

solving the puzzle of rainwater

real puzzle. Like the famous cube, you have to handle infiltration and attenuation of rainwater. look at things from all sides and angles. From The versatility and modularity of Wavin's units dealing with flooding, droughts, and groundwater make them perfect for all application areas. Easy depletion to urban heat stress and surface water to handle, install and maintain – with inspectable pollution, it is a difficult challenge to find long- and sustainable options. lasting solutions for all of them. On the last pages see what measures you can take with Wavin.

There is another piece to the puzzle: how to urban areas. Combined with intelligent techchoose between all the systems and solutions nology (StormHarvester), rainwater reuse can out there? Which one fits the solution best? It is be optimised. a puzzle of size and space below-ground, sustainability and environmental impact, traffic With Wavin's range of versatile products and load, maintenance requirements, local regula- trained service engineers, we are ready to serve tions and more.

Good rainwater management solutions are a One of the solutions are geocellular units that

But there is more. Geocellular units can also form an underground tank for trees to grow in

you no matter how your rainwater puzzle looks.



a solution for every side of the puzzle

Whatever the soil type, available area or load, the versatility and modularity of Wavin's rainwater units make them perfect for all application areas.

Q-Bic Plus

The optimal solution for fastest installation and total access for inspection and cleaning



AquaCell

The practical solution for space-saving with stackable design



AquaCell Lite

The simple solution for parks, gardens and all non-trafficked areas



Q-Bic Plus – total access for inspection and cleaning

Providing easy access for fast, effective inspection and cleaning, Q-Bic Plus ensures long-lasting optimal rainwater tank performance.

- 77% open floor space with lateral and vertical access; easy deployment of inspection and cleaning equipment
- Wide access (up to 370mm), bi-directional channels provides greater scope for CCTV and cleaning nozzle reach
- Unobstructed inspection and cleaning through flat tank surface with guiding profile

fast, easy and reliable installation

Q-Bic Plus speeds up installation significantly and ensures building a reliable tank; saving valuable time and space on your building site.

- Integrated connectors securing a safe tank with all units interlocked in one go; no need for clips and pins
- Push-fit functionality with modular units and accessories that simply click into place
- Easy to handle, lightweight and ergonomically designed with rounded edges, dedicated handgrips and walkable top deck





Installation



Regular version



Extra strong version (for extra heavy traffic loads and deep installations)

AquaCell Lite – the simple solution for landscaped areas and home application

Wavin's AquaCell Lite rainwater units are made are cost-effective, easy to install and provide a from 100% recycled plastic (PP) and specifically designed for non-trafficked areas like parks and gardens or parking for cars. AquaCell Lite units

practical solution for everyone who wants to act on climate change.

produc	t comparison	Q-Bic Plus	Aqu	aCell	AquaCell Lite
Dimensions	Length [mm]	1200	1200		1000
	Width [mm]	600	600		500
	Height [mm]	600	400		390
	Gross volume [I] (without bottom)	454 [432)	306 [288)		195
	Void ratio [%]	95-96%	94-96%		96%
	Weight main unit [kg]	14	11		7
	Pipe connections [mm]	160 -500	160 - 315		160
	Tank volume per truck [m3]	<138	<323		65
	Installation speed* [m3/min/person]	1	0,7		0,2
Window of Application**	Stacking		Regular	Double	-
	Cover depth without traffic load [m]	0,30-4,45	0,30-3,80	0,30-7,00	0,30-1,30
	Cover depth with 1 ton wheel load (car) [m]	0,30-4,45	0,30-3,80	0,30-7,00	0,45-1,20
	Cover depth with 10 tons wheel load (heavy truck) [m]	0,75-4,35	0,85-3,70	0,30-7,00	_
Accessibility 77%	Vertical access [mm]	350 x 240	Ø250		-
	Width inspection channel [mm]	370	200		-
	Inspection channel surface to total area [%]	77%	54%		-
General	Material	Virgin PP	Recycled PP		Recycled PP
	Colour	Blue	Black		Black
	Connectors	Integrated	Integrated		Separate
	Certifications/Standards	CSTB, DiBt, Komo, Benor, BBA	EN17152-1		BBA
* Indication based on installation test without groundworks connections and wrapping. Actual number can vary per project.					

Indication based on installation test without groundworks connections and wrapping. Actual number can vary per project.

^{**} General indication for installation above groundwater level, according to instructions for single layer tanks. For multi-layer tanks the window of application may be limited. Wavin always recommends a minimum cover of 0.3 meter. For specific projects seek advice of Wavin.





Green solution in focus

enable tree roots to thrive and trees to flourish

Planting more trees is important to make and keep our cities healthy, enjoyable and climate resilient. Well-developed tree roots result in healthy and fullgrown trees, while counter-productive soil compaction makes trees sensitive to drought.

Our new Q-Bic Plus Tree Tank solution lets trees flourish and prevents roots from damaging roads, as it facilitates the ideal circumstance for root growth with the required minerals, water and air. Made from our Q-Bic Plus units means it is very easy to install and provides a stable construction underground with its unique side panels that separate compacted soil from loose soil.

See how you can make cities greener wavin.com/treetank



Smart solution in focus

say hello to smart stormwater management The Wavin StormHarvester system features technology to optimise rainwater reuse while preventing flooding due to heavy rainfall. And it increases the potential of an infiltration system.

