

# EXPANDING ROCK ANCHORS | WEDGE STYLE

## Application/Installation



<b>ANCHOR APPLICATIONS</b>	For medium-duty guying where poles are in or near rocky areas.
<b>INSTALL IN THESE CLASS SOILS</b>	Class 0
<b>INSTALLING EQUIPMENT REQUIRED</b>	Hand or power drill and turning bar.
<b>LIMITATIONS ON USE</b>	In extremely soft rock, it is necessary to use grouting to avoid rock crumbling which could affect holding capacity. For permanent applications, Hubbell recommends always grouting to prevent future deterioration of the rock.

### INSTALLATION GUIDE:

#### STEP #1

Drill the hole.

*NOTE: Hole size is determined by the size of anchor used.*

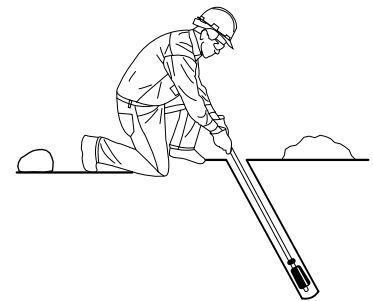


### BASIC INSTRUCTIONS FOR INSTALLING EXPANDING ROCK ANCHORS

1. Choose anchor site carefully. Rock anchors will only perform effectively in solid competent rock (Class O Soil).
2. Drill hole into the competent rock while providing additional length for the anchor to expand. For example, to achieve the minimum 12 inch installation depth, a hole must be drilled to a minimum of 15 inches. Be sure to drill so that the anchor rod will be in line with the guy.
3. Holes should be drilled so the diameter is as close to the specified diameter of the unexpanded anchor. For example, the hole drilled for a 3/4 inch dia. rod should be 2 inch dia. The hole drilled for a 1 inch dia. rod should be 2-1/2 inch dia. Be sure to thoroughly clean the drilled hole of rock dust and debris.
4. Check fit of unexpanded rock anchor against drilled hole. If needed, expand rock anchor to ensure tight fit prior to putting in drilled hole. Slide anchor down in hole. Use a bar through the eye to turn the rod until the anchor is fully expanded against the sides of the hole. For maximum anchor capacity, the rod should be torqued until permanent twist is noticed.
5. Rock anchors set in holes drilled 12 inches deep in competent class 0 soil (hard rock) will develop the full strength of the anchor rod.
  - 3/4 inch rod - Minimum Ultimate Strength of 23,000 lbs.
  - 1 inch rod - Minimum Ultimate Strength of 36,000 lbs.
6. It is recommended to grout the rock anchor after it is installed as an added measure to help protect the rock from degrading. Grouting may be performed using a funnel and PVC grout tube, which extends down the hole to the top of the wedges. A flowable neat cement grout (no aggregate), .4 - .45 water to cement ratio is suitable for grouting rock anchors. The grout will cover the drilled rock and prevent it from weathering over time.
7. The guy strand(s) may be attached to the anchor eye and fully loaded. The grouting may be done before or after the guy strands are attached.

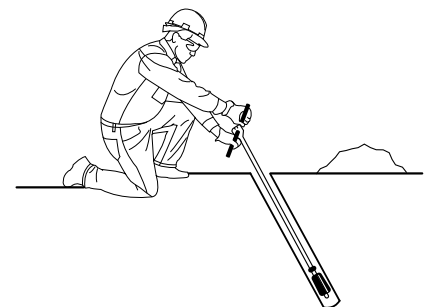
#### STEP #2

Push the anchor assembly down inside the hole. Ensure anchor is raised off the bottom to provide clearance for rod as the anchor is set.



#### STEP #3

Turn the rod until the anchor is expanded tight against the sides of the hole. Grout hole for soft rock or permanent applications.



**CHANCE**