



StormChamber™ System

Easy Inspection and Maintenance

Exceeds HS20 / HS25

Less components

Deeper cover

100+ year lifespan

INFILTRATION

STORAGE

REUSE

CONVEYANCE

ndspro.com

MADE IN
USA

StormChamber™ System

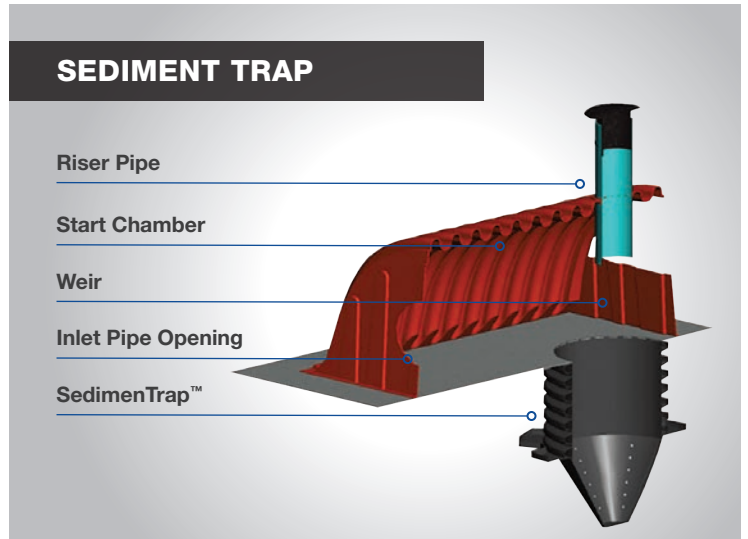
Easy Access Inspect – Simpler Maintenance – Design Flexibility



SEDIMENT ROW

Inlets connect via a sediment row, traps TSS before entering the main chamber system.

- Fabric-wrapped inlet row traps TSS for removal
- Internal bypass eliminates expensive manifolds
- Optional with or without header manifolds
- Simpler design, less components, smaller footprint



SEDIMENT TRAP

Riser Pipe

Start Chamber

Weir

Inlet Pipe Opening

SedimenTrap™

StormChamber™ System patented SedimenTrap™ product allows easy maintenance with lower O&M cost.

- Lowers total cost of ownership
- Built-in weir wall helps trap sediment
- Inspection can be done without a 3rd party
- Save water and cost, avoiding jet cleaning



DEEPER COVER

Heavy-duty HDPE allows StormChamber™ System to handle deep cover.

- Max cover of 16 ft. for SC-18, SC-34 chambers
- Max cover 8 ft. for SC-44 chambers
- Allows deeper pipe inverts
- Bury system below frost line



MULTI-STACKING

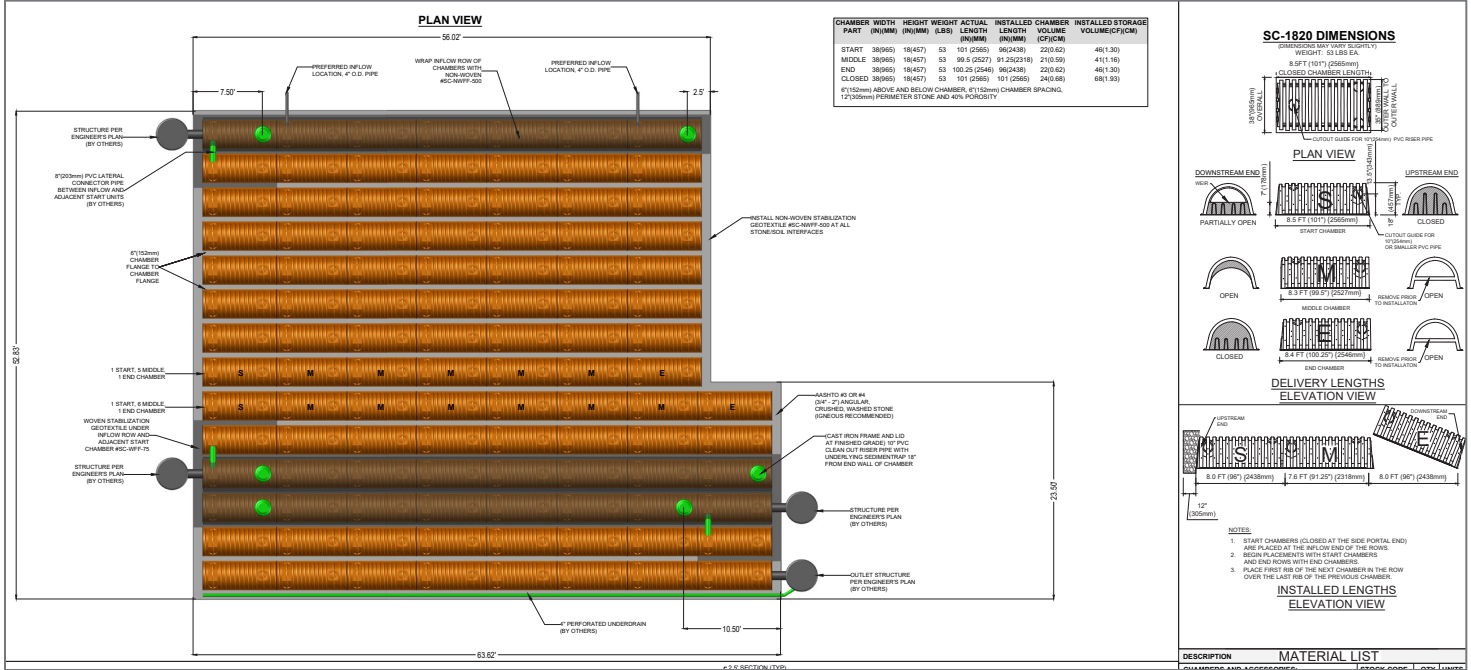
Multi-stacking reduces system footprint and can increase storage capacity in a limited space.

