

High-performance elastomeric coating designed to waterproof and protect concrete structures, walls and façades against carbonation, water ingress and weathering.



DESCRIPTION OF THE PRODUCT

FEATURES: High performance, single component elastomeric coating for the waterproofing and long-term protection of concrete constructions, walls and façades. RD-Elastoflex protects substrates against weathering, carbonation and water ingress while remaining fully breathable.

Formulated with pure acrylic resins and high-quality pigments, RD-Elastoflex allows water vapor to escape through the film, preventing trapped moisture and polluted air inside the structure. Its very high and permanent elasticity (> 600%), maintained even at low temperatures, enables effective crack bridging and long-term durability.

RD-Elastoflex is UV resistant and designed to be used as both primer and finishing coat. It complies with EN 1504-2 as a protective coating for concrete (Principles 1.3 / 2.3 / 8.3 according to EN 1504-9) and is CE marked.

RD-Elastoflex is water-based, virtually odour-free, **non-flammable** and **fast drying**. 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 Elastoflex is part of the SCS – Single Coating System product group and protects millions of square meters of assets worldwide. An SCS system means that one single product provides all functions: primer, intermediate coat, and topcoat.

➡ One product, multiple layers, full protection.

TYPICAL APPLICATION:

- ✓ Waterproofing and protection of concrete constructions, walls and façades
- ✓ Protection against carbonation, weathering and water ingress
- ✓ New construction and renovation projects
- ✓ Renovation of historical and landmark buildings
- ✓ Buildings with static or active cracks

KEY FEATURES & BENEFITS:

- ✓ Single component, water based elastomeric coating
- ✓ Very high elasticity (> 600%) with permanent crack bridging capacity
- ✓ Breathable: allows water vapour diffusion while blocking liquid water
- ✓ UV resistant – suitable as primer and finishing coat
- ✓ Excellent dirt pick up resistance for long lasting aesthetics
- ✓ Fast drying – reduced downtime
- ✓ Virtually odour free, non-flammable
- ✓ Suitable for use in occupied buildings
- ✓ EN 1504-2 compliant and CE marked

SUBSTRATES:

- ✓ New and old masonry
- ✓ Cement based substrates
- ✓ Concrete
- ✓ Existing paints & coatings such as alkyds, acrylics...

RECOMMENDED SYSTEMS
GENERAL PURPOSE APPLICATION - NON EN 1504 COMPLIANT

Application on walls and other mineral surfaces for protective and decorative purposes.

Product	Minimum total dry film thickness in μm mils	Minimum number of coats (*)	Total theoretical consumption \pm (**)	Total theoretical coverage \pm (**)
RD-Elastoflex	235 μm 9.5 mils	2	0.6 Kg/m ²	1.65 m ² /Kg 100 sq-f/gal

In case of porous and/or chalking surface, apply RD-Unifix until saturation.

SYSTEMS COMPLIANT WITH EN 1504-2

Mineral Substrates - Option 1

Product	Minimum total dry film thickness in μm mils	Minimum number of coats (*)	Total theoretical consumption \pm (**)	Total theoretical coverage \pm (**)
RD-Elastoflex	310 μm 12 mils	2	0.8 Kg/m ²	1.25 m ² /Kg 78 sq-f/gal

Porous Mineral Substrates - Option 2

Product	Minimum total dry film thickness in μm mils	Minimum number of coats (*)	Total theoretical consumption \pm (**)	Total theoretical coverage \pm (**)
RD-Unifix	until saturation	1	> 0.1L/m ²	10 m ² /L 400 sq-f/gal
RD-Elastoflex	310 μm 12 mils	2	0.8 Kg/m ²	1.25 m ² /Kg 78 sq-f/gal

RENOVATION WITH ACTIVE CRACKS

Product	Minimum total dry film thickness in μm mils	Minimum number of coats (*)	Total theoretical consumption \pm (**)	Total theoretical coverage \pm (**)
RD-Elastoflex	310 μm 12 mils	3	0.8 Kg/m ²	1.25 m ² /Kg 78 sq-f/gal

Active cracks must be reinforced using RD-Mur Fleece | RD-Fleece Woven (US), embedded into the first coat of RD Elastoflex. Followed by two coats of RD-Elastoflex.

(*) 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.

