

UNITY
RELIANCE

Waterstop &
Waterproofing System

UNICOAT

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UNICOAT BITUMEN 300

WATER BASED BITUMINOUS WATERPROOFING MEMBRANE



Product Features

UNICOAT BITUMEN 300 is a non-fibre, **water-borne** bituminous emulsion modified liquid-applied flexible waterproofing coating. It is dark brown in colour and dries to form a durable black waterproofing membrane.

UNICOAT BITUMEN 300 can be applied in multiple layers to form a continuous and flexible waterproofing system, providing reliable protection against water ingress. Its excellent adhesion allows it to bond effectively to a variety of common building substrates, while its flexibility helps accommodate minor substrate movement.

UNICOAT BITUMEN 300 can also be used as a protective coating for metal surfaces against corrosion and as a general **bituminous primer** for waterproofing systems. Its water-based formulation makes it suitable for applications where low odour and ease of handling are required.

Advantages

Excellent Waterproofing	Superior bonding strength
Can Be Applied On A Damp Surface	Excellent durability
Non-Toxic	Anti-bacterial and anti-fungal
Odour And Taint-Free	Effective Corrosion Protection
Suitable For Multiple-Layer Application	Suitable for Metal & Concrete Substrates

Fields of Application

Structural Waterproofing: Basements, retaining walls, concrete slabs, foundations.

Wet Areas: Bathrooms, kitchens, terraces, balconies, planter boxes.

Protective Coating: Metal surfaces (copper, zinc, steel, pipes), dowel bars, and concrete exposed to corrosion.

General Waterproofing Primer: For cement screed, tiles, roofing felt, and other bituminous systems.

Can be applied on various substrates such as concrete base, asbestos sheet, cement / sand screed, roofing felt, slates, tiles, pipes, metal surfaces like copper, zinc and other similar to it.

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UNICOAT BITUMEN 300

Physical Properties

Material	:	Rubberise Bitumen
Color	:	Dark Brown (before drying)
Appearance	:	Pasty, thixotropic consistency
Specific Gravity	:	0.99 @ 25°C
Solid Content	:	55 - 56%
Flash Point	:	None
Setting Time	:	8 hours depending on climatic condition
Service Temperature	:	10 - 50°C
Size	:	20 litres pail

Product Coverage

The theoretical coverage is approximately **0.75 litres per m²** per coat. For practical application, an additional **10–15% allowance** should be considered to account for wastage and surface irregularities.

Application should always be carried out in **two coats**, applied at **right angles** to one another, ensuring that the first coat has fully dried before applying the subsequent coat.

Important Note

- The application surface must not be exposed to moving water during the coating process.
- **UNICOAT BITUMEN 300** may be submerged in water after a curing period of 5–7 days, subject to ambient temperature and relative humidity conditions.
- When wet, **UNICOAT BITUMEN 300** is non-flammable. However, once fully dried, it will support slow combustion if exposed to fire.

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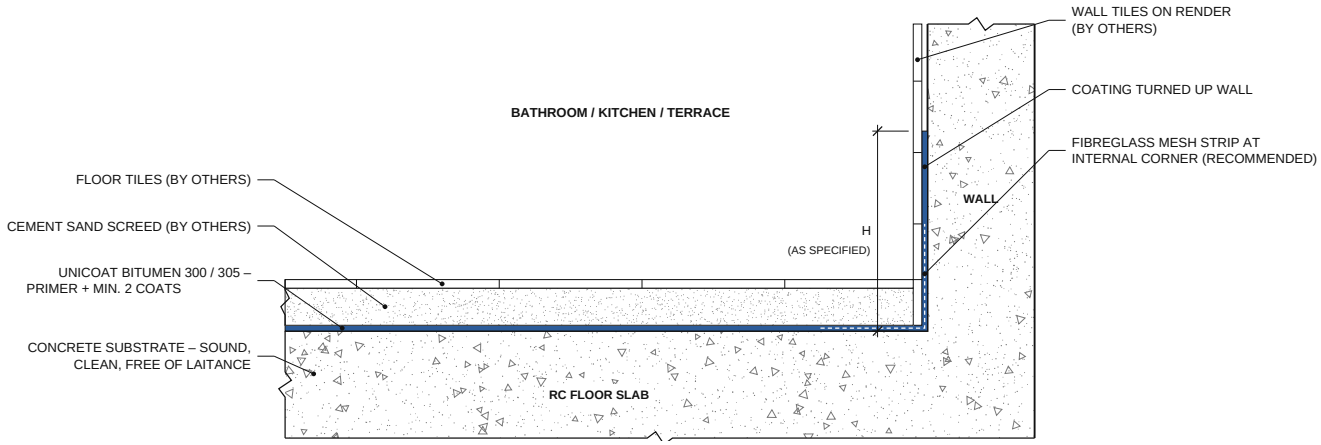
Typical Drawings

