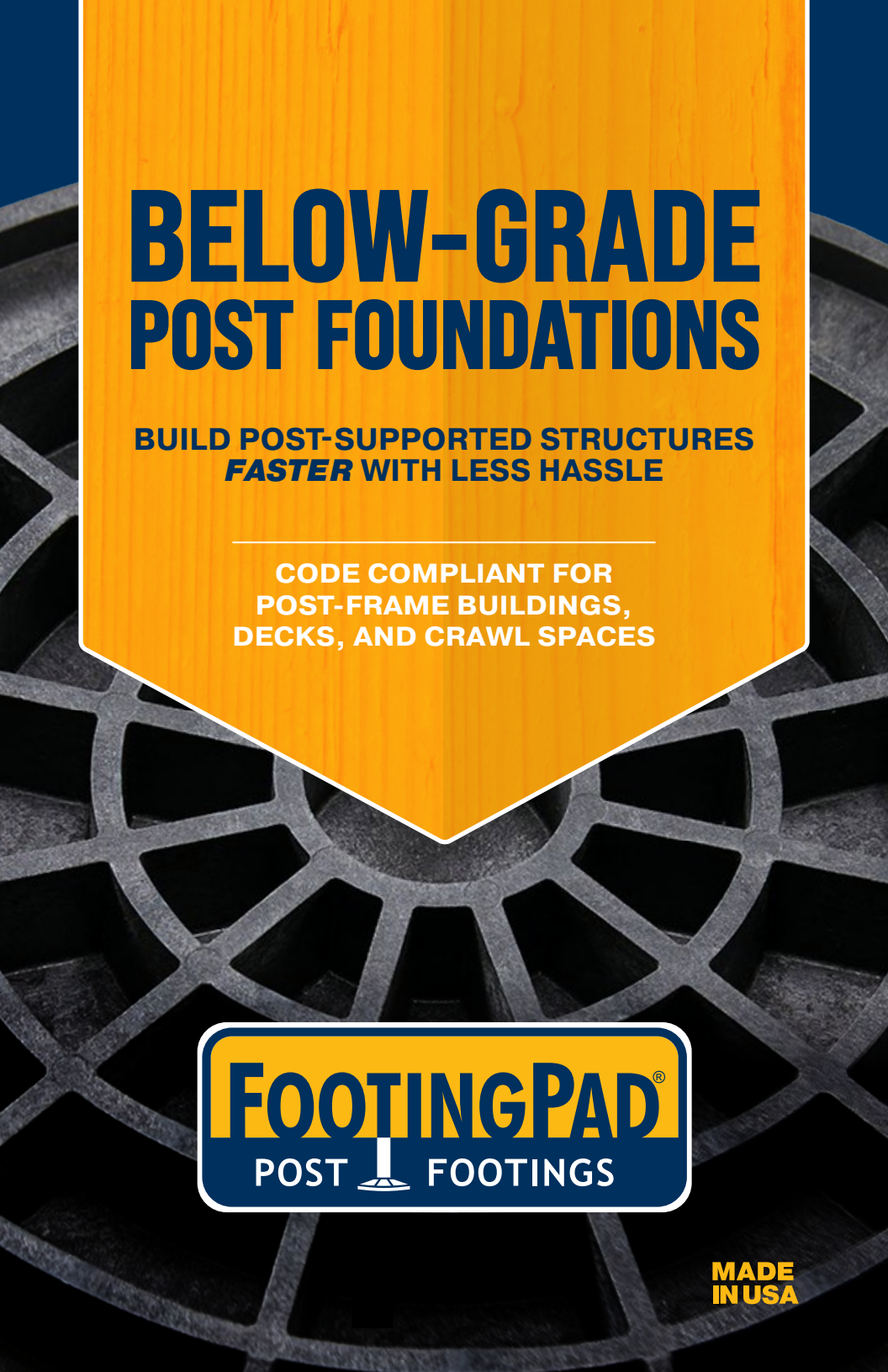
BELOW-GRADE POST FOUNDATIONS

BUILD POST-SUPPORTED STRUCTURES *FASTER* WITH LESS HASSLE

CODE COMPLIANT FOR POST-FRAME BUILDINGS, DECKS, AND CRAWL SPACES



FOOTINGPAD®
POST FOOTINGS

MADE IN USA

SUPERIOR TO CONCRETE

FootingPad® footings are easy to handle, quick to install, and engineered for lasting durability—unlike traditional concrete which is heavy, messy to mix, slow to cure, and prone to cracking.

