

# Other products and miscellaneous

## GIM Ground Improving Material

### ● Principle of GIM

GIM Ground Improving Material is an earthing backfill compound consisting of highly conductive materials, which increase the earthing system's efficiency. It is most useful for area with high soil resistance and also when the probability of erosion due to the flow of water exists.

Reference	Description	Weight (kg)	Size (cm)
AFK0030AT	Ground Improving Material GIM	15	60 x 40 x 20

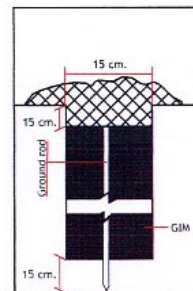
The most useful areas:

Rocky ground – Stony soil – Mountain tops – Moist sandy soil – Moist gravel – Dry gravel



### ● Earthing rod installation

Estimated bags of GIM for backfilling the holes around earthing rods					
Hole Diameter	Hole Depth (in meter)				
	1,8	2	3	5	6
10 cm	3	4	4	7	8
15 cm	6	7	8	14	16
20 cm	9	12	13	23	27
25 cm	13	17	19	35	41

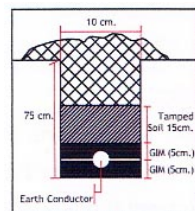


1. Dig a hole with a 15 cm diameter and with a 15 cm depth inferior to the earthing rod length.
2. Put the earthing rod into the hole to an approximately 15 cm depth, ensuring that the top of the earthing rod is around 15 cm below the ground level. Any exothermic welding or clamp connection is necessary.
3. Mix the GIM with 3-4 liters of water per bag and fill the hole with the mixture covering the earthing rod completely. Use a pole or other device to ensure that the GIM is properly compacted.
4. Fill the rest of the hole with the dirt removed earlier and removes excess standing water.
5. Use the table below for various holes depths and diameters.

### ● Trench installation

Estimated linear feet of ground conductor covering with each bag of GIM :				
Trench Width	Total thickness of GIM			
	5 cm	10 cm	15 cm	20 cm
10 cm	1,4 m	1,1 m	0,7 m	0,6
15 cm	1,1 m	0,7 m	0,45	0,35
20 cm	0,85 m	0,6 m	0,35	0,25
25 cm	0,85 m	0,5 m	0,3 m	0,2 m
30 cm	0,7 m	0,35 m	0,25 m	0,2 m

1. Dig a trench with a minimum width of 10 cm and depth of 75 meters or more if the frost line is deeper
2. Fill in the bottom of the trench with at least 5 cm of GIM spread out evenly
3. Place the round or tape conductor on top of the layer of GIM
4. Pour enough GIM on the conductor to completely cover it with at least 5 cm of GIM.
5. Fill in the trench with about 15 cm of tamped soil above the GIM.
6. Pour enough soil to completely fill in the trench.
7. According to the width of the trench and the GIM width use the opposite table.



### ● Plate or mesh installation

1. Dig a hole with a diameter of 30 cm superior to length of the plate or the mesh. (dig to reach moisture if possible).
2. Connect the conductor to the plate or mesh in at least two points with Exothermic Welding.
3. Fill in the bottom of the hole with at least 20 cm of GIM.
4. Place the plate or mesh horizontally on the GIM.
5. Pour 20 cm of GIM on the plate or mesh; be careful to completely recover it.
6. Fill in the rest of the hole on 50 cm with the mixture of soil pull out before.

