



**Description**

IPAFLEX BITU 1K is a flexible, solvent-free, crack-bridging, single-component bitumen coating, containing polystyrene, for the reliable waterproofing of buildings and structures.

- Ready to use, easy to apply by trowelling or spraying
- 1-component product
- Good stability
- Flexible, resilient, crack-bridging
- resistant to all aggressive substances that occur naturally in soils
- Contains polystyrene
- Solvent-free
- Does **NOT** contaminate ground water
- Shelf life of 12 months in frost-free storage

**Uses**

IPAFLEX BITU 1K protects underground structures permanently against ground moisture (capillary water, retained water), non-accumulating seepage water (DIN 18195-4), water without hydrostatic pressure (DIN 18195-5, medium loading) and accumulating see page water (DIN 18195-6). It can be applied to vertical and horizontal surfaces on any mineralbased substrate such as sand-lime brickwork, clay bricks, concrete blocks, concrete, cellular concrete, piaster and screeds.

**Fields of use**

- Cellars of residential and commercial buildings
- Foundations
- Floor slabs
- Underground car parks
- Balconies
- Terraces
- Wet rooms
- Retaining walls
- Applying insulation and drainage panels
- **NOT** suitable for sealing flat roofs or containers.

**Important Notes**

- The hardening time will vary with the nature of the substrate and the weather conditions. .
- At no point should the applied membrane be thinner than the minimum coating thickness.
- The wet coating thickness should not be exceeded by more than 100%.
- Where there is accumulating seepage water, fixed and loose flanged fittings should be used for penetrations, such as pipe penetrations etc.
- Floor drainage connections with flanged edges or clamped film should be reinforced with fabric strips

- - When sealing cellular concrete blocks, we recommend using IPA Reinforcing Fabric in the first membrane coating.
- - Do not apply in direct sunlight, in rain or when the ambient temperature is below +5°C.
- - Do not leave the finished membrane exposed for a long period.
- - Clean tools and equipment with water immediately after use.
- -To achieve professional-quality sealing membranes where there are expansion joints, connection joints, and building joints, IPA JointSealing Tape should be used in conjunction with Ipaflex 1K or 2K Bitumen Coating and integrated into the surface membrane (please see Technical Data Sheet for IPA Joint Sealing Tape).

**Technical data**

pH value	9.0-11.0
Viscosity Haake : Brookfield, Sp.F, 5 1/min	ca. 300 dPas ca. 220,000 – 320,000 mPas
Density	ca. 0,65-0,66 kg/l
Reduction in coating thickness on drying	ca.17 %
Solids content DIN ISO 3251 at +105 °C	ca. 67 %
Rain-resistance DIN 52461 Method B*	ca.5 hours
Complete drying*	At least 4 days
Crack-bridging E DIN 28052-6 at +4°C	>2mm
Heat resistance DIN 52123	> + 70°C
Cold-bending test DIN 52123 at 0°C	no cracks
Water impermeability 1mm fissure width	impermeable
Temperature range for application	approx. 0.33 N/mm3
Crack bridging- without fabric reinforcement	+5°C to +30°C
Delivery Form	30L plastic drums

\* the time required varies with relative humidity, temperature, coating thickness and substrate.

# IPAFLEX BITU 1K

## Substrate preparation

The substrate must be prepared in accordance with DIN 18195-3 Waterproofing of buildings and structures, and DIN 1053 Masonry.

Substrates must be hard, level, stable and frost-free, free of oil, grease, tar pitch, recesses, gaping cracks and flash, and free of contaminants such as dust, dirt, mortar residues and sinter layers. Channels must be rounded and edges chamfered.

The material can be applied to dry or slightly moist substrates. The drying time will be longer if the material is applied to a moist substrate.

Mineral-based substrates must be treated with DURIPAL. During the construction phase water must not be allowed to creep between the substrate and the membrane; where necessary use a suitable mortar or sealing slurry as an intermediate sealing layer.

Open butt joints up to 5mm wide should be filled and levelled with IPAFLEX Bitu 1K as a skim coat, or with thin rendering. Blistering due to deep pores or cavities in the concrete can also be prevented by applying a skim coat. The skim coat must be allowed to dry before you start to apply the sealing material. Open butt joints or recesses that are larger than 5mm should be filled with repair mortar.

Radius vertical and horizontal internal corners with repair mortar and a cat's tongue trowel.

The coating can be applied over existing bitumen coatings as long as they adhere firmly to the substrate and are cleaned before application.

## Application

### Primina:

Apply DURIPAL unthinned with a suitable paint brush or spray gun uniformly on to a dry or slightly damp substrate. Usage: 100-200 ml/m<sup>2</sup>. When the primer has dried completely, apply IPAFLEX BITU 1K. Apply in the desired thickness in a single operation using a float or trowel.

### Coat application:

Apply at least two coats of IPAFLEX BITU 1K; each coat must have the necessary thickness. Surfaces, and internal and external corners must be covered completely. You can start application of the second coat as soon as the first coat is dry enough not to be damaged.

### Membranes on vertical walls:

A membrane on a vertical wall must be applied on the foundation side down to ca. 100mm below the lower surface of the ground slab and up to ca. 300mm above the ground surface (protection against spray and splashing).

On brickwork, the membrane must extend beyond the brick surface to prevent water penetrating behind the membrane during the

construction phase. Where there is accumulating seepage water, it is essential that fabric is embedded in the membrane. For membranes that must withstand load case 2, medium loading, to DIN 18195-5, fabric reinforcement must be applied to all grooves, chamfers and corners. We recommend that fabric is also used on horizontal surfaces so as to ensure that the minimum coating thickness is maintained.

### Embedding fabric reinforcement

According to DIN 18195-5, medium loading, fabric reinforcement is to be applied at internal and external corners, and for DIN 18195-6, accumulating seepage water and water under hydrostatic pressure, fabric reinforcement must be embedded over surfaces.

### Applying insulation and drainage panels

IPAFLEX BITU1K can be used as an adhesive for insulation and drainage panels. Insulation and drainage panels should only be applied after the actual sealing membrane has dried completely.

### Usage / Dry-coating Thickness

Duty type/ Load case	Coating thickness, min		Usage in l/m <sup>2</sup>
	Wet	Dry	
Skim coat	-	-	ca. 1-2
Ground moisture and non-accumulation seepage water	3,7m m	3.00mm	ca.3,7
Water without hydrostatic pressure on floors and in wet areas	3,7m m	3,00mm	ca.3,7
Accumulating seepage water	4,9m m	4,00mm	ca.4,9
Applying insulation and drainage panels	-	-	ca.1-2

### Tools and Equipment

Ipaflex Bitu 1K can be applied with smoothing trowels, notched trowels, cat's tongue trowels, mortar trowels, or with suitable spraying equipment.

### Storage

Ipaflex Bitu 1K has a shelf-life of at least 12 months when stored in cool, dry, frost-free conditions in its unopened, original container.

### Occupational Safety

- Avoid contact with the skin and eyes
- When applying, wear rubber gloves with a cotton fabric lining at all times

### Disposal

-EWC code numbers: 080410 (waste adhesives and sealants) or 17 03 02 (bituminous mixtures) for dried out material residues.

### Vision 1906

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