TECHNICAL DATA SHEET

watertite TPM

Cold Applied Two-Part Liquid Rubber

DESCRIPTION

Watertite TPM is a two part liquid applied waterproofing compound, known as liquid rubber. When the two parts "A" and "B" are blended together, applied and cured they form a highly flexible and resilient waterproof membrane.

FEATURES

Watertite TPM material has exceptional hydrolytic stability and is therefore, insensitive to any moisture or water. Water and snow will not change or interfere with the cured properties.

Watertite TPM pot life and curing time may be adjusted to suit any particular job situation without changing or affecting the physical properties and performance of the cured membrane.

Watertite TPM forms a seamless impervious permanent seal. It retains original elasticity to expand and contract with rapid temperature changes and offers full protection against moisture, water, ozone, UV, salts and weathering.

Watertite TPM has many advantages. The seal keeps water and moisture out indefinitely. Being a liquid when applied, it finds its own level and thereby fills small cracks and imperfections, giving a perfect seamless seal and bond to all surfaces. Because of its excellent adhesive properties, moisture will not be able to penetrate the seal or travel in between the membrane and surface of the structure.

Watertite TPM is more economical than most conventional, other two-part or rubber sheeting waterproofing systems.

Watertite TPM adheres perfectly to most conventional construction materials and bridges cracks up to 3.18 mm (1/8") in width.

USES

Watertite TPM is ideal for waterproofing new construction and the maintenance of existing structures. Typical applications of both above and below grade, on horizontal, sloped and vertical surfaces are as follows:

Parking garages, Parking decks
Below grade wall waterproofing
Bridge decks
Between Slab waterproofing
Reservoirs and Cisterns
Roof decks
Shower rooms
Most tiles
Poured-in-place concrete
Asphalt
Tunnels
Mechanical rooms
Planters
Reflection Pools
Podium decks finished with concrete pavers

In addition to waterproofing, **Watertite TPM** is also used as a protective coating for insulation materials on roofs.

Watertite TPM can be used to protect the inside and outside of various tanks, including pollution control tanks.

Watertite TPM can be used as a liquid flashing system, for pitch, pockets and for small repairs.

PennKote Ltd. www.pennkote.com Phone:905.683.6447 Fax:905.428.3073 516 Finley Avenue, Ajax, ON, Canada, L1S 2E3

LIMITATIONS

Watertite TPM is not to be applied to surfaces that are either wet, oily, frosted, dirty or contaminated in any way.

Watertite TPM is not to be applied over lightweight concretes containing moisture or certain curing compounds.

NOTE

Consult **PennKote** for specific data on applications not detailed in this literature.

SPECIFICATION

1.0 General Conditions

.1 **Workmanship**
All work of this section is to be carried out by a skilled applicator approved by PennKote Limited and in strict accordance to Manufacturer's printed instructions.

.2 **Product Storage and Handling**
All materials are to be stored in a clean, dry and protected area in their original containers sealed and undamaged. Manufacturer's labels are to be easily visible and intact.

.3 **Protection of Other Work**
Care and precaution are to be exercised by the waterproofing applicator so as not to damage the work of other trades. The waterproofing applicator is responsible to take all necessary precautions to protect work of other trades during the application procedure.

.4 **Application Temperature**
Watertite TPM can be applied at atmospheric temperatures as low as –18°C (0°F).

2.0 Materials

.1 Waterproofing membrane shall be PennKote **Watertite TPM** two-part cold applied liquid membrane supplied in 22.7 kg (50 lb.) conventional 22.7 l (5 gallon) containers with activator in 0.55 l (1 pt) can.

.2 Surface conditioner shall be PennKote's **Watertite Surface Conditioner** polymer modified bituminous primer-sealer.

.3 Reinforcing fabric shall be PennKote **Pennflex** 16 denier nylon mesh.