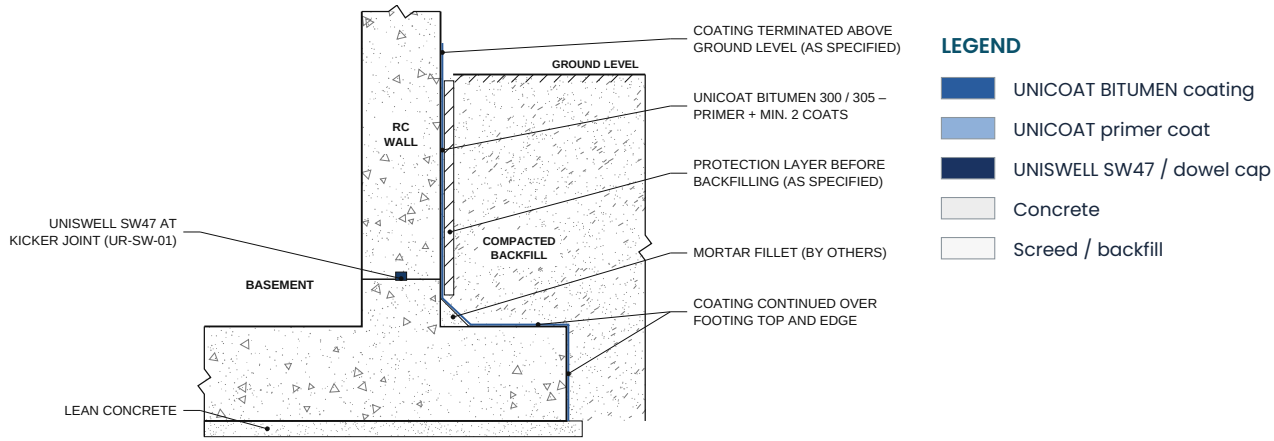
1 WET AREA FLOOR

Bathroom / kitchen / terrace – not to scale



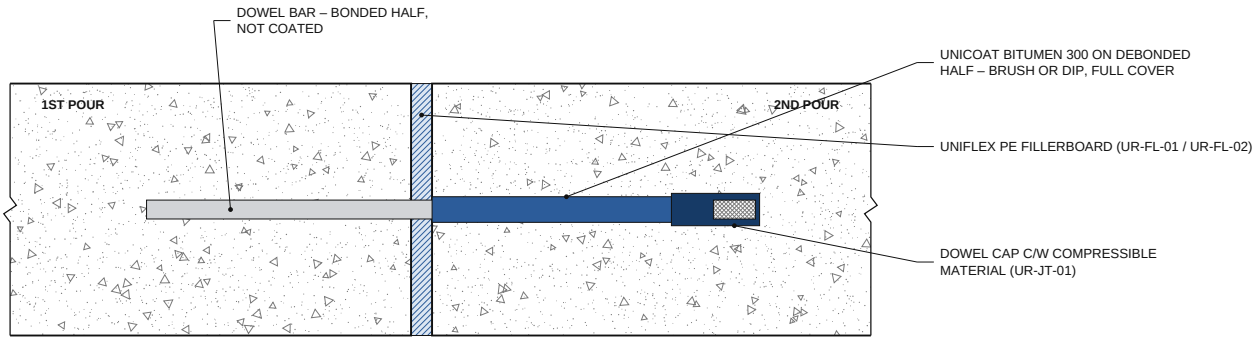
2 BASEMENT / RETAINING WALL

External face – not to scale



3 DOWEL BAR DEBONDING

Section at joint – not to scale



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Installation Procedures

1 Surface Preparation | 2 Priming | 3 Application

Installation Procedures

Step 1

SURFACE PREPARATION

All substrates to be coated with **UNICOAT BITUMEN 300** must be **firm and solid:** no hollow or loose areas, no crumbling or powdery surface, and no honeycombing or damaged concrete. The surface should be clean and free of dust, grease and contamination. It can be damp, but there must be no standing water. Remove all traces of curing compounds, paint coatings, laitance, organic growth, or other loose materials.

Surface preparation is best achieved by **high-pressure water jetting or light grit blasting.** Concrete with honeycombing, damage, or deterioration should be repaired with suitable repair mortars prior to application.

Step 2

PRIMING

Prime the prepared substrate with diluted **UNICOAT BITUMEN 300** (dilution ratio: **30–50% with clean water**) and apply using a brush or roller.

Apply the primer at a rate of **0.5 L/m²** and allow it to dry completely before proceeding with damp proof membrane or protective applications. Typical drying time is **approximately 8 hours,** depending on climatic conditions.

Step 3

APPLICATION

- **UNICOAT BITUMEN 300** can be applied using a **brush or squeegee**. Ensure the coating is worked well into the surface and struck off in one uniform direction.
- Apply a **minimum of two coats**, ensuring the **first coat is fully dry** before applying the second.
- The **second coat** should be applied **perpendicular** to the first coat to achieve optimum bond and coverage.

