

# Installation of Coir Wattles as slope reduction devices

Install coir wattles along contours of a slope to reduce slope length. These coir wattles slow flow velocity and trap sediment in runoff water. Use oak stakes with a notch and metal staples secure the coir wattles.

## Un-vegetated and disturbed slopes

### 1. Slope gradient less than 3:1

On un-vegetated and disturbed slopes, less than 3:1, we recommend using 9-in diameter coir wattles for sediment control. Rows of coir wattles should be placed 8 – 12 feet apart. Cut a 2-in deep trench and place the wattle in the trench. These wattles should be anchored with 18-in long oak stakes with a notch on the top and 6-in long metal staples. Place an oak stake in every 3 feet from the downstream side of the slope and a metal staple in every foot from the upstream and downstream sides of the slope in a staggered pattern. This will provide good contact between the wattle and the ground and prevent undercutting. Coir wattles can easily be joined with coir twine to get to the desired length.

### 2. Slope gradient up to 2:1

For un-vegetated and disturbed slopes, up to 2:1, we recommend using a soil erosion control blanket to reduce sediment movement. USE BioD-Straw or BioD-StrawCoco or BioD-OCF to cover the slope. Refer to the installation guide for blankets and mats on slopes. To break the sheet flow of water coming on the slope covered with an erosion control blanket, install rows of 6-in diameter coir wattles placed 20-ft apart. Place 12-in long oak stakes with a notch every 3-ft from the bottom side of the slope and 6-in metal staples every foot from the upstream and downstream sides of the slope in a staggered pattern. This will provide good contact between the wattle and the ground and prevent undercutting. Coir wattles can easily be joined with coir twine to get to desired length.

### 3. Slope gradient up to 1:1

For un-vegetated and disturbed slopes, up to 1:1, we recommend using a semi-permanent mat such as BioD-Mat 60 to cover the slope. Refer to the installation guide for blankets and mats on slopes. To break the sheet flow of water coming on the slope, install 9-in diameter coir wattles placed 30-ft apart. Place 18-in long oak stakes with a notch every 3-ft from the bottom side of the slope and 6-in metal staples every foot from the upstream and downstream sides of the slope in a staggered pattern. This will provide good contact between the wattle and the ground and prevent undercutting. Coir wattles can easily be joined with coir twine to get to desired length.

### 4. Slope gradient greater than 1:1

For un-vegetated and disturbed slopes greater than 1:1, we recommend using a semi-permanent mat such as BioD-Mat 70 or BioD-Mat 90 to cover the slope. Refer to installation guide for blankets and mats on slopes. To break the sheet flow of water coming on the slope, place 9-in diameter coir wattles in every 25-ft apart. Place 18-in long oak stakes with a notch every 3-ft from the bottom side of the slope and 6-in metal staples every foot from the upstream and downstream sides of the slope in a staggered pattern. This will provide good contact between the wattle and the ground and prevent undercutting. Coir wattles can easily be joined with coir twine to get to desired length.



**RoLanka**  
International, Inc.  
THE TRUE GREEN SOLUTION

ROLANKA INTERNATIONAL INC.  
155 ANDREW DRIVE  
STOCKBRIDGE, GEORGIA 30281  
1-800-760-3215  
PHONE: (770) 506-8211  
FAX: (770) 506-0391  
[www.rolanka.com](http://www.rolanka.com)

FIGURE 1

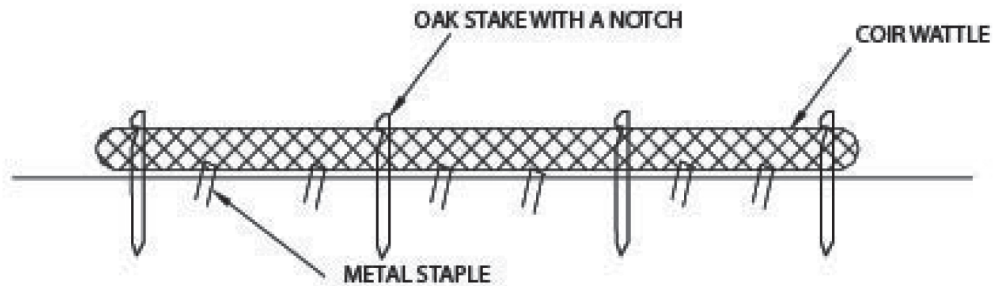
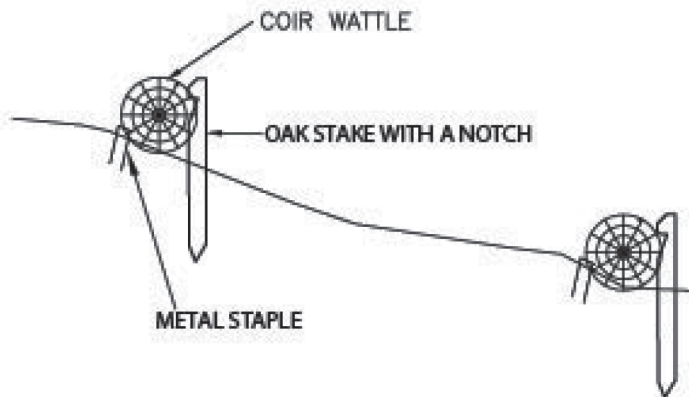
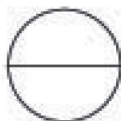


