

ICC-ES Evaluation Report

ESR-4829

Reissued May 2024


This report also contains:

- CBC and CRC Supplement

Subject to renewal May 2025

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<p>DIVISION: 33 00 00— UTILITIES</p> <p>Section: 33 46 00— Subdrainage</p>	<p>REPORT HOLDER:</p> <p>SUPER BEE HOLDINGS, LLC</p>	<p>EVALUATION SUBJECT:</p> <p>CHANNEL '58 DRAINAGE SYSTEM</p>	
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1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2021 and 2018 [International Building Code® \(IBC\)](#)
- 2021 and 2018 [International Residential Code® \(IRC\)](#)

Property evaluated:

- Interior Finish

2.0 USES

The Channel '58 Drainage System is used to lower the ground-water table as a supplement to the subsoil drainage system required in IBC Section 1805.4 and IRC Section R405.

3.0 DESCRIPTION

3.1 General: The Channel '58 Drainage System is intended for use in new and existing commercial and residential construction. The drainage system can be used with foundation walls of concrete masonry units, brick, stone, or poured concrete construction.

The components of the Channel '58 Drainage System are described in Sections 3.2 through 3.7.

3.2 Drain Channel: The Channel '58 Drainage System drain channel components are manufactured from an extruded polyvinyl chloride (PVC) compound. The drain channel component material is nominally 0.1 inch (2.54 mm) thick.

3.3 Cove Joint Protection: Polyethylene plastic sheets are applied to the cove joint of the inside face of the foundation wall to direct moisture below the floor level into the drainage channel. The cove joint protection consists of the materials described in either Section 3.3.1 or 3.3.2.

3.3.1 Dura Sealer (Option A): The Dura Sealer is 0.080-inch (2.03 mm) thick polyethylene plastic.

3.3.2 Footer Shield (Option B): The Footer Shield is 0.157-inch (4 mm) thick polyethylene plastic.

3.4 Wall Membrane Protection: Membranes are applied behind the cove joint protection described in Section 3.3.1. The wall membrane protection consists of the materials described in either Section 3.4.1 or Section 3.4.2.

3.4.1 Therma Sealer (Option A): The Therma Sealer is a 0.09-inch (2.29 mm) thick polyethylene film.

3.4.2 6-20 Mil Poly Woven Vapor Barrier (Option B): The 6-20 Mil Poly Woven Vapor Barrier is a 0.006- to 0.02-inch (0.15 to 0.51 mm) thick woven polyethylene membrane.

3.5 Plastic Angle: Plastic angles are used to connect the drain channel components and are manufactured from either polyvinyl chloride (PVC) or virgin high-density polyethylene (HDPE). They are 0.004 to 0.006 inch (0.1 to 0.15 mm) thick.

3.6 Crushed Stone: A nominal minimum 2-inch (50.8 mm) layer of 1-inch (25.4 mm) crushed stone is placed on one side of the drain channel to allow an air space between the footing and the channel.

3.7 Rivets: Thermoplastic or metal rivets are used to fasten the drain channel and plastic angle to the wall.

4.0 DESIGN AND INSTALLATION

4.1 General:

The Channel '58 Drainage System must be installed in accordance with the manufacturer's published installation instructions and this report. A copy of the manufacturer's published installation instructions must be available at the job site at all times during installation. See [Figures 1](#) and [2](#) for additional installation details.

The Channel '58 Drainage System crushed stone must be placed in accordance with IBC Section 1805.4 or IRC Section 405.1, as applicable.

Discharge of the Channel '58 Drainage System must be in accordance with IBC Section 1805.4.3 or IRC Section R405.1, as applicable.

4.2 Interior Finishes:

4.2.1 Class A: The Footer Shield cove joint protection and Therma Sealer wall membrane protection exhibit a flame spread index of less than 25 and a smoke-developed index of less than 450, per testing in accordance with ASTM E84. These components are considered Class A interior finishes per IBC Section 803.1.

4.2.2 Class C: The Dura Sealer cove joint protection exhibits a flame spread index of less than 200 and a smoke-developed index of less than 450, per testing in accordance with ASTM E84. This component is considered a Class C interior finish per IBC Section 803.1.

4.2.3 The 6-20 Mil Poly Woven Vapor Barrier and plastic angle meet the thickness exemption requirements outlined in Section 803.2 of the IBC for interior finish requirements.

