



PIN FOUNDATIONS INC

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DESIGN and ENGINEERING

Pin Foundations are pre-engineered systems. For some applications, in poorer soils or where heavy loads are being considered, a pier capacity must be determined from soils information specific to each site. The steps below will help you to define your project so that a Pin Foundation representative can assist you with your order.

Step 1—Determine your soil and site characteristics.

For Pin Foundations to determine load capacity, you must provide a general description of the soil, along with its angle of internal friction (phi angle), cohesive strength (if applicable) and dry unit weight.

This information can be obtained from sampling within the typical pin depth - 3 to 7 ft for DP-100, 2 to 5 ft for DP-50 - and need not involve a testing lab or expensive coring equipment. Most local geotechs can make these determinations with a single field visit, or be able to determine the information from regional soil surveys or previous soils studies done on site. Generally two to three samplings will suffice within a given project area.

Describe your site in terms of vegetation, topography, seasonal or consistent water or saturation levels, frost depth and water flow if applicable.

Step 1—Determine your structure's loads, preferred materials, height and width.

Boardwalk, Deck or Shed Construction

The capacity developed in step 1 will lead directly to recommended superstructure spans depending on the structure's width, height above grade and any additional loads. The use of railings, roofs, bridges and ramps will all affect the loading characteristics of the project and must be defined for Pin Foundations Inc.

Define your local snow loads (if applicable), pedestrian (psf) or vehicle loads, and superstructure dead loads along with spans, widths and proposed joist, post or beam sizes.

When considering your options, try to pick materials that are locally available, and will be acceptable to local building officials and environmental groups for use on your site. For boardwalk structures, consider the movement of wildlife on site when determining the height of the structure, and the related visual impact of railing systems and ADA access requirements. Consider also the bulk of the members you intend to use both for visual and site access issues, and the complexity of the structure as it relates to available contractor or volunteer labor skills.

The layout of the structure across should avoid large trees and their associated roots, which can make pin driving more time consuming. It should also skirt waterways or exposed rock. Although many pin installations have been done in difficult soil conditions, these types of installation are more difficult and expensive.

Step 3—Call your Pin Foundation Representative.

With the information above in hand, your representative can select the best system for your project, help detail or specify it for permit drawings if necessary, and provide you with material and shipping costs.

Provide your "Ship To:" zip code, the type of labor you intend to use - ie volunteer, general contractor or "in-house" crew, and indicate whether they can provide a forklift or not for offloading shipments.

There are generic details, manufacturer's installation instructions, and specifications on our web page that can be used, and/or revised as necessary for your specific project. Please call 1-253- 858-8809 or visit www.pinfoundations.com.