

ICC-ES Evaluation Report

ESR-3939

Reissued April 2024


This report also contains:

- CBC and CRC Supplement

Subject to renewal April 2026

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DIVISION: 07 00 00— THERMAL AND MOISTURE PROTECTION Section: 07 84 13.16— Penetration Firestopping Devices	REPORT HOLDER: CORPLUG, INC	EVALUATION SUBJECT: CORPLUG	
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1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2015, 2012, and 2009 [International Building Code® \(IBC\)](#)
- 2015, 2012, and 2009 [International Residential Code® \(IRC\)](#)

Property evaluated:

- Penetration Firestopping

2.0 USES

The CorPlug system is used as a through-penetration fire stop system, in accordance with 2015 IBC Section 714.4.1.2 (2012 IBC Section 714.4.1.1.2 and 2009 IBC Section 713.4.1.1.2) and IRC Section R302.4.1.2, to fill and seal a round opening left by the removal of a previously installed through-penetration firestop system in an existing one- or two-hour fire-resistance-rated, 3.5-inch-thick concrete floor-ceiling assembly. When installed in accordance with this report, the CorPlug system as an F rating/T rating of 1 hour or 2 hours.

3.0 DESCRIPTION

3.1 General:

The CorPlug system consists of a 3.5 inch (89 mm) deep, concrete-type, solid truncated cone with a partially embedded, bent steel rod and an intumescent sealant. The system is designed to seal round openings in fire-resistance-rated floor-ceiling assemblies as shown in [Figure 1](#). The CorPlug is available in the models and sizes specified in [Table 1](#).

3.2 3M Fire Barrier Sealant CP 25WB+: The 3M Fire Barrier Sealant CP 25WB+ is a latex-based, intumescent, single-component sealant. The sealant is packaged in 10-fluid-ounce (296 ml) cartridges, 20-fluid-ounce (591 ml) sausages, 27-fluid-ounce (798 ml) cartridges, 2-gallon (7.6 L) pails and 5-gallon (18.9 L) pails. The sealant has a shelf life of 12 months when stored in original unopened containers and stored indoors in dry conditions between 68°F and 90°F (20°C and 32°C).

4.0 DESIGN AND INSTALLATION

4.1 General:

Installation of the CorPlug system must comply with this report, the manufacturer's published installation instructions and the applicable code. The report holder's published installation instructions are to be available at the jobsite at all times during installation.

4.2 Substrate Preparation:

The opening and adjacent surfaces in the concrete floor-ceiling assembly must be clean and free of contaminants, such as dirt, dust, oil, moisture, grease and wax, that may inhibit adhesion or curing of the sealant.

4.3 Application:

The system must be installed as shown in [Figure 1](#). A ½-inch (12.7 mm) diameter bead of the 3M Fire Barrier Sealant CP 25WB+ must be applied to the circumference of the concrete opening ½ inch (12.7 mm) below the top surface of the concrete and a ½ inch (12.7 mm) diameter bead of the sealant must be applied to the circumference of the solid truncated cone ½ inch (12.7 mm) from the bottom of the cone, to fill the annular space between the CorPlug and the edge of the opening in the concrete floor-ceiling assembly when the CorPlug system is installed.

5.0 CONDITIONS OF USE:

The CorPlug 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 Materials and methods of installation must comply with this report, the report holder's published installation instructions and the applicable code. In the event of a conflict between the report holder's published installation instructions and this report, this report governs.
- 5.2 Fire-resistance-rated floor-ceiling assembly must comply with the applicable code.

6.0 EVIDENCE SUBMITTED

- 6.1 Reports of testing in accordance with ASTM E814 and an engineering analysis.
- 6.2 Quality documentation.

7.0 IDENTIFICATION

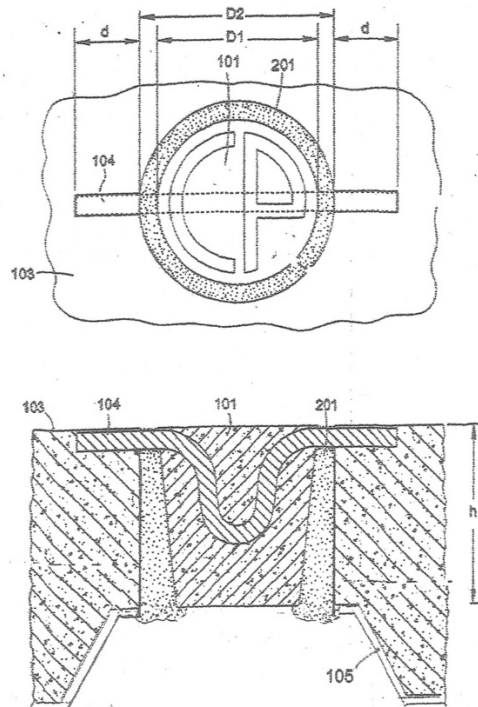
- 7.1 Each CorPlug described in this report is stamped with the letters "CP" on the top and traceability code consisting of year, month and batch number on the side. The product is also identified by a label bearing the manufacturer's name (CorPlug), the model number and the evaluation report number (ESR-3939).
- 7.2 The report holder's contact information is the following:

CORPLUG, INC.
2708 CARDINAL DRIVE
COSTA MESA, CALIFORNIA 92626
(714) 432-1995
www.corplug.com
info@corplug.com

TABLE 1—CORPLUG SYSTEM MODEL AND OPENING SIZES

Model Number	Opening Size Nominal Diameter ¹ (Inch)
10	1.0
15	1.5
20	2.0
25	2.5
30	3.0
35	3.5
40	4.0
45	4.5
50	5.0
55	5.5
60	6.0

¹The diameter of CorPlug is approximately $\frac{1}{8}$ -inch (3.2 mm) less than the opening size.



D2 = Diameter of hole to be sealed
D1 = Diameter of CorPlug: D2 – 0.125"
d = 1.0"
h = 3.50"

- 101 CorPlug assembly
- 103 2-hour fire-resistant-rated concrete floor-ceiling assembly
- 104 partially embedded, bent steel rod
- 105 18ga. steel floor deck
- 201 3M Fire Barrier CP25 WB+

FIGURE 1—TYPICAL INSTALLATION DETAILS

DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION

Section: 07 84 13.16—Penetration Firestopping Devices

REPORT HOLDER:

CORPLUG, INC.

EVALUATION SUBJECT:

CORPLUG

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that CorPlug, described in ICC-ES evaluation report ESR-3939, has also been evaluated for compliance with the codes noted below:

Applicable code editions:

- 2016 *California Building Code*® (CBC)
- 2016 *California Residential Code*® (CRC)

2.0 CONCLUSIONS

2.1 CBC:

The CorPlug, described in Sections 2.0 through 7.0 of the evaluation report ESR-3939, complies with Section 714.4.1.2 of CBC, provided the design and installation are in accordance with the 2015 *International Building Code*® (IBC) provisions noted in the evaluation report.

2.2 CRC:

The CorPlug, described in Sections 2.0 through 7.0 of the evaluation report ESR-3939, complies with Section R302.4.1.2 of CRC, provided the design and installation are in accordance with the 2015 *International Residential Code*® (IRC) provisions noted in the evaluation report.

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