**SPECIFICATIONS** 

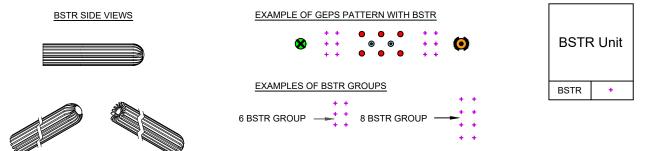
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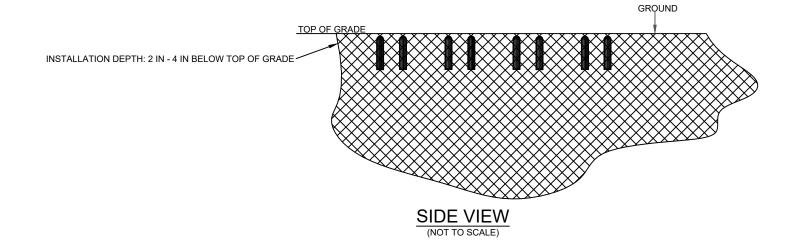
DETAIL

**TYPICAL** 

(BSTR)

BOOSTER





SPECIFICATIONS	
DIAMETER	0.8 INCHES
BASE LENGTH	18.25 INCHES
MATERIAL	POLYETHYLENE
INSTALLATION DEPTH	2 INCHES TO 4 INCHES
DRILL HOLE DIAMTER	1 INCH

PART 1 GENERAL

1.1 DESCRIPTION

- A. SUMMARY
- 1. THE FOLLOWING GENERAL SPECIFICATIONS DESCRIBE THE COMPONENTS AND INSTALLATION REQUIREMENTS FOR AN EXLTERRA PRODUCT PERFORMANCE-BOOSTING SYSTEM THAT UTILIZES THE PHYSICAL AND CHEMICAL MECHANISMS OF SOIL AND WATER TO PASSIVELY DECREASE COMPACTION, IMPROVE UPPER-LAYER SOIL CONDITIONS, AND IMPROVE UPPER-LAYER SOIL BEHAVIOR. BOOSTER (BSTR) SHALL BE A SUPPLEMENTARY SYSTEM OF BSTR PRODUCTS TO BE PLACED PER THE APPROVED DRAWINGS ALONGSIDE OTHER EXLTERRA PRODUCTS TO PASSIVELY IMPROVE THEIR PERFORMANCE THROUGH CONSTANT SOIL DECOMPACTION TO MEET OR EXCEED PROJECT PERFORMANCE GOALS.
- BSTR AS A SYSTEM IS COMPRISED OF:
- a. BSTR UNITS
- POLYETHYLENE BLEND, HD AND NA.
- 2) CONSIST OF AN EXTRUSION 18.25 INCHES IN LENGTH WITH A CLOSED-OFF TOP END.
- 3) IMPLEMENTED FOR DECOMPACTION AND INFILTRATION.

### 1.2 REFERENCES 01 42 00

- A. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)
- 1. ASTM D 1248, III, CLASS A, CAT. 5 STANDARD SPECIFICATION FOR IDENTIFICATION OF POLYETHYLENE PLASTICS.
- 2. ASTM D1505 STANDARD SPECIFICATION FOR DENSITY OF PLASTICS.
- 3. ASTM D1238 STANDARD SPECIFICATION FOR MELT-FLOW RATES OF PLASTICS.
- 4. ASTM D638 STANDARD SPECIFICATION FOR TENSILE PROPERTIES OF PLASTICS (DUMBBELL).
- 5. ASTM D790 STANDARD SPECIFICATION FOR FLEXURAL PROPERTIES OF PLASTICS.
- 6. ASTM D882 STANDARD SPECIFICATION FOR TENSILE PROPERTIES OF PLASTICS (SHEET).
- 7. ASTM D1709 STANDARD SPECIFICATION FOR IMPACT RESISTANCE OF PLASTICS (SHEET).
- 8. ASTM D1922 STANDARD SPECIFICATION FOR ELMENDORF TEAR STRENGTH OF PLASTICS (FILM).
- 9. ASTM D1525 STANDARD SPECIFICATION FOR VICAT SOFTENING TEMPERATURE OF PLASTICS.

