

SOIL SCREWTM

RETENTION WALL SYSTEM



- *Cost effective for soil nail wall designs*
- *Fast installation and immediate loading*
- *Predictable capacity*
- *Limited access areas*
- *Pre-engineered system*

CHANCE[®]

SOIL SCREWTM

RETENTION WALL SYSTEM

Site-specific, matched to conditions and loads

Simple Procedure

Faster, with fewer steps, the Chance SOIL SCREWTM Retention Wall System gives you economic advantages.

- Install quickly by the same hydraulic rotary equipment commonly used for soil nail wall construction.
- Immediate loading.
- No spoils to remove.
- Installs in any weather.
- Easy to store, reusable.



Load-bearing mode superiority of screw anchors

To remove the performance uncertainties and associated costs of grouted soil nails in soils of low shear strength, the Chance SOIL SCREW Retention Wall System employs screw anchors. When placed in the soil, a screw anchor acts as a bearing device. This is its fundamental difference compared to a grouted anchor, which relies on friction between

the soil and the grout.

In a soil nail application, the SOIL SCREW Retention Wall System constructs a gravity wall to reinforce in-situ soil with screw anchors nearly horizontal. Anchor sizes and grid spacing are determined by soil conditions and load requirements.

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

Compatible with other materials and practices

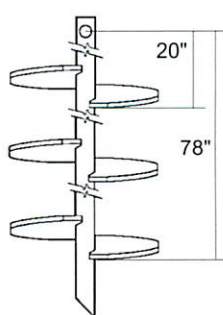
Terminations fit threadbar or provide a threaded stud to work with prefabricated or site-made lock-off devices. Other termination fittings also are available.

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

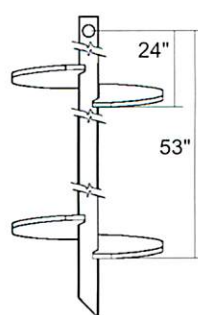


Modular components serve a wide range of jobs

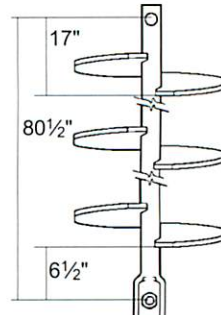
Select from double- and triple-helix leading and extension sections for job-specific combinations. Forged integral coupling sockets bolt-up quickly and efficiently transfer installing torque.



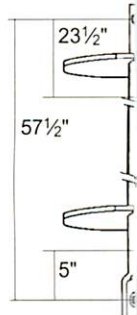
Three-Helix
Lead Section
C110-0691



Two-Helix
Lead Section
C110-0692



Three-Helix
Extension
C110-0689



Two-Helix
Extension
C110-0690



• **Less equipment than grouted nails**

• **Labor-saving, keeps crew small**

Predictable results — Capacity is proportional to installation torque

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.



Technical support and pre-engineered system for design flexibility and standards compliance

The SOIL SCREW™ Retention Wall System is based on more than 80 years of earth-anchor research and development by ISO-certified manufacturer A. B. Chance Company, which also markets to electric utilities, telecommunications and pipeline industries worldwide.

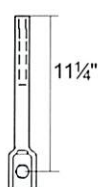
Performance ratings for installing torque and bearing capacity

Rated for 5,500 ft.-lb. maximum installation torque and *70,000 lb. minimum ultimate tension strength, SS5 anchors have solid steel 1½"-square shafts with 8"-diameter helices and are hot-dip galvanized to ASTM A 153 after fabrication.

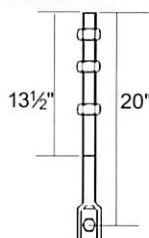
**Furnished coupling bolts limit ultimate tension rating.*

Termination Adapters

Both are hot-dip galvanized steel and fit 1½"-square-shaft SS5 anchors.



1" Threadbar Adapter
C114-0009



Threaded Adapter
C110-0026

To assist geotechnical, structural civil engineers and related consultants and contractors in applying the SOIL SCREW Retention Wall System, Chance provides a complete design package comprising:

- Soil Nail Design Manual for soil nailing with screw anchors (see back cover for more specifics),
- Sample specifications, available on request:
- Product data for owner-designed walls
- Performance data for design-build requirements.

SOIL SCREW™ RETENTION WALL SYSTEM

Now available on our website!
(www.hubbell.com/abchance)

Design Manual

More than

100 pages detail how to take advantage of the SOIL SCREW™ Retention Wall System for your soil nail walls, based on these industry guidelines and recommendations:

- FHWA (Federal Highway Administration) design and build guidelines.
- Recommendations of Clouterre - France.
- Key software for internal and global stability.

Expand your design team — just request your copy

Share in the profitable SOIL SCREW Retention Wall System. This manual can help you put it to work for you. Join other innovative designers who already have.

Contact your Chance representative today . . . or see it on our website: www.hubbell.com/abchance.



A practical desktop design reference

By designers for designers, this illustrated guide coordinates with accepted principles and computer tools. Contents include:

- Comparison to other walls such as tiebacks and mechanically stabilized earth (MSE)
- Suitable applications
- Procedures for Design
- Procedures for Construction.

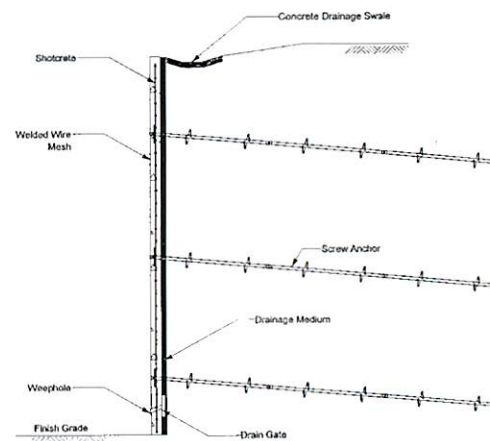


Figure 2.3.1. Temporary Facing Detail Using Shotcrete and Welded Wire Mesh.

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NOTE: Because Hubbell has a policy of continuous product improvement, we reserve the right to change design and specifications without notice.



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