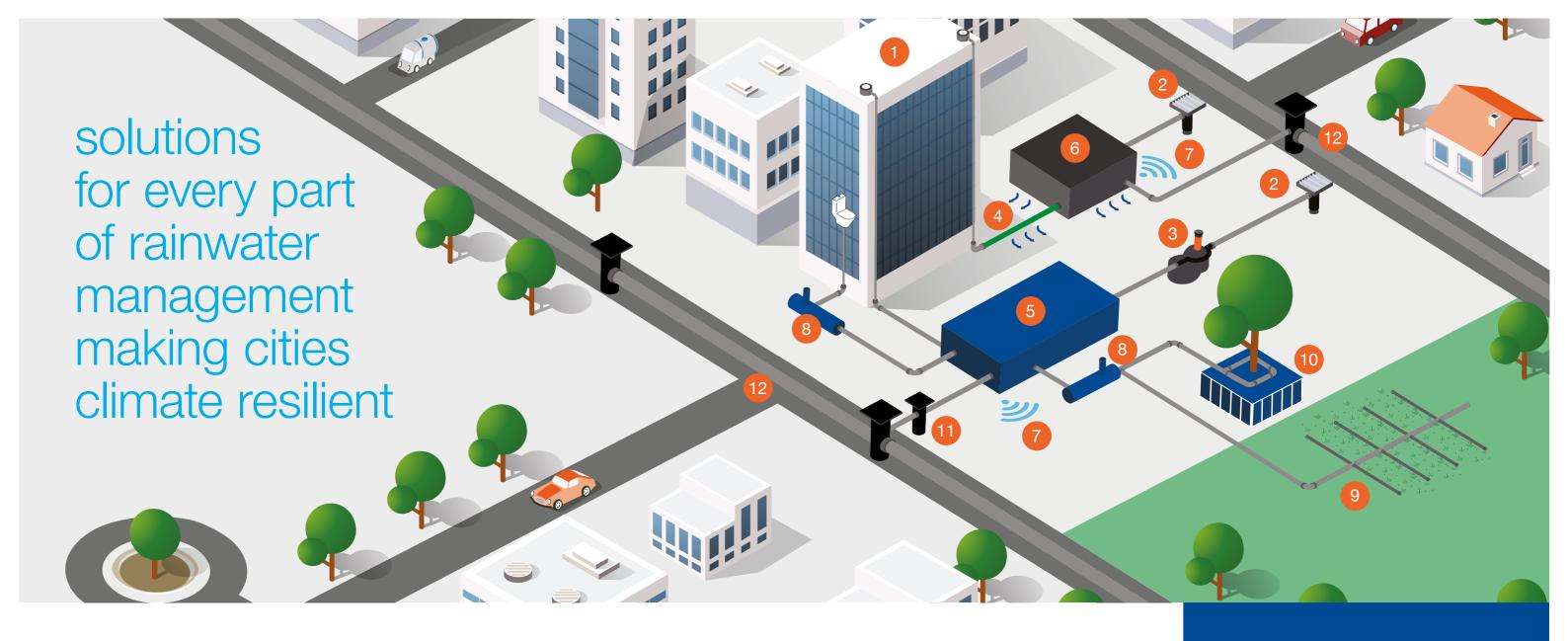
What if you could use an attenuation tank for water reuse all the time? Or use infiltration tanks in all soil conditions?

Well, that's all possible now with the Wavin Storm-Harvester – a combined solution of Wavin rainwater tanks and StormHarvester smart technology.

Get to know our pro-active Wavin StormHarvester system wavin.com/stormharvester



8



1. Rainwater collection from the roof

Siphonic systems have minimal impact on construction. Our Wavin QuickStream siphonic system manages the heaviest rainfall with ease.

2. Rainwater runoff via road gullies

Consider filter properties of the gully; our Tegra Road Gully has a unique design to prevent pollution and minimises the risk of flood damage.

3. Cleaning rainwater

Remove pollutants such as oil, sediments and heavy metals from collected rainwater. Our Certaro filter systems do the job.

4. Groundwater recharge

Use our IT infiltration pipes to recharge the groundwater during little rainfall and discharge the surplus during heavy rainfall.

5. Attenuation

Slow discharge of – or even store and reuse – rainwater. Our entire Q-Bic Plus and AquaCell range provide a solution to any situation.

6. Infiltration

Use infiltration tanks to discharge rainwater to the groundwater. For poor permeable soils, the smart StormHarvester technology can be added.

7. Harvesting rainwater

Our StormHarvester solution enables water to be stored in attenuation tanks for reuse on-site.

8. Pumps and filters for rainwater reuse

Using pumps and filters to operate reuse systems, we work together with partners to offer total solutions.

9. Greenification with irrigation

from reused water

Use rainwater for landscape irrigation. Wavin can support via sister company Netafim, world leader in drip irrigation.

10. Greenification with tree tanks

Our Q-Bic Plus Tree Tanks support tree growth in challenging urban environments and prevent road damage.

11. Flow control

Our orifices and vortex valves deliver simple solutions that optimise the regulation of rainwater.

12. Water discharge

Discharge rainwater to open water or a treatment plant with our system of X-stream pipes and Tegra inspection chambers.

Service and support at every stage of your project

With Wavin as your partner, you benefit from our project design skills and a comprehensive range to create your customised rainwater management solution.

- · Analysis and advice
- · Project design and calculation
- Delivery
- After sales service

Book your appointment today. wavin.com/rainwater







Wavin operates a programme of continuous product development, and therefore reserves the right to modify or amend the specification of their products without notice. All information in this publication is given in good faith, and believed to be correct at the time of going to press. However, no responsibility can be accepted for any errors, omissions or incorrect assumptions.

© 2020 Wavin

Wavin reserves the right to make alterations without prior notice. Due to continuous product development, changes in technical specifications may change. Installation must comply with the installation instructions.

WAVIN INDONESIA E-mail indonesia@wavin.com | Internet www.wavin.co.id







