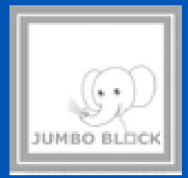


# Retention, water storage and infiltration basin



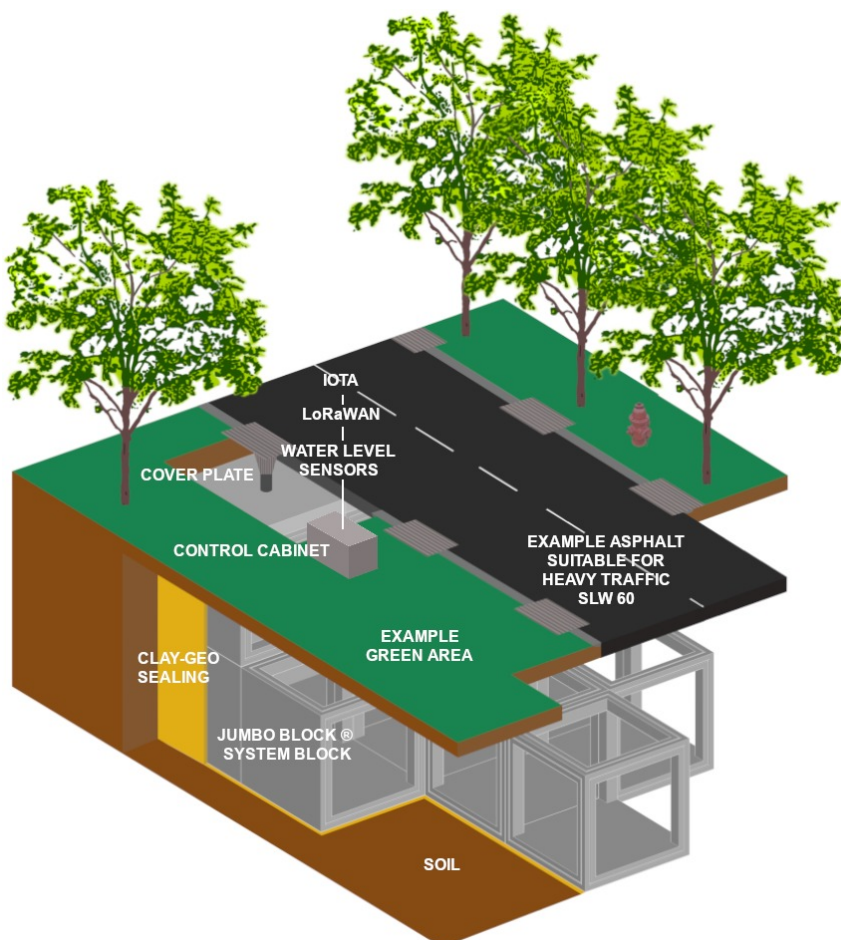
## The JUMBO BLOCK ® solution

Standardised retention, water storage and infiltration basins made to measure, for example for municipalities, industry, urban planners, landscapers and architects.

INFORM NOW



## The JUMBO BLOCK ® System



Extremely stable, very strong static load-bearing capacity, can be built over and can be driven over by heavy goods vehicles!

### RETENTION AREAS

- Municipalities,
- Industrial and chemical areas,
- areas near bodies of water,
- harbour areas,
- airports,
- agricultural land,
- endangered valleys and depressions,
- and many other applications.

There are no limits in planning!

Capacity ~13,900 litres per JUMBO BLOCK ®.

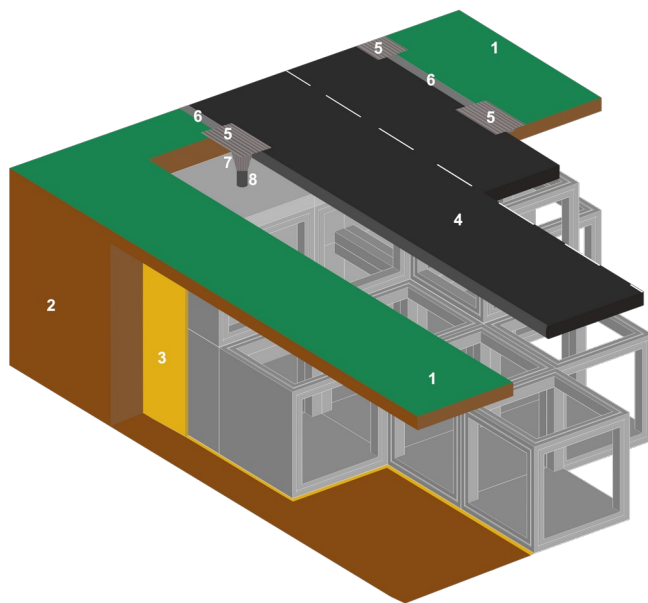
Composition freely selectable.

