

The Judy Company develops & installs anchoring systems of rock bolts, rock anchors, tiebacks, tiedowns, earth anchors, soil nails, concrete anchors, & post-tensioned tendons.

### About Anchoring

**Anchors are durable, reliable, economical** tension supports used in a wide variety of situations to stabilize, secure, and augment structures. Made of high strength steel bars or strands, they can be bonded to rock, concrete and many types of soil. Anchors are used to counteract external, overturning, uplift, and seismic forces, and are used actively (prestressed) or passively (non stressed).

**Soil and rock nails** are fully grouted, passive (non-tensioned) anchors used to resist uplift forces and failure forces on slopes or excavations. The nails take advantage of residual stresses in soil or excavations (broken or solid) for load transfer. Passive anchors are generally used where prestressing is neither not possible nor not desirable.

**Rock and concrete anchors** are prestressed tendons which can be bars or multiple strands. A portion of the length is bonded to rock or concrete by cement grout, resin, or fixed by a mechanical anchor. The upper portion, or free length, is left ungrouted for prestressing, but is grouted afterwards to lock in tension and protect against corrosion.



### Applications Include

- Retaining walls
- Tower bases
- Concrete structures
- Concrete form hardware
- Tunnels
- Mines
- Dams
- Bridges
- Slope stabilization
- Rock fall protection

### Advantages

- Bond length or hole diameter can be varied to adjust to changing conditions
- Bonding can be by cement, resin, or mechanical
- Anchors can be passive (unstressed) or prestressed
- Anchors can be any length, even hundreds of feet
- Single, double, or multiple layers of corrosion protection are available
- Various strengths of steel up to 150 ksi available
- Work in rock, either solid or broken, concrete, and many types of soil
- Tendons are coupled or coiled allowing installation with limited access
- Stranded tendons can be fabricated for extremely >> high capacity load

□ □ □



### Projects

- Bald Hill Dam, North Dakota
- Johnstown, PA Channel Rehabilitation
- Max Starke Dam, Marble Falls, TX
- Village Creek Water Treatment Plant, Birmingham, AL
- Pueblo Dam, CO