

# Geotechnics

## MebraDrain MD7407\*\*

MebraDrain is one of the most frequently used vertical drainage systems in the world. The MebraDrain has a high tensile strength to prevent damage during installation. The vertical drain keeps a very high discharge capacity during consolidation, especially in buckled condition, which occurs after first settlement.

### General

Type	MD7407**
Configuration	
Material	PP/PP

### Hydraulic properties drain

Initial in plane flow capacity $q(200, 0.1)^1$	EN ISO 12958	ml/m.s	120,0
Discharge capacity straight 30 days $q_w(300, 0.1)^2$	EN ISO 12958	ml/s	30,0
Discharge capacity buckled 30 days $q_w(200, 0.1)^2$	EN ISO 12958	ml/s	25,0

### Mechanical properties drain

Tensile strength	EN ISO 10319	kN	2,9
Elongation at 1,0 kN	EN ISO 10319	%	<1,6

### Hydraulic properties filter

Opening size $O^{90}$	EN ISO 12956	$\mu\text{m}$	61
Water permeability	EN ISO 11058	mm/s	20

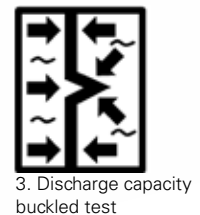
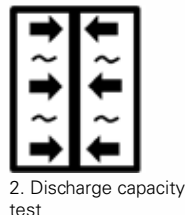
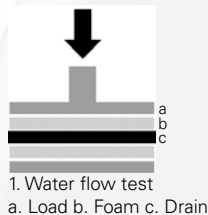
### Dimensions

Roll length	m	300
Drain width	mm	100
40 ft HC container (22 pallets)	km	151,8

<sup>1</sup> Water flow capacity in the plane: This ASTM water flow test determines the short-term initial behavior of vertical drains in straight condition. Testing the drain under foam/foam condition without creep. Settlement, the drain is already determined and the condition will be the buckled condition will become governing.

<sup>2</sup> Discharge capacity: This is the main property of a vertical drain. The 'Delfse test' determined the long-term behavior of vertical drains. The drain is test in pressurized water, simulating the earth's pressure, including creep.

<sup>3</sup> Discharge capacity buckled: The latter is of great importance since drains deform along with the settlement, including creep.



All information, illustrations and specifications are based on the latest product information available at the time of editing. The right is reserved to make changes at any time without notice. All mechanical, hydraulic and physical properties are initial values. Variations of 10% in mechanical and physical properties and 30% in hydraulic properties have to be allowed for.

