

# PENTENS T-200H

## UV Resistant Elastomeric PU Waterproofing Coating

### Product Data Sheet



### 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, environmentally friendly.
- Air and UV protection.
- Easy-cleaning and weather resistant.
- Chemical resistance and waterproof.
- User friendly, suitable to use on any surface.
- Adheres well over aged, galvanized and metal roofs, wood, asphalt or aluminum coatings, polystyrene foam insulation, polyester plastic panels, precast 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, L-Grey, White, Green
Resin	Modified Polyurethane and Acrylic
Density	1.10 kg/litre
Solid Content	> 55 % by weight
Elongation (%) (ASTM D412)	> 515 %
Tensile Strength (kgf/cm <sup>2</sup> ) (ASTM D412)	> 40
Tear Strength (kgf/cm) (ASTM D 624)	> 15
Solar reflectance (JIS R 3106)	86.9 %
Aging Test (80°C, 168hrs) (ASTM D 573-04)	
a. Tensile Strength	> 50 kgf/cm <sup>2</sup>
b. Elongation	> 450 %
c. Tear Strength	> 15 kgf/cm
Water Vapour Transmission (ASTM E 96 Method B)	< 5 perms
Curing Time	12 hours
Application Temperature	5°C ~ 40°C
Service Temperature	0°C ~ 80°C
Shelf Life	At least 1 year when unopened and damaged
Storage Condition	Store in a dry cool place
Packaging	4.5 kg/pail 20 kg/pail

### Important Notes

1. Thoroughly agitate contents before use.
2. Minimum ambient and substrate temperature is 5°C.
3. Never apply more than 1kg/m<sup>2</sup> of PENTENS T-200H in one single layer.
4. Apply only to clean and sound substrates where surfaces should be well dampened but free of surface water and leaks.

## Instruction For Use

### Surface Preparation

Surface must be sound, dry and clean (free from 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.

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 algacide and rinse with clean water. 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 clean water. Brush on at the approximate rate of 0.2~0.3kg/m<sup>2</sup>.

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.

On areas exposed to hot drying winds, 2 to 3 thin coats of PENTENS T-200H may work better than 1 thick coat.

### Precautions

The best method to ensure 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: roof 0.8~1.0 kg/m<sup>2</sup>/2 layers

- On facade/vertical surface: 0.67~1.0 kg/m<sup>2</sup>/2 layers

NOTE: Actual coverage may vary depending on substrate texture and porosity.

### Cleaning

Tools and equipment can be cleaned 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.