

### ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL MATERIAL FOR LAYER 1 <sup>1</sup> STARTS FROM THE TOP OF THE "C" LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBGRADE MAY BE PART OF THE "C" LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRONGER MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL MATERIAL FOR LAYER 1 <sup>1</sup> STARTS FROM THE TOP OF THE "EMBEDMENT STONE" (B) LAYER TO 1" (25.4 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBGRADE MAY BE PART OF THE "C" LAYER.	AASHTO M14 <sup>2</sup> A1, A.2.4, A.3 OR AASHTO M47 <sup>3</sup> 3, 307, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 88, 9, 10	BEGIN COMPACTIONS AFTER 1" (25.4 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 1" (25.4 mm) MAX LIFTS TO A MIN. 90% PROCTOR DENSITY FOR WELL GRADED MATERIALS AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER WIDTHS VEHICLE HEIGHT NOT TO EXCEED 30.00 IN (761.91 MM). FORCE NOT TO EXCEED 20.00 IN (508.00 MM).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE OF LAYER 1 TO THE "C" LAYER ABOVE.	AASHTO M47 <sup>3</sup> 3, 307, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M47 <sup>3</sup> 3, 307, 4, 467, 5, 56, 57	PLATE COMPACTION OR ROLL TO ACHIEVE A FLAT SURFACE. <sup>1A</sup>

**PLEASE NOTE:**  
 1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR, FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE "CLEAN, CRUSHED, ANGULAR #4 (AASHTO M47) STONE".  
 2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR A LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 1" (25.4 mm) MAX LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.  
 3. WHERE INFORMATION IS NOT PROVIDED FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY FINING OR GRADING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGN, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.  
 4. ONCE LAYER 1<sup>1</sup> IS PLACED, ANY SOLID MATERIAL CAN BE PLACED IN LAYER 1<sup>1</sup> UP TO THE FINISHED GRADE. MOST PAVEMENT SUBGRADE SOLS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 1<sup>1</sup> OR AT THE SITE DESIGN ENGINEER'S DISCRETION.

### SC-740 ISOLATOR ROW PLUS DETAIL

### SC-740 6\"/>

### SC-740 TECHNICAL SPECIFICATION

PART #	STUB	NOMINAL CHAMBER SPECIFICATIONS		
		SIZE (W X H X INSTALLED LENGTH)	CHAMBER STORAGE	MINIMUM INSTALLED STORAGE*
SC740PE07 / SC740PE08TFC	6\"/>			

**PRE-FAB STUB AT BOTTOM OF END CAP WITH FLAMP END WITH "B"**  
 PRE-FAB STUBS AT BOTTOM OR END CAP FOR PART NUMBERS ENDING WITH "B"  
 PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"  
 PRE-CORDED SC CAPS END WITH "C"

STUB	A	B	C
SC740PE07 / SC740PE08TFC	6\"/>		

ALL STUBS, EXCEPT FOR THE SC740PE2400 AND SC740PE2400R, ARE PLACED AT BOTTOM OF END CAP SLUG. THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH 1-888-288-2834.

\* FOR THE SC740PE2400R/SC740PE2400R THE 24\"/>

### PROPOSED LAYOUT

### NOTES

- MANHOLE SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECHNICAL # 33 FOR MANHOLE SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COMPILE ADDITIONAL PIPE TO STANDARD MANHOLE DIMENSIONS IN THE FIELD.
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE SOIL. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.

STRUCTURE CURBED PER PLAN (DESIGN BY ENGINEER / PROVIDED BY OTHERS)  
 STRUCTURE CURVED PER PLAN (DESIGN BY ENGINEER / PROVIDED BY OTHERS)

### SC-740 ISOLATOR ROW PLUS DETAIL

### SC-740 6\"/>

### STANDARD DETAIL NOT FOR CONSTRUCTION

### GENERAL NOTES

- MAXIMUM SURFACE LOADING RATE (BLR) INTO LOWER CHAMBER THROUGH DROP PIPE IS 1135 L/min/m<sup>2</sup> (27.9 gpm/ft<sup>2</sup>) FOR STORMCEPTOR EF4 AND S35 (LIMITED) (1.1 gpm/ft<sup>2</sup>) FOR STORMCEPTOR EF04 COL CAPTURE CONFIGURATION). WEIR HEIGHT IS 100 mm (6 INCH) FOR EF04. ALL DIMENSIONS INDICATED ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SPECIFIED.
- STORMCEPTOR STRUCTURE INLET AND OUTLET PIPE SIZE AND ORIENTATION SHOWN FOR INFORMATIONAL PURPOSES ONLY.
- UNLESS OTHERWISE NOTED, BYPASS INFRASTRUCTURE, SUCH AS ALL UPSTREAM OVERFLOW STRUCTURES, CONNECTING STRUCTURES, OR PIPE CONDUITS CONNECTING TO COMPLETE THE STORMCEPTOR SYSTEM SHALL BE PROVIDED AND ADDRESS SEPARATELY.
- DRAWING FOR INFORMATION PURPOSES ONLY. REFER TO ENGINEERS SITE/UTILITY PLAN FOR STRUCTURE ORIENTATION.
- NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED TO DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.

### INSTALLATION NOTES

- REINFORCE SUB-BASE BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE (LIFTING CLUTCHES PROVIDED).
- CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS. WATER TIGHT OR FLEXIBLE BOOT).
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT THE DEVICE FROM CONSTRUCTION RELATED EROSION RUNOFF.
- DEVICE ACTIVATION BY CONTRACTOR SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE STORMCEPTOR UNIT IS CLEAN AND FREE OF DEBRIS.

### SITE SPECIFIC DATA REQUIREMENTS

STORMCEPTOR MODEL EF4				
STRUCTURE ID	WATER QUALITY FLOW RATE (L/s)	PEAK FLOW RATE (L/s)	RETURN PERIOD OF PEAK FLOW (yrs)	DRAINAGE AREA (HA)
	*	*	*	*

PIPE DATA	I.E.	MATL.	DIA.	SLOPE (%)	HGL
INLET #1	*	*	*	*	J&K
INLET #2	*	*	*	*	BSF
OUTLET	*	*	*	*	EF4

\* PER ENGINEER OF RECORD

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### ENGINEERING STAMP

#	ISSUED FOR	DATE
#1	ISSUED FOR SPA	12/10/2021
#2	ISSUED FOR SPA	06/08/2021
#1	ISSUED FOR SPA	10/03/2021

### BLANCHARD LETENDRE ENGINEERING

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**CLIENT:**  
**12213559 CANADA INC.**  
 996-B ST. AUGUSTIN RD.  
 EMBURON, ON

**PROJECT:**  
**NEW MULTIPURPOSE DEVELOPMENT**  
 6497 MANOTICK MAIN ST,  
 MANOTICK, ON

**DRAWING:**  
**DETAILS**

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