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WHY USE FOOTINGPAD®

Lightweight and easy to use
FootingPad® is the only code compliant below-grade footing that is lightweight and easy to use.

Reduces labor costs
No need to transport and mix heavy concrete on the jobsite.

Easy to transport
Reduces transportation costs by eliminating pallets of heavy concrete footings or dry concrete.

Lifetime warranty

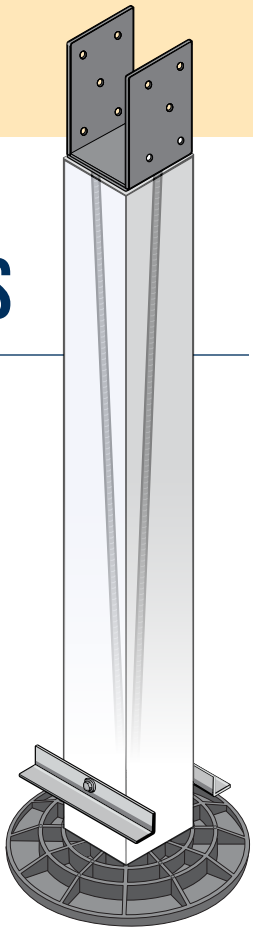
FEATURES AND BENEFITS

Engineered and third-party tested to be code compliant (ICC ESR-2147).

ICC ES ESR-2147

Eliminates hundreds of pounds of material to transport and handle.

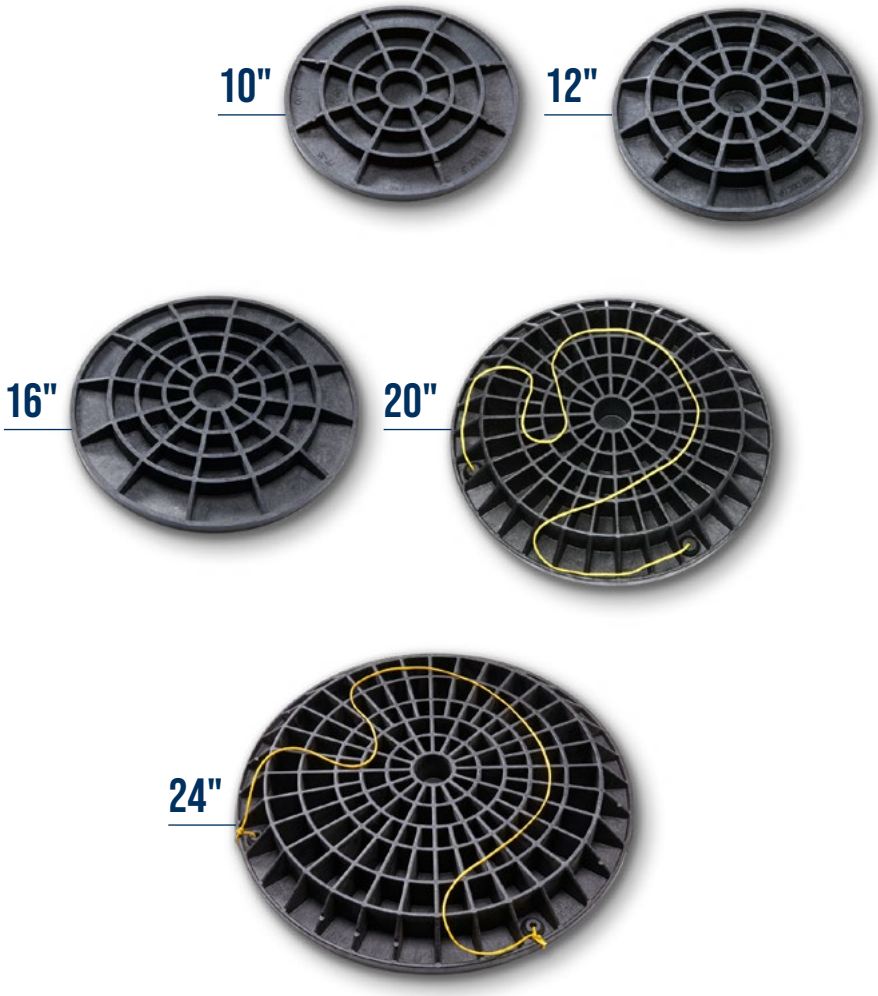
No mixing of concrete or jobsite delays waiting for concrete to cure.



