ACCEPTABLE FILL MATERIALS: STORMTECH MC-7200 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PEF INSTALLATIO P
С	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 600 mm (24") ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145 ¹ A-1, A-2-4, A-3 OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMP/ OVER THE CHA LAYERS IN 300 r DENSITY FOR V DENSITY FO
В	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE⁵	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE⁵	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	PLATE COMPAC

PLEASE NOTE:

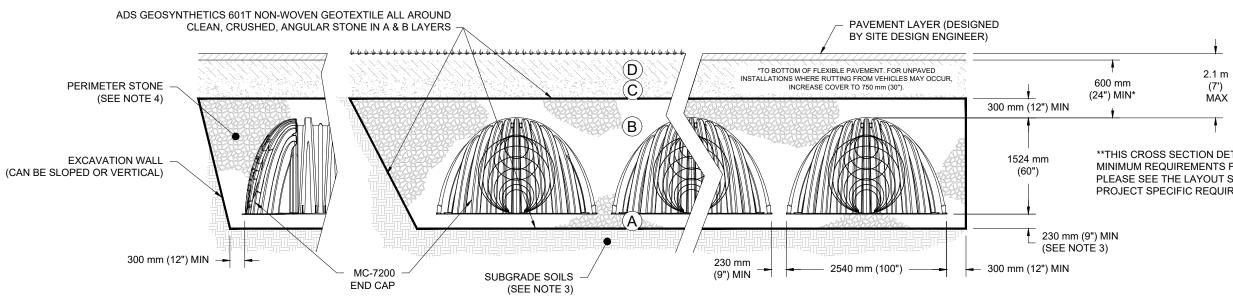
THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE". 1.

STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 230 mm (9") (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR. 2.

WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR 3 COMPACTION REQUIREMENTS.

ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION. 4

WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".



NOTES:

- 1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101
- 2. MC-7200 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- 3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS. REFERENCE STORMTECH DESIGN MANUAL FOR BEARING CAPACITY GUIDANCE.
- 4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- 5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - 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 THAN 75 mm (3").
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/FT/%. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

CTION / DENSITY REQUIREMENT

PER SITE DESIGN ENGINEER'S PLANS. PAVED TIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.

/IPACTIONS AFTER 600 mm (24") OF MATERIAL HAMBERS IS REACHED. COMPACT ADDITIONAL 00 mm (12") MAX LIFTS TO A MIN. 95% PROCTOR R WELL GRADED MATERIAL AND 95% RELATIVE FOR PROCESSED AGGREGATE MATERIALS.

NO COMPACTION REQUIRED

PACT OR ROLL TO ACHIEVE A FLAT SURFACE.^{2,3}

**THIS CROSS SECTION DETAIL REPRESENTS MINIMUM REQUIREMENTS FOR INSTALLATION. PLEASE SEE THE LAYOUT SHEET(S) FOR PROJECT SPECIFIC REQUIREMENTS.

								STANDARD CROSS SECTION
1		4640 TRUEMAN BLVD	¢		<u> </u>			
	P P	HILLIARD, OH 43026	StormTach					MC-7200 CHAMBER
								STORMTECH
) DF			Chamber System					
			1-800-821-6710 WWW.STURIMIECH.COM	DATE	DATE DRWN CHKD		DESCRIPTION	DRAWING #: 724-720_C CHECKED: JLM
1	THIS DRAWING HAS BEEN PREPA PRIOR APPROVAL, EOR SHALL RE	ARED BASED ON INFORMATION PROVIDED EVIEW THIS DRAWING PRIOR TO BIDDING A	TO ADSISTORATECH UNDER THE DIRECTION OF THE PROJECT'S ENGIN ND/OR CONSTRUCTION , IT IS THE ULTIMATE RESPONSIBILITY OF THE EX	IEER OF RECOF	RD ("EOR") THAT THE	DR OTHER PROJECT REF PRODUCT(S) DEPICTED /	PRESENTATIVE. THIS DRAWING IS NU AND ALL ASSOCIATED DETAILS MEE	THS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADSSTORMITCH UNDER THE DRECTION OF THE PROJECT SENGINEER OF RECORD (FOR) OR OTHER PROJECT REPRESENTATIVE THAIS DRAWING RIOT INTENDED FOR USE IN BIDDING OR CONSTRUCTION WITHOUT THE EOR'S OF PROJECT REPRESENTATIVE THAIS DRAWING FRIG REPARED BASED ON INFORMATION PROVIDED TO ADSSTORMITECH UNDER THE PROJECTS ENGINEER OF RECORD (FOR) OR OTHER PROJECTS) OR OTHER PROJECT REPRESENTATIVE THAIS DRAWING FRICK TO BIDDING OR CONSTRUCTION WITHOUT THE EOR'S OF PROJECTS) DEPICIPED AND ALL EVENT THE PROPULATE AND ALL EASING AND PROVIDED TO BIDDING OR CONSTRUCTION IT IS THE ULTIMATE RESPONSIBILITY OF THE FOR DURING IS DEPICIPED AND ALL EASING FRICK THE DATA PROVIDED DETALS MEET ALL APPLICABLE LANS, REGULATIONS, AND PROJECT REQUENTS.