Reinforced Application (Optional for Durability):

- For enhanced durability, the coating may be **reinforced with fibreglass fabric/mesh.**
- Apply the first coat onto the primed substrate, immediately **embed the fibreglass fabric/mesh**, and then apply the second coat.
- During the second coat application, lightly press the fibreglass fabric/mesh using a **pressure roller** to ensure proper bonding.
- A third coat may be applied if additional build-up is required.
- The coated membrane must be **protected from rain and moisture exposure until fully cured.**

Shelf Life & Storage

UNICOAT BITUMEN 300 has a shelf life of **12–24 months** when stored in its original, unopened container under dry conditions. Storage in areas of **high temperature or humidity** may reduce the product's effective shelf life.

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UNICOAT BITUMEN 305

SOLVENT BASED BITUMINOUS WATERPROOFING MEMBRANE



Product Features

UNICOAT BITUMEN 305 is a premium, non-fibreed, solvent-borne bitumien-modified liquid membrane engineered to provide reliable, flexible, and long-lasting seamless moisture protection across diverse structural applications.

Formulated for multi-surface versatile performance, **UNICOAT BITUMEN 305** applies as a deep dark brown liquid and cures into a continuous, tough black coating that bonds strongly to concrete, masonry, and metal substrates.

When applied in a multi-layer system, **UNICOAT BITUMEN 305** creates a high-durability, resilient waterproofing barrier capable of accommodating minor structural movement and thermal expansion without cracking or peeling.

Advantages

Excellent Waterproofing	Superior bonding strength
Multi-Purpose Versatility	Excellent durability
Seamless & Complete Coverage	Anti-bacterial and anti-fungal
Prevent corrosion	

Fields of Application

- **Structural Waterproofing:** Basements, retaining walls, concrete slabs, foundations.
- **Wet Areas:** Bathrooms, kitchens, terraces, balconies, planter boxes.
- **Protective Coating:** Metal surfaces (copper, zinc, steel, pipes), dowel bars, and concrete exposed to corrosion.
- **General Waterproofing Primer:** For cement screed, tiles, roofing felt, and other bituminous systems.

Can be applied on various substrates such as concrete base, asbestos sheet, cement / sand screed, roofing felt, slates, tiles, pipes, metal surfaces like copper, zinc and other similar to it.

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UNICOAT BITUMEN 305

Physical Properties

Material	:	Solvent Rubberise Bitumen
Colour	:	Dark Brown (before drying)
Appearance	:	Pasty, thixotropic consistency
Specific Gravity	:	0.89 @ 25°C
Solid Content	:	55 - 56%
Flash Point	:	≥ 50 °C
Setting Time	:	2-4 hours depending on climatic condition
Service Temperature	:	10 - 50°C
Size	:	20 litres pail

Product Coverage

The theoretical coverage is approximately **0.3–0.5 litres per m²** per coat. For practical application, an additional **10–15% allowance** should be considered to account for wastage and surface irregularities.

Application should always be carried out in **two coats**, applied at **right angles** to one another, ensuring that the first coat has fully dried before applying the subsequent coat.

Important Note

- The application surface must not be exposed to moving water during the coating process.
- **UNICOAT BITUMEN 305** may be submerged in water after a curing period of 5–7 days, subject to ambient temperature and relative humidity conditions.

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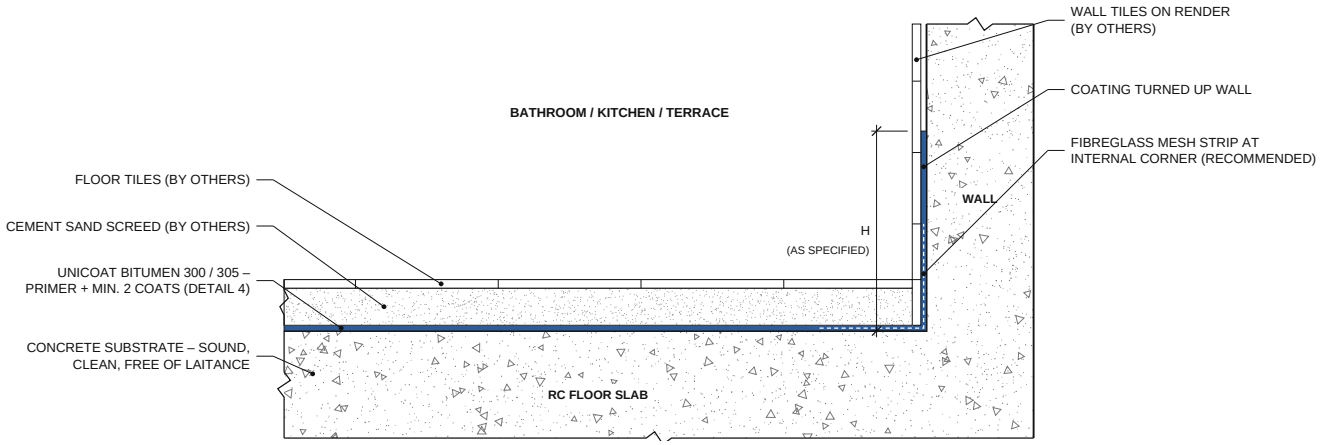
Typical Drawings