5.0 CONDITIONS OF USE:

The Channel '58 Drainage System 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** Installation must comply with this report, the manufacturer's published installation instructions and the applicable code. In the event of a conflict between the manufacturer's published installation instructions and this report, this report governs.
- 5.2** Excavation near existing foundations shall be in accordance with IBC Section 1804.1.
- 5.3** Dampproofing and waterproofing must be in accordance with IBC Section 1805.2 and 1805.3 or IRC R405.1, as applicable.
- 5.4** Water flow capacity of the Channel '58 Drainage System is outside the scope of this report.
- 5.5** The structural capacity of the existing foundation and appurtenant structures is outside the scope of this report.

6.0 EVIDENCE SUBMITTED

- 6.1** Manufacturer's published descriptive literature and installation instructions.
- 6.2** Tests in accordance with ASTM E84.
- 6.3** Quality documentation in accordance with the [ICC-ES Acceptance Criteria for Quality Documentation \(AC10\)](#), dated November 2021.

7.0 IDENTIFICATION

- 7.1** The Channel '58 Drainage System components must be labeled with the manufacturer's name and this evaluation report number (ESR-4829).

7.2 The report holder's contact information is the following:

SUPER BEE HOLDINGS, LLC
DBA '58 FOUNDATIONS
205 WEST OKLAHOMA AVENUE
KNOXVILLE, TENNESSEE 37917
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www.58foundations.com

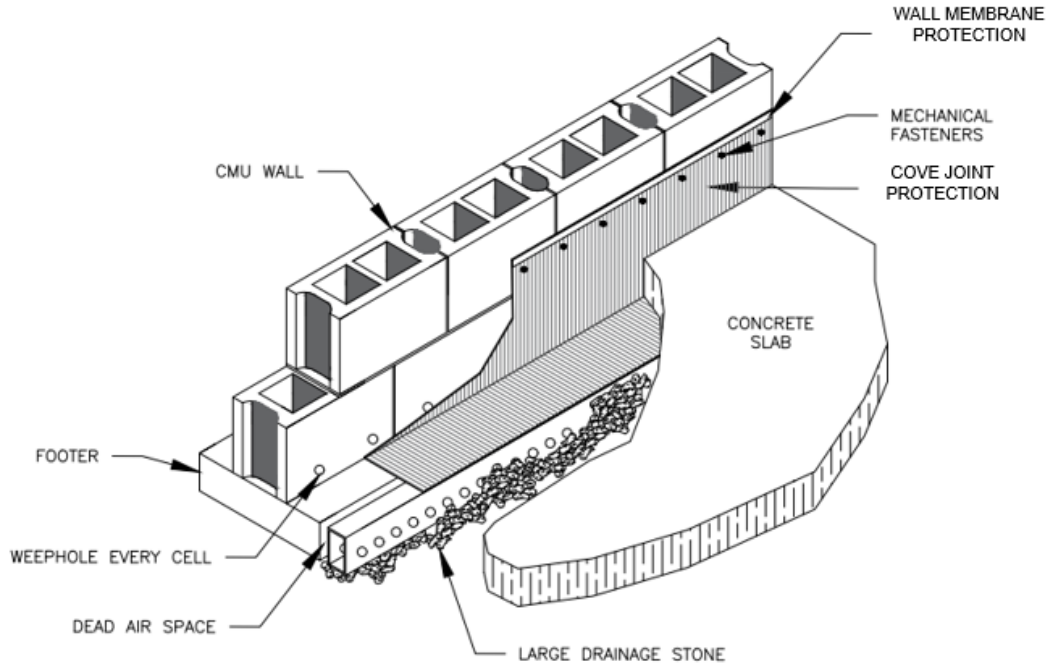


FIGURE 1—CHANNEL '58 DRAINAGE SYSTEM INSTALLATION (WITH CONCRETE MASONRY UNIT, BRICK, OR STONE WALL)