- Stacking can resolve tight area constraints
- SC-34 stacks up to 4 layers deep
- 20 years of experience/success
- AASHTO load rated

No-cost design assistance for StormChamber™ systems

- Send us your plan, concept or requirements.
- Have a competitor's plan for VE? Send it over.
- Need a budgetary quote for a conceptual plan?

Visit www.NDSpro.com/contact-us to upload your plans.



PROJECT NAME

PROJECT LOCATION

NDS STORMCHAMBER SYSTEM SPECIFICATIONS

- CHAMBERS SHALL BE NDS STORMCHAMBER.
- CHAMBERS SHALL BE AREA SHIPPED AND SHALL BE MANUFACTURED FROM HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE.
- CHAMBERS MUST EXCEED 4000 PSI (275.80 KN) MEET ASTM F1555, 15-20 AND 15-40 LIFE LOADING PER AASHTO LIFE SECTION 12.
- MANUFACTURED VERTICAL DIMENSIONS OF START, MIDDLE AND END CHAMBERS:
 - SC-1: 31.75 FT (9.68) INCHES TALL
 - SC-4: 5 FT (1.52) INCHES TALL
 - SC-4: 5 FT (1.52) INCHES TALL
- MINIMUM COVER FOR SC-1 AND SC-4 IS 8 INCHES. MINIMUM COVER FOR SC-4 IS 22 INCHES.
- SEDIMENTTRAP MANUFACTURED WITH HIGH MOLECULAR WEIGHT, HIGH DENSITY POLYETHYLENE.
- NON-WOVEN POLYPROPYLENE FILTER FABRIC TYPICALLY 300 G/SM OR APPROVED EQUAL.
- NON-WOVEN POLYPROPYLENE FILTER FABRIC 300 G/SM OR APPROVED EQUAL.
- THE PERFORMANCE OF NDS STORMCHAMBER IS DIRECTLY CORRELATED TO THE LOAD BEARING CAPACITY, PLACILITY AND PERMEABILITY OF NATIVE SOIL. FIRST HEAVE POTENTIAL, VOLUME AND LOAD-BEARING OF PROJECT SOILS, INSTALLATION METHODS USED AS WELL AS THE TYPE, GRADE AND THICKNESS OF THE SURROUNDING OVERLAY RISE.

