

### Water-Based PU Bituminous Waterproofing Membrane

#### Description

**PENTENS T-100** is a specially produced PU bituminous waterproofing compound for use on both internal and external surfaces. It will bond perfectly to almost any surface such as concrete, masonry, metal and timber. It may be applied to new or existing structures, and will bond to a damp surface. It can also be mixed with sand, to form a mortar of any desired consistency.

#### Uses

To provide a better water and vaporproof in complicating application surface compare to membrane-type and ensure better integrity between applied surfaces and waterproofing coating. Areas of application include:

- Floor slabs
- Patios, terraces and balconies
- Bathrooms
- RC gutters and planter boxes
- Swimming pools and water tanks
- Basements and fountains
- Retaining walls

#### Advantages

- High elasticity.
- Will bond to almost any surface.
- Does not run or creep under any heat.
- Resists a wide range of acids and alkalis.
- Can be applied to a damp surface.
- Odourless and produces no fumes.



#### Technical & Physical Data

Form	Paste like Emulsion
Color	Dark Brown
Specific Gravity CNS 6988	1.08
Hardness (Type A/1 Sec) CNS 6988	35
Tensile Strength (kgf/cm <sup>2</sup> ) CNS 6988	>28
Elongation (%) CNS 6988	>400
Tear Strength (kgf/cm) CNS 6988	>14
100% Modulus of Elasticity (kgf/cm <sup>2</sup> ) CNS 6988	10
Adhesive Strength (kgf/cm <sup>2</sup> ) JIS A6909	>8
Water Vapor Transmission (Perms) ASTM E96 Method B	<3
Puncture (kgf) ASTM E154	>9
Chemical Resistance (10% HCOOH, 60°C, 24 hrs) ASTM D543	No Changes on the surface of the sample
Friction Test ASTM D1894	1.21
Water Resistance (%) ASTM D543	7.3
Abrasion Resistance ASTM D4060	0.0115
Shelf Life	1 year when unopened and undamaged
Storage Condition	Store in a dry cool place
Packaging	20kg pail 200kg drum

#### Important Notes

1. Minimum ambient and substrate temperature is 5°C.
2. Never apply more than 1 kg/m<sup>2</sup> of PENTENS T-100 in one single layer.
3. Apply only to clean, sound substrates where surfaces should be well dampened but free of surface water and leaks.
4. **Thoroughly agitate contents before use.**

## Instruction for Use

### Surface Preparation

All the surfaces must be clean, free from grease, oil, laitance, and remove all the dirt and contaminants, which might affect adhesion. The impurity outside the structure body should be cleaned thoroughly.

Any crack or water leakage area should be pre-treated and reinforced with PENTENS Repair System (for more detail, please refer to our Technical Department) before the waterproofing.

For some difficult areas, such as the position of cracks, secondary joint, right angle of wall and the boundary shall be strengthened first with one layer of PENTENS T-100.

### Mixing

Generally it is not required but for smoother application, not more than 1kg of clean water can be added into 20kg of PENTENS T-100.

When used as a sand mortar, the amount of sand added to PENTENS T-100 will determine the plasticity of the mortar and the hardness of the set material.

### Application

Substrate should be primed with a 1:3 mixture of PENTENS T-007 and water. Brush on at the approximate rate of 0.3kg/m<sup>2</sup>.

On areas exposed hot drying winds. 2 to 3 thin coats of paint may be more successful than 1 thick coat. For indoor areas, it is recommended that allow approximately 30 minutes or after the primer becomes tacky then apply T-100.

With brush, roller, or spray method apply the first coat of PENTENS T-100 on the application surface. The first coat should be applied in one direction only. If possible the second coat should be applied at right angles to the first. Leave to cure for approximately 8 hours before applying second coat.

## Consumption

Two coats of PENTENS T-100 are recommended for complete waterproofing (1kg/m<sup>2</sup> per coat).

- Bathrooms and kitchen: minimum 2 coats.
- Roof, planter boxes, balconies, water tanks and basements: minimum 3 coats.

For more details, please refer to our Technical Department.

## Curing

For optimum performance, PENTENS T-100 should be allowed to cure for 24 hours before the finishing concrete, tiles etc and during this time precautions must be taken in order to prevent damaging to the coating.

## Note

The best method to assure good penetration of the first coat into the surface is by application with a nap roller. The succeeding coats may be spray or roller applied.

## Cleaning

Tools and equipment just can be clean with clean water immediately after use.

## Safety

Impervious gloves and barrier cream should be used when handling these products. Eye protection should be worn. In case of contact with eyes, wash thoroughly with plenty of water and seek medical advice if symptoms persist. If contact with skin occurs, it must be removed before curing takes place. Wash off with an industrial skin clearer followed by plenty of soap and water. Do not use solvent. Ensure adequate ventilation when using these products.