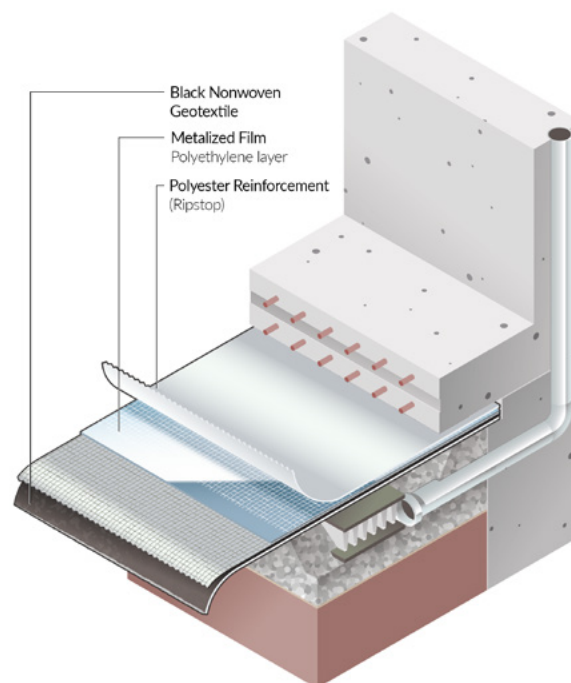


# MonoShield™ Technical Data Sheet



The MonoShield System is a 30-mil composite geomembrane comprised of flexible chemically resistant metalized film laminated to a geotextile, a copolymer polyethylene and a tear resistant PET reinforcement grid structure. The combination of the chemically resistant metalized film thermally bonded to polyethylene and the durable geotextile allows it to act as a vapor barrier system for low-level contaminated sites. It is designed and installed over the substrate with the geotextile fabric facing down and metallic side facing up to effectively mitigate vapor intrusion.



## Application Details:

- MonoBase is seamed together with a 6" overlap and bonded using Land Science's MonoCore at 60-mil thickness; applying the core to both above and below the barrier overlaps.
- MonoBase is overlapped at all perimeters a minimum of 3" onto the perimeter foundation with adherence using the Nitrile Core.
- All penetrations are wrapped using the MonoBase, zip tied and MonoCore is sprayed to seal each penetration.
- Smoke testing can be performed on the MonoShield System and is recommended to ensure the system is free of leaks.

## General Properties

Specifications	Specified Value	Tolerance	Typical Value	Test Standard
Product Thickness	0.80 mm	+/- 25%	0.790 mm	EN1849-2
Layer Thickness	0.570 mm	+/- 10%	0.574 mm	MFX Internal Method 20
Weight Per Square Meter	430 g/m <sup>2</sup>	+/- 10% rel.	467 g/m <sup>2</sup>	EN1849-2
Tensile Strength	>810 N/50mm		870 N/50 mm*	EN12311-1
	>780 N/50mm		1077 N/50 mm*	
Elongation at Break	20%	+/- 5	22%	EN12311-1
	12%	+/- 5	15%	
Sd-Value	> 150 m		180 m	EN1931
Straightness	Pass		Pass	EN1848-2
Dimensional Stability	Max. 2.0%		Less than 1.0%	EN1107-2
Visible Defects	No Visible Defects		No Visible Defects	EN1850-2



## Specific Configuration

Specifications	Specified Value	Tolerance	Typical Value	Test Standard
Width	300.5 cm	+/- 1%	301 cm	EN1848-2
Roll Length	50 m	-0.0%; +1.0% rel.		EN1848-2
Weight Per Roll	64.7 kg	+/-6% rel.	66 kg.	
Colors (shade)	metallic grey/black		Pantone 7544C/2479 CP	
Logo Film	No		Not Possible	
Winding	on core, wrapped		d50 mm cardboard tube	
Packaging	horizontal, wood cages		20 rolls/pal	

## Special Properties

Specifications	Specified Value	Typical Value	Test Standard
Fire Properties	No demand. class F	Class F	EN13501-1
Temperature Range	-40° C to +80° C		
Perforation Resistance	High but not quantified	NPD	
UV Stability	Min. 3 months kly 170/y	> 6 Months	Free Outdoor Exposure
Light Transmission	Not specified, but low	<5%	Internal Monarflex test
Water Column Tightness	Min. 2m WC	> 5 m WC	EN1928 method B (pressure)