STRONG: ROAD RETENTION



# Retention, water storage and infiltration basin

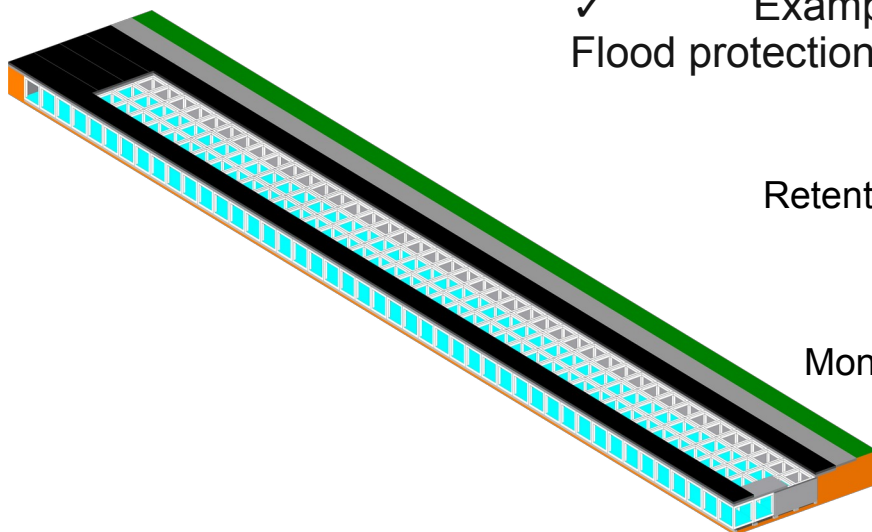
## USING THE ROADBED FOR RETENTION



- 9 1) Green area (with or without planting)
- 10 2) Soil
- 3) Waterproofing (here clay lane)
- 11 4) Roadway (or built-up area)
- 5) Rainwater drain
- 6) Rainwater gutter
- 12 7) Strainer
- 8) Drain pipe
- 9) Cover plate
- 10) to 13) JUMBO BLOCK® modules

We define road retention not only as a storage space for flood water (for example during heavy rain events), but also as an adaptation to the consequences of climate change, because water storage is also becoming increasingly important.

JUMBO BLOCK® is statically a strong structure, but flexible in the system. Even when it has already been installed. It represents an enormous simplification for the maintenance, extension and installation of sewage and supply lines. Once a road surface has been installed, it remains in place for the long term.



✓ Example 4-lane road retention: 300m  
Flood protection, up to 50cm water level height

Plant size: W 10.0 m x L 112.5 m  
Retention volume: 2,502 m<sup>3</sup> (2.5 million l)  
Total weight of the plant: 1,346 t

Water level:  
Monitoring by means of sensor system  
Technology: LoRaWAN®  
IoT protocols: IOTA

[MORE ABOUT ROAD RETENTION](https://jumboblock.app)



# Retention, water storage and infiltration basin

## JUMBO BLOCK ® and safety

JUMBO BLOCK ® is smart.

Using water level data to better identify forecasts and developments due to climate change and prevent disasters.

By using the water level data and a complete documentation of damage events, events become more transparent. Suitable solutions for your facility can be offered via the IOTA network. Hardware requirements are reduced through IoT (Internet of Things). Transmission to the network can be realised via various options, such as a wireless network connection using LoRaWAN® or also other pre-configured systems. LoRaWAN® has a comparatively low energy requirement with a long range.

### Security and documentation

Seamless security in the documentation of damage events. Measurement data can be made available to end users, residents and authorities, and can also be shared.

Type plates with QR codes can be used to assign systems even if documentation is not available at the time.

For example, in acute damage events and flooding scenarios.

Monitoring via sensor system for water level

Battery life: up to 10 years

Operating temperature: -10/-30°C to +60/+70°C (sensor/transceiver)

Technology: LoRaWAN®

Recommended IoT protocols: IOTA

IOTA transactions are free of charge.

EXPLORE MORE

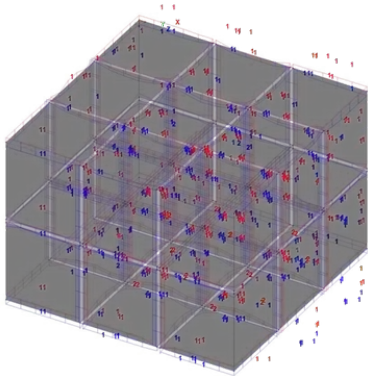


# Retention, water storage and infiltration basin

## Engineering, planning and execution

With over 20 years of experience.

EXPERIENCE: OUR TEAM



### ✓ Engineering

Development, design, production and the careful testing of our solutions are bundled in the engineering department. This results in close coordination and innovative solutions that comply with the latest technology and environmental standards.



### ✓ Planning

We have solutions for many applications. For example, in the planning of retention under heavy and special areas for industry, commercial and drainage and in drainage technology in general. "Out of the box solutions are not new to us, no matter how difficult the requirements are.



### ✓ Ausführung

After the JUMBO BLOCK® production and the purchase of supplementary plant components, a large network of partners from the structural and civil engineering sector is ready to install and commission your plants in the best quality. From start to finish, we focus on quality and experience.

## Connect with us



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