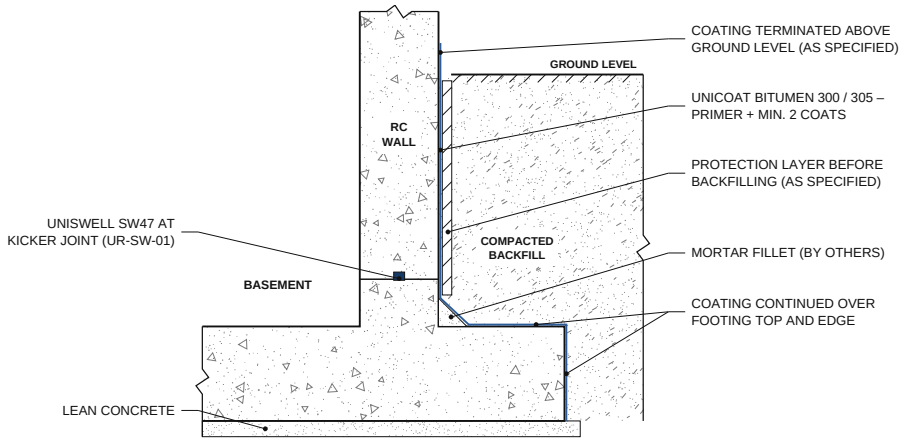
1 WET AREA FLOOR

Bathroom / kitchen / terrace – not to scale



2 BASEMENT / RETAINING WALL

External face – not to scale

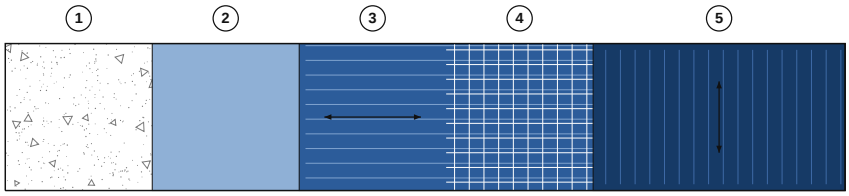


LEGEND

- UNICOAT BITUMEN coating
- UNICOAT primer coat
- UNISWELL SW47 / dowel cap
- Concrete
- Screed / backfill

3 COATING SEQUENCE

Stepped plan – not to scale



1. SUBSTRATE PREPARED – SOUND, CLEAN, REPAIRED
2. PRIMER COAT – 300 DILUTED WITH WATER / 305 UNDILUTED (SEE TABLE), DRY FULLY
3. 1ST COAT – BRUSH WELL IN, STRIKE OFF IN ONE DIRECTION
4. FIBREGLASS MESH (OPTIONAL) – LAID INTO THE WET 1ST COAT, PRESSURE-ROLLED
5. 2ND COAT AT RIGHT ANGLES AFTER 1ST COAT IS DRY; 3RD COAT IF MORE BUILD-UP NEEDED

NOTES

- Min. 2 coats at right angles.
- Let each coat dry fully.
- Protect from rain until cured.
- Mesh at corners is optional.

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Installation Procedures

1 Surface Preparation | 2 Priming | 3 Application

Installation Procedures

Step 1
SURFACE PREPARATION

All substrates to be coated with **UNICOAT BITUMEN 305** must be **structurally sound, clean, dry, and free from dust, grease, or any surface contamination**. Remove all traces of curing compounds, paint coatings, laitance, organic growth, or other loose materials.

Surface preparation is best achieved by **high-pressure water jetting or light grit blasting.** Concrete with honeycombing, damage, or deterioration should be repaired with suitable repair mortars prior to application.

Step 2
PRIMING

UNICOAT BITUMEN 305 is supplied ready for use and should not be diluted.

A primer coat should be applied at a rate of **0.10–0.20 litres per square metre**, ensuring uniform coverage of the prepared substrate. The primer must be allowed to dry fully, typically within **two to four hours** depending on temperature and humidity, before the application of subsequent coats.

Step 3
APPLICATION

- **UNICOAT BITUMEN 305** can be applied using a **brush or squeegee**. Ensure the coating is worked well into the surface and struck off in one uniform direction.
- Apply a **minimum of two coats**, ensuring the **first coat is fully dry** before applying the second.
- The **second coat** should be applied **perpendicular** to the first coat to achieve optimum bond and coverage.

