



AQUATEX



AQUATEX · UNDERGROUND WATER SYSTEMS

BlockTech block reservoirs.

Fast-assembly modular polymer reservoirs for accumulating water and infiltrating it into the ground – built on site like brickwork, with no heavy machinery.

95%

usable working volume

<1 min

to assemble 1 m³

300 m³

per euro-truck

3 m

burial depth



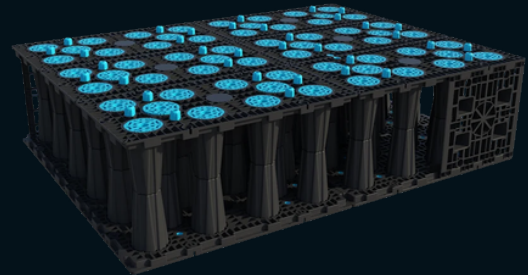
AQUATEX

WHAT IT IS

A reservoir you lay like brick.

BlockTech is a system of fast-erected polymer underground reservoirs for accumulating water and infiltrating it into the soil. The reservoir is built on site from special-shaped modular elements joined like brickwork – no heavy construction machinery, no additional structural reinforcement.

A high share of the built volume is usable – up to 95% fill – and the elements nest for compact storage and transport. Once buried, the interior can be video-inspected and cleaned hydrodynamically.



ASSEMBLED MODULE

WHERE IT IS USED

01

Accumulator reservoirs

Hold rainwater and release it slowly, or store it for technical reuse.

02

Flow equalisers

Buffer surge discharges so downstream systems are not overloaded.

03

Regulating reservoirs

Smooth flow rates across a stormwater or process network.

04

Infiltration structures

Return rainwater to the ground where there is no sewer to discharge into.

ADVANTAGES

- > Simple, fast assembly with no heavy construction plant
- > Sits under car parks and access roads – carries vertical load
- > Significant working volume – up to 95% of the built volume is usable
- > Compact in storage and transport – elements nest
- > Durable and corrosion-proof – polymer, not steel or concrete
- > Video inspection and hydrodynamic cleaning after burial

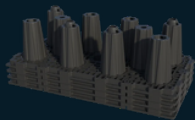


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CONFIGURATION

Four elements, clicked together.

Modules connect with a single click – stack and press – and can be cut in half where needed. The assembled structure needs no extra reinforcement, and every part in the system is one of these four.



01

Main module

A lattice deck on tapered cones, laid brick-bonded so the joints stagger between courses.

CARRIES THE VERTICAL LOAD

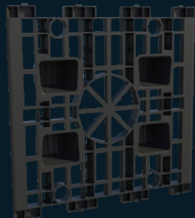


02

Fixator (lock)

Polymer locks tie neighbouring elements together and stop the courses shifting. No tools.

SLEEVE + TWIN-RING LOCK

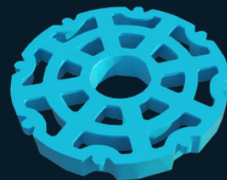


03

Side panel

Perimeter element. Takes the horizontal earth load and gives the wrap a flat face.

FRAMES THE WRAP



04

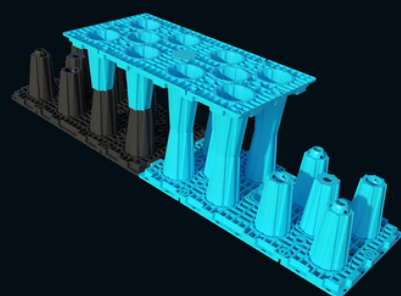
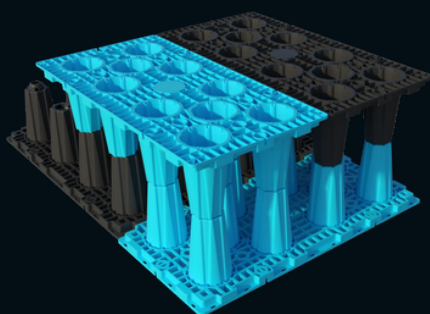
Sectional lid

Caps the top course and closes the cone openings, forming the deck backfill sits on.

FLOW PASSES THROUGH

HOW THEY STACK

Courses are laid at a half-module offset so the vertical joints never line up – the same bond a bricklayer uses. Where a reservoir dimension does not land on a whole module, the element is simply cut in half.

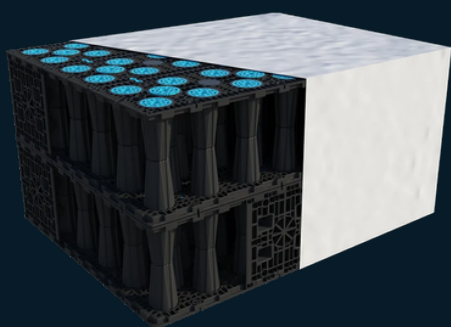




VERSIONS

Let it soak, or hold it tight.

The same structure does two different jobs. What changes is the wrap.

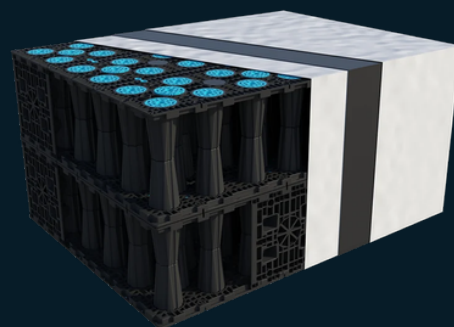


GEOTEXTILE ONLY

Infiltration reservoir

Wrapped in nonwoven geotextile: rainwater accumulates in the structure, then percolates into the surrounding soil.

