# General installation instructions for BioD-Block™ system

1. Before installing BioD-Block™ coir block system, clean and level the base of the eroded streambank. If necessary, strengthen the toe and the foundation using rocks as show in the diagram (Fig. 1). Place at least 2 inches of soil on the top and level the surface well.
2. To make 12-in tall soil lifts, use BioD-Block™ 12-300. To make 16 in tall soil lifts, use BioD-Block™ 16-300 or BioD-Block™ 16-400. BioD-Block™ 16-400 has longer fabric which will increase the safety of the constructed soil lifts.
3. Place a BioD-Block™ unit on level surface, keeping the female end towards direction of extending, and spread the bottom fabric. Anchor the bottom fabric to the ground well with suitable length metal staples or wooden pegs. Fill soil up to the height of the coir block (Fig. 1) and compact the filled soil well. Cover the compacted filled material with top fabric and anchor it well (Fig. 2).
4. If the water table is close to the top of the first soil layer, plant native plants on and around BioD-Block™ (Fig. 3a). If the soil surface is at the water level, do not plant now. Most of the woody plants including willows will not grow in submerged conditions.
5. Repeat the coir block installation procedure described above to make soil lift layers as needed to the top of the bank. On the very top layer, spread grass seeds.
6. The BioD-Block™ system has been further improved with invisible holes in the middle of the coir block for easy planting through the coir block, when necessary. Each planting hole is filled with a coir fiber plug. Live plant cutting can be planted through these holes during construction or later. Coir fiber plugs can be easily pulled out to expose the hole in the middle of the fiber block. When planting through the block is necessary, remove the coir plug and inset live plant through the hole into the middle of the soil layer.
7. Joining BioD-Block™ units can be done easily with their unique connection method. Male and female end connection in BioD-Block™ maintains continuity and structural integrity of the connected section. Fabric extending beyond fiber block at female end provides structural support for inserted male end. Insert male end of second BioD-Block™ to female end of first BioD-Block™ and drive stakes as shown in the picture. Drive stakes through overlapping fabrics of two BioD-Block™ units at their connection to avoid failures through the connection.
8. We recommend using minimum 1 in x 1.5 in x 15 in pine wedges at every 3 ft. to anchor the bottom fabric to the ground before filling with soil and 2 in x 2 in x 24 in pine wedges on the top fabric after filling with soil. These wedges may be substituted with 12 in or longer metal staples if necessary. Additional anchors will increase the safety factor of the constructed slope.
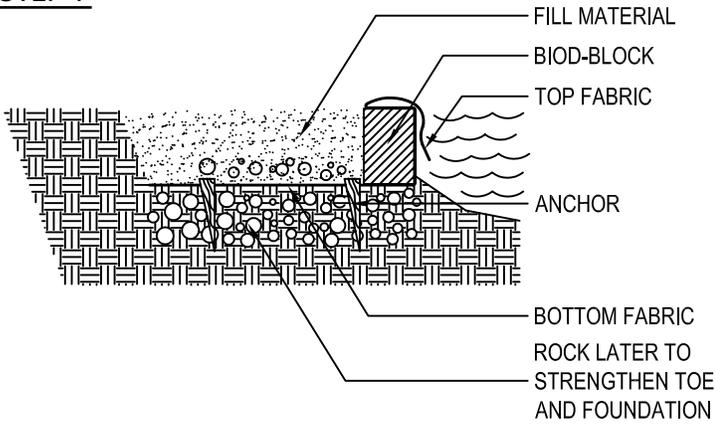
Planting through the coir block
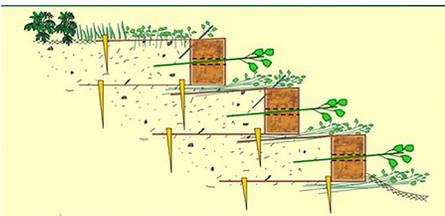
Connecting coir blocks

BioD-Block™ system can be used in several different applications in many different forms of installations. Designers and end users may consider unique site conditions to select best form of installation.
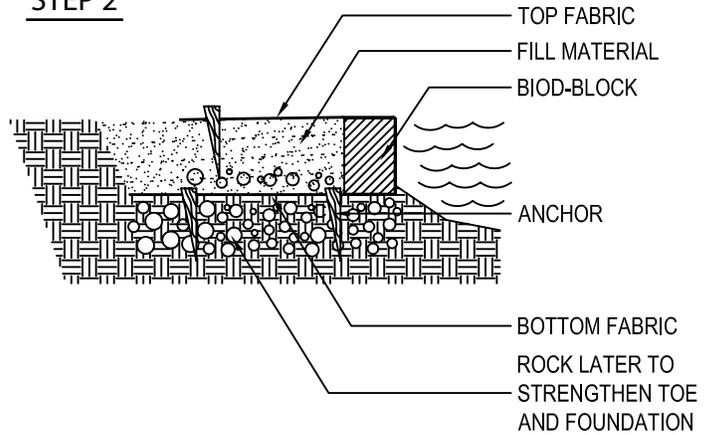
RoLanka International, Inc.™
The True Green Solution