Reinforced Application (Optional for Durability):

- For enhanced durability, the coating may be **reinforced with fibreglass fabric/mesh.**
- Apply the first coat onto the primed substrate, immediately **embed the fibreglass fabric/mesh,** and then apply the second coat.
- During the second coat application, lightly press the fibreglass fabric/mesh using a **pressure roller** to ensure proper bonding.
- A third coat may be applied if additional build-up is required.
- The finished coating must be **protected from rain, running water, and moisture exposure** until it is fully cured. Under typical site conditions, allow **5–7 days curing time** before backfilling, submersion, or long-term water contact.

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Shelf Life & Storage

UNICOAT BITUMEN 305 has a shelf life of **12–24 months** when stored in its original, unopened container under dry conditions. Storage in areas of **high temperature or humidity** may reduce the product's effective shelf life.

Health & Safety

Flammable. Keep away from sparks, naked flames, heat sources and hot work. No smoking in the work area. Apply only in well-ventilated areas. In enclosed spaces (basements, tanks, pits), use forced ventilation and avoid breathing the vapour. Wear protective gloves, goggles and overalls. Avoid contact with skin and eyes. Skin contact: wipe off, then wash with soap and water. Eye contact: rinse immediately with clean water for at least 15 minutes and seek medical advice. Keep a dry-powder or foam extinguisher nearby. Do not use a water jet on a bitumen fire. Keep containers closed when not in use. Keep out of reach of children. Do not let product enter drains or waterways. Refer to the Material Safety Data Sheet (MSDS) for full health and safety information.

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UNICOAT CSM

FIBRE GLASS CHOPPED STRAND MAT



Product Features

UNICOAT CSM (chopped strand mat) is a non-woven glass fibre mat made from chopped glass strands, randomly distributed and held together with a binder. It is available in emulsion-bound and powder-bound grades.

UNICOAT CSM is used as the reinforcement layer in liquid-applied waterproofing systems. Embedded between coats, it takes up the coating evenly, bridges hairline cracks and adds tear and puncture resistance to the finished membrane.

The mat conforms easily to corners, upstands and uneven surfaces, and is supplied in 100, 225 and 450 g/m² grades to suit the required membrane thickness.

How it is used: apply the first coat of waterproofing, lay **UNICOAT CSM** into the wet coat and press it in with a roller until it is fully wetted out with no air pockets, then apply the next coat over it. Overlap adjacent lengths by at least 50 mm.

Grade guide: CSM 100 for detailing at corners, joints and upstands; CSM 225 for general roof and wet-area waterproofing; CSM 450 for heavy-duty or high-build systems.

Advantages

Superior Mechanical Strength	Cost-Effective
High Resin Absorbency	Versatile Application Use
Excellent Conformability	Customizable Options
Uniform Material Distribution	Reliable Bonding
Emulsion & Powder Bound Grades	Long-Lasting Durability

Fields of Application

Roof Slabs & Gutters	Water Tanks
Wet Areas & Bathrooms	Corners & Upstands
Podium & Terrace Decks	Crack & Joint Reinforcement
Planter Boxes	Re-roofing & Repairs

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Technical Properties

Property	Test Method	CSM 100	CSM 225	CSM 450
Mass Per Unit Area	ISO 3374 - 2000	100g/m² ± 7.5%	225g/m² ± 7.5%	450g/m² ± 7.5%
Loss on Ignition	ISO 1887 - 1995	3.5% ± 2.0	4.4% ± 1.4	3.7% ± 1.1
Moisture Content	ISO 3344 - 1997	0.2% Max	0.2% Max	0.2% Max
Tensile Strength (min)	ISO 3342 - 1995	50 N/50mm	80 N/50mm	140 N/50mm

Physical Properties

Material	:	Chopped glass fibres with emulsion or powder binder
Colour	:	White
Size	:	UNICOAT CSM 100 : 1M X 50M UNICOAT CSM 225 : 1.3M X 126M UNICOAT CSM 450 : 1.04M X 64M
Weight	:	UNICOAT CSM 100 : approx. 5kg UNICOAT CSM 225 : approx. 37kg UNICOAT CSM 450 : approx. 30kg

Important Note / Special Note

- Wear gloves, long sleeves and goggles to protect against fibre dust and skin irritation.
- Avoid contact with skin and eyes, and avoid breathing in fibre dust. Cut the mat in a well-ventilated area.
- If fibres get on the skin, rinse with cold water and do not rub. Remove and wash contaminated clothing.
- If eye irritation persists after rinsing with clean water, seek medical advice.

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Shelf Life & Storage

UNICOAT CSM has a shelf life of **12 months** when stored in its original packaging in a dry, covered area. Keep away from moisture, rain and direct sunlight.

