

Getting Started / Project Services

Ground Frame Beam, Saddle, and Column capacities are specified based on site-specific soils, structure-specific loads, and design-specific information. The foundation designs are to be submitted by the project sponsors as a stamped engineer's alternative under the IBC or other applicable building codes. The steps below provide guidelines for preparing project information for Pin Foundations, Inc. (PFI) to assist in finalizing your Ground Frame project.

Step 1: Determine soil and site characteristics.

A general description of the project site is required, along with detailed geotechnical information about the topsoil and underlying mineral soils. Required information for the mineral soils includes the soil's in-place unit weight, cohesive strength, and angle of internal friction (phi angle). Soil log blow counts (N-values) are also requested. This information can be obtained from geotechnical sampling within the typical pipe depth of 2-4 feet. 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 the site is sloped, the degree or slope ratio must be provided. Slopes steeper than 3:1 are not typically appropriate for Ground Frame installations.

Step 2: Determine structural loads.

The structural loads that the building will put on the foundation (bearing, uplift, lateral) must be determined. Project configuration, use, size, height, and preferred building materials all contribute to the live and dead loads that transfer to the foundation. These loading parameters should be provided to PFI as early in the design process as possible. For light frame structures, please provide the pounds per linear foot (plf) around the perimeter, lateral loads for each wall plane, and any point loads—bearing and/or uplift—at any column or shear panel edge locations.

Step 3: Contact your PFI representative.

With the soils and loading information, your PFI representative can assist in selecting the appropriate Ground Frame products for your project. Please be prepared to discuss the required height of the frame for your site, any drainage or slope conditions, any ADA access requirements if applicable, and your preferred design aesthetic for the frame perimeter at grade—i.e., fully skirted, partially skirted, or fully open. PFI offers either a Manufacturer's Capacity Analysis or an Engineer Stamped Capacity Submittal depending on your permitting requirements. Project connection details, installation instructions, and project specifications are available on our website or can be developed specifically for your project as required.

Step 4: Obtain a project quote and start building.

Once the proper Ground Frame components are specified and a delivery address has been provided, estimated costs for materials, services, and shipping can be provided, along with time frames for delivery. Reviewing project information, determining foundation size, pipe lengths, product quantities, and framing elements, and preparing quotes must be done properly and thoroughly. Please be sure to leave enough time for PFI to respond to your specific project requirements.