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DIVISION: 02—SITE CONSTRUCTION
Section: 02620—Subdrainage

REPORT HOLDER:

AMERICAN WICK DRAIN CORPORATION
1209 AIRPORT ROAD
MONROE, NORTH CAROLINA 28110
(704) 238-9200
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EVALUATION SUBJECT:

AKWADRAIN™ FOUNDATION STRIP DRAIN

ADDITIONAL LISTEES:

EPRO SERVICES, INC.
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TREMCO BARRIER SOLUTIONS, INC.
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1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2003 *International Building Code*® (IBC)
- 2003 *International Residential Code*® (IRC)
- 1997 *Uniform Building Code*™ (UBC)
- BOCA® *National Building Code*/1999 (BNBC)
- 1999 *Standard Building Code*® (SBC)

Property evaluated:

Foundation drainage system

2.0 USES

AKWADRAIN™ Foundation Strip Drains are used as alternatives to conventional sand- or gravel-covered pipe drains installed around building foundations in accordance with the applicable code.

3.0 DESCRIPTION

3.1 General:

AKWADRAIN™ Foundation Strip Drain is a composite drainage system consisting of a three-dimensional drainage

core and a nonwoven, needle-punched filter fabric and fittings. The filter fabric is wrapped around and bonded to the drainage core, preventing intrusion of backfill material and the filter fabric into the flow channels during backfilling. Soil particles are held back by the filter fabric, allowing water to pass through to the drainage core.

AKWADRAIN™ Foundation Strip Drain is 1 inch (25.4 mm) deep, and is available in standard nominal widths of 6, 12, 18, 24 and 36 inches (152, 305, 457, 610 and 914 mm, respectively) and roll lengths of 50 feet (152 m) to 500 feet (1524 m).

3.2 Components and Fittings:

3.2.1 Rigid Core: The Rigid Core component of the AKWADRAIN™ Foundation Strip Drain is thermoformed from a black extruded plastic to form an internal dimpled drainage core with a 1-inch (25.4 mm) depth.

3.2.2 Filter Fabric: The Filter Fabric component of the AKWADRAIN™ Foundation Strip Drain is a geotextile, made from polypropylene, that is black in color, nonwoven and needle-punched for water flow.

3.2.3 Splice Fitting: Splice fittings are used to connect rolls of AKWADRAIN™ together using a minimum 3-inch-wide (76 mm) polyethylene tape at each joint.

3.2.4 Tee Fitting: Tee fittings are used to join one run or branch of AKWADRAIN™ to another at a 90-degree angle. A minimum 3-inch-wide (76 mm) polyethylene tape is used to secure each joint.

3.2.5 Outlet Fitting: The Outlet Fitting is a black plastic fitting used to connect AKWADRAIN™ to the drainage piping, using a minimum 3-inch-wide (76 mm) polyethylene tape at the joint.

3.2.6 Corner Fitting: The Corner Fitting is a black plastic fitting used to connect AKWADRAIN™ sections around an inside or outside corner at a 90-degree angle. A minimum 3-inch-wide (76 mm) polyethylene tape is used to secure each joint.

3.2.7 Corner Guard Fitting: The Corner Guard is a black plastic fitting with polypropylene nonwoven geotextile bonded to plastic. The fitting is used as an alternative to the corner fitting to allow the bending of AKWADRAIN™ around an inside or outside corner at a 90-degree angle. A minimum 3-inch-wide (76 mm) polyethylene tape is used to secure each joint.

3.2.8 Step Down Fitting: The Step Down Fitting is a black plastic fitting used with AKWADRAIN™ to facilitate changing vertical height along a foundation. A minimum 3-inch-wide (76 mm) polyethylene tape is used to secure each joint.

3.2.9 Universal Fitting: The Universal Fitting is a black plastic fitting with polypropylene nonwoven geotextile bonded

to the plastic, and is used to connect various widths of AKWADRAIN™ to the drainage piping. A minimum 3-inch-wide (76 mm) polyethylene tape is used to secure each joint.

4.0 INSTALLATION

Prior to AKWADRAIN™ Foundation Strip installation, waterproofing or dampproofing shall be installed on the below-grade foundation or retaining wall in accordance with the applicable code. AKWADRAIN™ drainage material shall be unrolled along the footing at the base of the wall parallel to the length of the wall. The Filter Fabric adheres to the partially cured waterproofing or dampproofing. When AKWADRAIN™ is applied to cured waterproofing, dampproofing or concrete foundations, an adhesive compatible with the drainage material, or mechanical means (i.e., insulation anchors as specified by the waterproofing or dampproofing manufacturer), shall be used to hold the drain system in place. An outlet fitting shall be attached to the end of the AKWADRAIN™ Foundation Strip Drain, and a 4-inch-diameter (102 mm) plastic pipe complying with the applicable plumbing code is attached to the outlet fitting. The AKWADRAIN™ Foundation Strip Drain perimeter drain shall discharge by gravity or mechanical means into an approved drainage system that complies with the applicable plumbing code. The below-grade foundation or retaining wall shall then be backfilled and compacted to the density required by the applicable code.

The AKWADRAIN™ Foundation Strip Drain shall be installed in accordance with this report and the manufacturer's published installation instructions. Where the manufacturer's published installation instructions and this report differ, this report shall govern.

5.0 CONDITIONS OF USE

The AKWADRAIN™ Foundation Strip Drain as described in this report complies with, or is a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 The manufacturer shall submit installation instructions for the AKWADRAIN™ Foundation Strip Drain at the time of permit application.
- 5.2 When adhesives are used to attach the AKWADRAIN™ Foundation Strip drainage system to foundation or retaining walls, American Wick Drain Corporation shall verify compatibility of the adhesives with the drainage system.

6.0 EVIDENCE SUBMITTED

- 6.1 Installation instructions.
- 6.2 Data in accordance with the ICC-ES Acceptance Criteria for Composite Foundation Drainage Systems (AC243), dated February 2004.
- 6.3 A quality control manual.

7.0 IDENTIFICATION

Each package of the AKWADRAIN™ Foundation Strip Drain shall be identified with the name and/or trademark and the address of American Wick Drain Corporation or one of the report listees, as indicated in Table 1 of this report; the product name; and the evaluation report number (ESR-1107).

TABLE 1—COMPANY NAME/PRODUCT NAME CROSS-REFERENCE

COMPANY NAME	PRODUCT TRADE NAME
American Wick Drain Corporation	AKWADRAIN™
Epro Services, Inc.	ECODRAIN-DS™
Tremco Barrier Solutions, Inc.	DrainStar®