Advanced Building Products, Inc.

PO Box 98

Springvale, Maine 04083 Toll Free 800-252-2306 Fax 207-490-2998

Website www.advancedbuildingproducts.com

Email info@ABP-1.com

# **Guide Specification**

August 2015

Specifier Notes: This guide specification is written in Construction Specifications Institute (CSI) 3-Part Format in accordance with *The CSI Construction Specifications Practice Guide, MasterFormat, SectionFormat,* and *PageFormat.* 

This Section must be carefully reviewed and edited by the Architect to meet the requirements of the Project and local building code. Coordinate this Section with Division 01, other specification sections, and the Drawings. Delete all Specifier Notes after editing this Section.

Section numbers and titles are based on MasterFormat 2014 Update.

#### **SECTION 33 46 36**

### FOUNDATION AND RETAINING WALL DRAINAGE

Specifier Notes: This Section covers Advanced Building Products, Inc. "AdvancedDrain .125", "AdvancedDrain .25", "AdvancedDrain .40", and "AdvancedDrain .50" composite drainage mats used to eliminate hydrostatic pressure from behind below-grade foundation and retaining walls. Consult Advanced Building Products, Inc. for assistance in editing this Section as required for the Project.

Use of "AdvancedDrain" may contribute to LEED credits. Consult Advanced Building Products, Inc. for more information.

#### PART 1 GENERAL

### 1.1 SECTION INCLUDES

A. Composite drainage mats.

# 1.2 RELATED REQUIREMENTS

Specifier Notes: Edit the following list of related sections as required for the Project. Limit the list to sections with specific information that the reader might expect to find in this Section, but is specified elsewhere.

A. Section 33 46 00 – Subdrainage.

### 1.3 REFERENCE STANDARDS

Specifier Notes: List reference standards used elsewhere in this Section, complete with designations and titles.

- A. ASTM International (ASTM) (www.astm.org):
  - ASTM D 5199 Standard Test Method for Measuring the Nominal Thickness of Geosynthetics.
  - 2. ASTM D 5261 Standard Test Method for Measuring Mass per Unit Area of Geotextiles.

# 1.4 SUBMITTALS

Specifier Notes: Edit the Submittals article as required for the Project. Delete submittals not required.

- A. Comply with Division 01.
- B. Product Data: Submit manufacturer's product data, including installation instructions.
- C. Samples: Submit manufacturer's sample of composite drainage mats, minimum 6 inches by 6 inches.
- D. Manufacturer's Certification: Submit manufacturer's certification that materials comply with specified requirements and are suitable for intended application.
- E. Warranty Documentation: Submit manufacturer's standard warranty.

#### 1.5 QUALITY ASSURANCE

A. Manufacturer's Qualifications: Manufacturer regularly engaged, for a minimum of 5 years, in the manufacturing of composite drainage mats of similar type to that specified.

# 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Delivery Requirements: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Storage and Handling Requirements:
  - 1. Store and handle materials in accordance with manufacturer's instructions.

- 2. Keep materials in manufacturer's original, unopened containers and packaging until installation.
- 3. Store materials in clean, dry area indoors.
- 4. Protect materials during storage, handling, and installation to prevent damage.

# PART 2 PRODUCTS

### 2.1 MANUFACTURERS

A. Manufacturer: Advanced Building Products, Inc., PO Box 98, Springvale, Maine 04083. Toll Free 800-252-2306. Fax 207-490-2998. Website www.advancedbuildingproducts.com. Email info@ABP-1.com.

Specifier Notes: Specify if substitutions will be permitted.

B. Substitutions: [Not permitted] [Comply with Division 01].

### 2.2 MATERIALS

Specifier Notes: Specify "AdvancedDrain .125", "AdvancedDrain .25", "AdvancedDrain .40", or "AdvancedDrain .50" composite drainage mats. Delete composite drainage mats not required.

