

PRODUCT DATA SHEET

Sika® Drainage Mat

PREFABRICATED DRAINAGE COMPOSITES

PRODUCT DESCRIPTION

Sika® Drainage Mat composites are available in both high flow dimpled core and high crush resistant geonet constructions. They perform a multi-faceted role by providing protection for RoofPro and Sikalastic®-320 NS/SL membranes as well as a means of collecting and conveying excess water in plaza decks, split slabs, planters, roof gardens and other roofing and waterproofing applications.

Sika® Drainage Mat 420 and 720

Sika® Drainage Mat 420 and 720 consist of an impermeable high flow dimpled polypropylene drainage core heat-bonded to a layer of non-woven polypropylene (420) or woven polypropylene (720) filter fabric on the top side and a polyethylene membrane protection film on the bottom side. The filter fabric retains soil or sand particles as well as freshly placed concrete or grout, allowing filtered water to pass into the drainage core. Use the nonwoven filter fabric with soil, sand or stone ballast; use the woven filter fabric with freshly placed concrete or grout.

Sika® Drainage Mat 1000

Sika® Drainage Mat 1000 consists of a high density polyethylene geonet drainage core with its ridges heat fused to a layer of nonwoven polypropylene filter fabric on the top side and a heavy duty non-woven polypropylene membrane protection fabric on the bottom side. The filter fabric retains soil or sand particles as well as freshly placed concrete or grout, allowing filtered water to pass through to the core. The bottom protection fabric provides cushioning for the waterproofing membrane. The geonet core is highly crush resistant yet flexible enough to conform to irregular surfaces. Sika Drainage Mat 1000 is suitable for

heavy loads and split slabs exposed to vehicular traffic.

Sika® Drainage Mat GRS

Sika® Drainage Mat GRS for vegetated roof assemblies consists of an impermeable dimpled polystyrene drainage core. The core is perforated, then bonded to a root resistant non-woven polypropylene filter fabric on the top side and nonwoven polypropylene membrane protection fabric on the bottom side. The filter fabric helps prevent roots from affecting the efficiency of the drainage/aeration layer as well as retaining soil or other fine particles from being washed away and allows water to pass into the drainage core. The bottom protection fabric provides cushioning for the waterproofing membrane. The core is installed dimpled side down to allow water retention within the cups. Excess water is collected and conveyed to a proper collection system, helping to control drainage flow.

USES

- Plaza decks
- Split slabs
- Planters
- Ballasted roofs
- Green roofs
- Foundation Walls

CHARACTERISTICS / ADVANTAGES

- Variable flow and compressive strength configurations
- High crush resistant configurations for vehicular traffic
- Pre-assembled filtration and membrane protection layers
- Conformable to irregular surfaces
- Mildew and rot resistant

PRODUCT INFORMATION

Construction	Drainage Mat 420	Drainage Mat 720	Drainage Mat 1000	Drainage Mat GRS	
	CBR Puncture (ASTM D-6241)	250 lbs. (1.113 kN)	850 lbs (3.78 kN)	450 lbs (2.0 kN)	238 lbs (gray) 250 lbs (black)
	Grab Tensile (ASTM D-4632)	100 lbs. (.45 kN)		160 lbs. (.712 kN)	
	AOS (EOS)	70 US Sieve (.212 mm)	40 US Sieve (.42 mm)	80 US Sieve (.18 mm)	
Packaging	Individual rolls in plastic bags				
Shelf Life	Indefinite				
Storage Conditions	Store properly in original, unopened, undamaged sealed packaging in dry conditions, flat and wrinkle free at temperatures between 40 °F and 95 °F (4–35 °C)				
Dimensions	Drainage Mat 420	Drainage Mat 720	Drainage Mat 1000	Drainage Mat GRS	
	4' x 50' (1.2 x 15.2 m)	4' x 50' (1.2 x 15.2 m)	4' x 50' (1.2 x 15.2 m)	4' x 50' (1.2 x 15.2 m)	
	41 lbs.	50 lbs.	55 lbs.	88 lbs	
Thickness	Drainage Mat 420/720	Drainage Mat 1000	Drainage Mat GRS	(ASTM D-1777)	
	0.40"	0.25"	1.0"		

TECHNICAL INFORMATION

Compressive Strength	Drainage Mat 420	Drainage Mat 720	Drainage Mat 1000	Drainage Mat GRS	(ASTM D-1621)
	15,000 psf	21,000 psf	40,000 psf	9,500 psf	
Opening Size	Drainage Mat 420	Drainage Mat 720	Drainage Mat 1000	Drainage Mat GRS	(ASTM D-4751)
	70 US Sieve	40 US Sieve	80 US Sieve	70 US Sieve	
Water Flow Capacity	Flow (through core)				
	Drainage Mat 420	Drainage Mat 720	Drainage Mat 1000	Drainage Mat GRS	(ASTM D-4716, Hydraulic Gradient=1)
	21 gal/min/ft	23 gal/min/ft	8.5 gal/min/ft	30 gal/min/ft	
	Flow (through fabric)				
	Drainage Mat 420	Drainage Mat 720	Drainage Mat 1000	Drainage Mat GRS	(ASTM D-4491)
	140 gal/min/sf	60 gal/min/sf	110 gal/min/sf	250 gal/min/sf	
Water Retention	Drainage Mat 420	Drainage Mat 720	Drainage Mat 1000	Drainage Mat GRS	(-)
	-	-	-	1.1 gal/10 sf	

APPLICATION INSTRUCTIONS

APPLICATION

Clean surface of loose debris and install Sika® Drainage Mat directly on Sikalastic® RoofPro and Sikalastic®-320 NS/SL membrane with filter fabric side up and membrane protection layer down and in the direction of maximum slope. Attach mat to membrane surface with Sikaflex® 11FC or approved adhesive as necessary to keep in position. At edge overlaps place adjacent panels so the cores abut and secure the fabric at 3–5' (0.9–1.5 m) intervals with Sikaflex® 11FC or approved adhesive. At roll ends and abutments without overlaps peel back fabric and remove 4" (10.2 cm) of core then secure overlap. All core joints and terminations must be covered by fabric overlay.

LIMITATIONS

- Do not expose Sika Drainage Mats to direct sunlight for extended periods of time.
- Do not expose to aromatic hydrocarbons (i.e., jet fuel, diesel fuel, kerosene)

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

See Legal Disclaimer.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

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Product Data Sheet
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LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. **NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

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