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.

This technical data sheet is given in good faith and does not guarantee the application work.
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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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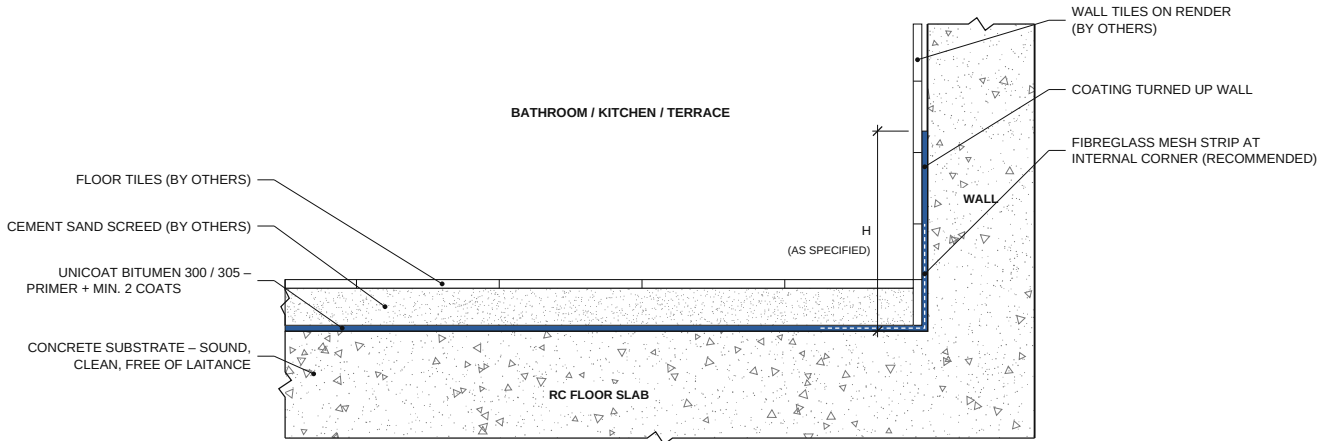
Typical Drawings

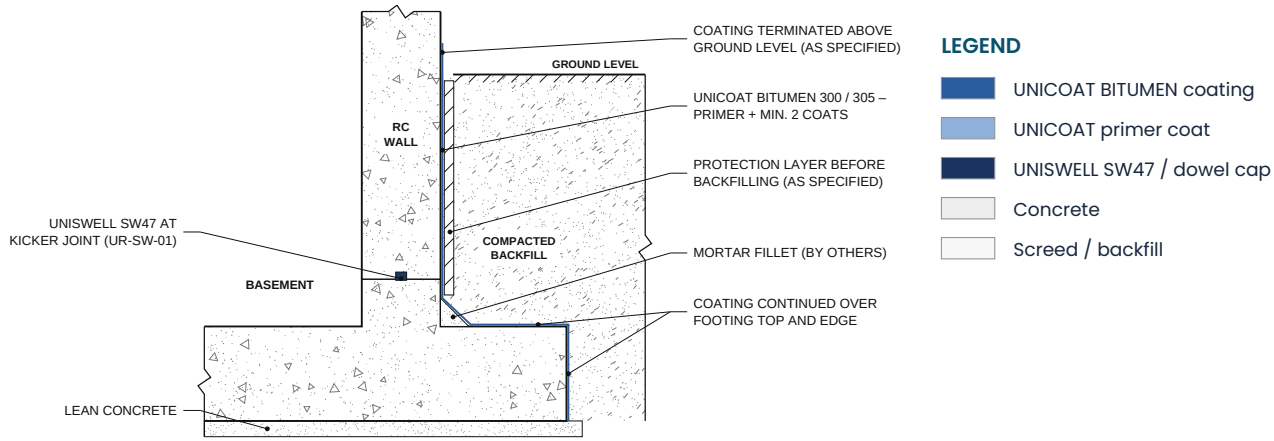
1 WET AREA FLOOR

Bathroom / kitchen / terrace – not to scale



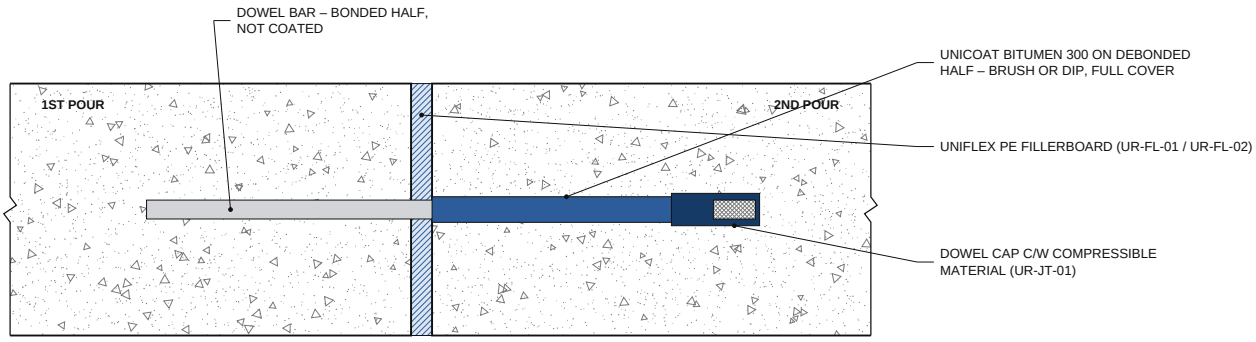
2 BASEMENT / RETAINING WALL

External face – not to scale



3 DOWEL BAR DEBONDING

Section at joint – not to scale



Ref. drawing UR-CT-01. For illustration only, not for construction. Details to be designed and approved by the project engineer.

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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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