- > Rainwater disposal where there is no city sewer or discharge point
- > Reduces load on an under-capacity sewer
- > Cuts sewer construction cost
- > Prevents flooding in heavy rain



GEOMEMBRANE WRAP

Accumulator reservoir

Geotextile, then a waterproof geomembrane, then a second geotextile: watertight storage of rainwater.

- > Prevents surge discharge of rainwater to the sewer
- > Stores rainwater for technical reuse
- > Optimises complex sewer design
- > The area above stays fully usable

SIDE BY SIDE

	INFILTRATION	ACCUMULATOR
Covering	Nonwoven geotextile only	Geotextile + geomembrane + geotextile
Function	Accumulate, then percolate to soil	Watertight rainwater storage
Usable volume	up to 95%	up to 95%
Assembly rate	1 m3 in under 1 min	1 m3 in under 1 min
Transport	300 m3 per euro-truck	300 m3 per euro-truck
Load-bearing	Under parking / traffic	Under parking / traffic

FOOTPRINT AND VOLUME CALCULATED PER SITE - MODULES ASSEMBLE INTO PRACTICALLY ANY SHAPE.



AQUATEX

INSTALLATION

Eight steps, no crane.

One cubic metre of reservoir goes together in under a minute. The whole build runs on hand labour and an excavator for the pit.

01

Excavate & level

Dig a pit 1.5 m larger than the reservoir on each side; compact and level the base to one datum.

02

Lay covering material

Spread across the pit with allowance for the whole reservoir, including joints.

03

Stack modules

Lay modules brick-bonded on site – the assembled structure needs no extra reinforcement.

04

Join with fixators

Connect the courses with the polymer locks.

05

Frame the perimeter

Install side panels and sectional lids as the frame for the covering material.

06

Add inspection wells

At inlets and outlets, for later inspection and flushing.

07

Fix & check

Secure the covering material; check sheet joints and welded seams.

08

Backfill

Complete the install with backfill – ready to bear load above.



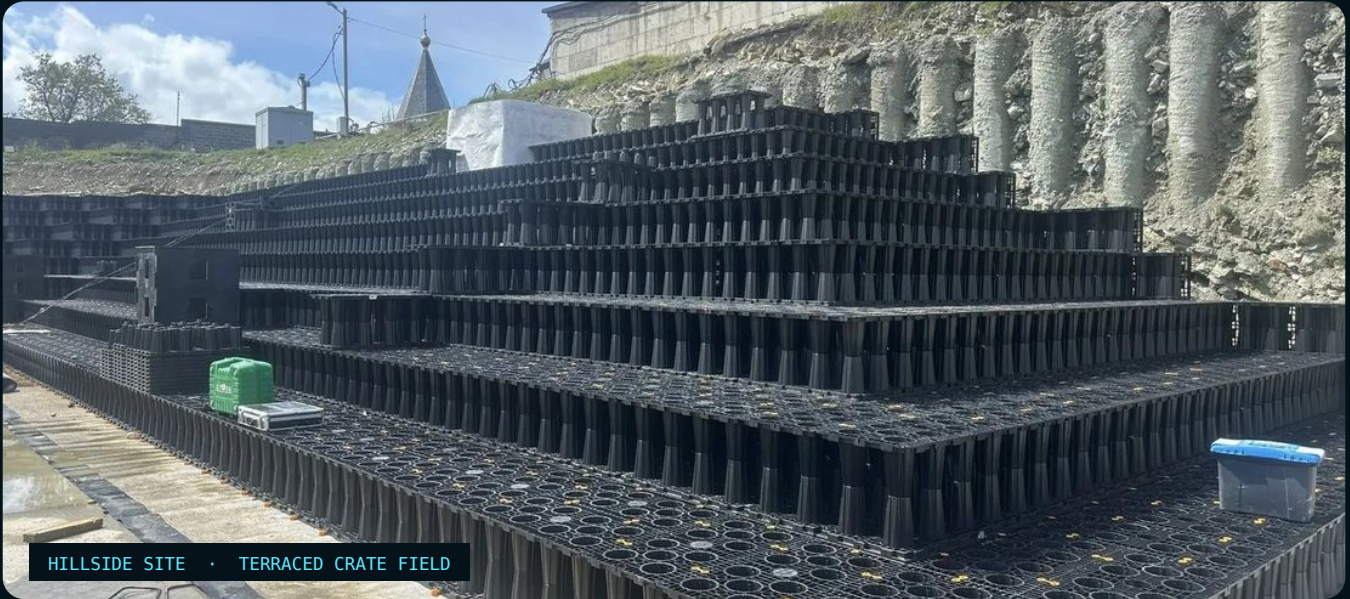


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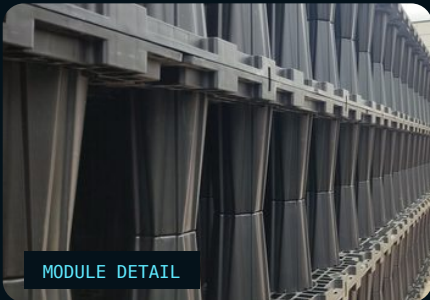
FROM THE FIELD

Built on real sites.

Photographs from live BlockTech installations - no renders.



HILLSIDE SITE · TERRACED CRATE FIELD



MODULE DETAIL



CAPPED & READY



UNDER PARKING



AQUATEX

Give us a volume and a site.

We will size the reservoir, pick infiltration or accumulator, and send back a specification and a price - an engineer reading your requirement, not a checkout.

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AQUATEX TRADING - FZCO · IFZA, DUBAI, UNITED ARAB EMIRATES

BLOCKTECH IS SUPPLIED WORLDWIDE. SPECIFICATIONS ARE INDICATIVE AND CONFIRMED PER PROJECT.