REQUIREMENTS FOR CONSTRUCTION EQUIPMENT

- NDS RECOMMENDS BACKFILL METHODS, STONEHOPPER LOCATED OFF THE CHAMBER BED, BACKFILL AS RISES ARE BUILT TO BE TOOK BY EXCAVATOR IN THE FRONT FROM TOP OF SUBGRADE AND SHOULDER FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR. CONVEYORS OR EXCAVATORS SHOULD BE LOCATED SUCH THAT THEIR LOADS DO NOT INCLUDE THE CHAMBERS SHOULD BE USED TO PLACE BACKFILL STONE.
- NO CONSTRUCTION EQUIPMENT ALLOWED ON TOP OF THE CHAMBER SYSTEM UNTIL MINIMUM STONE COVER REQUIREMENTS HAVE BEEN MET. 8000 FOR SC-1 AND SC-4 AND 12000 FOR SC-4. ONLY TRUCKS SHOULD BE USED TO PLACE BACKFILL STONE.
- NO WHEEL LOADS SHOULD BE APPLIED OVER THE SYSTEM. ONCE THE MINIMUM STONE HAS BEEN PLACED OVER THE SYSTEM OF THE CHAMBERS, ONLY 3000 WHEEL LOADS SHOULD BE APPLIED TO THE SYSTEM WITH A MAXIMUM GROUND PRESSURE OF 180 PSF ARE PERMITTED OVER THE STRUCTURE.
- DO NOT EXCEED STONE WEIGHTS IN ANY ONE PLACE. HEAVY TRUCKS SHOULD NOT BE USED TO PLACE STONE WORKING ABOVE THE CHAMBER ROW. ANY CHAMBERS DAMAGED BY USING THE "SLIP AND PULL" METHOD ARE NOT COVERED UNDER THE WARRANTY.
- ONCE 10% OF COVERED MATERIAL IS OVER THE CHAMBERS, HIGHWAY VEHICLES OF 15-20 AND HEAVY TRUCKS OPERATED OVER THE STRUCTURES.
- A FRONT END LOADER CAN BE OPERATED OVER THE STRUCTURES AS LONG AS THE MINIMUM STONE LOAD DOES NOT EXCEED 1000 POUNDS. CONSTRUCTION EQUIPMENT CAN BE OPERATED AS LONG AS THE VEHICLE WEIGHT DOES NOT EXCEED 1000 POUNDS.

BACKFILL METHODS

PROPER

IMPROPER

ACCEPTABLE FILL MATERIALS: NDS STORMCHAMBER SYSTEMS

Material Location	Material	Minimum	Maximum
Under Inflow Row	AASHTO #3 OR #4 (3/4" - 2") ANGULAR, CRUSHED, WASHED STONE (IGNEOUS RECOMMENDED)	12" (305mm)	18" (457mm)
		12" (305mm)	18" (457mm)
Between Inflow and Adjacent Start Units	10" (254mm) PVC CLEANOUT RISER PIPE	12" (305mm)	18" (457mm)
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PROJECT NAME: STORMCHAMBER

PROJECT LOCATION: NDS Design Worx

NDS STORMCHAMBER SYSTEM DETAILS

INSPECTION AND MAINTENANCE OF STORMCHAMBER SEDIMENTTRAP ROW

THE QUALITY AND LOCATION OF INSPECTION PORTS VARY BY SITE. PLEASE REFER TO THE SITE PLAN AND LAYOUT TO THE CHAMBER ROW FOR PORT LOCATIONS. REFER TO THE PLAN FOR PORT LOCATIONS. REFER TO THE PLAN FOR PORT LOCATIONS. REFER TO THE PLAN FOR PORT LOCATIONS. REFER TO THE PLAN FOR PORT LOCATIONS.

