

**TECHNICAL DATA SHEET**

**DELTA®-MS UNDERSLAB**

**Sub-Base Course & Vapor Retarder.**

**MATERIAL**

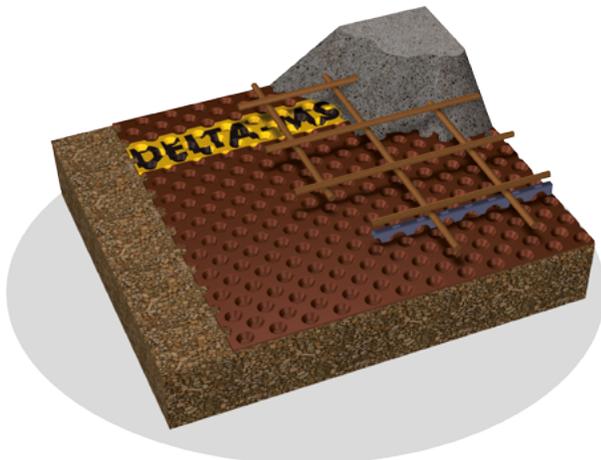
DELTA®-MS UNDERSLAB is manufactured with an exclusive co-extrusion process, utilizing 60% recycled high density polyethylene (HDPE) from municipal recycling programs in the middle, and two thin layers of a special virgin HDPE on the outside. The encapsulation of the recycled HDPE ensures that DELTA®-MS UNDERSLAB is protected against degradation caused by oxidation and environmental influences, like acidic soils or alkalinity (concrete). DELTA®-MS UNDERSLAB, equipped with highly effective additive packages, provides high compressive strength, impact resistance, and chemical and environmental stress crack resistance.

**PROPERTIES**

DELTA®-MS UNDERSLAB is a dimpled membrane, impermeable to water and water vapor. The dimple pattern creates an air-gap between the membrane and the foundation wall. This allows any incidental water getting past the dimpled membrane to flow freely to the perimeter footing drain. The air-gap provides a safe separation and full capillary break between the concrete floor slab and any ground moisture. DELTA®-MS UNDERSLABs available in many sizes to cover any foundation with a minimum of overlaps and seams. DELTA®-MS UNDERSLAB may be installed over gravel, compacted soil, undisturbed soil, and on (inplace off) of working (mud) concrete slabs.

**APPLICATION**

Used as sub-base course, DELTA®-MS UNDERSLAB provides crucial advantages: Quick installation time, no equipment, no additional excavation. The product is available in many convenient roll sizes, making installation very easy. Foot traffic and wheelbarrow traffic will not damage DELTA®-MS UNDERSLAB.



**Technical Data**

Product name	DELTA®-MS UNDERSLAB	
Color	chocolate brown	
Material	Recycled high-density polyethylene, encapsulated between two layers of special virgin HDPE	
Dimple height	5/16" (8 mm)	ASTM D6364-06
Compressive strength	approx. 5,200 psf (250 kN/m <sup>2</sup> )	ASTM D6364-06
Fire resistance	B2	DIN 4102
	B1 available upon request	
Flow rate / unit width @ hydr. grad. 1; 100 kPa	10.6 gal/min/ft (132 l/min/m)	ASTM D4716-08
Flow rate / unit width @ hydr. grad. 0.1; 100 kPa	3 gal/min/ft (37.5 l/min/m)	ASTM D4716-08
Air-gap volume between dimples	approx. 0.13 gal/ft <sup>2</sup> (5.3 l/m <sup>2</sup> )	ASTM D4716-08
Water penetration resistance	> 120 psi (815 kPa) Watertight	AATCC 127-1995
Water vapor transmission	< 22 ng/(Pa s m <sup>2</sup> )	ASTM E96, Meth. A
Vapor permeance	< 0.3 perms [grains/h/ft <sup>2</sup> /in Hg]	ASTM E96, Meth. A
Temperature range	-22°F to +176°F (-30°C to +80°C)	ASTM D5261-92
Chemical properties	Excellent chemical resistance, resistant to root penetration, rot-proof	
Toxicity	non-toxic, non-polluting	
Roll length	65' 7" (20 m)	
Roll width / weight	3' 6" (1.07 m)	28 lbs (12.7 kg)
	5' (1.52 m)	41 lbs (18.6 kg)
	6' (1.83 m)	47 lbs (21.3 kg)
	6' 7" (2.00 m)	51 lbs (23.1 kg)
	7' (2.13 m)	55 lbs (24.9 kg)
	8' (2.45 m)	63 lbs (28.6 kg)
	9' 10" (3.00 m)	77 lbs (34.9 kg)
Service life expectancy	> 25 years (at pH between 4 and 9, and temperature below 77°F / 25°C). Do not expose to UV light for more than 30 days.	

DELTA® products support sustainable and energy-efficient building practices, including efforts toward achieving LEED® certification (LEED® for New Construction & Major Renovations, LEED® for Core and Shell, LEED® for Existing Buildings and LEED® for Homes).

For technical support, call our technical support team at 1-888-4DELTA4 (1-888-433-5824) extension 326, or visit [www.dorken.com](http://www.dorken.com).