OTHER TYPICAL APPLICATION RECOMMENDATIONS

On smooth surface:

Apply a first coat of RD-Elastodeck diluted with 25% water or a coat of RD-Multiprim.

On non-powdering existing paint - aesthetical fresh-up:

The number of coats depends on the orientation and exposure of the wall.

Walls frequently exposed to driving rain require a total of two coats of RD-Elastoflex.

For other, less exposed façades, one coat may be sufficient.

If the existing coating is powdering (chalking), apply first A coat of RD-Unifix.

Risk of graffiti:

RD-Elastoflex can be top coated by one or two coats of RD-Hydrograff HP Clear.

On wood panels:

Use an appropriate primer to block the stain if any and apply two layers of RD-Elastoflex.

Occasional contact with chemicals and/or intensive surface wear

The system can be top coated by one or two additional coats of RD-Hydrograff HP if not already specified in the system.

⚠ For projects where breathability / vapour permeability is critical:

The application of RD-Hydrograff HP may affect the vapour permeability of the RD-Elastoflex system. It is therefore strongly recommended to apply RD-Hydrograff HP strictly and only to the areas where protection is required.

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: 0.015–0.023
- Pressure: 180 bar | 2600 psi

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

SURFACE PREPARATION: General:
The substrate must be clean, dry and free from dust and non-adherent materials. New masonry must be cleaned using a wire brush to remove all mortar splashes. Painted substrates should be cleaned with RD-Eco PowerClean and rinsed by high-pressure washing.
If the substrate is affected by moss or biological growth, remove it using a suitable anti-moss treatment.
Repair cracks using RD-Acryl W; active cracks must be reinforced with RD-Mur Fleece.
Use RD-Cement Filler to carry out major concrete repairs.

DILUTION: Product is ready-for-use.
Dilute with **maximum 10%** water when applying by airless or in warm weather conditions (> 25°C | > 77°F) for better wettability.

DRYING TIME: (20°C | 68°F) Touch dry: ± 2 hours
Recoatable: ± 24 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: Flat 5 % +/- 5 (Gardner 60°), depending on the shade.

COLORS: White.
RAL, NCS and bespoke colors are available via the RD Coatings tinting system.

DENSITY: 1.55 ± 0.05 Kg/L | ± 9.6 lb/gal (US)

SOLIDS CONTENT: In weight: 72 % ± 2
In volume: 56 % ± 2

VISCOSITY: 200 - 220 P (Brookfield 20RPM)

VOC CONTENT: < 40 g/L | 0.33 lb/gal (US)

FLASH POINT: Non-flammable.

STORAGE STABILITY: 24 months: keep away from heat and frost

PERFORMANCE STANDARDS & TEST RESULTS

Standard / Method	Short description	Result
EN 1504-2:2004	Surface protection system for concrete	Complies – CE marked
EN 1542	Pull-off adhesion on concrete	Up to 1.90 kN (427 lbs)
EN 1542 + EN 13687-1 / -2	Adhesion after freeze-thaw and thermal shock	No cracking, no loss of adhesion
EN 1062-6	Carbon dioxide permeability (carbonation protection)	sD = 113 m → excellent CO ₂ barrier
EN 1062-6	Water vapor permeability (breathability)	sD,H ₂ O = 0.25 m → very breathable
ASTM D1653 (Method B)	Water vapor transmission under wet conditions	25.7 perms (US)
EN 1062-3	Capillary water absorption	Class W1 – low water uptake
ASTM D6904	Resistance to wind-driven rain	Best category
EN 1062-7	Crack-bridging (dynamic)	Class B 3.1 at –10 °C
EN 1062-7	Crack-bridging (static)	Class A3, up to 0.5 mm
ASTM D1305	Crack-bridging ability (low temperature cycling)	No cracking, no loss of adhesion
ASTM D412	Tensile strength and elongation	Elongation up to 580 %
NT Build 489	Chloride migration resistance	Good chloride protection
ASTM D1308	Chemical resistance	Good – recovery after exposure
ASTM D3273	Mold resistance	Rating 8 / 10
ISO 11507	UV resistance / accelerated weathering	Stable – controlled matting
ISO 16000-6	Indoor air VOC emissions	A+

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

SAFETY DATA

Information related to 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.