

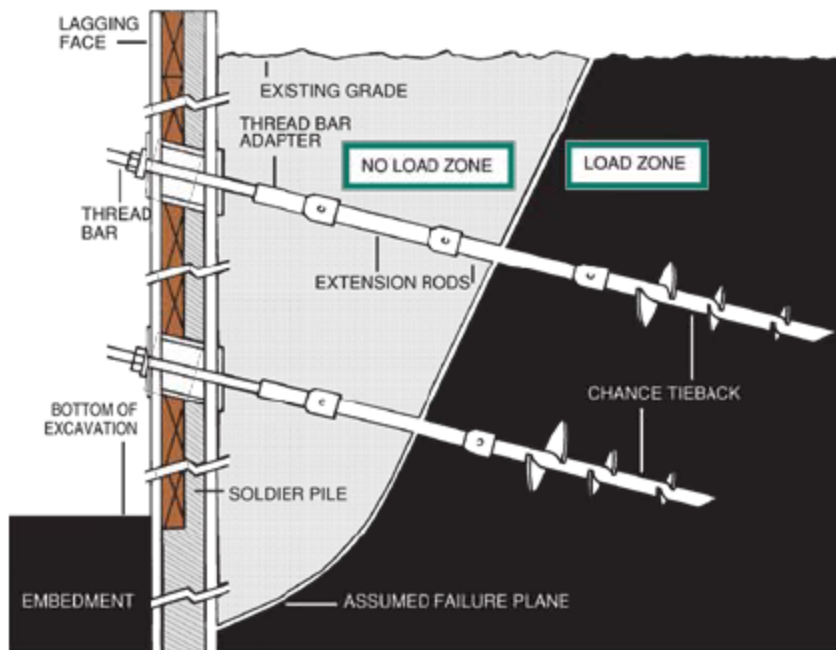
## DriveTech Helical Foundation Systems

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## Helical Tie Back Anchor Considerations



Tiebacks are designed to provide support against lateral forces created by soil. One of the most common applications for tiebacks is retaining walls either temporary walls or permanent and basement foundation walls. Note: Proper soil analysis must be done before installation. If conditions are unknown water pressure must be assumed to be present. The ultimate capacity is calculated taking into consideration the following requirements. Tieback vertical placement depends on the soil height against the wall. [DriveTech Helical Foundation Systems](http://drivetechsystems.com) recommends tiebacks be installed close to any horizontal crack in the wall. In case more than one tier of tiebacks is needed, typically

the location of the first tier is located at 20 to 50 percent of the distance from the surface to the bottom of the footing for walls up to 15 feet high. Minimum vertical and axial embedment are required to avoid shallow failure mechanisms. The minimum vertical embedment varies depending on the diameter of the helix. [DriveTech Helical Foundation Systems](#) recommends a vertical embedment at least three times the largest helix diameter. The axial embedment requirement will vary from project to project. [DriveTech Helical Foundation Systems](#) recommends a minimum axial embedment that places the last helix plate at least three times its own diameter beyond the potential slip surface. The installation angle varies usually from 5° to 30° measured from the horizontal, but the typical value used in most cases is about 15°.