.4 Transition membrane shall be minimum 1.0mm (40mil) self adhering crosslaminated polyethylene bonded to polymer modified bituminous membrane supplied by PennKote Ltd.

.5 Expansion joint flexible sheeting shall be minimum 1.5mm (60 mil) self adhesive polyethylene backed polymer modified bituminous membrane supplied by PennKote Ltd.

.6 Protection surfacing shall be asphalt solid core board of 3.18 mm (1/8") minimum thickness or PennKote approved alternate.

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3.0 Application

1. Surfaces must be clean, dry and free from loose contaminants. Wire brushing and/or scraping of the substrate may be required to adequately prepare surface.

2. Mix **Watertite TPM** by adding activatorinto the base compound and mixing with a double blade agitator attached to a 12.7mm (1/2") drill at a low speed (700 rpm) for a period of not less than 5 minutes.

3. Apply mixed **Watertite TPM** with squeegie, trowel or spray application. Material must be spplied continously over a surface at a minimum thickness of 1.5mm (60mil) wet. Care should be taken to apply material completely around all projections.

4. For cracks and non-moving jooints less than 1.59mm (1/16") wide apply **Watertite TPM** as directed, embed **Pennflex** reinforcing fabric into fresh membrane and top dress over the reinforced area with an additional coat of **Watertite TPM**.

5. For flashing applications, cracks larger than 1.59mm (1/16") wide, dynamic joints and at terminations apply **Watertite TPM** as directed, fully embed the prefabricated transition membrane into the freshly cured membrane and top dress the edges of the preformed membrane with an additional coat of **Watertite TPM.**

4.0 CLEAN-UP

1. Applicator is responsible for the removal of surplus material and waste material incurred during the application.

2. Equipment and tools may be cleaned using XYLOL**.**

WARRANTY

PennKote Ltd. warrants its products against manufacturing and material defects. PennKote will, for a period of two years from the date of application, supply replacement material for product proven to be defective. This warranty is in lieu of any and all other warranties expressed or implied. Pennkote Ltd. and any Distributor or Retailer of this product accept no liability for incidental or consequential damage due to defective material or improper installation. The user shall determine the suitability of this product for intended use.

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Cold Applied Two-Part Liquid Rubber

APPLICATION DATA	
Colour	black
Packaging	premeasured 22.5 kg (50lb) unit consisting of 2.5 l pail containing base compound and 0.55 l (1 pt) can of activator
Coverage	approximately 0.45 sq.m./kg. (2.2 sq.ft.per lb.)for 1.52mm (60 mils) approximate dry thickness
Cured Thickness	1.5mm (60 mil)
Pot Life	30 to 40 minutes at temperatures 16°C (60°F) to 27°C (80°F)
Cure Time	light pedestrian traffic in approximately 12 hours, fully cured in 7 days
Application Temperature	between –18°C (0°F) and any working temperature
Shelf Life	unmixed; indefinite
Toxicity	Fresh compound contains volatile and flammable solvents. Harmful if swallowed. Avoid prolonged contact with body surface.
Caution	Harmful if swallowed. Avoid prolonged skin contact with fresh material. KEEP OUT OF REACH OF CHILDREN.
PHYSICAL PROPERTIES	
Tensile Strength (ASTM D412) **after aging***	14.76 kg./sq.cm.(210 psi) 14.76 kg./sq.cm.(210 psi)
100% Modulus (ASTM D412) **after aging***	6.33 kg/sq.cm.(90 psi) 7.03 kg/sq.cm.(100 psi)
Elongation (ASTM D412) **after aging***	490% 470%
Hardness: (ASTM D2240, Shore 00) **after aging***	78 80
Tear Strength (ASTM D624, Die C)	17.9 kg./cm.(lineal) (100 pli)
Brittle Point (ASTM D746)	-61°C (-78°F)
Water Vapour Transmission (ASTM E96)	0.54 X 10^{-3} perms, metric
Environmental Resistance	excellent resistance to moisture, ozone, ultra-violet, extreme temperatures, industrial atmospheres
Chemical Resistance	excellent resistance to salts, diluted acids and alkali solutions, bacteria and fungi