- A. Composite Drainage Mats: "AdvancedDrain .125".
  - 1. Core bonded to filter fabric.
  - 2. Core:
    - a. Material: Polypropylene.
    - b. Type: Tangled matrix of randomly oriented monofilaments shaped into series of parallel porous drainage channels.
  - Filter Fabric:
    - a. Material: Polyester.
    - b. Type: Nonwoven.
    - c. Fabric Overlap: 3 inches (76 mm).
  - 4. Nominal Weight, ASTM D 5261:
    - a. Core:  $11.4 \text{ oz per sq yd } (388 \text{ g/m}^2)$ .
    - b. Fabric: 2.9 oz per sq yd (100 g/m²).
    - c. Composite: 14.4 oz per sq yd (488 g/m²).
  - 5. Nominal Thickness, ASTM D 5199:
    - a. Core: 0.125 inch (3 mm).
    - b. Composite: 0.145 inch (4 mm).
- B. Composite Drainage Mats: "AdvancedDrain .25".
  - 1. Core bonded to filter fabric.
  - 2. Core:
    - a. Material: Polypropylene.
    - b. Type: Tangled matrix of randomly oriented monofilaments shaped into series of parallel porous drainage channels.

- 3. Filter Fabric:
  - a. Material: Polyester.
  - b. Type: Nonwoven.
  - c. Fabric Overlap: 3 inches (76 mm).
- 4. Nominal Weight, ASTM D 5261:
  - a. Core: 14.3 oz per sq yd  $(485 \text{ g/m}^2)$ .
  - b. Fabric: 2.9 oz per sq yd (100 g/m²).
  - c. Composite: 17.2 oz per sq yd (585 g/m<sup>2</sup>).
- 5. Nominal Thickness, ASTM D 5199:
  - a. Core: 0.25 inch (6 mm).
  - b. Composite: 0.26 inch (7 mm).
- C. Composite Drainage Mats: "AdvancedDrain .40".
  - 1. Core bonded to filter fabric.
  - Core:
    - a. Material: Polypropylene.
    - b. Type: Tangled matrix of randomly oriented monofilaments shaped into series of parallel porous drainage channels.
  - Filter Fabric:
    - a. Material: Polyester.
    - b. Type: Nonwoven.
    - c. Fabric Overlap: 3 inches (76 mm).
  - 4. Nominal Weight, ASTM D 5261:
    - a. Core:  $17.4 \text{ oz per sq yd } (592 \text{ g/m}^2)$ .
    - b. Fabric:  $2.9 \text{ oz per sq yd } (100 \text{ g/m}^2)$ .
    - c. Composite: 20.4 oz per sq yd (692 g/m²).
  - 5. Nominal Thickness, ASTM D 5199:
    - a. Core: 0.4 inch (10 mm).
    - b. Composite: 0.41 inch (10 mm).
- D. Composite Drainage Mats: "AdvancedDrain .50".
  - 1. Core bonded to filter fabric.
  - Core:
    - a. Material: Polypropylene.
    - b. Type: Tangled matrix of randomly oriented monofilaments shaped into series of parallel porous drainage channels.
  - 3. Filter Fabric:
    - a. Material: Polyester.
    - b. Type: Nonwoven.
    - c. Fabric Overlap: 3 inches (76 mm).
  - Nominal Weight, ASTM D 5261:
    - a. Core: 20 oz per sq yd  $(678 \text{ g/m}^2)$ .
    - b. Fabric: 2.9 oz per sq yd (100 g/m<sup>2</sup>).
    - c. Composite: 22.9 oz per sq yd (778 g/m²).
  - 5. Nominal Thickness, ASTM D 5199:
    - a. Core: 0.5 inch (13 mm).
    - b. Composite: 0.51 inch (13 mm).

# PART 3 EXECUTION

# 3.1 **EXAMINATION**

- A. Examine surfaces to receive composite drainage mats.
- B. Notify Architect of conditions that would adversely affect installation or subsequent use.
- C. Do not begin installation until unacceptable conditions are corrected.

# 3.2 INSTALLATION

- A. Install composite drainage mats in accordance with manufacturer's instructions at locations indicated on the Drawings.
- B. Install composite drainage mats:
  - To allow flow of water in all directions within drainage core.
  - 2. To prevent soil from entering drainage core while providing ample flow of water.
- C. Secure composite drainage mats to surfaces with construction adhesive or termination bars in accordance with manufacturer's instructions.
- D. Butt composite drainage mats together without overlapping.
- E. Apply construction adhesive on fabric overlap for sealing adjacent composite drainage mats to prevent soil intrusion at joints.

# 3.3 PROTECTION

A. Protect installed composite drainage mats from damage during construction.

### **END OF SECTION**