PROJECT INFORMATION				
ENGINEERED PRODUCT MANAGER				
ADS SALES REP				





1412 STITTSVILLE MAIN STREET

STITTSVILLE, ON, CANADA

SC-310 STORMTECH CHAMBER SPECIFICATIONS

- 1. CHAMBERS SHALL BE STORMTECH SC-310.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE OR POLYETHYLENE COPOLYMERS.
- CHAMBERS SHALL BE CERTIFIED TO CSA B184, "POLYMERIC SUB-SURFACE STORMWATER MANAGEMENT STRUCTURES", AND MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE CSA S6 CL-625 TRUCK AND THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED. TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787. "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK). AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:

FROM REFLECTIVE GOLD OR YELLOW COLORS.

- TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS. TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL. THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS
- TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2922 SHALL BE GREATER THAN OR EQUAL TO 400 LBS/FT/%. AND b) TO RESIST CHAMBER

DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 23° C / 73° F), CHAMBERS SHALL BE PRODUCED

- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE
- DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS: THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER. THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR
- DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE. THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2922 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-310 SYSTEM

- 1. STORMTECH SC-310 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A
- 2. STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE". 3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS.
- STONESHOOTER LOCATED OFF THE CHAMBER BED. BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
- BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- 4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- 5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- 6. MAINTAIN MINIMUM 150 mm (6") SPACING BETWEEN THE CHAMBER ROWS.
- 7. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 20-50 mm (3/4-2").
- 8. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN
- 9. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

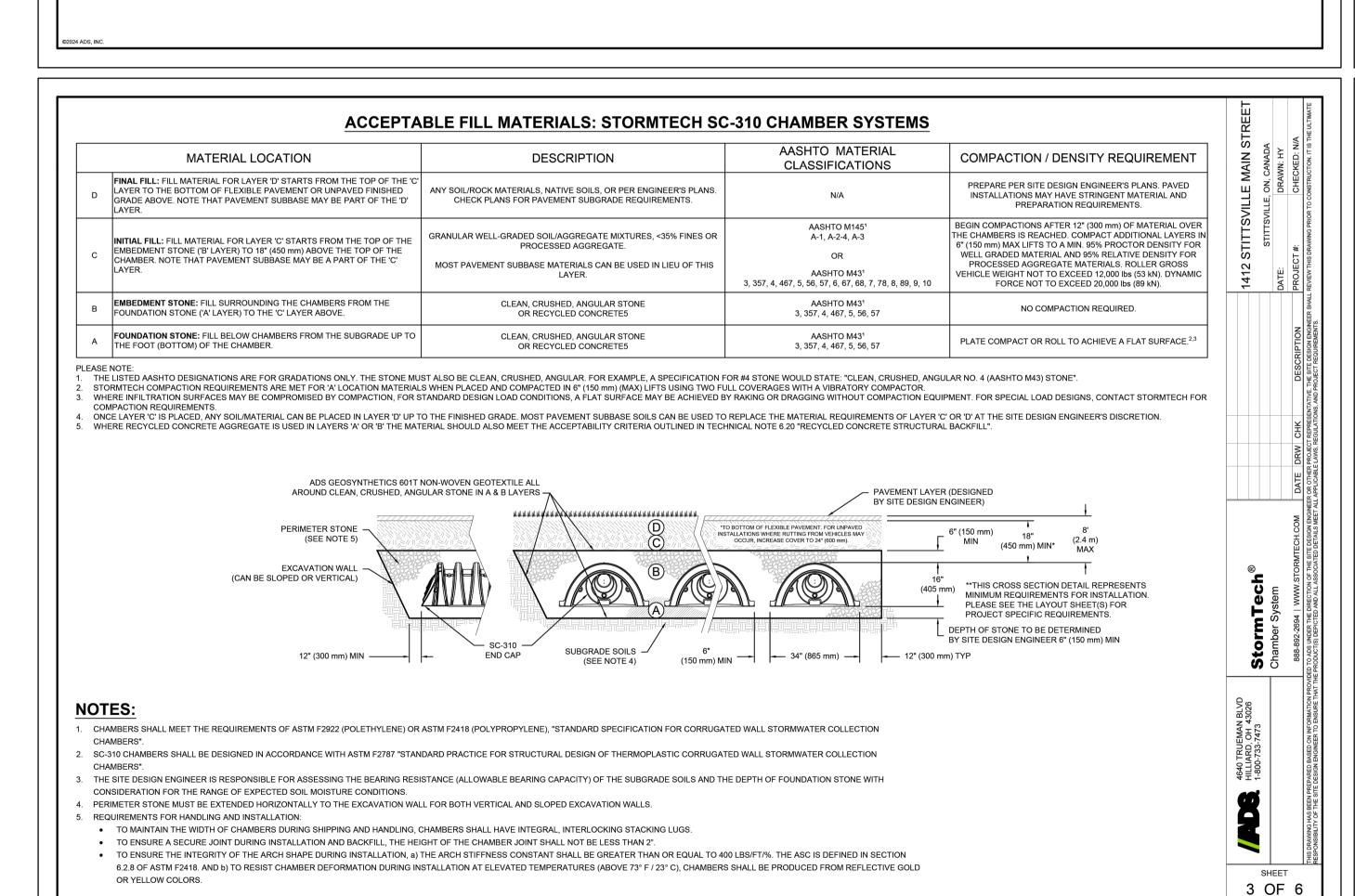
STORMTECH RECOMMENDS 3 BACKFILL METHODS:

1. STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".

- 2. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-310 & SC-740 CHAMBERS IS LIMITED: NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
- NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE". WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- 3. FULL 900 mm (36") OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

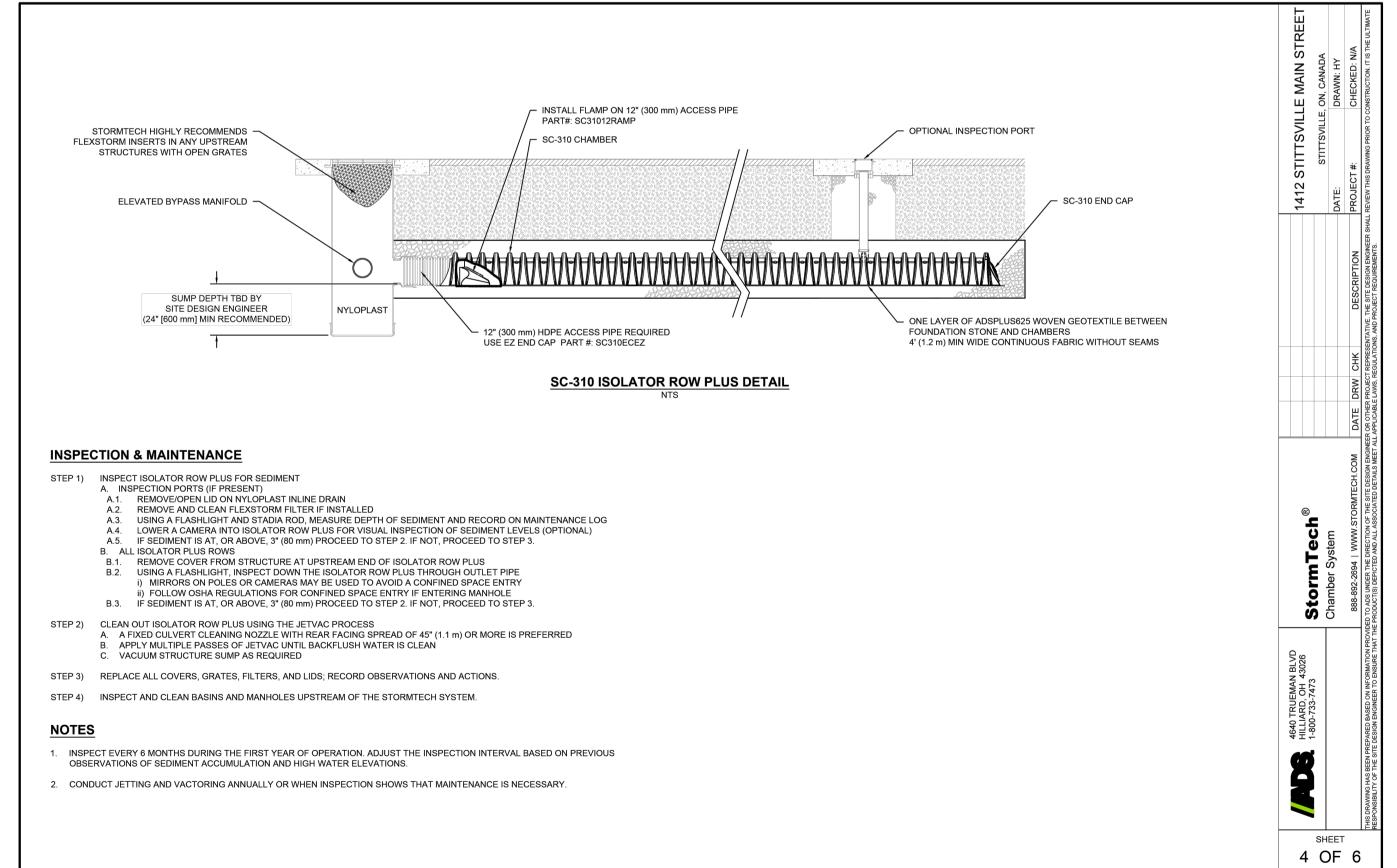
USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