Site Photos







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UNICOAT CTE

COAL TAR EPOXY PROTECTIVE COATING



Product Features

UNICOAT™ CTE is a two-component, high-solids coal tar epoxy coating based on solvent. It protects steel and concrete in immersion service, and can be built up to 200 microns dry film thickness. It cures to a hard, smooth, durable film.

It is designed as a dependable and cost-effective protective coating against corrosion on steel and concrete exposed to aggressive environments, including immersed and underground structures.

Advantages

Brush, roller or spray applied	High solids, 75% by volume
Up to 200 microns DFT per coat	Hard, smooth and durable film
Fresh water & sea water immersion	Protects both steel and concrete
Resists sewage, chemicals & abrasion	Long-lasting corrosion protection
Suits buried & underground structures	Cost-effective heavy-duty coating

Fields of Application

Water & Wastewater: sewage treatment plants, sumps, manholes and drains.

Marine & Immersion: jetties, piles, barges and ballast tanks in fresh or sea water.

Tanks & Pipework: linings for tanks, pipes and trenches carrying crude and petroleum products.

Industrial Plants: steel and concrete in paper mills, chemical plants and similar industries.

Buried Structures: underground steel and concrete exposed to aggressive soil.

Important Note

- Not recommended for immersion in aromatic or ketone solvents, or strong oxidising acids.
- Do not use mixed material beyond the recommended pot life.
- Apply only between 10 – 35 °C and avoid direct sunlight. Above 30 °C the pot life is shortened.
- Use the recommended thinners only to avoid problems with the finish.

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Typical Chemical Resistance

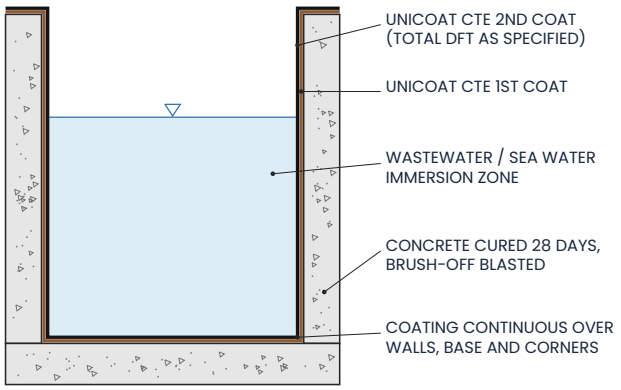
Exposure	Immersion	Spillage	Fumes
Acids	Very Good	Excellent	Excellent
Alkalies	Very Good	Excellent	Excellent
Solvents	Good	Very Good	Excellent
Salts	Excellent	Excellent	Excellent
Water	Excellent	Excellent	Excellent

Physical Properties

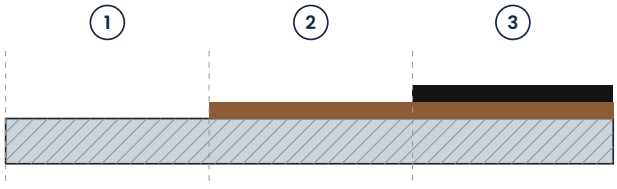
Finish	:	Semi-Gloss
Solids Content	:	75% ± 2 by volume
Color	:	Black / Brown
No. of Components	:	2
Recommended No. of Coats	:	2
Recommended Dry-Film Thickness	:	200µ
Mixing Ratio	:	16 : 4 by volume of Part A and Part B (4 : 1)
Pot-Life @ 25°C	:	4 hours
Drying @ 25°C	:	10 days (full cure)
Cleaner	:	Xylene
Application Methods	:	Airless, rollers or conventional spray
Packaging	:	20L / set (16L + 4L)
Calculated Coverage (200µ / coat)	:	3–4 m²/L depending on surface and application

Typical Drawing

1 SUMP / TANK LINING — Concrete section



2 STEEL – COATING BUILD-UP — Stepped section



1. STEEL – BLAST CLEAN SA 2½ (IMMERSION) OR SA 2 (NON-IMMERSION)
2. UNICOAT CTE 1ST COAT – BRUSH, ROLLER OR AIRLESS SPRAY
3. UNICOAT CTE 2ND COAT – BUILD UP TO SPECIFIED TOTAL DFT

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Installation Procedures

1 Surface Preparation | 2 Mixing & Stir | 3 Application

Installation Procedures

Step 1
SURFACE PREPARATION

For Non-immersion Service
Abrasive blast clean in accordance to SSPC-SP-6 (SA 2) 'Commercial Blast'

For Immersion Service
Abrasive blast clean in accordance to SSPC-SP-10 (SA 2½) 'Near White Metal'

For Concrete Surfaces
Allow new concrete to cure for 28 days. Brush-off blast.

Step 2
MIXING & STIR

Stir each component separately using electric drill fitted with a paint mixer or a wing type mixing paddle.