STEP 1

FILL MATERIAL
BIOD-BLOCK
TOP FABRIC
ANCHOR
BOTTOM FABRIC
ROCK LATER TO STRENGTHEN TOE AND FOUNDATION

1. BEFORE INSTALLATION, CLEAN AND GRADE BASE OF STREAMBANK. STRENGTHEN TOE AND FOUNDATION USING ROCKS IF NECESSARY. PLACE UNIT ON LEVEL SURFACE, KEEPING FEMALE END TOWARDS DIRECTION OF EXTENDING, AND SPREAD THE BOTTOM FABRIC. ANCHOR DOWN BOTTOM FABRIC AND FILL WITH SOIL TO HEIGHT OF UNIT.

STEP 2

TOP FABRIC
FILL MATERIAL
BIOD-BLOCK
ANCHOR
BOTTOM FABRIC
ROCK LATER TO STRENGTHEN TOE AND FOUNDATION

2. COVER THE FILL MATERIAL WITH TOP FABRIC AND ANCHOR IT.

STEP 3A

FILL MATERIAL
NATIVE HYDROPHYTIC PLANTS
BIOD-BLOCK
ANCHOR
BOTTOM FABRIC
ROCK LATER TO STRENGTHEN TOE AND FOUNDATION
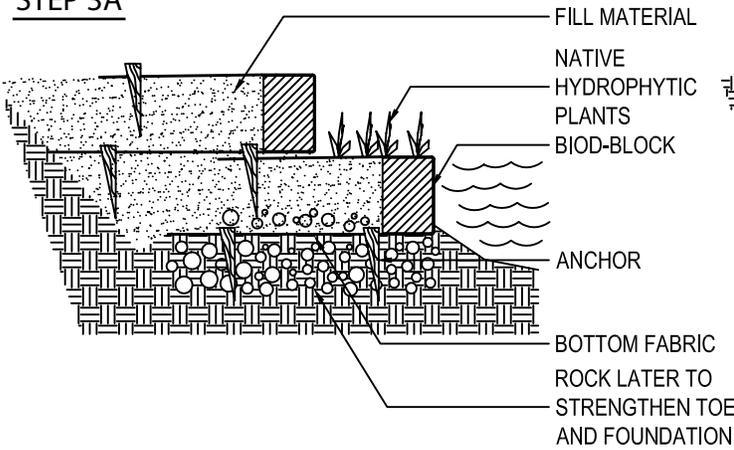
3A. IF WATER TABLE IS CLOSE TO TOP OF FIRST LAYER, PLANT NATIVE HYDROPHYTIC PLANTS ON AND AROUND BIOD-BLOCK. REPEAT EARLIER PROCEDURE AND INSTALL ANOTHER LAYER OF BIOD-BLOCK.

STEP 3B

FILL MATERIAL
WOODY PLANT CUTTINGS
BIOD-BLOCK
ANCHOR
BOTTOM FABRIC
ROCK LATER TO STRENGTHEN TOE AND FOUNDATION
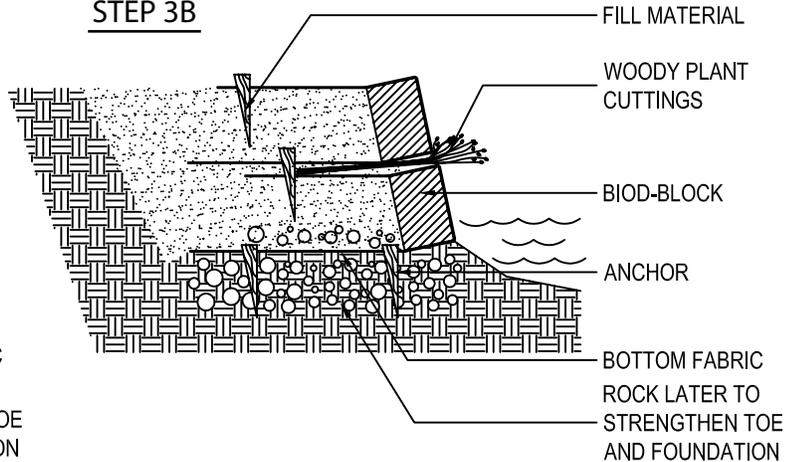
3B. IF WATER TABLE IS BELOW FIRST LAYER, PLANT WOODY PLANT CUTTINGS ON THE BIOD-BLOCK. REPEAT EARLIER PROCEDURE AND INSTALL ANOTHER LAYER OF BIOD-BLOCK.

NOTES:

1. DO NOT SCALE DRAWINGS.
2. FABRIC EXTENDING BEYOND FIBER BLOCK FEMALE ENS PROVIDES STRUCTURAL SUPPORT FOR INSERTED MALE END.
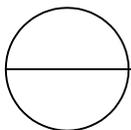
BIOD-BLOCK COIR BLOCK SYSTEM INSTALLATION