



Legacy report on the BOCA® National Building Code/1999

DIVISION: 33 00 00—UTILITIES

Section: 33 46 00—Subdrainage

REPORT HOLDER:

OHIO STATE HOME SERVICES, INC.

EVALUATION SUBJECT:

EVER-DRY FOUNDATION DRAINAGE SYSTEM

EVALUATION SCOPE:

Compliance with the following code:

BOCA® National Building Code/1999

- Section 1813.5.2 Foundation drains
- Section 1813.5.3 Drainage disposal
- Section 106.4 Alternative materials and equipment
- Section 1905.1 General (minimum concrete slab thickness)

DESCRIPTION

Ohio State Home Services, Inc./Ever-Dry Foundation Drainage System is a subsurface seepage drainage system for ground water or storm water on the below grade story or basement of existing residential buildings. The Ever-Dry Foundation Drainage System functions by directing water or moisture from the exterior side of the foundation. The system consists of two water interceptor/removal assemblies. One assembly is on the exterior of the foundation wall at the intersection of the grade and the foundation wall. This exterior assembly is intended to divert surface storm water before it travels down the face to the exterior of the existing foundation. The exterior assembly consists of a polyethylene film and a perforated PVC pipe set into a washed gravel trench that is a minimum of 18 inches (457 mm) deep. The other assembly is below the interior slab of the basement floor at the intersection of the basement floor and the foundation wall. This interior assembly is intended to remove ground water or storm water that has come into the foundation wall and traveled down the wall to this assembly. The interior assembly consists of a drain tile set into a washed gravel bed. The drain tile directs water or moisture so that it is discharged from the structure by gravity or mechanical means. Refer to Figure 1 at the end of this report for a schematic illustration of the system.

Both the exterior and interior drainage piping are installed so that they drain to a collection sump from which the water is directed away from the building. The exterior

drainage is to be through gravity means where possible and is to be kept separate from the interior portion. The interior assembly of the system is installed in a shallow trench along side the footing. The footing shall not be undermined under any circumstances during the excavation of this trench.

The completed installation of the Ohio State Home Services, Inc./Ever-Dry Foundation Drainage System shall result in a completely buried and concealed system.

CONDITIONS OF USE

This report is limited to the applications and products as stated in this report. The ICC-ES Subcommittee on National Codes intends that the report be used by the code official to determine that the report subject complies with the code requirements specifically addressed, provided that this product is installed in accordance with the following conditions:

- The system shall be installed in accordance with the manufacturer's installation instructions and this report.
- The footing shall not be undermined under any circumstances during the excavation of the trench required for the installation of the system.
- The system is limited to installation on existing residential construction only.
- There shall not be any exposed material on the interior side of the foundation wall after the installation of the system except for the "Waterproofer's Sand Mix" (Evercrete) concrete replacement material.
- The system shall not be installed when the load capacity of the wall is not adequate or is jeopardized by the excavation and/or installation. Methods required to enhance the capacity or stability of the foundation system shall be determined by a registered design professional and are outside the scope of this report. Repair of cracks in existing basement foundation walls shall be limited to nonstructural cracks.
- The system shall not be installed in such a manner as to reduce the lateral load-resisting capabilities of the basement foundation walls.
- Water which drains into this drainage system shall be collected and disposed of in an approved manner in accordance with the 1998 *International Plumbing Code*®.
- "Waterproofer's Sand Mix" from American Stone-Mix, Inc., (packaged under private label as Evercrete) shall be used for the replacement of concrete removed from an existing basement slab for the installation of the system when the thickness of the replacement is less than 3¹/₂-inch-thick (89 mm).

- The minimum thickness of the "Waterproofer's Sand Mix" from American Stone-Mix, Inc. (Evercrete) shall be 2 inches (51 mm).
- The system shall be installed only by work crews trained and employed by Ohio State Home Services.
- Use of the system as an alternative to waterproofing as prescribed by Section 1813.4 of the BOCA® *National Building Code*/1999 is outside the scope of this report.
- This report is subject to periodic re-examination. For information on the current status of this report, contact the ICC-ES.

ITEMS REQUIRING VERIFICATION

The following items are related to the installation of the report subject, but are not within the scope of the evaluation. These items are related to the determination of code compliance for the structure on which the subject is used.

- ✓ The collection and disposal system shall be installed in accordance with the 1998 *International Plumbing Code*®, the design of which is outside the scope of this evaluation. Water that collects in the exterior portion of the system shall be drained through gravity means if possible.
- ✓ Modifications and repairs of structural cracks to the existing foundation walls shall not be made without construction documents, prepared, signed and sealed by a registered design professional, and are outside the scope of this report.

APPLICATION FOR PERMIT

The aid in the determination of code compliance with this report, the following represents the minimum level of information to accompany the application for permit:

- The language "See ICC-ES Legacy Report No. 94-07."
- Specifications for this system shall reflect the conditions of this report.

- Instruction regarding investigation of the load-carrying capacity of the existing foundation system to determine adequacy of the wall to carry the imposed loads.
- Details that indicate the collection and disposal of water from the system complies with the requirements of the 1998 *International Plumbing Code*®.

