

# T100NR

## 100-MIL THERMOPLASTIC WATERPROOFING MEMBRANE

### DESCRIPTION

T100NR is a 2.5 mm (100 mil) thick non-reinforced PVC-P thermoplastic waterproofing membrane for tunnel projects with excellent puncture and elongation properties. Membrane is dual color with black bottom and a thin integral yellow signal layer on the top. T100NR is resistant to root penetration and micro-organisms.

### APPLICATIONS

T100NR primary application is to waterproof bored rock tunnels and associated stations and shafts. The membrane is part of a system that includes a PVC water-barrier sectional grid and pre-installed remedial grout tubing network. The membrane is installed with the yellow signal layer facing the installer and is secured into position in accordance with CETCO membrane installation guidelines. Field seaming is accomplished by fusing the PVC-P membrane using conventional welding equipment in accordance with CETCO installation guidelines. Per project requirements, double channel welding equipment may be used allowing for air pressure testing of the air channel between the two welds.

### LIMITATIONS

The membrane is not prolonged UV stabilized and cannot be installed on structures permanently exposed to UV light and weathering. Consult CETCO for additional technical data and installation guidelines. Refer to Material Safety Data Sheet for health and safety information.

### ROLL SIZE

1.9 m x 15.2 m Length  
(74-Inch Width x 50-Foot)

TECHNICAL DATA		
PROPERTY	TEST METHOD	TYPICAL VALUE
Thickness	ASTM D751	2.5 mm (100 mil)
Hydrostatic Pressure Resistance (1 hr @ 100 psi)	ASTM D5385	70 m (231 ft)
Tensile Strength	ASTM D638	20 mPa (2,910 psi)
Ultimate Elongation	ASTM D638	290%
Tearing Resistance	ASTM D1004	28 lbs
Water Absorption	ASTM D570	0.09%
Static Puncture Resistance	ASTM D5602	1,780 N (400 lbf)
Low Temperature Flexibility (-30° F)	ASTM D2136	Pass
Low Temperature Impact	ASTM D1593	-30°C (-20°F)
Water vapor Transmission	ASTM E96	0.036 gr/m/hr (0.1 perms)
Dynamic Puncture Resistance	ASTM D5635	32.2 J (23.7 ft-lbf)
Chemical Resistance pH Value 2 to 13		Pass
Flammability	EN ISO 11925-2	Pass/Self Extinguishing

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