1.3 QUALITY ASSURANCE 01 43 00 / QUALITY CONTROL 01 45 00

- A. MANUFACTURER QUALIFICATIONS 01 43 13
- 1. THE POLYETHYLENE BLEND USED IN BSTR EXTRUSIONS MUST MEET THE ASTM AND FDA SPECIFICATIONS OUTLINED IN 1.2 REFERENCES 01 42 00.
- B. FIELD QUALITY CONTROL PROCEDURES 01 45 16
- 1. ALL COMPONENTS SHALL BE VISUALLY INSPECTED FOR DEFECTS. ALL DEFECTIVE COMPONENTS SHALL IMMEDIATELY BE REMOVED FROM THE SITE AND REPLACED.
- 2. REPAIRS MAY NOT BE MADE TO DEFECTIVE COMPONENTS. ALL DEFECTIVE COMPONENTS MUST BE REPLACED AND ARE NOT TO BE USED ON THE PROJECT SITE.
- 3. THE QUALITY AND COMPOSITION OF ALL COMPONENTS SHALL BE SUBJECT TO INSPECTION UPON DELIVERY OF THE BSTR PRODUCTS TO THE PROJECT SITE. INSTALLATION IS TO BE PERFORMED ONLY BY EXLTERRA-LICENSED INSTALLERS WITH THE EXPRESS APPROVAL OF EXLTERRA PRIOR TO INSTALLATION.
- 4. CHANGES TO THE LAYOUT OF BSTR UNITS DURING INSTALLATION MUST BE APPROVED BY AN EXLTERRA ENGINEER OR LAYOUT DESIGNER BEFORE THE CHANGES ARE MADE. ALL APPROVED CHANGES TO THE LAYOUT MUST BE MARKED BY THE EXLTERRA-LICENSED INSTALLER FOR THE CREATION OF AN AS-BUILT DRAWING TO MAINTAIN QUALITY AND ACCOUNTABILITY.

### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. MEET ALL REQUIREMENTS OF THE MANUFACTURER IN TERMS OF HANDLING AND STORAGE.
- B. PROTECT ALL MATERIALS FROM DAMAGE DURING DELIVERY AND STORE ALL MATERIALS AWAY FROM UV LIGHT IN THE PROVIDED BOXES OR UNDER A TARP WHEN TIME FROM DELIVERY TO INSTALLATION EXCEEDS 48 HOURS.
- C. STORAGE OF GEPS SHAFTS SHOULD OCCUR ON LEVEL SURFACES TO PREVENT WARPING OR DAMAGE TO THE PLASTIC EXTRUSIONS.

# **OOSTER (BSTR) SPECIFICATIONS**

TO FIND A VALUE ADDED RESELLER IN YOUR AREA VISIT

WWW..CONVERGENTWATER..COM/STORMWATER-PRODUCTS OR CONTACT

EXLTERRA



CONT'D ON NEXT PAGE.

### 2.1 BSTR UNITS

- A. BSTR UNITS ARE A SINGLE EXTRUSION.
- 1. EXLTERRA GROUNDWATER ENERGY PASSIVE SYSTEM AS DESIGNED BY EXLTERRA INC., 618 EAST 10 MILE RD, MI, 48030. (248) 268-2336.
- 2. BSTR UNITS SHALL BE PLACED BY LICENSED INSTALLERS FOLLOWING THE PROVIDED LAYOUT.
- 3. BSTR UNITS ARE A SUPPLEMENTARY TECHNOLOGY TO BOLSTER THE PERFORMANCE OF EXISTING EXLTERRA PRODUCTS AND ARE NOT USED AS A STANDALONE SYSTEM.

### PART 3 EXECUTION

### 3.1 GENERAL

A. PLACE ALL BSTR UNITS IN ACCORDANCE WITH EXLTERRA'S REQUIREMENTS AS OUTLINED IN 3.2 - INSTALLATION AND THE PROVIDED LAYOUT.

