

## **Fire Code Compliant Geomembranes**



Both HAZGARD® 535 and HAZGARD® 1000 have been tested in Canada to meet the requirements of Part 4 of the National and Provincial Fire Codes for the secondary containment of gasoline, diesel, and other fuels. HAZGARD® 535 is rated for aboveground and HAZGARD® 1000 is rated for both above or belowground applications. HAZGARD® 535 is fire retardant and can be used for exposed applications, while HAZGARD® 1000 must be backfilled. Both materials are rated for the containment of flammable and combustible liquids including oxygenated fuels that contain alcohol. In section 4.3.7.2 2 of the 2005 National Fire Code the requirement is that "Where a membrane provides the level of impermeability required ... it shall conform to ULC/ORD C58.9, Secondary Containment Liners for Underground and Aboveground Flammable and Combustible Liquid Storage Tanks." HAZGARD® 535 and HAZGARD® 1000 were independently evaluated and found to comply fully with the required test methods.

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.



## **Fire Code Compliant Geomembranes**

## Material Specifications:

	HAZGARD® Minimum Material Properties			
Style	Test Method	HAZGARD® 535	HAZGARD® 1000	
Fire Code Compliant		Yes; Class 1A Aboveground	Yes; Class 1B Below/Aboveground	
28d Permeance to Test Fluids*		<10 g/m2/hr	<5 g/m2/hr	
30d Compatibility to Test Fluids*		<10% Wt Change	<10% Wt Change	
30d Soil Burial		Pass	Pass	
Tear Strength after 30d in Gasoline		>90% retained	>90% retained	
Flammability		Pass; Flame Out in <5 sec	not for exposed use	
Thickness	ASTM D5199	35 mil 0.88 mm	26 mil 0.65 mm	
Tensile Strength	ASTM D751	300 lbs 1330 N	400 x 350 lbs 1780 x 1560 N	
Elongation	ASTM D751	1000%	25 %	
Low Temperature	ASTM D1790/D2136	-40°F -40°C	-45°F -43°C	
Test Fluids include 16 different flan	nmable, combustible, an	d oxygenated liquids as defined	d by the ULC/ORD C58.9.	

**Shop Seam Strengths** 

	HAZGARD® Minimum Shop Seam Strengths			
Style	ASTM (U)	HAZGARD® 535(U)	HAZGARD® 1000(S)	
Heat Bonded Seam Strength	D6392 (U) D751 (S)	55 lbs 9.6 N/mm	200 lbs 890 N	
Heat Bonded Peel Adhesion Strength	D6392 25.4 mm (1") Strip	45 lbs 7.9 N/mm	19 ppi 3.3 N/mm	

**Field Seam Strengths** 

	HAZGARD® Minimum Field Seam Strengths			
Style	ASTM (U)	HAZGARD® 535(U)	HAZGARD® 1000(S)	
Heat Bonded Seam Strength	D6392 (U) D751 (S)	55 lbs 9.6 N/mm	200 lbs 890 N	
Heat Bonded Peel Adhesion Strength	D6392 25.4 mm (1") Strip	45 lbs 7.9 N/mm	19 ppi 3.3 N/mm	