

## High Temperature Resistant Geomembranes



Normally the service temperature of a geomembrane is the ambient temperature of the containment. In certain specialized applications the service temperature can be much higher. The longevity of geomembrane materials can be challenged by higher temperatures. A selection of geomembrane materials has been developed that are specifically designed to combat the effects of elevated thermal stress. High temperature resistant geomembranes are specially formulated to resist the degradation that can be brought about by heat. Heat accelerates the natural ageing process of a polymer and can reduce the expected service life. As part of the HAZGARD series of secondary containment geomembranes, the HT 5000 provides a combination of strong physical material strengths with excellent chemical resistance and high thermal properties. Our HT 2000 is a very similar polymer blend to HT 5000 but is not supported with a polyester fabric scrim.

Contain Enviro Services Ltd. is the leader in the supply and installation of geomembranes for a wide variety of challenging applications. No single geomembrane is suitable for every containment application; contact Contain Enviro Services Ltd. for technical support to assist in recommending the correct geomembrane for your application.



## **High Temperature Resistant Geomembranes**

## **Material Properties:**

	High Temp Geomembranes Minimum Material Properties				
Style	ASTM Unsupported Materials (U)	High Temp 2000 (U)	ASTM Supported Materials (S)	Hazgard 5000 HT (S)	
Thickness (Nominal)	D1593	30 mil 0.75 mm	D1593	30 mil 0.75 mm	
Tensile Strength (MD)	D882	65 ppi 11.4 N/mm	D751	600 lbs 2670 N	
Elongation	D882	400%	D751	25 %	
Tear Strength (MD)	D1004	8 lbs 35.6 N	D751	125lbs 556 N	
Low Temperature	D1790	-22°F - 30°C	D2136	-30°F -35°C	
Hydrostatic Resistance	D751 (A)	75 psi 517 kPa	D1203	800 psi 5.5 mPa	

**Shop Seam Strengths** 

	High Temp Minimum Shop Seam Strengths				
Style	ASTM Unsupported Materials (U)	High Temp 2000 (U)	ASTM Supported Materials (S)	Hazgard 5000 HT (S)	
Heat Bonded Seam Strength	D6392 25.4 mm (1") Strip	37 ppi 6.5 N/mm	D6392 25.4 mm (1") Strip	210 ppi 36.7 N/mm	
Heat Bonded Peel Adhesion Strength	D6392 25.4 mm (1") Strip	FTB 19 ppi 3.3 N/mm	D6392 25.4 mm (1") Strip	FTB 10 ppi 1.8 N/mm	

Field Seam Strengths

	High Temp Minimum Field Seam Strengths				
Style	ASTM Unsupported Materials (U)	High Temp 2000 (U)	ASTM Supported Materials (S)	Hazgard 5000 HT (S)	
Heat Bonded Seam Strength	D6392 25.4 mm (1") Strip	28 ppi 5.0 N/mm	D6392 25.4 mm (1") Strip	140 ppi 24.5 N/mm	
Heat Bonded Peel Adhesion Strength	D6392 25.4 mm (1") Strip	AD-BRK 10 ppi 1.7 N/mm	D6392 25.4 mm (1") Strip	FTB 10 ppi 1.8 N/mm	