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2013 DOI: 10.1061/9780784413234.079

## **LAMPIRAN**

Lampiran 1. Hasil uji Karakteristik fisik dan mekanis PVD CT-D822



# CeTeau-Drain CT-D822

## Drain Body

Extrusion profile of 100% polypropylene with the following important properties:

- environmental safe
- large water flow capacity
- flexible
- high tensile strength and toughness
- inert to natural occurring acids alkalis and salt
- workable and easy to handle at low temperatures
- no wet shrinkage or growth

## Filter Jacket

Nonwoven fabric of 100% polyester without any binders, with the following important properties:

- balanced strength in both directions
- high tensile strength and toughness
- no wet shrinkage or growth
- good resistance to rot, moisture and insects
- high water permeability
- inert to natural occurring acids, alkalis and salt
- excellent filtration characteristics
- tear, burst and puncture resistant
- environmental safe

Physical properties		Unit	CT-D822
Drain Body	Configuration	-	+++++
	Material	-	PP
	Colour	-	white
Filter Jacket	Material	-	PET
	Colour	-	grey
Assembled Drain	Weight	g/m	75
	Width	mm	100
	Thickness	mm	4

Mechanical properties	Symbol	Test	Unit	CT-D822
<b>Filter Jacket</b>				
Grab Tensile Stength	<i>F</i>	ASTM D4632	N	480
Elongation	$\epsilon$	ASTM D4632	%	32
Tear Strength		ASTM D4533	N	120
Pore Size	$O_{95}$	ASTM D4751	$\mu\text{m}$	< 75
Permeability	<i>k</i>	ASTM D4491	m/s	> $1.0 \times 10^{-4}$
<b>Assembled Drain</b>				
Tensile Strength	<i>F</i>	ASTM D4595	kN	2.75
Elongation at break	$\epsilon$	ASTM D4595	%	40
Strength at 10% elongation	<i>F</i>	ASTM D4595	kN	2.2
Elongation at 1 kN tensile strength	$\epsilon$	ASTM D4595	%	1.5
Discharge capacity at 100 kPa	$q_w$	ASTM D4716	$\text{m}^3/\text{s}$	$158 \times 10^{-6}$
Discharge capacity at 150 kPa	$q_w$	ASTM D4716	$\text{m}^3/\text{s}$	$157 \times 10^{-6}$
Discharge capacity at 200 kPa	$q_w$	ASTM D4716	$\text{m}^3/\text{s}$	$155 \times 10^{-6}$
Discharge capacity at 250 kPa	$q_w$	ASTM D4716	$\text{m}^3/\text{s}$	$150 \times 10^{-6}$
Discharge capacity at 300 kPa	$q_w$	ASTM D4716	$\text{m}^3/\text{s}$	$141 \times 10^{-6}$
Discharge capacity at 350 kPa	$q_w$	ASTM D4716	$\text{m}^3/\text{s}$	$135 \times 10^{-6}$

Transport details	Unit	CT-D822
Roll length	m	250
Outside diameter roll	m	1.10
Inside diameter roll	m	0.15
Weight roll	kg	20
40ft container	m	125,000

All information, illustrations and specifications are based on the latest product information available at the time of printing. The right is reserved to make changes at any time without notice. All mechanical properties are average values. Standard variations in mechanical strength of 10% and in hydraulic flow and pore size of 20% have to be allowed for.

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