

Approval #

BP-032400001-BAP (Replaces DIS-012403004 & BP-042100004-BVP)

Industry Services Division 4822 Madison Yards Way P.O. Box 7302 Madison, WI 53701-7302

Wisconsin Building Product Evaluation

Material

PROFORM™ HD

Footing Form and Drainage System and Radon Removal System

Manufacturer

Prinsco Inc 1717 16th Street NE Willmar, MN 56201

SCOPE OF EVALUATION

This report evaluates the PROFORMTM HD for use as a footing form, as a drainage tile system, and as part of a radon removal system for use in the construction of commercial buildings and of one- and two-family dwellings. The information submitted was reviewed for compliance with the provisions of both the current Wisconsin Commercial Building Code and current Wisconsin Uniform Dwelling Code (UDC).

DESCRIPTION AND USE

The PROFORMTM HD drainage pipe is a stay-in-place form for concrete footing construction and serves as part of the foundation drain system and part of a radon removal system after construction. PROFORMTM HD is a rectangular shaped corrugated interior & smooth exterior pipe manufactured from recycled high-density polyethylene (HDPE) material. PROFORMTM HD's exterior dimensions are approximately 2.6-inches wide by 6.5 inches high, in lengths of up to 10 feet. The PROFORMTM HD pipe has 0.5-inch wide by 0.2-inch deep corrugated ribs on the interior and a smooth exterior with horizontal drainage slots. Nominal interior dimensions are 2-inch wide by 6 inches high. Wall thickness varies from about 0.02-inches to 0.125-inches. Installed level, PROFORMTM HD drainage pipe walls are perforated with four rows of slots to permit groundwater to enter the pipe interior, as can be seen in the PROFORMTM HD Foundation Drainage Specification.

For typical footing construction, the connection detail for the bleeder (cross-over) connections between the inner and outer PROFORMTM HD drains is as follows: a hole is cut into the PROFORMTM HD using a hole saw and a HDPE adapter is inserted into the hole. The process is repeated on the opposite side of the footing, and a length of corrugated HDPE pipe is connected between the adapters. Alternatively a 2" PVC bleeder may be used as indicated in the PROFORMTM HD Installation Guide from the manufacturer. Calculations are on file with the Department for the different hydraulics of bleeder sizes as used for spacing recommendations. This connection provides an unobstructed connection between the collector tile and a tile to the sump or outlet. The full area of the adapter is available to conduct groundwater from one side of the footing to the other. This connection offers less resistance to flow than the traditional butt joint connection of drain tiles, which provides only the area of the open joints or perforations. See the PROFORMTM HD Installation Guide for cutting 10' sticks of PROFORMTM HD.

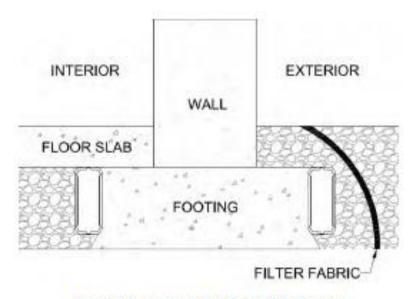


FIGURE 2—INSTALLATION CROSS SECTION Note: For illustrative purposes only

Accessories and fittings include couplings, 45° and 90° elbows, vertical 90° angle pieces for stepped foundations, end caps, single drain outlet, metal grade stakes, steel spacer/spreader straps, and 4-inch PROFROM crossover adapter. Spacer straps ensure equidistant form setup and can serve as a rebar chair. PROFORMTM HD can be used as part of a radon venting system when using the Radon Venting System Guide to remove that gas as is found on page 5 of the current PROFORMTM HD Installation Guide available from the manufacturer.

TESTS AND RESULTS

The PROFORM™ HD has been tested to appropriate sections of ASTM D3350, ASTM F405 & ASTM F667 standards for Polyethylene pipe and fittings. Safety Data sheet for Prinsco Inc. polyethylene pipe and fitting materials is available from the manufacturer, it indicates very low

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hazard of any sort. A signed report, by an independent testing laboratory or the manufacturer, which concludes that the product functions and performs in accordance ICC-ES Acceptance Criteria (AC10) assertions was submitted to ICC to obtain the ESR-4078 approval.

PROFORMTM HD shall be installed in accordance with manufacturer's installation instructions found at www.prinsco.com under residential products. PROFORMTM HD drainage pipe has earned an ICC- ES certification, for which the full report can be viewed (Control-click) from this link: https://icc-es.org/report-listing/esr-4078/. The PROFORMTM HD shall be installed with the gravel or crushed stone and an approved filter membrane material outside the footing per IBC 1805.4.2 [or SPS 321.17(3)(d)6.c. or (3)(d)4. UDC provision]. Recommended bleeder spacing noted in the current PROFORMTM HD Installation Guide is maximum 75' for 3" or 4" bleeders or maximum 40' spacing for 2" PVC with this system installation when both interior and exterior tiles are present for dwellings.

LIMITATIONS OF APPROVAL

The UDC limitations below are in accordance with the current **Wisconsin Uniform Dwelling Code:** PROFORMTM HD shall be installed in accordance with current manufacturer's installation instructions. The Wisconsin Building Product Evaluation Number must be provided when plans that include this product are submitted for review.

The commercial limitations below are in accordance with the current **Wisconsin Uniform Commercial Building Code:** PROFORMTM HD shall be installed in accordance with current manufacturer's installation instructions. The Wisconsin Building Product Evaluation Number must be provided when plans that include this product are submitted for review.

DISCLAIMER

This approval will be valid through 12/31/2029 unless manufacturing modifications are made to the product or a re-examination is deemed necessary by the department. The Wisconsin Building Product Evaluation Number must be provided when plans that include this product are submitted for review. This approval addresses only the specified applications for the product and does not waive any code requirement not specified in this document.

Reviewed by: Jack A. Miller
Peer Review: JLH .

Approval Date: 03/29/2024 By: Jack A. Miller

Commercial building plan examiner & product reviewer