



JUMBO BLOCK® – The World's Largest & Strongest Rainwater Retention System

JUMBO BLOCK® is the largest and most stable freely scalable rainwater retention system worldwide. Prevention is key – safeguarding people and infrastructure before floods occur is not only more effective but also far more cost-efficient than dealing with the aftermath of destruction.



- ✓ Extreme durability – Withstands the highest static loads
- ✓ Class F 900 load capacity – Built for heavy-duty applications
- ✓ Future-proof water management – Scalable, adaptable & highly efficient

JUMBO BLOCK® delivers unmatched stability, resilience, and long-term security in flood protection and sustainable infrastructure.

Technical Data:

- Material: Concrete
- Edge Length per Block: 2.5 m
- Capacity: 13.9 m³/block
- Water Column: 2224 liters/m²
- Total System Volume: Unlimited

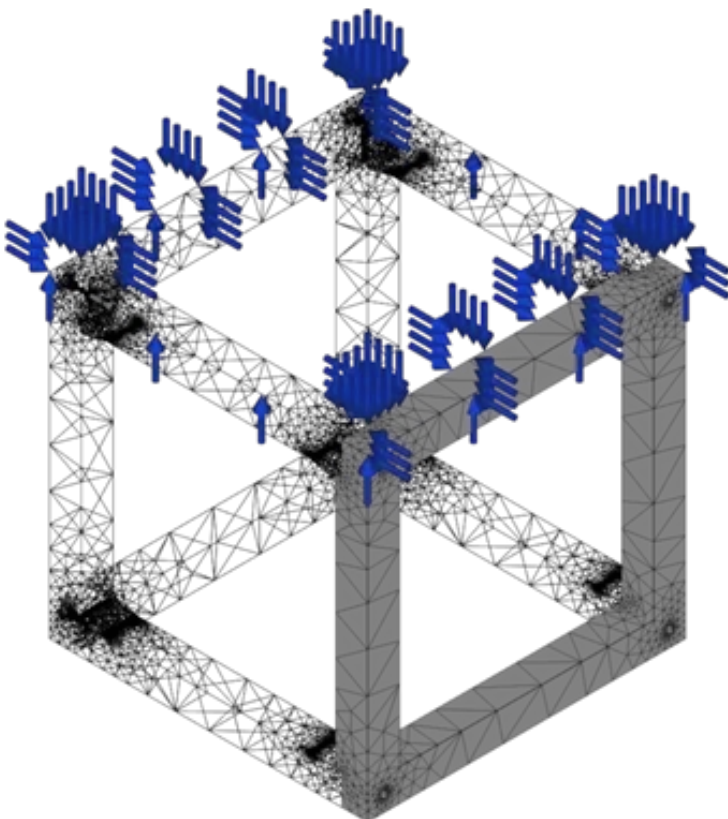
Key Features:

- ✓ Modular Design – Stable and secure, unlimited size, can be built over, freely configurable
- ✓ Environmentally Friendly – Reusable and recyclable, sedimentation and filtration, promotes natural water cycles
- ✓ Quick Installation – Reduces construction times, minimizes traffic disruptions

Versatile Installation Options:

- Urban Areas
- Industrial Zones
- Transport Infrastructure
- Agricultural Land
- Natural Environments
- Parks and Recreational Spaces
- ... and many other use cases!

There are no limits when it comes to planning!





The JUMBO BLOCK® solution

Opportunities and possibilities



1 JUMBO BLOCK®

The core of the system – a massive, hollow, load-bearing concrete module (2.5 m x 2.5 m x 2.5 m) with an impressive capacity to support up to 792 tonnes. This block is designed for underground installation, forming the backbone of a modular and scalable retention system.

2 Sedimentation and Filtration

The built-in filtration system in this example captures sediments and impurities within the JUMBO BLOCK® itself. This design prevents clogging and extends the lifespan of the system, while maintaining a continuous water flow.

3 Heavy-Duty Cover Plate

The cover plate provides an ultra-strong, load-bearing surface above the JUMBO BLOCK®. It enables heavy-duty applications like roads, airport runways, and industrial sites, while ensuring surface stability and protecting the system below.

4 Side Plate

Side plates are installed to enclose the JUMBO BLOCK® modules on the sides, preventing lateral water movement and ensuring system integrity. They help stabilize the overall structure and protect against shifting forces.

5 Base Plate

The base plate provides a stable foundation for each JUMBO BLOCK®, distributing the weight evenly and creating a secure, level base. This feature is essential for ensuring structural stability and longevity.

6 Sealing System

The sealing systems for JUMBO BLOCK® provide durable, waterproof solutions for module connections. Using high-performance adhesives and sealants, they securely seal joints and connections, preventing water loss and optimizing retention efficiency. Their flexible, durable materials ensure long-term functionality under varying conditions.



JUMBO BLOCK®

Road Retention – More Than Just Flood Protection

Road retention is not just about storing floodwater during heavy rain events – it's a smart adaptation to the growing need for water storage. As water becomes an increasingly valuable resource, JUMBO BLOCK® provides a robust yet flexible framework that integrates seamlessly into infrastructure.

- ✓ Strong & adaptable – Maintains structural integrity while allowing flexibility within the system, even after installation.
- ✓ Simplified maintenance & expansion – Easy access for sewage, utility lines & future upgrades.
- ✓ Long-term stability – Once installed, road surfaces remain intact, reducing disruption & costs.

JUMBO BLOCK® sets the standard for efficient rainwater retention and sustainable water management, absorbing and storing floodwater to enhance water availability while minimizing flood risks.

JUMBO BLOCK® – The Future of Urban Rainwater Retention

How can a city become climate-resilient without overburdening its infrastructure?
Our architectural model demonstrates how JUMBO BLOCK® strengthens urban resilience:

- ✓ Smart storage & management of rainwater
- ✓ Efficient use of space – beneath streets & plazas
- ✓ Combining flood protection with sustainable water availability

This innovative solution enables future-proof urban planning, prevents flooding, and promotes sustainable water management – seamlessly integrated into the urban environment.



FLOOD PROTECTION

Planning area: 55 x 65 m
Development: 653.2 m² floor area
Driveways: 1 x 9 m, 2 x 7.5 m

Retention: JUMBO BLOCK®
Volume: 3868,8 m³

- ✓ **Protection**



FLOODING

Planning area: 55 x 65 m
Development: 653.2 m² floor area
Driveways: 1 x 9 m, 2 x 7.5 m

Without Retention
Flood height: 1.02 m

- ✓ **Architectural model as film**



Engineering, planning and execution

Over 30 years of experience

✓ Engineering

Development, design, production and the careful testing of our solution approaches are bundled in engineering.

This results in close coordination and innovative solutions that correspond to the latest state of the art technology and environmental standards.

✓ Planning

We have proposed solutions for many applications.

For example, in the planning of retention under heavy loads and special areas for industry, commerce and generally in drainage technology.

“Out of the box” solutions are nothing new to us, no matter how difficult the requirements are.

✓ Execution

After the JUMBO BLOCK ® production and the purchase of additional system components, a large network of partners from civil and structural engineering is available to install and commission your systems in the best quality.

From start to finish, we rely on quality and experience.

JUMBO BLOCK®

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