

HYDROCHAIN™ TRITON VAULT

COMPOSITE VAULTS FOR MAXIMUM FLEXIBILITY, CAPACITY AND SUSTAINABILITY

The classic double-barrel vault shape of this innovative five-component system provides both structural strength and design flexibility for stormwater management systems. Manufactured of lightweight composite material, site owners and contractors experience savings at every stage: shipping costs, excavation and installation labor and equipment costs, plus significant costs with the reduced need for stone backfill.

The underground vault system can eliminate the need for holding ponds, creating opportunities for green space. Adding end caps, cover tiles, close-offs and locks to the vaults offers unlimited design flexibility and creates a stormwater system with high-volume capacity per square foot.

HOW THE HYDROCHAIN TRITON VAULT SYSTEM WORKS



1. Stormwater flows into the inlet control structure.
2. From there, stormwater flows into the main header row (forebay section), which contains trimmed end caps (weirs). The main header row can be configured in any shape or size to capture whatever volume is needed for the first flush of a rain event.
3. The main header row incorporates a sediment barrier where total suspended solids (TSS) settle out on the sediment floor.
4. As the flow increases in a rain event, stormwater flows over the weirs into the vault system's entire storage area.
5. If desired, an outlet control structure can be used to control the release rate through an existing storm sewer system.
6. Inspection ports can be added anywhere in the system.
7. Maintenance of the header row is easily done through the inlet control structure.
8. If a liner is used with the system, the water can be used for irrigation or greywater.

Superior to Concrete

Modular design for **quicker, easier installation** than concrete vaults

Conserves energy with less equipment used **in shipping and installation**

Can be configured for **multidirectional water flow**

Corrosion-resistant composite and **eco-friendly** soy resin

Designed to withstand **H-25/HS-25 axle loads**

Superior to Chambers

Up to 70% reduction of stone backfill

Design flexibility with configurations and accessories

More storage space with open bottom

HYDROCHAIN PRODUCTS FOR STORMWATER SYSTEMS OF ANY SCOPE

HydroChain Triton Vaults can be installed as the foundation for a HydroChain System. The vault sections can be configured in numerous ways and in unlimited numbers to accommodate large volumes of stormwater. It is the ultimate composite solution to maximize stormwater management while minimizing site footprint.

BACKED BY DECADES OF SUCCESSFUL INSTALLATIONS

- 15 years of composite manufacturing and stormwater treatment technology
- Site-specific product design by in-house engineers
- Stringent quality control of manufacturing
- Comprehensive installation instructions

TRITON VAULT CAPACITIES

This chart includes storage volumes, dimensions and weights.

	U.S. Measurement	Metric Measurement
Bare vault system storage (vault and covers)	41.4 cu ft per unit	1.17 m ³ per unit
Installed storage (per unit)	50 cu ft per unit	1.42 m ³ per unit
Installed storage (per sq ft or sq m)	4.24 cu ft per square foot	1.29 m ³ per square meter
W x H x L & Weights	41.3" x 36" x 41.3" 50 lbs	1049 mm x 914 mm x 1049 mm 22.7 kg

These estimates are based on 50,000 cu ft vault system with cover tray, 6 in / 15 cm base stone, 12 in / 30 cm top stone, and 40% porosity.

TRITON VAULT COMPONENTS

- Vault chamber – Maximizes storage value within a smaller footprint while retaining the same 4-foot section height as the standard S29 chamber system
- End cap – Allows complete design flexibility and flow rates
- Close off – Fills in the gap between the vaults and trays, preventing top backfill from entering the system
- Tray – Reduces the need for top stone backfill by creating a total cover plate
- Lock – Ensures that trays are locked together for added strength

Contact watersales@shawcor.com for more information on configuring chambers to meet your project requirements.

FOR NEW AND RETROFIT STORMWATER SYSTEMS

- Industrial and commercial sites
- State, provincial and municipal transportation facilities
- Housing developments
- Government facilities
- Highway lane expansion
- Parking ramps and lots
- Schools and athletic facilities
- Health care facilities
- Airports
- Retail fuel and truck stops
- Grocery stores and convenience stores



Shawcor Ltd. is a leading global company specializing in products, services and solutions for the water, energy, infrastructure and transportation markets. We continually pursue sustainable solutions that protect the environment, conserve resources and extend asset life. Headquartered in Toronto, Canada, Shawcor operates in more than 20 countries and employs approximately 5,000 people.