

## HYDROCHAIN™ CHAMBER

# INSTALLATION FLEXIBILITY WITH COMPOSITE INFILTRATION CHAMBERS

Chambers provide long-term, effective infiltration for commercial, industrial and municipal projects. The chambers' eco-friendly composite material and design geometry result in a structurally strong product for maximum storage in minimum site space. This material has been used for more than 50 years in the automotive, industrial and underground tank industries.

The structural strength of the chambers allows for direct piping connections into the front, side or top of the chambers. This can save cost and space by eliminating the need for manifold systems, manholes and catch basins. An engineered solution for each project is based on system requirements, site footprint and total stormwater volume.

- Designed to exceed the specifications of ASTM F2418, F2787 and F2922 standards, and AASHTO LFRD Section 12
- Performance verified through independent third-party testing

#### HOW THE CHAMBER SYSTEM WORKS

- 1. The heart of the Chamber system is the main header row, which is installed in either parallel or perpendicular configurations. This row serves as a collection point for incoming stormwater runoff. Inlet pipes can be placed virtually anywhere in the chamber system.
- 2. The main header row allows the sediment to settle as the water from the inlet manhole rises upward to the connecting pipe inverts.
- Sediment collects on the sediment floors before the water passes into the distribution chamber rows.
- 4. The stormwater passes through the connection pipes into the storage chambers, where it filters back through the soil to recharge aquifers just as it would in nature.
- Connection pipes can be placed anywhere in the chamber system to equalize water elevations and optimize hydraulic efficiency.



Can be configured for pollutant capture and treatment

## Water reuse

for irrigation when liner is used

Can be used for Retention, detention and infiltration

## Deeper burial

than other chambers

## Corrosion-resistant

impermeable composite material

Manufactured with **eco-friendly** soy-based resin

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



## HYDROCHAIN PRODUCTS FOR STORMWATER SYSTEMS OF ANY SCOPE

HydroChain Chambers can be installed as a stand-alone infiltration system, or as a storage or infiltration component of a multi-stage water-quality system, such as the HydroChain System. The chambers can also be completely wrapped with an impermeable liner to create a retention system.

#### 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

#### **DESIGNED FOR EASY INSTALLATION & MAINTENANCE**

- One-person installation possible with compact lightweight design
- · Lightweight chamber material reduces shipping costs
- Chambers are easy to handle and install
- Large inlet and access ports allow for easy inspection and clean out
- · Sediment sumps expedite cleaning with a hydrovac truck

## CHAMBER OPTIONS AND CAPACITIES

This chart includes chamber model options, storage volumes, dimensions and weights

## 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

MODEL	M-6	C-10	S-22	S-29
Minimum Storage with stone*	4.6 cu ft per linear foot	7.1 cu ft per linear foot	13.6 cu ft per linear foot	14.8 cu ft per linear foot
	.4 m³ per linear meter	.7 m³ per linear meter	1.3 m³ per linear meter	1.4 m³ per linear meter
Minimum Storage without stone	2.3 cu ft per linear foot	4 cu ft per linear foot	9.4 cu ft per linear foot	9.8 cu ft per linear foot
	.2 m³ per linear meter	.4 m³ per linear meter	.9 m³ per linear meter	.9 m³ per linear meter
Dimensions W x H x L and Weights	inches = 34 x 17.5 x 32 cm = 86.4 x 44.4 x 81.3 12 lbs / 5.4 kg	inches = 40 x 25 x 32 cm = 101.6 x 63.5 x 81.3 15 lbs / 6.8 kg	inches = 55 x 35 x 30 cm = 139.7 x 86.4 x 76.2 28 lbs / 12.7 kg	inches = 59 x 36 x 35 cm = 149.9 x 91.4 x 88.9 37 lbs / 16.8 kg

<sup>\*</sup> These volumes assume stone placed 6 inches / 15 cm above, below and between the chambers, with 40% porosity.

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

We are a global materials science technology company specializing in products 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.