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1. MAINTENANCE WITH SEDIMENTTRAP - VACUUM TRUCK METHOD

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2. MAINTENANCE WITHOUT SEDIMENTTRAP - WATER JET METHOD

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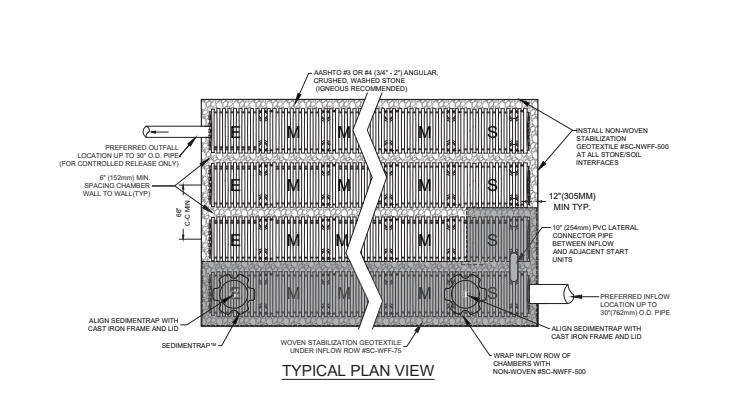
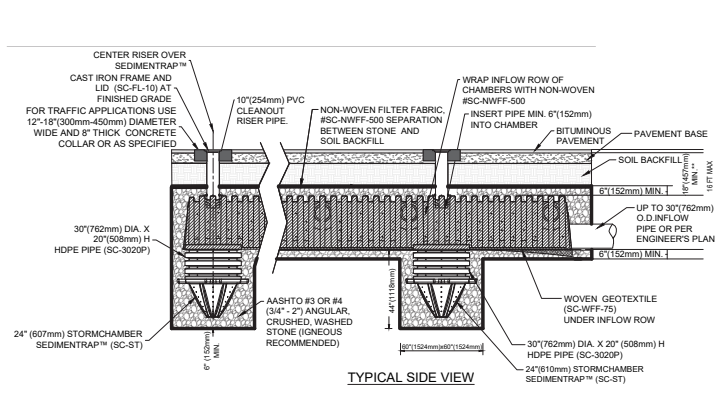
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NDS STORMCHAMBER SYSTEM DETAILS



NDS® StormChamber™ Systems



SC-44



SC-34



SC-18

Nominal Design Specifications Comparison

Chamber Storage	88 ft³ (2.5 m³)	72 ft³ (2.04 m³)	21 ft³ (0.6 m³)
Installed Storage w/stone	147 ft³ (4.2 m³)	107 ft³ (3.0 m³)	41 ft³ (1.2 m³)
Height	41" (1041 mm)	34" (864 mm)	18" (457 mm)
Width	80" (2032 mm)	60" (1524 mm)	38" (965 mm)
Actual Length (Closed Unit)	87" (2210 mm)	103" (2616 mm)	101" (2565 mm)
Installed Length (Start/End Unit)	80" (2023 mm)	97" (2464 mm)	96" (2438 mm)
Installed Length (Middle Unit)	74" (1880 mm)	91" (2311 mm)	91.25" (2318 mm)
Weight	120 lbs (54.4 kg)	100 lbs (45.4 kg)	53 lbs (24.0 kg)
Chamber per Pallet	9-20	30	50
Material	HDPE	HDPE	HDPE
ASTM Standard F2922/F2787	Exceeds	Exceeds	Exceeds

Installation Specification Comparison

Minimum Stone Above Chambers	12" (305 mm)	6" (152 mm)	6" (152 mm)
Minimum Stone Below Chambers	9" (229 mm)	6" (152 mm)	6" (152 mm)
Minimum Chamber Row Spacing	9" (229 mm)	6" (152 mm)	6" (152 mm)
Minimum Stone Border	12" (305 mm)	12" (305 mm)	12" (305 mm)
Maximum Cover	8 ft. (2.44 m)	16 ft. (4.88 m)	16 ft. (4.88 m)
Minimum Cover	22" (559 mm)	18" (457 mm)	18" (457 mm)

Product Codes

Start Unit	SC-44105-S-O	SC-3475-S-O	SC-1820-S-O
Middle Unit	SC-44105-M-O	SC-3475-M-O	SC-1820-M-O
End Unit	SC-44105-E-O	SC-3475-E-O	SC-1820-E-O
Closed Unit	SC-44105-C-O	SC-3475-C-O	SC-1820-C-O



HydroCad®
Stormwater
Modeling

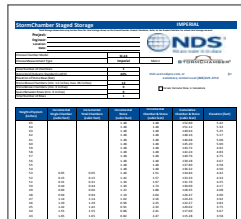


Our CAD technicians and engineering staff are available to assist you with all aspects of your project. Contact Technical Support 888-825-4716

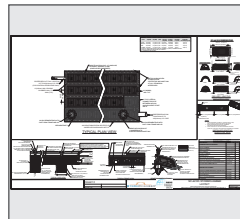
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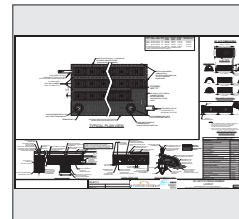
Volume Calculator



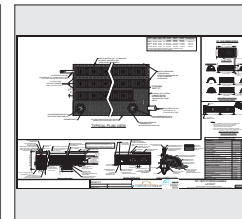
Stage Storage



SC-44 Detail



SC-34 Detail



SC-18 Detail

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