FIVE SIZES AVAILABLE

Support loads up to 9,327 lbs!

FootingPad® supports the same load as equal-sized concrete footing.



CODE COMPLIANCE

Independently tested and certified to meet International Code Council building code standards.

FootingPad® is ICC-ES-certified for post-frame buildings, decks, and crawl spaces.

The ICC-ES Evaluation Report (ESR-2147) can be downloaded from footingpad.com/ICC.

IMPORTANT

ICC ES ESR-2147

Provide a printed copy of the ESR report to your building inspector to show code compliance.

MULTIPLE USES

FootingPad® is engineered and ICC-ES-certified to support solid wood posts, laminated columns, pre-cast concrete columns, concrete poured in Sonotubes, and crawl space jacks.

Solid wood post or laminated column

Perma-Column®

Sonotube

Crawl space jack

SIZING FOOTINGS

FootingPad® footings support the same loads as equal-sized concrete footings.

Footing size selection must be based on both the load it will carry and the type of supporting soil. In an overload condition, failure occurs in the soil—not the footing. When overstressed, the footing settles as the underlying soil compresses or shears.

DIAMETER	WEIGHT	ALLOWABLE LOADS*			
		1,500 PSF SOIL	2,000 PSF SOIL	2,500 PSF SOIL	3,000 PSF SOIL
10"	1 lb.	810 lbs.	1,081 lbs.	1,351 lbs.	1,622 lbs.
12"	2 lbs.	1,126 lbs.	1,536 lbs.	1,946 lbs.	2,356 lbs.
16"	4 lbs.	2,009 lbs.	2,739 lbs.	3,470 lbs.	4,200 lbs.
20"	9 lbs.	2,687 lbs.	3,973 lbs.	5,259 lbs.	6,545 lbs.
24"	13 lbs.	4,013 lbs.	5,784 lbs.	7,556 lbs.	9,327 lbs.

*Maximum load based on the psf soil capacity noted

Detailed sizing information is available on footingpad.com

BUILDING WIDTH GUIDELINES

2,000 PSF SOIL 5 PSF DEAD LOAD 8-FT. POST SPACING

	SNOW LOAD											
BUILDING WIDTH	5 PSF	10 PSF	15 PSF	20 PSF	25 PSF	30 PSF	35 PSF	40 PSF	45 PSF	50 PSF	55 PSF	60 PSF
24 ft.	10"	16"	16"	16"	20"	20"	20"	20"	24"	24"	24"	24"
28 ft.	12"	16"	16"	20"	20"	20"	24"	24"	24"	24"	Adjust	Adjust
32 ft.	12"	16"	16"	20"	20"	24"	24"	24"	Adjust	Adjust	Adjust	Adjust
36 ft.	12"	16"	20"	20"	20"	24"	24"	Adjust	Adjust	Adjust	Adjust	Adjust
40 ft.	16"	16"	20"	20"	24"	24"	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust
44 ft.	16"	16"	20"	24"	24"	24"	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust
48 ft.	16"	20"	20"	24"	24"	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust
52 ft.	16"	20"	20"	24"	24"	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust
56 ft.	16"	20"	24"	24"	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust
60 ft.	16"	20"	24"	24"	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust
64 ft.	16"	20"	24"	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust
68 ft.	16"	20"	24"	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust
72 ft.	20"	20"	24"	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust
76 ft.	20"	24"	24"	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust
80 ft.	20"	24"	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust
84 ft.	20"	24"	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust
88 ft.	20"	24"	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust
92 ft.	20"	24"	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust
96 ft.	20"	24"	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust	Adjust

