

UV Resistant Elastomeric Waterproofing Coating

Description

PENTENS T-200H is based on a newly developed Water based Polyurethane and Acrylic Polymers. It dramatically reduces solar heat absorption in either air-conditioned or non-air conditioned buildings. It takes the majority of the heat load off a building's skin and reduces temperatures to approximately that of outside shade.

Uses

PENTENS T-200H is a one-part elastomeric cross linking latex copolymer emulsion designed as exposed waterproofing coating on:

- RC gutters and planter boxes
- Floor slabs
- Roof decks
- Wood siding / Fences
- External wall
- Flat roof
- Metal roof
- Concrete structures

Advantages

- High elongation
- Can resist to ponding water.
- Water based, environment friendly.
- Air and UV protection.
- Self-cleaning and weather resistant
- Chemical resistant and waterproof.
- User friendly, suitable use on any surface.
- Adheres well over aged, galvanized and metal roofs, wood, asphalt or aluminum coatings, polystyrene foam insulation, polyester plastic panels, pre-cast flat concrete and barrel cement tiles and many roofing materials.
- Prevention of ravages of acid rain, freeze-thaw, cycles, sunlight, bacteria and fungus.
- Non-toxic.

Technical & Physical Data

Form	Liquid
Color	Grey, white, green, yellow etc
Resin	Modified Polyurethane and Acrylic
Density	1.10
Solid content	> 55 % by weight
Elongation	> 515%
Tensile Strength (ASTM C412)	> 40 kgf/cm ²
Tear Strength (ASTM D624)	> 15 kgf/cm ²
Solar reflectance (JIS R 3106)	86.9 %
Solar Absorptance (JIS R 3106)	13.1%
Aging test at 80°C, 168 Hrs (ASTM D573-04)	
a. Tensile strength	> 50 kgf/cm ²
b. Elongation	> 450%
c. Tear strength	> 15 kgf/cm ²
Water Vapor Transmission	
ASTM E96 Method B	<5 Perms
Curing Time	12 hours
Application Temperature	5°C to 40°C
Service Temperature	0°C to 80°C
Self life	At least 1 year when unopened and damaged
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/m² of PENTENS T-200H 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

Surface must be sound, dry and clean (free of dirt, gravel, pollution, mildew and all foreign material). Do not apply if any rain is imminent. Repair flashings and damaged areas. Cracks and old bitumen joints shall be repaired first. On existing surfaces must be thoroughly cleaned before applying PENTENS T-200H.

Remove all gravel. The main reason of applying gravel on the roof was to protect the old surface from the sun's rays. Removing gravel will greatly reduce the weight load on the roof, and provide a firm surface for the new coating.

Sweep and vacuum or power wash surface to remove dirt and dust. Cut out roof blisters and repair with acrylic embedded in polyester fabric or polymer concrete.

Remove mildew with sodium hypochlorite or other algaeicide and rinse with Tack down curled, lifted seams flush with the surface. Fill any other gaps with silicon impregnated latex caulk. Any loose shingles should be gently lifted and glued down with roofing cement.

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/m².

On areas exposed hot drying winds. 2 to 3 thin coats of paint may be more successful than 1 thick coat.

PENTENS T-200H is suggested to apply at least 2 coats. 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 2 to 8 hours before applying second coat. PENTENS T-200H can be installed with conventional airless spray equipment, brush or roller.

Precautions

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.

Coverage

- On concrete roofs : 40-50 m² /20 kg /coat
- On façade/vertical : 40-60 m² /20 kg /coat

Actual coverage may vary depending on substrate texture and porosity.

Cleaning

Tools and equipment can be clean with clean warm water immediately after use. Hardened material can only be mechanically removed.

Safety

PENTENS T-200H is non-toxic. For personal precautions, applicators are recommended to wear gloves and goggles when handling PENTENS T-200H.