*** heat aging for 1 wk at 70°C(158°F)**

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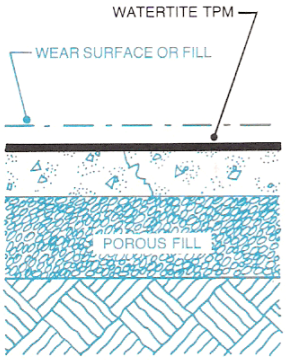
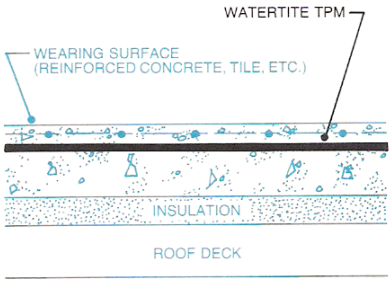
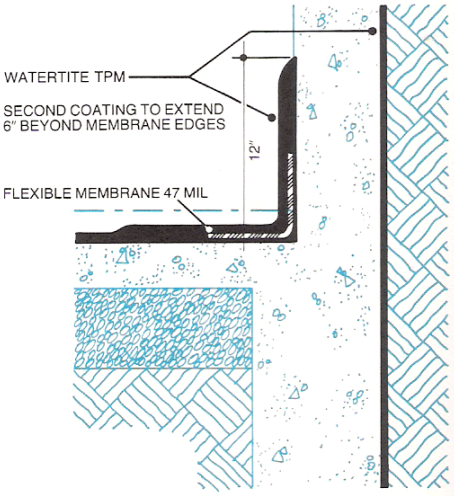
WATERTITE TPM (Two-part Membrane)
Application Details: not to scale



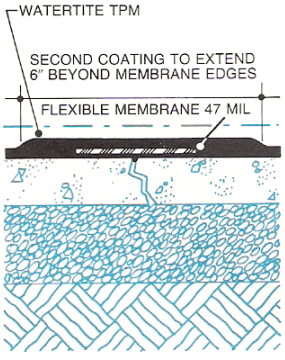
SURFACE CRACKS TO ⅛″



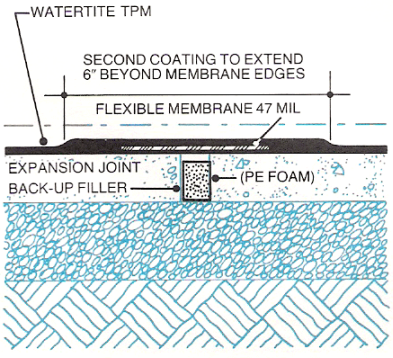
PODIUM OR PEDESTRIAN DECK



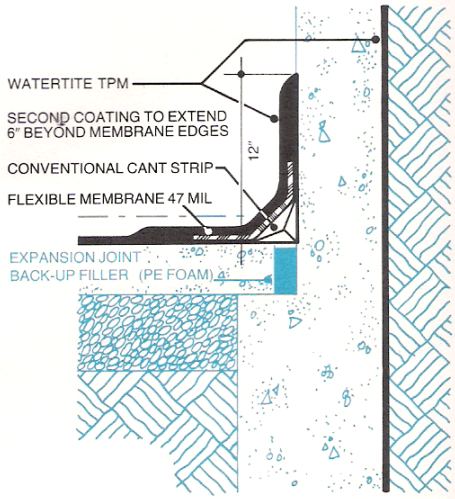
HORIZONTAL-VERTICAL TRANSITION



JOINTS AND STRUCTURAL
CRACKS ⅛″ TO ½″ WIDE



CONSTRUCTION AND EXPANSION JOINTS
OVER ½″ WIDE (MAXIMUM 2″ WIDTH)



HORIZONTAL-VERTICAL EXPANSION

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