

# SOIL SCREW Retention Wall System





# Faster, better soil nailing with the SOIL SCREW® Retention Wall System

Construct gravity walls faster with the SOIL SCREW® Retention Wall System. Its speed and bearing mode can beat the delays and costs of grouted soil nails.

## Features

- Predictable capacity
- Cost-effective method
- Easy to store, reusable
- Pre-engineered system
- Labor-saving, keeps crew small
- Screws into place (not predrilled)
- Less equipment than grouted nails
- Site-specific to conditions and loads
- Extendable with bolted joint connection
- Compatible with other materials and practices
- Bearing device in place (not friction dependent)









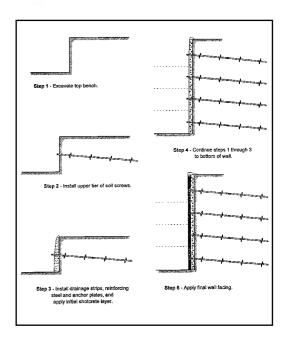
# Benefits

- No grout
- Fast installation
- Clean installation
- Immediate loading
- No spoils to remove
- Lower installed costs
- One-trip convenience
- Installs in limited access areas
- Reclaims valuable building locations
- No heavy installing equipment required



# Build better gravity walls by design





#### **Design Manual and tech support**

Expand your design team with a SOIL SCREW® Retention Wall System Design Manual. It is available on our web site and on CD or 100-page hardcopy on request. This illustrated desktop guide coordinates with accepted principles and computer tools.

- Compatible with key software for internal and global stability
- Complies with FHWA (Federal Highway Administration) design-build guidelines
- Based on recommendations by industry expert Clouterre (France)
- Compares to other wall types such as tiebacks and mechanically stabilized earth (MSE)
- Suitable applications
- Design and construction procedures

Developed by designers, it serves geotechnical, structural and civil engineers, consultants and contractors along with our:

- Sample specifications Product data for owner-designed walls
- Performance data for design-build requirements



A reinforced-shotcrete veneer often is applied to the wall face.

#### Load-bearing superiority of screw anchors

Bearing plates are spaced along the entire length of screw anchors. These true-spiral helices install with ease and minimal soil disturbance. Monitoring torque during installation accurately indicates expected holding capacity for predictable results. Capacity is proportional to installation torque.

The SOIL SCREW® Retention Wall System reinforces in-situ soil with screw anchors near horizontal. Anchor sizes and grid spacing are determined by soil conditions and load requirements, including intended overburden.

The System removes performance uncertainties and associated costs of grouted soil nails in soils of low shear strength. Screw anchors in soil act as bearing devices as opposed to grouted anchors which rely on friction between the soil and grout.

Profit from the design flexibility of this fundamental difference. Join other innovative designers who already have. Get your SOIL SCREW Design Manual today on our web site or contact your Chance representative.



# The SOIL SCREW®

SOIL SCREW® anchors have 1-1/2"-square shafts with 8"-diameter helices and are hot-dip galvanized per ASTM A 153 after fabrication.

55 kip Torque Rating and \*70 kip Ultimate Tension Rating for Extensions and Lead Sections.



Two-Helix Extension



Three-Helix Extension

#### **Extensions**

Forged integral coupling sockets bolt-up quickly, efficently transfer installing torque. Length, from through-hole to coupling bolt centers: 57-1/2" or 80-1/2".

\*Furnished coupling bolts limit ultimate tension rating.



Two-Helix Lead Section



Three-Helix Lead Section

**Lead Sections**Select from double- and triple-helix leading and extension sections for job-specific combinations. Length, from through-hole center to leading edge of first helix: 53" or 70".

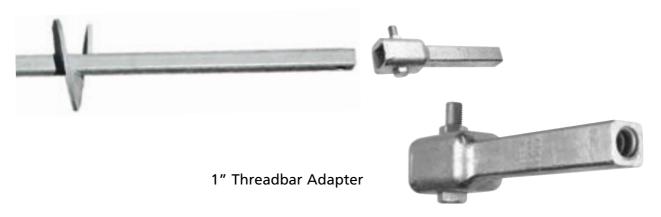
# Retention Wall System

Terminations fit threadbar or provide a threaded stud to work with prefabricated or site-made lock-off devices. Other termination fittings also are available.

In some cases, the through-hole at the shaft end may be simply crosspinned.



Threaded Stud Adapter



#### **Termination Adapters**

Both fit 1-1/2" square-shaft anchors. Both are hot-dip galvanized per ASTM A 153 after fabrication.

# Anchoring the World

Since 1912, Chance has been the international leader in earth anchoring. Our helical piers and anchors are used worldwide to secure soil retention projects and deep foundation applications such as residential and commercial buildings, tower foundations and heavy equipment foundations.

Engineered for dependability and long-term stability, CHANCE® helical piers and anchors feature exclusive anchoring techniques, tools, designs and sizes that make other foundation methods a thing of the past.

Approved by all national building code agencies, CHANCE® helical piers and anchors are your first line of defense against poor soil conditions, landslides, floods and time.

#### Demand A Better Foundation

With nearly 400 dealers and distributors worldwide, Chance is ready to provide you everything you need to get the job done right. Chance offers engineering guidance, field supervision, accessibility, warehouses, material traceability, AWCcertified welders, technical support and complete documentation.

Ask a distributor near you for our comprehensive design manual (hardcopy or CD) or download a complete CSI Manu-Spec® online. Demand a better foundation today. Locate your nearest distributor at www.abchance.com.

## Down. Right. Solid.

Our tagline is our promise. CHANCE® helical piers and anchors go down with power into the ground and are accurate, level and right the first time. The result is solid stability.



www.abchance.com



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