

COMMERCIAL AND SPECIAL-ORDER PROJECT SERVICES

Diamond Pier foundations for commercial and special-order projects are based on site-specific soils and project structure loading information provided by the customer, contractor, designer, or project sponsor. The steps below provide guidelines for preparing the required project information for submittal to Pin Foundations, Inc. (PFI).

Step 1: Determine soil and site characteristics.

A general description of the site and soil, along with the soil's angle of internal friction (phi angle), cohesive strength, and in-place unit weight, must be provided. This information can be obtained from geotechnical sampling within the typical pin depth. Generally, two to three samplings will suffice within a given project area, unless significant changes in topography, saturation, or vegetation indicate potential soil variations. If there is standing water on the site, this must be defined as year-round, tidal, or seasonal, and the typical depth should also be defined. If the water is flowing, velocities and/or heights relative to the proposed structure may be required. The local regional frost depth must also be indicated, if applicable. If the site is sloped, the degree or slope ratio must be provided. Slopes steeper than 2:1 (27 degrees) are not typically appropriate for Diamond Pier foundation systems. See the [Sample Soils Letter](#) documents on our website for examples of the geotechnical information required.

Step 2: Determine structural loads.

The structural loads (bearing, uplift, lateral) for each Diamond Pier footing must be provided. Project configuration, size, height above grade, materials, and dead and live loads—including pedestrian or vehicle loads, snow loads, or load combinations—will all lead to the necessary bearing, uplift, and lateral loads that transfer to the foundations. These loads should all be calculated for each Diamond Pier foundation and submitted to PFI for review. Proposed post or beam sizes intended for connection to the foundations should also be provided to ensure compatibility with the pier model type, plinth size, embedded anchor bolt(s), and configuration(s).

Note: The layout of the structure should avoid 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 such conditions, these types of installation can be more difficult.

Step 3: Contact your PFI representative.

With the information gathered in steps 1 and 2, your PFI representative can assist in specifying the appropriate foundation system for your project. PFI offers either a Manufacturer's Capacity Analysis or an Engineer Stamped Submittal. Generic details, manufacturer's installation instructions, and specifications are available on our website to add to your project documents.

Step 4: Obtain a project quote.

With the proper Diamond Pier model(s) specified, estimated material, services, and shipping costs can be provided, along with time frames for delivery. (Please have a "Ship To" address and zip code available.) Please note, however, that reviewing project information, determining pier size, pin length, and product quantities, and preparing quotes for public bidding must be done properly and thoroughly. Please be sure to leave enough time for PFI to respond to your specific project requirements.

Visit www.diamondpiers.com or call 866-255-9478 (toll free) or 253-858-8809 for more information.