

Loresco EnviroCoke IV™ and PermaPlug™ Specialty Backfills

Protection For Environmentally Sensitive Areas

Contamination of underground aquifers is a major concern in today's environmentally conscious society. To prevent deep groundbed cathodic protection systems from polluting ground water in environmentally sensitive zones, Corrpro supplies Loresco's EnviroCoke IV and PermaPlug specialty backfills.

EnviroCoke IV is a conductive carbon-based cementitious backfill with an extremely low permeability. It is designed to surround the casing at the discharge zones of a cathodic protection system and prevent the intermixing of waters held in separate aquifers. The material mixes with water, and can be easily pumped for placement around the well casing. After settling for 24 hours, the protective backfill becomes structurally stable.

PermaPlug is a non-conductive backfill designed to seal the entrance of a deep-anode-bed cathodic protection system. The backfill is made from naturally occurring bentonite rock, which swells when saturated with water to provide a leak-tight seal. This seal stops surface fluids from flowing into the well and contaminating potable water aquifers. The material does not require mixing, and can be poured directly into the hole at the surface of the deep anode bed. Because the material completely seals the entrance of the cathodic protection system, it is strongly advised that a



vent pipe be utilized to release gases and to provide access to the system so that water can be added if necessary.

Typical Applications

EnviroCoke IV and PermaPlug specialty backfills are designed for use in deep groundbed cathodic protection systems located in environmentally sensitive zones. Used in conjunction, the two backfills effectively protect underground aquifers from contamination. Both products have been tested according to EPA leachate standards, and have been found to meet all quality requirements for materials utilized in underground burial. The backfills should be stored in a dry area prior to use.

CHEMICAL COMPOSITION

EnviroCoke IV	PermaPlug
49% Portland Cement	98% Bentonite
48.9% Fixed Carbon	2% Wetting Agents
0.1% Ash	—
0.0% Moisture	—
0.0% Volatile Matter	—



Corrpro Companies Europe Limited

Adam Street, Bowesfield Lane, Stockton on Tees, TS18 3HQ

Telephone: (01642) 614106 (8 lines) Telex: 587388

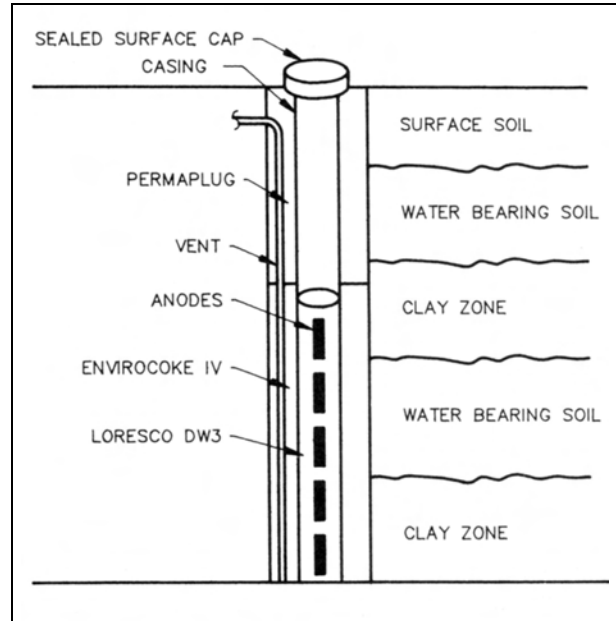
Fax: (01642) 614100 E-mail: ccel@corrpro.co.uk

Loresco EnviroCoke IV™ and PermaPlug™ Specialty Backfills

Ordering Procedure

EnviroCoke IV and PermaPlug are supplied in 100 lb. and 50 lb. bags respectively. To order the required material for your installation project, indicate that you need EnviroCoke IV and/or the PermaPlug backfill, and specify the total pounds required. A chart has been provided to assist in calculating the total pounds necessary for various types of installations. An example is also included to help illustrate the ordering process.

Calculation Example	
ITEM	EXAMPLE
Backfill Material	<i>EnviroCoke</i>
Hole Diameter	<i>6 in.</i>
Hole Depth	<i>10 ft.</i>
Number of Holes	<i>10</i>
Total Backfill Wt.	<i>1,430 lbs.</i>
Total Bags Req'd	<i>15</i>



Standard Dimensions and Shipping Weights				
BACKFILL	BULK DENSITY		SHIPPING WT. PER BAG	
	lbs./ft. ³	(kg/m ³)	lbs.	(kg)
EnviroCoke	75	(1204)	75	(34)
PermaPlug	70	(1124)	50	(22.7)

Calculation Chart					
HOLE DIAMETER		BACKFILL REQUIRED			
		ENVIROCOKE IV		PERMAPLUG	
in.	(mm)	lbs./ft.	(kg/M)	lbs./ft.	(kg/M)
4	(102)	6.4	(9.5)	6.1	(9.1)
6	(152)	14.3	(21.3)	13.7	(20.4)
8	(203)	25.5	(38.0)	24.4	(36.4)
10	(254)	39.8	(59.4)	38.2	(57.0)
12	(305)	57.2	(85.3)	54.9	(81.9)



Corrpro Companies Europe Limited
 Adam Street, Bowesfield Lane, Stockton on Tees, TS18 3HQ
 Telephone: (01642) 614106 (8 lines) Telex: 587388
 Fax: (01642) 614100 E-mail: ccel@corrpro.co.uk