



Different Types of Earth Anchors

Williams Form Engineering is known throughout the world as one of the leaders in the manufacturing of ground anchor systems. With over 80 years of experience we are able to provide product and/or information for virtually any ground anchor application, and if necessary supply on-site technical assistance. Williams manufactures or distributes anchors in all four primary groups of ground anchor systems available on the market today. The four primary groups of ground anchors are as shown:



→ **Cement Grout Bonded Anchors**

Cement grout is used to develop a bond between the anchor and the soil or rock. Williams anchors can be made with several different types of steel grades.



Polyester Resin Anchors

Resin cartridges are used to develop anchorage between the anchor bar and the rock. Williams supplies All-Thread-Bars and threaded rebar for resin anchoring. Resin anchors often are a fast and economical solution for temporary rock support.



Mechanical Rock Anchors

A mechanical head assembly with an expansion shell and cone is used to develop a friction lock between the rock and head assembly.



Mechanical Soil Anchors

A pivoting plate such as the one used with the Manta Ray soil anchor shown above, is driven to a specified depth and rotated 90° to develop anchorage in the soil.