



Underground water storage system



Applications

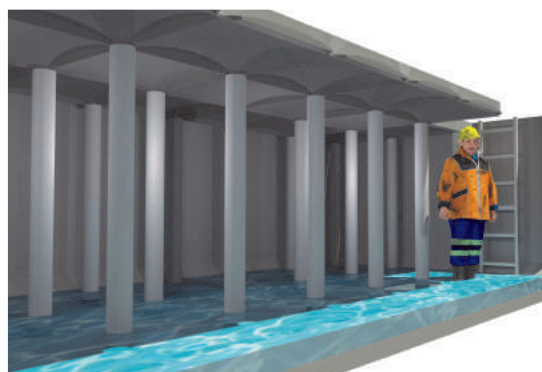
This underground water storage system can be built at low cost. The smart construction method means that less concrete and reinforcement are needed. Length, width and height can be adapted to fit any situation. The underground storage system can serve as a sedimentation tank. Some other examples of use are:

- storage system for rainwater
- storage system for water to be reused
- storage system for surface water
- storage system for wastewater
- underground sprinkler system
- fire water supply

The water storage system is available for residential and office buildings, business parks and infrastructural projects. The underground infiltration facility offers a versatile solution for meeting the statutory rainwater storage requirements. The rainwater is temporarily stored in the underground water storage system, before infiltrating the soil, or being discharged into the sewerage system or the surface water.

Benefits

- ◆ Man-accessible for inspection and cleaning
- ◆ Traffic class 450 kN without ground cover
- ◆ upto 2.000 liter/m²
- ◆ Straightforward installation
- ◆ Pre-assembled
- ◆ Optional 600mm manhole
- ◆ Flexible options for connection
- ◆ Flexible dimensions
- ◆ Durable





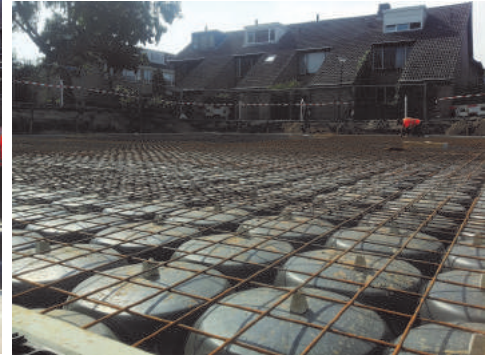
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Use of durable drainage material



Installation between retaining walls



Reinforcement ready for pouring concrete dek

Watershell Atlantis



height*	mm	750	1000	1250	1500	1750	2000
width	mm	500x500	500x500	500 x 500	500 x 500	500 x 500	500 x 500
column height	mm	590	840	1090	1340	1590	1840
column diameter	mm	110	110	110	110	110	110
volume	liter/m ²	624	970	1211	1452	1693	1934
concrete filling**	liter/m ²	55	64	73	82	91	100

Watershell Neptunus



height*	mm	750	1000	1500	2000	2500	3000
width	mm	1000 x 1000	1000 x 1000	1000 x 1000	1000 x 1000	1000 x 1000	1000 x 1000
column width	mm	630	880	1380	1880	2380	2880
column diameter	mm	110 / 160	110 / 160	110 / 160	110 / 160	110 / 160	110 / 160
volume	liter/m ²	635	880	1370	1860	2350	2840
concrete filling**	liter/m ²	43	50	60	70	80	90

* the columns are available in variable heights - available in any height.

** the quantity of concrete required to fill the columns and cassettes up to the top - excluding the concrete compression layer applied above the cassettes.



Underground water storage system

Case studies



project:	De Kwakel - Olij Rozen
	underground water storage system
client:	Olij Rozenvermeerderingen
capacity:	1.200 m3
	traffic class 450 (kN)
material:	Watershell Atlantis



project:	Delft - IKEA
	underground water storage system
client:	IKEA
capacity:	80 m3
	traffic class 450 (kN)
material:	Watershell Atlantis



project:	Arnhem - Sprinklerkelder
	underground water storage system
client:	Verkade Beton BV
capacity:	208 m3
	5 kN/m2
material:	Watershell Atlantis



project:	Enschede - Voormalig Grolschterrein
	underground water storage system
client:	Elja beton en waterbouw B.V.
capacity:	1.500 m3
	traffic class 450 (kN)
material:	Watershell Atlantis



project:	Geulle - Marktplein
	underground water storage system
client:	Oranjewoud Realisatie B.V.
capacity:	200 m3
	traffic class 450 (kN)
material:	Watershell Atlantis

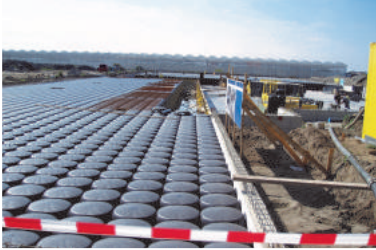


project:	Oudenbosch - Industrieweg
	underground water storage system
client:	Gemeente Halderberge
capacity:	800 m3
	traffic class 450 (kN)
material:	Watershell Atlantis



Underground water storage system

Case studies



project:	s-Gravenzande - Vreugdenhil
	underground water storage system
client:	Verkade Beton BV
capacity:	6.000 m3
	10 kN/m2
material:	Watershell Atlantis



project:	Enschede - Voortsweg
	underground water storage system
client:	Roelofs Wegenbouw
capacity:	1.500 m3
	traffic class 450 (kN)
material:	Watershell Neptunus



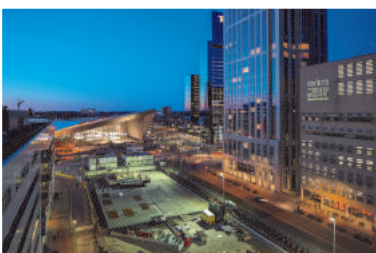
project:	Leeuwarden - Noordwesttangent
	underground water storage system
client:	
capacity:	3 x 70 m3
	traffic class 600 (kN)
material:	Watershell Atlantis



project:	Margraten - Amerikaplein
	underground water storage system
client:	Oranjewoud Geleen
capacity:	340 m3
	traffic class 450 (kN)
material:	Watershell Atlantis



project:	Hoofddorp - Park 2020
	underground water storage system
client:	KWS Infra B.V. Duivendrecht
capacity:	1225 m3
	N.a.
material:	Watershell Atlantis



project:	Rotterdam - Kruisplein
	underground water storage system
client:	Besix Nederland
capacity:	2700 m3
	18 kN/m2
material:	Watershell Atlantis