

Polyfond Kit Drain

Protection and drainage system made from studded HDPE laminated with nonwoven fabric



POLYFOND KIT DRAIN is a protection and drainage system made from high-density extruded polyethylene (HDPE) laminated with a polypropylene needle-punched nonwoven. It is particularly effective in protecting the waterproofing of underground structures or earth retaining structures in general and provides excellent drainage capacity.

Certifications

CE PRODUCT COMPLIANT
WITH EUROPEAN STANDARD
EN 13252:2014

INTENDED USES

POLYFOND KIT DRAIN is a protection and drainage system made from high-density extruded polyethylene (HDPE) laminated with a polypropylene needle-punched nonwoven. It is particularly effective in protecting the waterproofing on underground structures, while also providing effective drainage capacity as well as being perfect for use in lightweight roof gardens (extensive green roofs).

The structure and geometry of the studs give **POLYFOND KIT DRAIN** excellent mechanical performance, ensuring perfect ventilation and excellent water drainage.

In addition, **POLYFOND KIT DRAIN** is designed to provide the waterproofing membrane with suitable protection during foundation backfilling work. The polypropylene nonwoven ensures excellent water filtering and drainage capacity, enabling effective vertical and horizontal drainage.

INSTALLATION TIPS

Vertical application on underground structures or earth retaining structures: **POLYFOND KIT DRAIN** can be applied on retaining walls by precutting the geocomposite to the desired size, allowing for the fact that it must also cover the drainage pipe previously set in place and covered with medium-grade washed river gravel. Place **POLYFOND KIT DRAIN** with the nonwoven fabric side facing the backfill and the smooth side facing the waterproofing layer on the wall to be protected.

The edges of **POLYFOND KIT DRAIN** - the mechanical protection and drainage layer - must overlap by approx. 20 cm. On vertical walls, **POLYFOND KIT DRAIN** must be fixed mechanically to the top of the wall with the aid of a polyethylene or metal profile with rivets; a sealant will then be applied between the profile and the concrete wall.

Horizontal application on roof gardens with no reservoir: When producing roof gardens, the drainage layer can be produced by laying **POLYFOND KIT DRAIN** straight on top of the waterproofing build-up with the filtering nonwoven side facing the growing medium. Drainage must be produced both on the flat part of the garden and along the vertical turn-ups around the outside edges with no break.

POLYFOND KIT DRAIN must be overlapped by at least 10 cm on the sides and approx. 15 cm on the ends, exercising great care while backfilling that the growing medium does not lift the overlapping edges, ending up between the two drainage geocomposites. The growing medium must be positioned and laid straight after **POLYFOND KIT DRAIN** has been installed.

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TECHNICAL CHARACTERISTICS

STANDARD	TECHNICAL CHARACTERISTICS	UNIT OF MEASURE	NOMINAL VALUES		
GEOCOMPOSITE					
EN ISO 9864	MASS PER UNIT AREA	g/m ²	600 (±85)		
EN ISO 9863-1	THICKNESS	mm	7,5 (±2)		
EN ISO 10319	TENSILE STRENGTH MD/CMD	kN/m	12/10 (-2)		
EN ISO 10319	ELONGATION AT MAX. LOAD MD/CMD	%	50/60 (±10)		
EN ISO 12958	IN-PLANE WATER FLOW CAPACITY (20 kPa, M/M i=1)	l/(m·s)	1,7 (-0,2)		
NONWOVEN FABRIC					
EN ISO 9864	MASS PER UNIT AREA	g/m ²	100 (±10)		
EN ISO 10319	MEDIUM TENSILE STRENGTH MD/CMD	kN/m	6/6 (-1)		
EN ISO 10319	ELONGATION AT MAX. LOAD MD/CMD	%	45/60 (±30)		
EN ISO 12236	STATIC PUNCTURE RESISTANCE CBR	N	1000 (-100)		
EN ISO 13433	DYNAMIC PUNCTURE RESISTANCE	mm	34 (+9)		
EN ISO 11058	FLOW NORMAL TO THE PLANE	mm/s	90 (-40)		
EN ISO 12956	CHARACTERISTIC OPENING (PORE) SIZE	micron	95 (±30)		
GEOCOMPOSITE PROPERTIES					
EN ISO 12958	IN-PLANE WATER FLOW CAPACITY, MD	l/(m·s)	-20%		
IN-PLANE WATER FLOW CAPACITY, MD ACCORDING TO EN ISO 12958 -20% (l/s)/m					
	HYDRAULIC GRADIENT		Load 20 kPa M/R	Load 50 kPa M/R	Load 100 kPa M/R
	i=0,04		0,30	0,17	0,07
	i=0,10		0,50	0,30	0,10
	i=1		1,90	1,15	0,50

PACKAGING

Roll size: 2x20 m - 2,4x20 m..

STORAGE

Shelf life of product stored correctly in a dry place, out of direct sunlight: 24 months. The date of manufacture is given on the packaging.

SAFETY RULES

POLYFOND KIT DRAIN is an article and according to current European regulations (EC Reg. 1906/2007-REACH) does not require a safety data sheet to be compiled.

LEGAL RULES

The values given are approximate average data relating to the current product range and may be edited or updated by Polyglass SpA at any time without any prior notice. As the Customer or User, it is your responsibility to check that the technical data sheet you have is valid for the batch of product in question and, whatever the case, that you have the latest version issued.

Always refer to the latest up-to-date version of the Technical Data Sheet and relevant Declaration of Performance, both of which you can find on our site www.polyglass.com. As the End User, it is your responsibility to check that the product is fit for its intended purpose.

PRODUCT FOR PROFESSIONAL USE

