----------|---------------|--------------------------|
| Finish        | RD-Monoguard   | 233 / 9,35 | 100 / 4   | 0,23 l / 175  |                          |
| Other option: |                |            |           |               |                          |
| Primer        | RD-Elastometal | 386 / 15,4 | 220 / 8,8 | 0,48 kg / 106 | High lifespan > 15 years |
| Finish        | RD-Monoguard   | 186 / 7,4  | 80 / 3,2  | 0,19 l / 219  |                          |
| TOTAL         |                |            | 250 / 10  |               |                          |

| Steel located in aggressive marine & industrial environments – C4 |                    | Wet film thickness in microns / mils | Dry film thickness in microns / mils | Consumption per m <sup>2</sup> / ft <sup>2</sup> per gallon | Comments                      |
|---|--------------------|--------------------------------------|--------------------------------------|---|-------------------------------|
| Primer  | RD-Elastometal     | 315 / 13                             | 175 / 7                              | 0,40 kg / 130   | Very High lifespan > 25 years |
| Finish  | RD-Elastometal (*) | 315 / 13                             | 175 / 7                              | 0,40 kg / 130   |                               |
| TOTAL   |                    |                                      | 350 / 14                             | 0,80 kg / 65  |                               |

Other option:

|        |                    |            |          |               |                          |
|--------|--------------------|------------|----------|---------------|--------------------------|
| Primer | RD-Elastometal     | 263 / 10,5 | 150 / 6  | 0,33 kg / 155 | High lifespan > 15 years |
| Finish | RD-Elastometal (*) | 263 / 10,5 | 150 / 6  | 0,33 kg / 155 |                          |
| TOTAL  |                    |            | 300 / 12 | 0,66 kg / 76  |                          |

(\*) On objects for which aesthetics are highly important, the second coat of RD-Elastometal can be replaced by one coat of RD-Monoguard which offers a semi-gloss enamel type of finish:

|               |                |            |          |               |                          |
|---------------|----------------|------------|----------|---------------|--------------------------|
| Finish        | RD-Monoguard   | 233 / 9,35 | 100 / 4  | 0,23 l / 175  |                          |
| Other option: |                |            |          |               |                          |
| Primer        | RD-Elastometal | 263 / 10,5 | 150 / 6  | 0,33 kg / 155 | High lifespan > 15 years |
| Finish        | RD-Monoguard   | 233 / 9,3  | 100 / 4  | 0,23 l / 175  |                          |
| TOTAL         |                |            | 250 / 10 |               |                          |

| Steel located in moderate environments – C3 |                    | Wet film thickness in microns / mils | Dry film thickness in microns / mils | Consumption per m <sup>2</sup> / ft <sup>2</sup> per gallon | Comments                      |
|---|--------------------|--------------------------------------|--------------------------------------|---|-------------------------------|
| Primer                                      | RD-Elastometal     | 270 / 11                             | 150 / 6                              | 0,35 kg / 152   | Very High lifespan > 25 years |
| Finish                                      | RD-Elastometal (*) | 270 / 11                             | 150 / 6                              | 0,35 kg / 152   |                               |
| TOTAL                                       |                    |                                      | 300 / 12                             | 0,70 kg / 76  |                               |

Other option:

|        |                    |           |           |               |                          |
|--------|--------------------|-----------|-----------|---------------|--------------------------|
| Primer | RD-Elastometal     | 193 / 7,7 | 110 / 4,4 | 0,24 kg / 211 | High lifespan > 15 years |
| Finish | RD-Elastometal (*) | 193 / 7,7 | 110 / 4,4 | 0,24 kg / 211 |                          |
| TOTAL  |                    |           | 220 / 8,8 | 0,48 kg / 105 |                          |

(\*) On objects for which aesthetics are highly important, the second coat of RD-Elastometal can be replaced by one coat of RD-Monoguard which offers a semi-gloss enamel type of finish:

|        |              |         |          |            |  |
|--------|--------------|---------|----------|------------|--|
| Finish | RD-Monoguard | 151 / 6 | 65 / 2,6 | 0,15 / 270 |  |
|--------|--------------|---------|----------|------------|--|

Other option:

|        |                |           |         |               |                          |
|--------|----------------|-----------|---------|---------------|--------------------------|
| Primer | RD-Elastometal | 175 / 7   | 100 / 4 | 0,22 kg / 232 | High lifespan > 15 years |
| Finish | RD-Monoguard   | 233 / 9,3 | 100 / 4 | 0,23 l / 175  |                          |
| TOTAL  |                |           | 200 / 8 |               |                          |