### 3.2 INSTALLATION

- A. EXLTERRA INC. / LICENSED EXLTERRA INSTALLER TO FURNISH ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS NECESSARY TO INSTALL AND/OR PREPARE THE SITE FOR PLACEMENT OF BSTR IN ACCORDANCE WITH EXLTERRA'S INSTRUCTIONS AND AS SHOWN ON THE LAYOUTS AND AS SPECIFIED.
- B. REVIEW EXLTERRA'S INSTALLATION PROCEDURES AND COORDINATE INSTALLATION WITH OTHER WORK AFFECTED, SUCH AS GRADING, EXCAVATION, UTILITIES, CONSTRUCTION ACCESS AND EROSION CONTROL TO PREVENT SITUATIONS WHERE BSTR CANNOT BE INSTALLED AS PER EXLTERRA'S INSTRUCTIONS AND AS PER THE PROVIDED LAYOUT.
- C. WEATHER CONDITIONS
- 1. EXERCISE GOOD CONSTRUCTION SITE SAFETY PRACTICES TO ENSURE THAT INSTALLATION IS NOT ATTEMPTED IN WEATHER CONDITIONS THAT WOULD BE UNSAFE OR INEFFECTIVE, I.E. DURING/DIRECTLY AFTER HEAVY RAINFALL.
- 2. THE POLYMER BLENDS USED IN BSTR ARE CAPABLE OF WITHSTANDING TEMPERATURES AS LOW AS -20°F WITHOUT STRUCTURAL OR PERFORMANCE CONCERNS LOW TEMPERATURES WILL NOT HAMPER INSTALLATION OF BSTR, BUT CARE MUST BE TAKEN TO ENSURE THE GROUND CAN BE DRILLED WITHOUT DAMAGE TO THE INSTALLER'S EQUIPMENT.
- D. PROTECT PARTIALLY COMPLETED INSTALLATION AGAINST DAMAGE FROM OTHER CONSTRUCTION TRAFFIC WHEN WORK IS IN PROGRESS AND FOLLOWING COMPLETION OF BACKFILL THROUGH PROPER COMMUNICATION AND CLEAR VISUAL INDICATORS.
- E. SOIL CONDITIONS
- 1. ENSURE SOIL CONDITIONS ALLOW FOR THE EQUIPMENT/MACHINERY TO BE SAFELY USED FOR THE PURPOSE OF BSTR INSTALLATION. TAKE NOTE OF GROUND STABILITY AND SLOPE AND PLAN ACCORDINGLY. IF

- COMPLICATIONS ARE EXPECTED DUE TO OBSERVED SOIL CONDITIONS IN A GIVEN AREA, CONTACT EXLTERRA IMMEDIATELY TO CONFIRM A CHANGE IN THE LAYOUT
- 2. ENSURE SOIL CONDITIONS ALLOW FOR SAFE DRILLING. UNFORESEEN ROCKY CONDITIONS MUST BE REPORTED TO EXLTERRA, AS IT MAY REQUIRE A CHANGE IN LAYOUT, AND A NEW ESTIMATE FOR THE PROJECT TIMELINE MUST BE MADE.
- F. PACKAGING
- BSTR REQUIRES NO ASSEMBLY PRIOR TO INSTALLATION.
- 2. ALL BSTR UNITS ARE DELIVERED IN PALLETS/SKIDS OF BOXES OF VARYING DIMENSIONS BASED ON QUANTITY.
  3 3 CL FANUP
- A. KEEP ALL BSTR UNITS CLEAN UNTIL THEY ARE INSTALLED AND BACKFILLED.
- B. UPON COMPLETION, CLEAN THE SURROUNDING AREA OF DEBRIS AND LEFTOVER CONSTRUCTION MATERIALS.
- C. ENSURE THAT SOIL LEFTOVER AFTER BACKFILLING HAS BEEN COMPLETED IS DISPOSED OF ACCORDING TO CLIENT SPECIFICATIONS.
- D. NO ADDITIONAL MAINTENANCE IS REQUIRED OF BSTR ONCE INSTALLATION IS COMPLETED.

### CON FROE

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EXLTERRA CONT

REVISED

**NOVEMBER 2024** 

## **300STER (BSTR) SPECIFICATIONS**

END OF SPECIFICATION