SIZING FOR TRIBUTARY AREA

SNOW LOAD	TRIBUTARY AREA	FOOTINGPAD® DIAMETER BY SOIL CAPACITY (PSF)			
		1,500 PSF	2,000 PSF	2,500 PSF	3,000 PSF
40 PSF	20 sq. ft.	10"	10"	10"	10"
	40 sq. ft.	16"	16"	12"	10"
	60 sq. ft.	20"	16"	16"	16"
	80 sq. ft.	24"	20"	16"	16"
	100 sq. ft.	24"	20"	20"	16"
	120 sq. ft.	n/a	24"	20"	20"
	140 sq. ft.	n/a	24"	24"	20"
	160 sq. ft.	n/a	n/a	24"	20"
50 PSF	20 sq. ft.	12"	10"	10"	10"
	40 sq. ft.	20"	16"	16"	12"
	60 sq. ft.	24"	20"	16"	16"
	80 sq. ft.	24"	20"	20"	16"
	100 sq. ft.	n/a	24"	20"	20"
	120 sq. ft.	n/a	24"	24"	20"
	140 sq. ft.	n/a	n/a	24"	24"
	160 sq. ft.	n/a	n/a	n/a	24"
60 PSF	20 sq. ft.	16"	12"	10"	10"
	40 sq. ft.	20"	16"	16"	16"
	60 sq. ft.	24"	20"	20"	16"
	80 sq. ft.	n/a	24"	20"	20"
	100 sq. ft.	n/a	24"	24"	20"
	120 sq. ft.	n/a	n/a	24"	24"
	140 sq. ft.	n/a	n/a	n/a	24"
	160 sq. ft.	n/a	n/a	n/a	n/a
70 PSF	20 sq. ft.	16"	12"	12"	10"
	40 sq. ft.	24"	20"	16"	16"
	60 sq. ft.	24"	24"	20"	20"
	80 sq. ft.	n/a	24"	24"	20"
	100 sq. ft.	n/a	n/a	24"	24"
	120 sq. ft.	n/a	n/a	n/a	24"
	140 sq. ft.	n/a	n/a	n/a	n/a
	160 sq. ft.	n/a	n/a	n/a	n/a

EASY INSTALLATION

1 Dig the post hole

Dig post hole slightly wider than the FootingPad® diameter and deeper than the frostline or 24 inches deep (whichever is greater).

2 Level and compact the bottom

Use a 2x4 or other tool to level and compact the soil at the bottom of the hole.

3 Place the FootingPad®

Place FootingPad® in the bottom of the hole, smooth side down.

4 Place the post

Place post in the hole approximately centered on top of the FootingPad®.

5 Backfill

Backfill around the post with the original soil. No concrete required.

6 Compact soil and check alignment

Compact the backfill around the post every 12 inches as you fill the hole. Use a level to ensure the post is straight.

ONLINE TOOLS: FOOTINGPAD.COM

Easy-to-use Sizing Calculators

Building Code Compliance (ESR-2147)

Footings 101 (Educational Materials)

FootingPad® vs. Concrete

Sizing Charts

VIDEOS: YouTube
youtube.com/@footingpad

FAQS

What will my inspector say?

Inspectors recognize ICC-ES-certification and typically approve FootingPad® if sized correctly for the load of your structure. Provide ESR-2147 to your inspector, available on footingpad.com.

What size do I need?

Size is determined by load and soil type. Use sizing charts and calculator on footingpad.com.

What about lateral support?

Lateral (side-to-side) support is provided by the compacted backfilled soil.

What if I don't want to put wood in the ground?

FootingPad® can be used with Perma-Column® pre-cast concrete posts or Sonotube concrete forms.

What about uplift resistance?

Simple cleats attached to the post near the footing will provide uplift resistance.

ICC-ES EVALUATION REPORT PAGE 1

ICC EVALUATION SERVICE®

ICC-ES Evaluation Report

ESR-2147

Reissued May 2024

Revised September 2024

Subject to renewal May 2026

ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.

DIVISION: 31 00 00—EARTHWORK Section: 31 60 00—Special Foundations and Load-Bearing Elements	REPORT HOLDER: PERMA-COLUMN, LLC FOOTINGPAD POST FOOTINGS	EVALUATION SUBJECT: PERMA-COLUMN FOOTINGPAD® MODELS FP-10, FP-12, FP-16, FP-20, AND FP-24	

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2024, 2021, 2018, 2015, and 2012 *international Building Code®* (IBC)
- 2024, 2021, 2018, 2015, and 2012 *international Residential Code®* (IRC)

Properties evaluated:

- Structural
- Durability

2.0 USES

The FootingPad® models FP-10, FP-12, FP-16, FP-20, and FP-24 are used as footings for the support of post columns in exterior locations or under-floor spaces in buildings of Type V construction under the IBC or any construction under the IRC. The FootingPad® post foundations are used as individual, isolated footings supporting gravity loads only.

