

# Drilled Shafts

PRE-CONSTRUCTION PIERS, SINKHOLE REPAIR,  
SOIL & STRUCTURAL STABILIZATION

# Drilled Shafts

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Drilled shafts can be constructed in a range of diameters and access conditions with various reinforcement types, and in nearly all subsurface conditions from soft organics to cobbles and most rock formations. Typical diameters range from 12 to 240 inches and depths exceeding 200 feet have been achieved.

## Cased Drilled Shafts

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The temporary casing is removed while maintaining the concrete tremie pipe within the casing and thus creating a positive concrete head of approximately 8 to 10 feet inside the casing. The specific casing teeth pattern and the oscillating motion during the extraction of the casing will eliminate the potential for a smooth wall surface by creating a grooved pattern during casing removal.

The fully cased shaft hence results in a greater soil-to-concrete shear resistance compared with all the other installation methods. Using temporary casing in combination with self-consolidated concrete will enhance overall shaft quality and reduces the risk of shaft non-conformities while providing a more cost effective option than using permanent steel casings.

## Uncased Drilled Shafts

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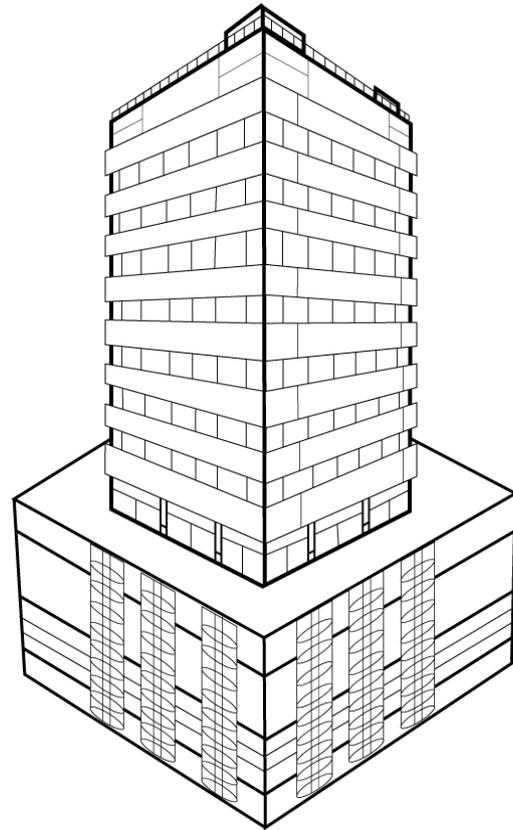
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## Typical Applications for Drilled Shafts

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- Support heavy loads and minimize settlement
- Support uplift loads
- Support lateral loads
- Structures on swelling soils
- Residential foundation repair/underpinning





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