INFORMATION SUBMITTED

- The manufacturer's patent documentation, dated September 3, 1985-Patent Number 4,538,386, (which includes a product description, design standard, material components, and installation instructions).
- A comparative analysis, prepared by Elizabeth Skalne, Research Engineer for American Stone-Mix, Inc., and reviewed and stamped by Kenneth W. Jensen, P.E., dated July 9, 1996, containing a modulus of rupture analysis, minimum compressive strength, and comparison between standard weight 3¹/₂-inch-thick (89 mm) concrete slab and the 2-inch-thick (51 mm) "Waterproofer's Sand Mix," (under the trade name "Evercrete") The analysis indicates that the 2-inch-thick (51 mm) "Waterproofer's Sand Mix" was the structural equivalent to the standard weight 3¹/₂-inch-thick (89 mm) concrete slab.

PRODUCT IDENTIFICATION

All Ohio State Home Services, Inc./Ever-Dry Foundation Drainage System components and materials or the packaging, manufactured in accordance with this report shall be marked at the plant with the following identification:

"See ICC-ES Legacy Report No. 94-07."

The report holder's contact information is the following:

OHIO STATE HOME SERVICES, INC.
365 HIGHLAND ROAD EAST
MACEDONIA, OHIO 44056
www.ohiostatewaterproofing.com

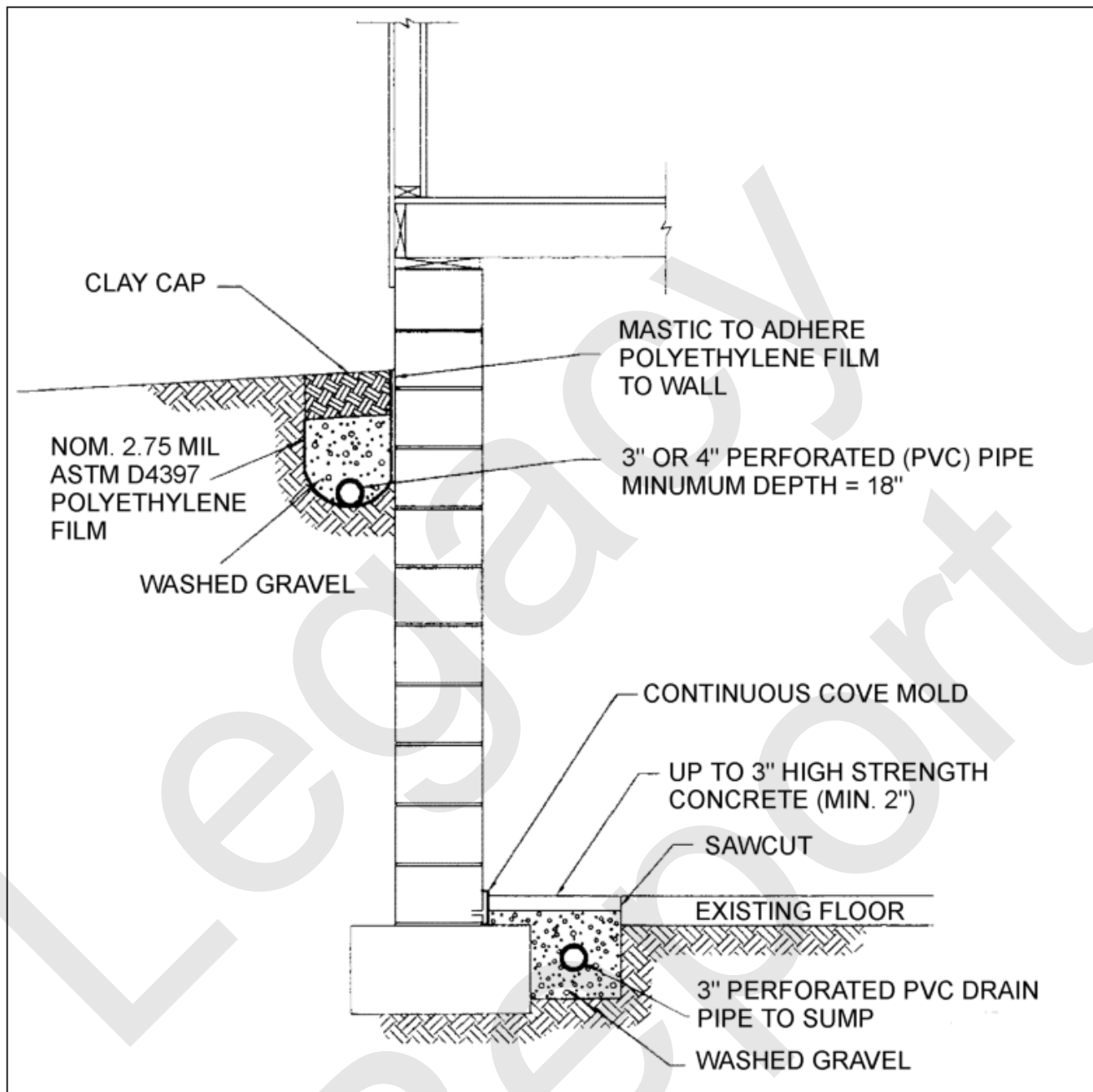


FIGURE 1—TYPICAL WALL SECTION