Then pour entire content of Part B into Part A and continue to mix material for 2-3 minutes until smooth and homogeneous before use. Do not mix partial kits.

Step 3
APPLICATION

For airless spray, use standard airless spray equipment with 28:1 or higher pump ratio and orifice tip size of 0.021 to 0.025".

For conventional spray, use industrial equipment spray gun. Separate air and fluid pressure regulators, mechanical pot agitator and a moisture trap in the main air supply line recommended.

It can be applied by brush or roller. Additional coat may be required to achieve the dry film thickness. Take care to avoid runs and sags.

Shelf Life & Storage

UNICOAT CTE has a shelf life of **12 months** when stored at temperatures below 30°C, kept out of direct sunlight and rain. Keep all containers tightly sealed until ready for use.

Health & Safety

Flammable. Keep away from heat, sparks and open flame. No smoking. Use in well-ventilated areas. Provide forced ventilation in enclosed spaces. Avoid breathing vapour or spray mist. Wear solvent-resistant gloves, safety goggles and overalls. Use a respirator when spraying or in confined spaces. Avoid skin and eye contact. May cause skin irritation or allergic reaction. Skin contact: wash with soap and water. Eye contact: rinse with clean water for 15 minutes and seek medical attention. Do not use mixed material beyond its pot life. Dispose of waste according to local regulations. Keep out of reach of children. Refer to the MSDS for details.

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UNICOAT MOULD OIL

OIL-BASED RELEASE AGENT



Product Features

UNICOAT MOULD OIL is a ready-to-use, oil-based release agent formulated for aluminium, steel, and other metal formworks. It produces a thin, stable film that acts as a barrier between the formwork and fresh concrete, ensuring clean demoulding and uniform, stain-free surfaces.

By preventing adhesion, it enhances concrete finish quality while reducing damage to formwork, extending its service life.

Advantages

- Ensures **easy and clean demoulding** of formwork
- Produces **smooth, uniform, stain-free concrete finishes**
- Reduces **surface blowholes and blemishes**
- Protects formwork against **corrosion and wear,** extending service life
- **Economical coverage rate**, lowering overall project cost
- Supplied **ready to use**, requiring no dilution or mixing

Fields of Application

- Aluminium and steel formwork systems
- Precast concrete moulds requiring smooth finishes
- General shuttering and mould linings in building and civil works
- Large-scale repetitive casting operations where consistent performance is critical

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UNICOAT MOULD OIL

Physical Properties

Appearance	:	Dark Brown Liquid
Specific Gravity	:	0.87 – 0.97 @ 25 °C
Typical Coverage*	:	15 – 18 m²/L per coat (depending on porosity and application method)
Packaging	:	206 L Drum
Shelf Life	:	12 months in original unopened container
Storage Conditions	:	Store in a cool, dry area. Protect from frost, direct sunlight, and excessive heat

* Coverage varies depending on substrate condition, surface porosity, and application method.

Important Note / Special Note

- Not recommended for use on plastic or resin-based formworks.
- Over-application may cause dusting, staining, or patchy surfaces.
- Should not be applied on contaminated formwork surfaces or those treated with curing agents.
- Not suitable where high early-strength surface finishes are required without prior site trials.

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Installation Procedures

1 Surface Preparation | 2 Application | 3 Finishing & Precautions

Installation Procedures

Step 1

SURFACE PREPARATION

All formwork surfaces must be **clean, dry, and free from oil, grease, dirt, laitance, or hardened concrete residues**.

Contaminated or previously treated formworks should be cleaned thoroughly before application to ensure optimum performance.

Step 2

APPLICATION

Stir the product gently before use to ensure homogeneity. Apply **UNICOAT MOULD OIL** by **brush, roller, or low-pressure spray** equipment fitted with a fine nozzle. The product should be applied as a **thin, uniform film** across the formwork surface. Excess material must not be allowed to accumulate; any surplus should be drained and carefully removed from edges with a sponge or cloth.

Step 3

FINISHING & PRECAUTIONS

For best results, apply one coat **immediately before concreting**. Avoid over-application, as this can lead to dusting, staining, or patchy concrete surfaces. Do not dilute the product or mix with other release agents.

Shelf Life & Storage

Store locked up, in the original closed container, under shelter in a dry place at 5 – 40 °C.
UNICOAT MOULD OIL will maintain a shelf life of 12 months if unopened and stored as recommended.

Health & Safety

Do not handle until all safety precautions have been read and understood. Avoid inhalation of mist, vapours or spray. Handle only in a well-ventilated area. Wear protective gloves and eye protection. Avoid release to the environment. If inhaled: remove victim to fresh air and keep comfortable for breathing. Call a poison center if you feel unwell. In case of eye contact: flush thoroughly with water, lifting eyelids. If exposed or concerned: seek medical attention. Collect spillage. Refer to the **Material Safety Data Sheet (MSDS)** for detailed health and safety information.