APPLICANT:

	CONCEPTUAL ELEVATIONS:		ITEM ON			SE OF CHAMBER		
STORMTECH SC-310 CHAMBERS MAXIMUM ALLOWABLE (GRADE (TOP OF PAVEMENT/UNPAVED): GRADE (UNPAVED WITH TRAFFIC):	2.997 PART TYPE	LAYOUT	DESCRIPTION mm BOTTOM PREFABRICATED EZ END CAP, PART#: SC310ECEZ / TYP OF ALL 300 mm	INVERT*	* MAX FLOW		
STONE ABOVE (mm) MINIMUM ALLOWABLE G	GRADE (UNPAVED NO TRAFFIC): GRADE (TOP OF RIGID CONCRETE PAVEMENT):	1.016 PREFABRICATED EZ END CAP	А во	TTOM CONNECTIONS AND ISOLATOR PLUS ROWS	23 mm		F	∢ 、
STONE VOID STONE VOID MINIMUM ALLOWABLE G INSTALLED SYSTEM VOLUME (m³) TOP OF STONE:	GRADE (BASE OF FLEXIBLE PAVEMENT):	1.016 FLAMP 0.711 MANIFOLD	C 200	TALL FLAMP ON 300 mm ACCESS PIPE / PART#: SC31012RAMP I mm x 200 mm TOP MANIFOLD, MOLDED FITTINGS	89 mm		MAIN	J. F.
3 (PERIMETER STONE INCLUDED) TOP OF SC-310 CHAMBE (COVER STONE INCLUDED) 200 mm x 200 mm TOP M		0.559 PIPE CONNECTION		mm BOTTOM CONNECTION mm DIAMETER (610 mm SUMP MIN)	15 mm	051/- 101	E MAIN S	ON, CANAD DRAWN: HY
(BASE STONE INCLUDED) 300 mm ISOLATOR ROW 8 SYSTEM AREA (m²) 200 mm BOTTOM CONNE	PLUS INVERT:	0.175 PLUS ROW) 0.168 NYLOPLAST (OUTLET)		D mm DIAMETER (610 mm SUMP MIN)		25 L/s IN 20 L/s OUT		
7 SYSTEM PERIMETER (m) BOTTOM OF SC-310 CHA BOTTOM OF STONE:	AMBER:	0.152 0.000	1 1	······································		202/0001	TTTSVILLE, ORTITISVILLE, ORTIT	N I
		— 19.339 m — 17.721 m		2.896 m = 3.505 m			StormTech® 1412 ST	or System DATE:
ISOLATOR ROW PLUS							4640 TRUEMAN BLVD HILLIARD, OH 43026 1-800-733-7473	L
(SEE DETAIL)							X	(
PLACE MINIMUM 3.810 m OF ADSPLUS625 WOVEN GEOTE	DUE TO THE ADAE	BE DETERMINED BY SITE DESIGN ENGINEE	R. SEE TECH	NOTE #6.32 FOR MANIFOLD SIZING GUIDANCE.	TO 071115	DD MANUSCUS		(
BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR PROTECTION AT ALL CHAMBER INLET ROWS	COMPONENTS IN THE F	ELD.		ND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE RY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.	TOSTANDA	KD MANIFOLD		
X X X	THIS CHAMBER SY	STEM WAS DESIGNED WITHOUT SITE-SPECI	IFIC INFORM	ATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESP	ONSIBLE FO	R		\perp
	DETERMINING							HEE
BED LIMITS	DETERMINING THE SUITABILITY OF TH PROVIDED.	E SOIL AND PROVIDING THE BEARING CAPAC	CITY OF THE	INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS IN RPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVE	IFORMATION	N IS	2 (O E



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ELEVATIONS ARE DERIVED FROM ONTARIO CONTROL MONUMENT 0011968U118, HAVING A PUBLISHED ELEVATION OF 126,180m

TBM: CC ON THE SOUTHWEST CORNER OF THE HYDRO TRANSFORMER CONCRETE PAD. ELEV.

No. REVISION DESCRIPTION ELITE PROPERTY DEVELOPMENTS INC. SEPT. 2024 RE-ISSUED FOR SPA RE-ISSUED FOR SPA APR. 2025 JUL. 2025 RE-ISSUED FOR SPA OCT. 2025 RE-ISSUED FOR SPA

RE-ISSUED FOR SPA

ENGINEER STAMP

NOV. 2025

1412 STITTSVILLE MAIN STREET TOWNSHIP OF STITTSVILLE

DETAILS PLAN 2

DESIGN: HY FILE: 524659 DRAWN: HY DATE: SEPT 2024 CHECK: GC SCALE:

DET-2

Drawing Name: 524659—DET01.dwg, Plotted: Nov 26, 2025