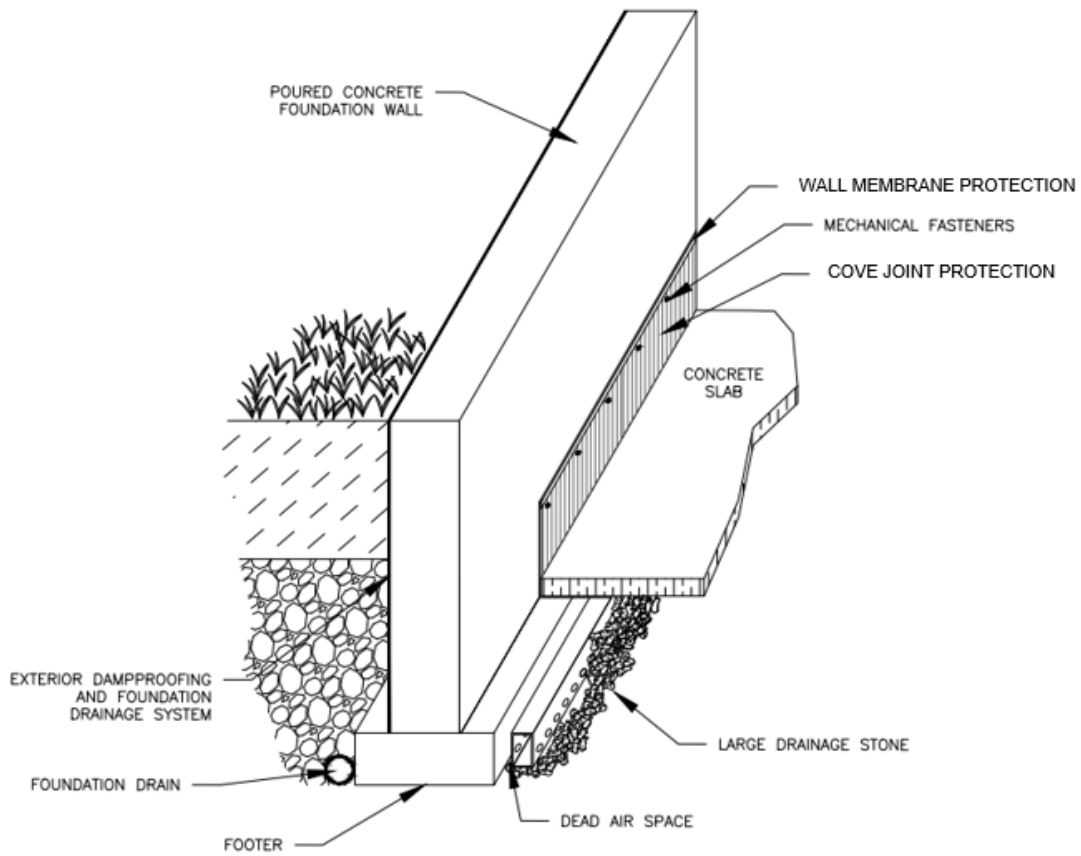


FIGURE 2—CHANNEL '58 DRAINAGE SYSTEM INSTALLATION (WITH POURED CONCRETE WALL)

DIVISION: 33 00 00—UTILITIES
Section: 33 46 00—Subdrainage

REPORT HOLDER:

SUPER BEE HOLDINGS, LLC DBA '58 FOUNDATIONS

EVALUATION SUBJECT:

CHANNEL '58 DRAINAGE SYSTEM

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that the Channel '58 Drainage System, described in ICC-ES evaluation report ESR-4829, has also been evaluated for compliance with the code(s) noted below.

Applicable code edition(s):

- 2022 California Building Code (CBC)

For evaluation of applicable Chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) AKA: California Department of Health Care Access and Information (HCAI) and the Division of State Architect (DSA), see Sections 2.1.1 and 2.1.2 below.

- 2022 California Residential Code (CRC)

2.0 CONCLUSIONS

2.1 CBC:

The Channel '58 Drainage System, described in Sections 2.0 through 7.0 of the evaluation report ESR-4829, complies with CBC Chapters 8 and 18, provided the design and installation are in accordance with the 2021 *International Building Code*® (IBC) provisions noted in the evaluation report and the additional requirements of CBC Chapters 8 and 18, as applicable.

2.1.1 OSHPD:

The applicable OSHPD Sections and Chapters of the CBC are beyond the scope of this supplement.

2.1.2 DSA:

The applicable DSA Sections and Chapters of the CBC are beyond the scope of this supplement.

2.2 CRC:

The Channel '58 Drainage System, described in Sections 2.0 through 7.0 of the evaluation report ESR-4829, complies with CRC Section 4829, provided the design and installation are in accordance with the 2021 *International Residential Code*® (IRC) provisions noted in the evaluation report and the additional requirements of CRC Section 4829, as applicable.

This supplement expires concurrently with the evaluation report, reissued May 2024.