3.0 DESCRIPTION

The FootingPad® models FP-10, FP-12, FP-16, FP-20, and FP-24 are molded composite footings manufactured from a proprietary composite of engineered polypropylene and fiberglass. The FootingPad® post foundations are circular, ribbed-plastic pads formed by an injection molding process. See Figures 1, 2, 3, 4 and 5 for dimensions and rib configurations.

4.0 DESIGN AND INSTALLATION

4.1 Design:

The FootingPad® post foundations are designed as shallow or surface rigid footings that transmit, uniformly to the supporting soil, the applied gravity load imposed by a minimum $3^1/_2$-inch by $3^1/_2$-inch (89 mm by 89 mm) post on the FP-10 pad, a minimum $3^1/_2$-inch-by-$3^1/_2$-inch (89-mm-by-89-mm) post on the FP-12 pad, a minimum $4^1/_2$ inch by $5^1/_2$ inch (114 mm by 140 mm) post on the FP-16 pad, a minimum $4^1/_2$ inch by $5^1/_2$ inch (114 mm by 140 mm) post on the FP-20 pad and a minimum $4^1/_2$-inch–by-$5^1/_2$-inch (114-mm-by-140-mm) post on the FP-24 pad. The posts must have a solid base bearing on the pads. Allowable loads are controlled by the type of supporting soil. The post foundations design load must not exceed the allowable gravity loads shown in Table 1.

ICC-ES EVALUATION REPORT PAGE 2

4.2 Installation:

The post location or spacing must be determined by the loads imposed on the FootingPad® post foundation and the allowable load for the specific type of soil (see Table 1). If in a post application, the post hole must be slightly larger than the post foundation diameter and deep enough to satisfy all design requirements. The bottom of the hole must be flattened and leveled to provide a uniform bearing surface for the FootingPad® post foundation. The FootingPad® post foundations must be placed into the hole with the flat side down. The footing must be tamped until level and stable in the bottom of the hole. The square-cut-post end must be positioned as close as possible to the center of the FootingPad® post foundation and the post must be plumbed. The dirt around the post must be placed in 12-inch lifts (30.5 cm), tamping each lift before more soil is added.

5.0 CONDITIONS OF USE:

The FootingPad® models FP-10, FP-12, FP-16, FP-20, and FP-24 described in this report comply with, or are suitable alternatives 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 applicable code and the manufacturer's published installation instructions. If there is a conflict between the manufacturer's installation instructions and this report, this report governs.

5.2 The FootingPad® post foundations are used to support post columns for Type V construction under the IBC or any construction under the IRC.

5.3 Exterior FootingPad® post foundations must be placed not less than 12 inches (305 mm) below the undisturbed ground surface (i.e., finished grade) in accordance with IBC Section 1809.4 and IRC Sections R403.1.4 and R507.3.2.

5.4 Exterior FootingPad® post foundations must be installed below the frost line of the locality unless protected from frost in accordance with IBC Section 1809.5 and IRC Sections R403.1.4.1 and R507.3.3.For installation in under-floor spaces such as crawl spaces in compliance with the IBC and IRC, the bottom of interior footings are permitted to be installed at finished grade unless otherwise required by IBC Section 1809.5 or IRC Section R403.1.4.1 for frost protection or by IBC Section 1805.1.2 or IRC Section R408.6 for surface or ground-water.

5.5 The FootingPad® post foundations must be used as individual isolated footings to resist bearing loads only and must not be used to resist lateral or uplift loads.

5.6 The design of the structure supported by the FootingPad® post foundations is outside the scope of this report.

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Molded Plastic Footing Pads (AC49), dated August 2013 (editorially revised July 2024).

7.0 IDENTIFICATION

7.1 Each FootingPad® post foundation must have a permanent label or etching including the name of the manufacturer, the model number, and the evaluation report number (ESR-2147).