| Metallic roofs with a slope > 4% |                                 | Wet film thickness in microns / mils | Dry film thickness in microns / mils | Consumption per m <sup>2</sup> / ft <sup>2</sup> per gallon | Comments                 |
|----------------------------------|---------------------------------|--------------------------------------|--------------------------------------|---|--------------------------|
| Primer                           | RD-Elastometal                  | 315 / 13                             | 175 / 7                              | 0,40 kg / 130   | High lifespan > 15 years |
| Finish                           | RD-Elastometal (*)              | 315 / 13                             | 175 / 7                              | 0,40 kg / 130   |                          |
| TOTAL                            |                                 |                                      | 350 / 14                             | 0,80 kg / 65  |                          |
| Areas with stagnating water:     |                                 |                                      |                                      |   |                          |
| Primer                           | RD-Elastometal + RD-Roof Fleece | 315 / 13                             | 175 / 7                              | 0,40 kg / 130   |                          |
| Finish                           | RD-Elastometal                  | 940 / 38                             | 525 / 21                             | 1,10 kg / 43  |                          |
| TOTAL                            |                                 |                                      | 700 / 28                             | 1,50 kg / 32  |                          |

## Roofs with risks of stagnating water:

Apply a total quantity of 1,5 kg/m<sup>2</sup> / 32 ft<sup>2</sup>/gal. of RD-Elastometal and use RD-Roof Fleece in the first layer. See our detailed user manual on [www.rd-coatings.com](http://www.rd-coatings.com)

## Risks of chemical spills or graffitis:

The system can be top coated by one or two coats of RD-Hydrograff HP Clear High Gloss.

Indicated consumption is theoretical and does not consider potential losses during application. It can also be influenced by the porosity of the substrate.

## Application instructions

### APPLICATION CONDITIONS:

Ambient temperature: minimum 5°C (41°F) – optimal between 12 and 25°C (54 and 77°F).

Relative humidity: maximum 80%

Surface temperature must be minimum 3°C (5°F) above dew point.

### APPLICATION MEANS:

Brush, roller or airless (nozzle size: 015-023)

Application by airless is recommended and makes it easier to reach the recommended thicknesses. Use a device that allows a minimum pressure of 180 bar / 2600 psi at the outlet.

### PREPARATION OF THE SUBSTRATE:

The substrate must be clean: dry, degreased and dust free. Non adhering elements such as older coatings or rust must be removed. Different type of surface preparation are possible:

1/ Remove rust manually or by power tool to ST2 – ISO 8501-1/SSPC SP2 or SP3.

2/ Blasting to SA 2½ - ISO 8501-1/NACE3/SSPC SP6.

3/ High pressure washing following SSPC SP12 WJ4.

Contact your RD Coatings representative in case of hesitation

### DILUTION:

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

On aluminum: dilute the first coat of RD-Elastometal with 25% water.

### DRYING TIME (20°C - 68°F):

Touch dry: +/- 3 hours

Recoatable: +/- 6 hours

### CLEANING OF TOOLS:

Water

**SPECIFICITIES:**

Mix well before use.

## Technical data

### **FINISH (Gardner 60°):**

Satin – 15%+/- 5

### **COLOURS:**

Stock colours: white, aluminium.

RAL, NCS and bespoke colours. Available on RD Coatings dispensing system.

### **DENSITY:**

1.25 +/- 0.05 g/cm<sup>3</sup>

### **SOLIDS CONTENT:**

In weight: 64-66 %

In volume: 55-57 %

### **VISCOSITY:**

180 - 250 P (Brookfield 20RPM)

### **VOC CONTENT:**

< 8 g/l

### **FLASH POINT:**

Not flammable

### **STORAGE:**

24 months, keep away from frost and store away from heat.

## Norms and tests

|                                |                                  |
|--------------------------------|----------------------------------|
| SALT SPRAY                     | ISO 12944 / ASTM B117 / ISO 4628 |
| ADHESION PULL-OFF TEST         | ISO 4624                         |
| KESTERNICH TEST                | ISO 3231                         |
| ADHESION X-CROSS CUT           | ISO 2409                         |
| RESISTANCE TO MOISTURE         | ISO 4628                         |
| WATER RESISTANCE               | ASTM D970                        |
| ABRASION RESISTANCE TABER      | ASTM D4060                       |
| ABRASION RESISTANCE            | ASTM D968                        |
| PENCIL HARDNESS                | ASTM D3363                       |
| PENDULUM HARDNESS              | ISO 1522                         |
| CHEMICAL RESISTANCE            | ISO 2812                         |
| FLEXIBILITY                    | ASTM D522                        |
| IMPACT RESISTANCE              | SANS 5146 / ASTM D2794           |
| QUV TEST                       | ASTM D4587 / ASTM G53            |
| RESISTANCE TO HIGH TEMPERATURE | ASTM D2485                       |
| WATER VAPOR TRANSMISSION       | ASTM D1653                       |
| SURFACE FLAMMABILITY           | ASTM E84-03                      |
| OVERALL MIGRATION              | EN 1186                          |
| ENCAPSULATION OF LEADED PAINT  | ASTM E 1795                      |

## Safety data

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

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.