

Description

PENTENS PU-100 is a liquid-applied, permanent elastic, cold applied and cold curing, two component, polyurethane membrane used for long-lasting waterproofing. It can be applied in any desirable thickness, up to 2mm in one single layer. It forms an elastic, waterproof and long life membrane, showing very good adhesion to the old substrate. It is used to establish and maintain continuous watertight seals. It protects constructions from humidity, acid rain, seawater, fuels, oils, bacteria, chemicals etc.

Uses

PENTENS PU-100 due to its long lasting unchangeable properties is widely used for:

- Waterproofing of Rooftops
- Protection of Polyurethane Foam Insulation
- Waterproofing and Protection of Water Supply Channels
- Waterproofing and Protection of Water Storage Tanks
- Waterproofing and Protection of Flowerbeds, Fountains, etc
- Waterproofing and Protection of Tunnels
- Waterproofing and Protection of Pipes and Metal Surfaces etc.
- Protection of Freezer Storage Rooms
- Waterproofing of Undertile Areas in Bathrooms, Kitchens, Balconies, Swimming Pools, etc

Advantages

- Excellent adhesion to almost any surface: concrete, stone, wood, metal, brick etc.
- High elasticity
- The sealant maintains its mechanical properties within a temperature span of -40⁰C to +110⁰C
- Superior chemical resistance
- The membrane withstands root penetration.
- Seamless, waterproofing

Technical & Physical Data

Density	1.29
Hardness (Type A)	34
Tensile strength (kgf/cm ²)	21
Elongation (%)	361
Tear strength (kgf/cm)	6
100% Modulus of elasticity (kgf/cm ²)	11
Oven Aging, 168 h at 70 ⁰ C	
Hardness (Hs)	35
Tensile strength (kgf/cm ²)	21
Elongation (%)	338
Tear strength (kgf/cm)	6

* Comply with the Chinese National Standard – CNS 6988

Packaging

PENTENS PU-100A is supplied in 20 kg pails.
PENTENS PU-100B is supplied in 10 kg pails.

Storage

The material should be stored in dry and cool rooms for up to 12 months. Protect the material against moisture and direct sunlight. Storage temperature: 5⁰C – 30⁰C. Products should remain in their original, unopened containers, bearing the manufacturers name, product designation, batch number and application precaution labels.



Instruction for Use

Surface Preparation

The surface needs to be clean, dry and sound, free of any contamination, which may harmfully affect the adhesion of the membrane.

Concrete:

New concrete structures need to dry for at least 28 days. Smooth high spots. Fill low areas, holes, cracks or joints with the appropriate sealant. Prime the concrete surface with PENTENS E-500 primer ($0.2\sim0.3\text{kg/m}^2$).

Repair of cracks and joints:

Clean expansion joints, saw cuts and control joints of dust, residue or other contamination. Prime with the transparent PENTENS E-500 primer. Allow 2-3 hours to dry. Apply a stripe coat of the appropriate sealant, 100mm wide, by 1-2mm thick, centered over all cracks, hairline cracks and cold joints. Cover wet sealant with 100mm wide fiber glass or polyester mesh. Allow 12-24 hours to cure.

Application

PENTENS PU-100A and PENTENS PU-100B should be mixed according to the stipulated mixing ratio (2:1 part by weight).

The mixing of the components has to be effected very thoroughly, especially on the walls and bottom of the pail until the mixture becomes homogeneous.

PENTENS PU-100 can be applied by using a spatula, roller, brush or airless spray gun in one or two layer (For 1mm thickness: 1.2kg/m^2).

Each layer needs at least 24 hours / mm thickness to dry.

All exposed areas of PENTENS PU-100 should be coated with 2 coats of PENTENS PU-120 Polyurethane Surface Finish Coating to ensure maximum ultraviolet radiation. (0.2kg/m^2 per coat).

Final curing will occur after 5 days. Do not apply the waterproofing membrane if rain is imminent during or immediately following installation.

Safety

PENTENS PU-100 A+B contains isocyanates and xylene. Keep away from fire sources. Do not smoke. Sufficient ventilation is recommended, otherwise wear respiratory equipment. Gloves and goggles must protect hands and eyes. In case of contact of the material with the eyes, rinse with plenty of water and consult a physician. Hand and tools must be cleaned before polymerization, with solvent or cleaner.