FIGURE 2



NOTES:

1. DO NOT SCALE DRAWING.
2. SELECT SUITABLE DIAMETER COIR WATTLE.
3. USE SUITABLE LENGTH ANCHORS.

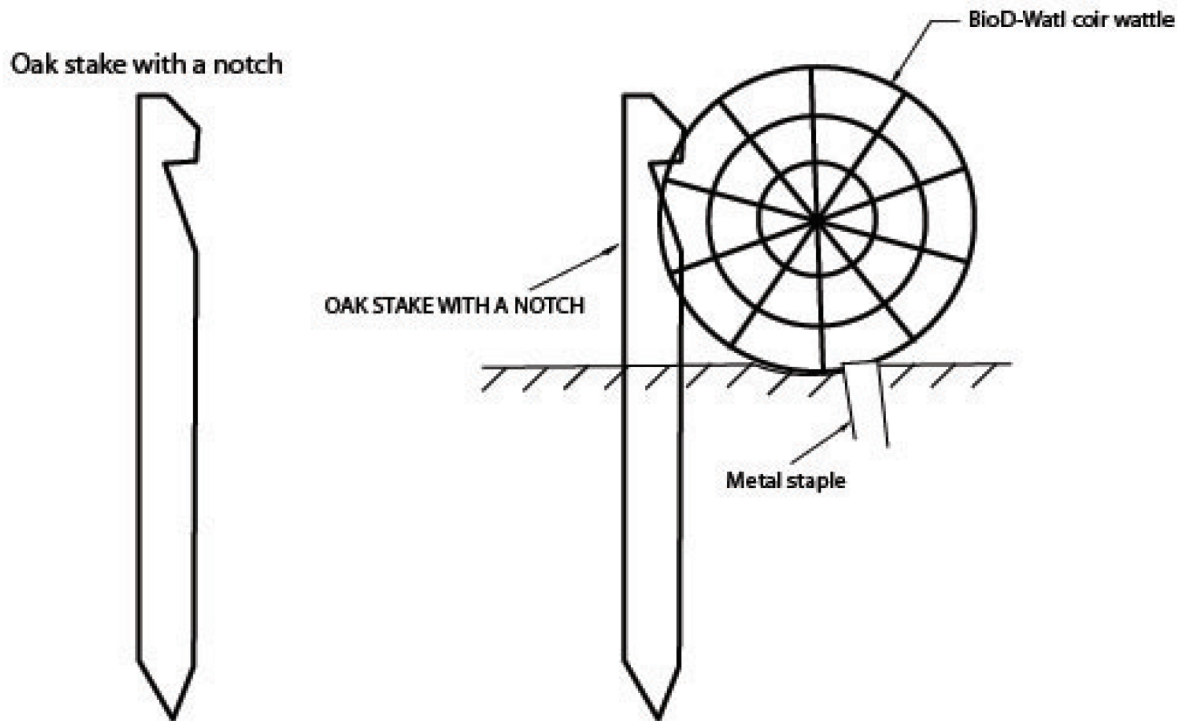


COIR WATTLE CHECK DAMS ON SLOPES



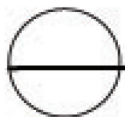
**RoLanka**  
International, Inc.  
THE TRUE GREEN SOLUTION

ROLANKA INTERNATIONAL INC.  
155 ANDREW DRIVE  
STOCKBRIDGE, GEORGIA 30281  
1-800-760-3215  
PHONE: (770) 506-8211  
FAX: (770) 506-0391  
[www.rolanka.com](http://www.rolanka.com)



**NOTES:**

1. DO NOT SCALE DRAWINGS.



## ANCHORING COIR WATTLES WITH OAK STAKES WITH A NOTCH