

GEOFLEX™ ULTRA

GEOHU20B, GEOHU30B & GEOHU40B

Meets GRI-GM17 Standard Specification

Product Description

GeoFlex™ Ultra GEOHU20B, GEOHU30B and GEOHU40B are very flexible linear-low density polyethylene geomembranes. Virgin grade high-strength LLDPE provides exceptional elongation, tensile and impact strength. Antioxidants and a minimum carbon black content of 2.0% delivers excellent protection from UV rays and harsh weather conditions. GeoFlex™ Ultra is exceptionally pliable and conforming, and is preferred for ease-of-field seaming or factory fabricated high strength seams.

Product Use

GeoFlex™ Ultra GEOHU20B, GEOHU30B and GEOHU40B are used in containment applications that require excellent outdoor longevity, chemical resistance and exceptional toughness, even in cold weather environments. GeoFlex™ Ultra is highly flexible and conforms easily to uneven surfaces, and is engineered to be used in more critical applications including the fish-safe requirements for aquaculture. GeoFlex™ Ultra GEOHU20B, GEOHU30B and GEOHU40B meet or exceed the comprehensive requirements of GRI-GM17 Standard Specification for (LLDPE) geomembranes, and perform well in water and waste water applications for commercial and municipal projects. GeoFlex™ Ultra GEOHU40B is recommended and meets the performance expectations for use in coal ash capping and temporary capping systems requiring

extended longevity.

Size & Packaging

GeoFlex™ Ultra GEOHU20B is available in up to 75,000 square ft panels and GeoFlex™ Ultra GEOHU30B in up to 50,000 square ft panels. GeoFlex™ Ultra GEOHU40B is available in up to 38,000 square f panels. Pre-fabricated, stepped panels are produced in our quality-controlled factory environment; all panels are accordion folded and tightly rolled onto a heavy duty core for ease of handling and time saving installation.



GeoFlex™ Ultra Pond Liner

Product	Part #
GEOFLEX™ ULTRA	GEOHU20B
GEOFLEX™ ULTRA	GEOHU30B
GEOFLEX™ ULTRA.....	GEOHU40B

APPLICATIONS

- Decorative Ponds
- Pond/Canal Liners
- Outdoor Covers
- Fire Ponds
- Remediation Liners
- Brine Ponds
- Oil Field Pit Liners
- Mine Tailing Ponds
- Interim Landfill Caps
- Waste Water Ponds
- Golf Course Pond Liners
- Farm Ponds
- Leachate Collection Ponds

GEOFLEX™ ULTRA

GEOHU20B, GEOHU30B & GEOHU40B

Meets GRI-GM17 Standard Specification

PROPERTIES	TEST METHOD	GEOFLEX™ ULTRA GEOHU20B**		GEOFLEX™ ULTRA GEOHU30B		GEOFLEX™ ULTRA GEOHU40B	
		Min. Roll Averages	Typical Roll Averages	Min. Roll Averages	Typical Roll Averages	Min. Roll Averages	Typical Roll Averages
APPEARANCE		Black		Black		Black	
THICKNESS	ASTM D5199	20 mils	21 mils	30 mils	31 mils	40 mils	41 mils
WEIGHT		100 lbs/MSF		150 lbs/MSF		200 lbs/MSF	
DENSITY	ASTM D792 or ASTM D1505	0.939 Max. g/cm ³					
*TENSILE STRENGTH	ASTM D6693 1. Tensile Strength at Break 2. % Elongation at Break	136 lbf/in 800 %	151 lbf/in 950 %	170 lbf/in 800 %	189 lbf/in 1000 %	208 lbf/in 800 %	242 lbf/in 1000 %
*TEAR RESISTANCE	ASTM D1004	13 lbf	15 lbf	18 lbf	19 lbf	22 lbf	24 lbf
PUNCTURE RESISTANCE	ASTM D4833	49 lbf	53 lbf	62 lbf	66 lbf	77 lbf	85 lbf
CARBON BLACK %	ASTM D1603 D4218	2 - 3					
CARBON BLACK DISPERSION	ASTM D5596	Pass					
OXIDATIVE INDUCTION TIME (OIT) or HIGH PRESSURE OIT	ASTM D3895 ASTM D5885	> 100 min. > 400 min.					
OVEN AGING AT 85° C (90 Days)	ASTM D5721/D5885	Pass		Pass		Pass	
UV RESISTANCE (1600 Hours)	GRI GM11	Pass		Pass		Pass	
DIMENSIONAL STABILITY % CHANGE	ASTM D1204	< 2					
MULTIAXIAL TENSION % ELONGATION	ASTM D5617	>90	>120	>90	>120	>90	>120
ENVIRONMENTAL STRESS CRACK RESISTANCE HOURS TO FAILURE	ASTM D5397 Appendix A	> 400					
2% SECANT MODULUS	ASTM D 5323	14,636 psi	15,951 psi	21,845 psi	23,807 psi	30,667 psi	32,066 psi
PERMS	ASTM E96 Method 73° F, 50% RH		0.045 grains/ft ² /hr/in. Hg		0.029 grains/ft ² /hr/in. Hg		0.022 grains/ft ² /hr/in. Hg
MAXIMUM STATIC USE TEMPERATURE		180° F		180° F		180° F	
LOW TEMP, IMPACT FAILURE TEMP	ASTM D746	< -70° F		-70° F		-70° F	
FACTORY SEAM REQUIREMENTS							
BONDED SEAM STRENGTH	ASTM D6392	45 lbf/in width	57 lbf/in width	65 lbf/in width	81 lbf/in width	99 lbf/in width	101 lbf/in width
SEAM PEEL ADHESION	ASTM D6392	30 lbf/in width	35 lbf/in width	45 lbf/in width	50 lbf/in width	60 lbf/in width	69 lbf/in width

* Tests are an average of MD and TD directions.

** GEOHU20B values extrapolated using GEOHU30B & GEOHU40B

Hydraulic conductivity values are derived from permeability data. HU20 = 3.62×10^{-10} cm/sec, HU30 = 2.33×10^{-10} cm/sec, and HU40 = 1.77×10^{-10} cm/sec.

GeoFlex™ Ultra GEOHU20B, GEOHU30B and GEOHU40B are very flexible linear-low density polyethylene geomembranes. Virgin grade high-strength LLDPE provides exceptional elongation, tensile and impact strength. Antioxidants and a minimum carbon black content of 2.0% delivers excellent protection from UV rays and harsh weather conditions. GeoFlex™ Ultra is exceptionally pliable and conforming, and is preferred for ease-of-field seaming or factory fabricated high strength seams.

Note: To the best of our knowledge, unless otherwise stated, these are typical property values and are intended as guides only, not as specification limits. Chemical resistance, odor transmission, longevity as well as other performance criteria is not implied or given and actual testing must be performed for applicability in specific applications and/or conditions. GeoCHEM, Inc. MAKES NO WARRANTIES AS TO THE FITNESS FOR A SPECIFIC USE OR MERCHANTABILITY OF PRODUCTS REFERRED TO, no guarantee of satisfactory results from reliance upon contained information or recommendations and disclaims all liability for resulting loss or damage.

GeoCHEM, INC. / Engineered Films Division

Sales & Procurement Center - Phone No. (907) 562-5755 ~ Fax No. 206.219.3740

WA State Sales - Phone No. (206) 774.8777 ~ Toll Free: 1 (800) 490.5320

GeoCHEM Website: <http://www.geocheminc.com>

Contact Us: <http://www.geocheminc.com/contactus.php>



GeoCHEM
INCORPORATED