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

PERMA-COLUMN PRODUCTS, INC.
400 CAROL ANN LANE
OSSIAN, INDIANA 46777
(800) 522-2426
www.footingpad.com

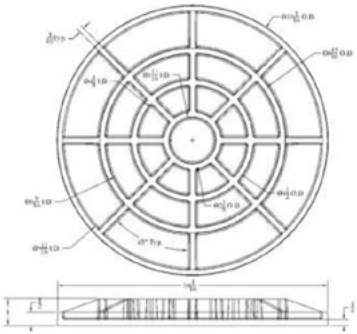
ICC-ES EVALUATION REPORT PAGE 3

TABLE 1— FOOTINGPAD® POST FOUNDATION ALLOWABLE LOADS (POUNDS) RELATED TO LOAD-BEARING PRESSURES OF FOUNDATION MATERIALS

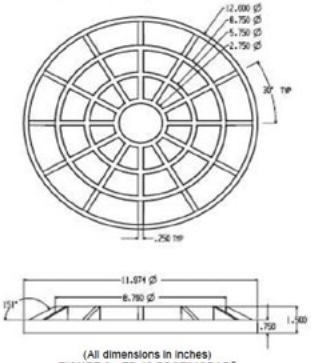
FOOTINGPAD® MODEL	PAD DIAMETER	LOAD-BEARING PRESSURES OF FOUNDATION MATERIALS[1]			
		1500 psf	2000 psf	2500 psf	3000 psf
FP-10	10 inch	810 lbs.	1081 lbs	1351 lbs	1622 lbs.
FP-12	12 inch	1126 lbs.	1536 lbs	1946 lbs	2356 lbs.
FP-16	16 inch	2009 lbs.	2739 lbs	3470 lbs	4200 lbs.
FP-20	20 inch	2687 lbs.	3973 lbs	5259 lbs	6545 lbs.
FP-24	24 inch	4013 lbs.	5784 lbs	7556 lbs	9327 lbs.

For **SI:** 1 inch = 25.4 mm; 1 lbf = 4.4 N; 1 lbf/ft^2 = 47.9 Pa.

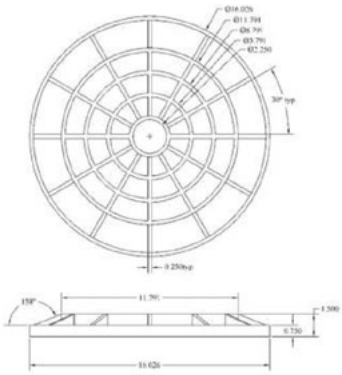
1. Load-bearing pressures of foundation materials shall be determined using the presumptive load-bearing values in IBC Table 1806.2 or IRC R401.4.1, as applicable, or the load-bearing values shall be determined with a site-specific soil investigation, as required by the code official.



(All Dimensions in inches)
FIGURE 1—FP-10 FOOTINGPAD®

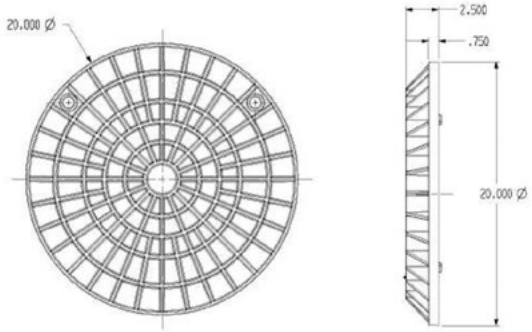


(All dimensions in inches)
FIGURE 2—FP-12 FOOTINGPAD®

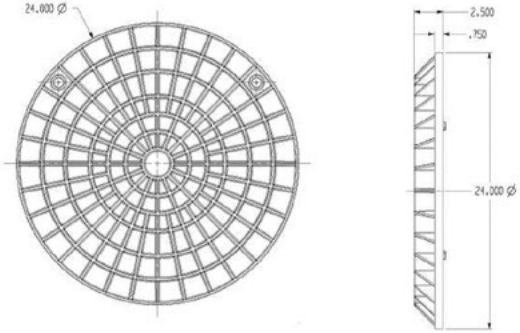


(All Dimensions in inches)
FIGURE 3—FP-16 FOOTINGPAD®

ICC-ES EVALUATION REPORT PAGE 4



(All Dimensions in inches)
FIGURE 4— FP-20 FOOTINGPAD®



(All Dimensions in inches)
FIGURE 5—FP-24 FOOTINGPAD®

A FAMILY OF PERMANENT FOUNDATION SOLUTIONS

PERMA COLUMN®

RICHLAND LAMINATED COLUMNS

PERMA-COLUMN DECK POSTS™

STURDI-WALL® BY PERMA-COLUMN

FOOTINGPAD® POST FOOTINGS

25-FPAD-003

MADE IN USA