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UNICOAT SS

SODIUM SILICATE CHEMICAL CONCRETE HARDENER



Product Features

UNICOAT SS is an advanced water-based sodium silicate solution engineered to soak deep into the capillary pores of concrete structures. Once applied, it triggers a chemical reaction with free lime and active compounds inside the concrete matrix, creating a permanent, insoluble crystalline structure that hardens and densifies the substrate from within. This internal crystallization seals microscopic pores, increases surface wear resistance, and eliminates dusting from loose particles on fragile or porous concrete.

Unlike topical sealers that leave a film on top, **UNICOAT SS** works entirely below the surface. It preserves the concrete's original natural look and texture while delivering a dust-proof, abrasion-resistant, and low-maintenance finish built for heavy daily use and vehicular traffic.

Advantages

- **Harder surface:** hardens the concrete and raises its compressive strength
- **Less dust:** greatly reduces dusting on the finished surface
- **Longer life:** better resistance to abrasion and wear
- **Safe to handle:** non-toxic, but alkaline (see handling precautions)

Fields of Application

Concrete Floors	Concrete roads & Pavements
Walls & Slabs	Concrete pipes
Bridges	Basement walls

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Physical Properties

Material	:	Sodium Silicate
Appearance	:	Clear To Cloudy Liquid
Specific Gravity	:	Approx 1.4 g/ml
Typical Coverage	:	840 m² / 28 kg of **UNICOAT SS** diluted with 56 kg of water
Packaging	:	28kg pail & 300kg drum
Shelf Life	:	24 months in an unopened container
Storage Conditions	:	Store in a cool, dry area. Protect from frost, direct sunlight, and excessive heat

Technical Properties

	Compressive Strength of mortar, N/mm²	
Curing Age (Days)	Untreated with UNICOAT SS	Treated with UNICOAT SS
32	29.3	34.4
64	34.5	39.1
108	35.0	42.5
225	43.0	54.5

- Comparison data of compressive strength of 1:3 mortar cube with and without treated with **UNICOAT SS** using rebound hammer.

	Weight Loss / g	
No. of Cycle	Untreated with UNICOAT SS	Treated with UNICOAT SS
500	3.89	1.46
1000	8.35	2.82
1500	13.43	3.90
2000	17.47	5.16

- Comparison data of abrasion resistant of 1:3 mortar cube with and without treated with UNICOAT SS after 500 days ageing using wheel H-22 @ 1kg load.

This technical data sheet is given in good faith and does not guarantee the application work.
All Unity Reliance technical data sheets & method statements are updated on a regular basis and can be subject to change without notice.
It is the user's responsibility to obtain the latest version of the information required.

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Mixing & Coverage

UNICOAT SS must be diluted with water at a ratio of 28 kg of **UNICOAT SS** to 56 kg of water. This mixture gives a total coverage of 840 m². Ensure that the mix is homogeneous prior to application.

Actual coverage depends on the profile and porosity of the concrete surface.

Health & Safety

Although **UNICOAT** SS is a non-toxic liquid, its alkaline nature requires wearing protective clothing, gloves, goggles, and safety boots during handling and application.

Avoid skin and eye contact. In case of contact, immediately rinse the affected area with clean water and seek medical advice.

Apply to old concrete, or to new concrete that has cured for at least 14 days. Do not use on natural stone. Avoid contact with wood, glass or metal surfaces, as the hardener may cause discolouration.

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Installation Procedures

1 Surface Preparation | 2 Mixing & Stir | 3 Application

Installation Procedures

Step 1

SURFACE PREPARATION

Substrates intended for treatment with **UNICOAT SS** must have undergone at least 14 days of curing. It is essential that all surfaces are completely free of grease, wax, oil, paint, dust, and any loose adhering materials prior to starting the process. While the product can be used on damp surfaces, you must ensure there is no standing water present before the application begins.

Additionally, any surrounding wood, glass, or metal surfaces should be protected with tape or covering sheets to prevent potential discolouration caused by accidental contact with the hardener.

Step 2

MIXING & STIR

UNICOAT SS must be diluted with water at a ratio of 28 kg of **UNICOAT SS** to 56 kg of water. This mixture gives a total coverage of 840 m². Ensure that the mix is homogeneous prior to application.

It should be noted that the actual consumption rate may vary depending on the specific profile and surface porosity of the concrete substrate being treated.

Step 3

APPLICATION

UNICOAT SS is a versatile treatment that can be applied using a spray, roller, broom, or other similar equipment. For proper results, a minimum of two coats should be applied using the recommended dilution ratio. After the first coat is laid down, it must be allowed to dry for a period of at least 2 hours.

Once the final application is complete, the treated area must remain undisturbed and should not be stepped on until it is fully dry, which typically requires at least 24 hours. Any tools used during the procedure can be easily cleaned with water.

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