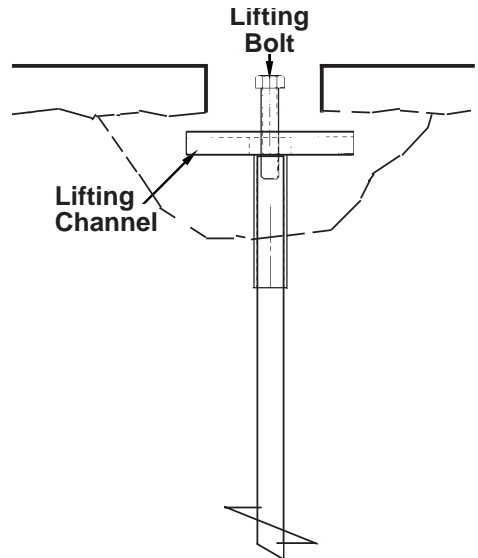


A CASE HISTORY

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| Project: Balfour Residence Gallup, NM | Structural Engineer: Structural Design Associates Albuquerque, NM | Underpinning Contractor: Vic Peery Construction, Inc. Albuquerque, NM |
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Job Description: Due to a non-uniform, lightly compacted, sand fill below the interior slab of this single story, wood frame with brick veneer home, the floor slab was experiencing differential settlement, primarily along a central interior corridor. The perimeter of the house was bearing on a competent clay and was stable. Geological investigation revealed that competent hard sandy clay at a depth of 8' was satisfactory to bear an underpinning anchor system.

Repair: Eighty-seven Chance HELICAL PIER[®] Foundation Systems screw anchors were installed through cored 6"-dia. holes in the slab on a 6' grid to allow the slab to be raised with a slab bracket on the top of the anchor. Average installation depth of the anchors was 10'. As the dead weight of the slab and the service live load totalled 40 PSF, the anchors were only required to support 1,500 lb. The 6"-dia. helices on the solid-steel 1½" square shaft were installed to a minimum torque of ____ ft.-lb. for a minimum load of 3000 lbs. per anchor using a portable 2,500 ft.-lb. hydraulic driver. Voids created by lifting the slab were grout filled.



Cross-sectional view of slab lifting bracket



1"+ gap can be seen between column and ceiling.



Gap is closed after lifting slab.