

NORMAL CONSTRUCTION CONDITIONS LOAD CHART

Model & Pin Length >	DP-50 ESR-1895 Code Compliant				
	DP-50 36"	DP-50 42"	DP-50 50"	DP-75 50"	DP-75 63"
Bearing in 2000 psf Sands ¹	3600#	3600#	3600#	5150#	5850#
Bearing in 1500 psf Silts/Clays ¹	2700#	2700#	2700#	3870#	4400#
Equivalent Bearing Area	1.8 sf	1.8 sf	1.8 sf	2.58 sf	2.93 sf
Base Area Comparison	18" cylinder	18" cylinder	18" cylinder	21" cylinder	23" cylinder
Uplift	670#	920#	1175#	1215#	1380#
Lateral	575#	820#	1070#	1150#	1310#
Frost Zone Rating	36"	42"	48"	48"	60"

NOTES:

1. Values applicable in properly drained, sound soils with a minimum 1500 psf bearing capacity. See IRC Table R401.4.1 for complete soils listing.
2. For simple structures only. No asymmetrical, rotational, overturning, or dynamic loads.
3. For safe sites only. For steep slopes, seismic zones E, sites exposed to hurricanes, floods, or high water, or sites with historic evidence of conventional foundation failure, special construction conditions review may be required. Wind design in designated areas per the 2012 IRC may also be required.
4. All capacities use four pins of the specified length per foundation. Length includes that portion embedded within the foundation head. Load capacities shown may be higher when site-specific evaluation is performed.
5. DP-50 uses defined in paragraph 2.0 of ESR-1895 are limited to residential decks, covered decks, stairways, and walkways. For DP-50 uses beyond these types of projects, refer to the Cross Pin Group Test Report (EEI Report No. 07-020-8).
6. Minimum 50" Pins are recommended for use of DP-50 where uplift and/or lateral loads govern.
7. See Diamond Pier Installation Manual for description of sound soils, simple structures, and safe sites.

Larger Size Diamond Pier foundations are also available: Models DP-100E and DP-200E.

For these larger pier sizes, site-specific soils information, project application and loads must be determined by a registered design professional and provided to Pin Foundations, Inc., for calculated pier/pin capacities.