

WOOD / COIR / STRAW LOGS

INSTALLATION SHEET

Product description :

Straw logs: straw fibres retained by a photodegradable or biodegradable net.

Wood logs: wood fibres retained by a photodegradable or biodegradable net.

Coir logs: coir fibres held by a woven fabric of biodegradable coconut fibres.



Figure 2 : Log with apron

Coir logs with apron: coir apron on either side of the logs to allow greater adherence to the ground and minimize the risk of scouring.

The logs are used for erosion control and sedimentation applications. When installed in a channel, they filter water, retain sediment and reduce water velocity. When installed in a slope or on a shoreline, they reduce erosion by retaining sediment.



Figure 1 : Log

Installation steps :

1. Remove any debris, rocks or roots from the logs installation area. The logs must be in close contact with the ground. Optional: Dig a 5 cm deep trench.
2. Place the logs on the prepared surface. Using a trench, fill the voids with the soil in place so that the logs are well stabilized.
3. Ensure adequate overlap for the logs that must be placed side by side.
4. Insert wooden stakes on the downstream side approximately every 1 m. More stakes may be required in the presence of a large water flow. The posts must be installed through the logs net only.
5. For logs with an apron, 20 cm U-shaped anchors are also inserted on each side of the logs at about every 25 cm.

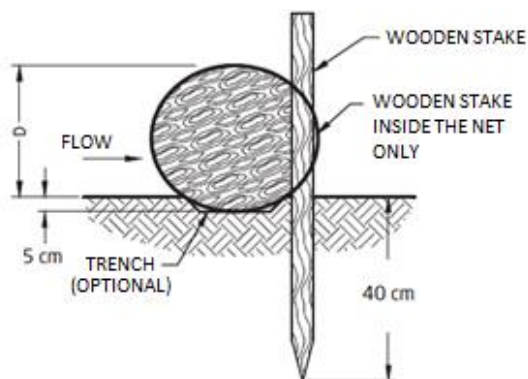


Figure 3 : Installation of a log without apron

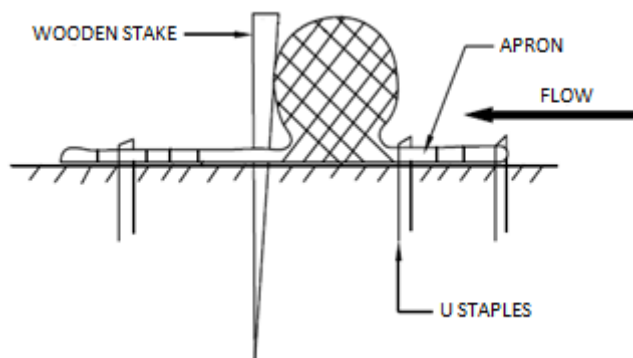


Figure 4 : Installation of a log with apron

The logs can also be installed on a mat to increase the effectiveness of erosion control.

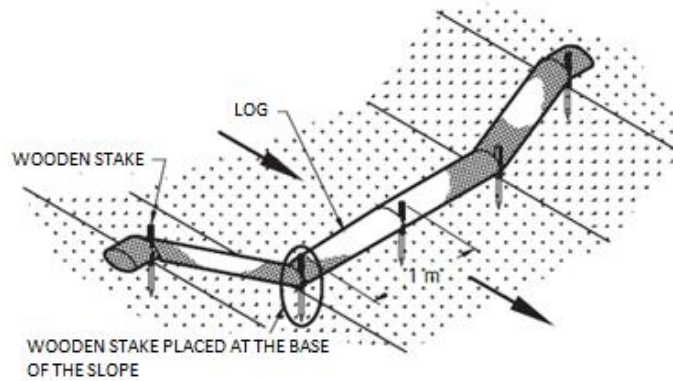


Figure 4 : Installation of a log without a mat

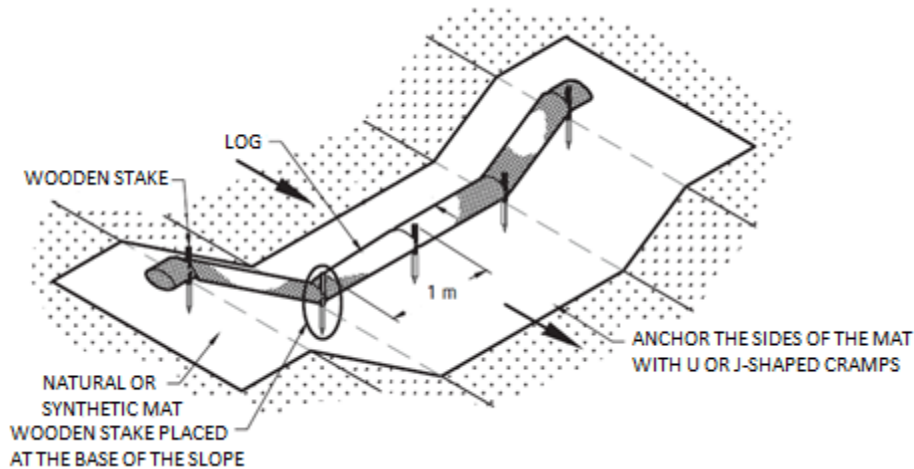


Figure 5 : Installation of a log with a mat

The recommended length of wooden stake is 76 cm for logs less than 30 cm in diameter and 120 cm for logs 50 cm in diameter. The mats anchorage must be a minimum of 40 cm.

NOTE : The concept has to be determined by the engineer in charge of the project. Any information, verbal or written, forwarded by Texel Technical Materials, cannot in any way be interpreted as conceptual information. Any information must be verified and approved by the engineer in charge of the project.

The spacing between two logs in a channel can be calculated by the following formula:

$$\text{Spacing (m)} = (\text{Section diameter (m)} / \text{Channel slope (\%)}) \times 100$$

Channel slope (%)	Example of required logs spacing (m)	
	Log of 23 cm in diameter	Log of 30 cm diameter
0.5	46.00	60.00
1	23.00	30.00
1.5	15.33	20.00
2	11.50	15.00
2.5	9.20	12.00
3	7.67	10.00
3.5	6.57	8.57
4	5.75	7.50
4.5	5.11	6.67
5	4.60	6.00
5.5	4.18	5.45
6	3.83	5.00
6.5	3.54	4.62
7	3.29	4.29
7.5	3.07	4.00
8	2.88	3.75
8.5	2.71	3.53
9	2.56	3.33
9.5	2.42	3.16
10	2.30	3.00
11	2.09	2.73
12	1.92	2.50
13	1.77	2.31
14	1.64	2.14
15	1.53	2.00
16	1.44	1.88
17	1.35	1.76
18	1.28	1.67
19	1.21	1.58
20	1.15	1.50