

# REM GROUND ENHANCEMENT MATERIAL



It was developed in REM 2003.

It is a material with a very good conductivity that solves your most difficult grounding problems.

REM increases soil conductivity in all types of soil.

It is an ideal material for weakly conductive soils such as rocky areas, mountain peaks, sandy soil. REM is the solution in cases where ground rods cannot be used.

It also eliminates the problems to be experienced due to limited space.

No other substance can reduce soil resistance and keep it at low resistance as well as REM.

There is no system that can keep the life of the grounding system as long as REM with high conductivity.

REM's performance; It has been proved by passing the challenging tests prepared with the latest technology and riveted with confidence in its field.

### Effect of REM

- It reduces the resistance of the soil.
- When installed, it keeps the resistance constant for the life of the system.
- Works in all soil types.
- REM is a very effective material.
- It does not dissolve or deteriorate over time.
- It increases frost resistance by 10%.
- There is no need for periodic checks or renewals.
- There is no need for maintenance.
- Whether the environment is dry or damp it does not change anything.

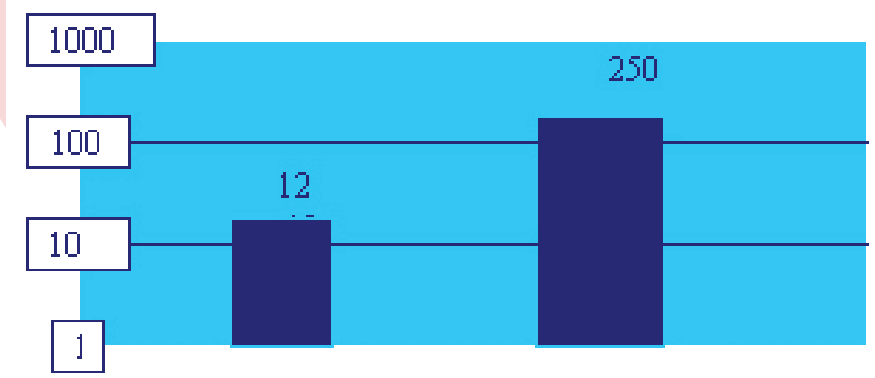
### REM is Environmentally Friendly,

- It has no effect on the soil.
- It does not pollute groundwater.

### REM is Easy to Use

- Easy to carry in 10 kg bags.
- 1 person is sufficient for assembly.
- If the soil is wet or dry, it does not change anything.
- There is no need to mix when using dry. It is enough just to open and pour.
- When used dry, it absorbs moisture from the soil immediately.
- It reduces the area to be grounded.
- It reduces the use of the ground electrode.
- It reduces grounding cost.

## Resistance Characters - Resistance (OHM-CM)



### REM Bentonite Clay

As the graph shows, the resistance of REM is 20 times lower than the other.

### Technical assistance

RADSAN's experienced technical staff is ready to help you and answer your questions.

please do your next work with REM.

Do your next work with REM and take advantage of REM's long-lasting advantage for less resistance and high conductivity.

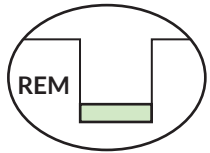
REM is absolutely reliable and the best.

## Descriptions

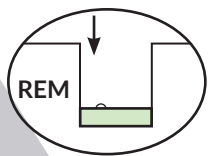
- REM is a continuous and maintenance-free system.
- It does not lose its effect over time.
- REM can be used on both dry soil and wet ground.
- In case of constant water contact, it does not lose anything from its conductivity.
- The soil specific resistance where REM is used is not bigger than 20 ohm-cm.
- In order to reduce earthing resistance, as coal which is mixed into the soil, REM . does not corrode galvaniz corrosion with electrodes.
- In order to reduce earthing resistance, as a salt which is added to the soil, REM isn't made any Acidic reaction with Electrodes

## Application of REM

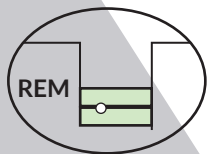
### EARTHING GROUNDING APPLICATION WITH HORIZONTAL GROUNDING CONDUCTOR



1. Please dig a channel up (usually deeper than the dimensions) in the 10.2 cm wide and (4\*30 inch) dept or to the below freezing limit. Please fill the base with REM till to 2,5 cm. (1 inch).



2. Please place the conductor on top of REM.



3. Please pour the same amount of REM onto the conductor. (Please make sure that the conductor is completely closed.)



4. Please fill with soil on top of (4 inches) 10,2 cm thickness. consecetuer adipiscing LOGO COMPANY

Values for different kinds of channels are given in the table below.

#### APPROXIMATIVE EARTHING CONDUCTOR LENGTH THAT 1 BAG REM WILL COVER IN THE CHANNEL

WIDTH OF THE CHANNEL	TOTAL THICKNESS OF REM			
	1"	2"	3"	4"
	(2,5 cm)	(5,1 cm)	(7,6 cm)	(10,2 cm)
4" (10,2cm)	14,0'(4.3m)	7,0'(2.1m)	4,7'(1.4m)	3,5'(1.1m)
6" (15,2cm)	9,3'(2.8m)	4,7'(1.4m)	3,1'(0.9m)	2,3'(0.7m)
8" (20,3cm)	7,0'(2.1m)	3,5'(1.1m)	2,3'(0.7m)	1,8'(0.5m)
10" (25,4cm)	5,6'(1.7m)	2,8'(0.9m)	1,9'(0.6m)	1,4'(0.4m)
12" (30,5cm)	4,7'(1.4m)	2,3'(0.7m)	1,6'(0.5m)	1,2'(0.4m)

Half of this thickness should be applied below the conductor and above half of the conductor.

## APPLICATION INSTALLATION WITH EARTHING BAR

- A hole which is 7.6 cm. (3 inches) or larger (6 inches) and 15.2 cm from the length of the ground rod is drilled.
- Please place the stick in the hole and strike up to 1 foot (30 cm). (If possible, the top of the top of the bar needs to be lower 15.2 cm from the V end (6 inches)).  
Then using cadweld products, you can make all the connections you want with bar.
- Pour the required amount of REM (table 2) into the hole.  
Make sure the REM is well-filled around the rod.
- Fill the remaining space with soil.

NOTE: Water accumulated in the hole must be drained before processing. REM is standard if it is desired to be used moist,  
You can use conventional tools such as cement mixer. Please use 5.7-7.6 liters (3/2, 2 gallons) water for 1 bag of REM. (table 2)

**PREDICTION DEPTH THAT THE 1 REM BAG WILL FILL IN  
(Density 1442 kg/m<sup>3</sup>)**

DIAMETER OF THE HOLE	DEPT OF THE HOLE						
	6'(1,8m)	7'(2,1m)	8'(2,4m)	9'(2,7m)	17'(5,2m)	18'(5,8m)	20'(6,1m)
3"(7,6cm)	2	2	2	2	4	4	4
4"(10,2cm)	2	3	3	3	6	7	7
5"(10,2cm)	3	4	4	5	9	10	10
6"(15,2cm)	5	5	6	7	13	14	15
7"(17,8cm)	6	7	8	9	17	19	20
8"(20,3cm)	8	9	11	12	22	25	26
9"(22,9cm)	10	12	13	15	28	31	32
10"(25,4cm)	12	14	16	18	34	38	40





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