



SOIL HEATING CABLE INSTRUCTIONS

INSTALLATION: Cut plastic or metal hardware cloth, with 1/2 in. (1 cm.) openings, to fit the planting area. Arrange the cable on the hardware cloth in a pattern so that it is at least 3 in. (7.5 cm.) from the sides of the flat and at least 4-5 in. (10-13 cm.) away from other portions of the cable. Loosely attach the cable to the hardware cloth using string, tape or plastic ties. The thermostat should be located approximately half way between the center and edge of the pattern.

Use a flat constructed of wood or insulation board. Be sure there are adequate drain openings in the bottom of the flat. Cover the bottom of the flat with a layer of sand or gravel for drainage and then add 1/2-1 in. (1-2 cm.) of soil or non-flammable bedding mixture. Place the hardware cloth and cable assembly in the flat with the warming cable side down. This will protect the cable from being damaged by tools used to cultivate or move plants. Mark the thermostat location with a stick. Add an additional 2-3 in. (5-7 cm.) of soil/mixture over the hardware cloth. Add water to the soil/mixture. It is the moisture that conducts and distributes the heat. Plug the cable into a 110-120 volt power supply. Allow the cable to operate for several hours to reach steady temperatures. Use a soil thermometer to check temperature and uniformity. Adjust the cable placement as required and repeat the preceding steps if necessary.

If potted seeds or plants are to be used, add only one (1) in. (2.5 cm.) of soil/mixture over the hardware cloth. Place the pots on the soil/mixture layer and then add additional soil/mixture around the pots to within 1/2 in. (1 cm.) of the lip of the pots. Without this additional soil/mixture to conduct heat to the sides of the pots, there will be little or no heat transmitted through the bottom of the pots. Add water and check temperatures and uniformity.

For desert type plants which do not require as much moisture, again add only one (1) in. (2.5 cm.) of soil/mixture over the hardware cloth. Add water and check for temperature and uniformity. Then, add 2-3 in. (5-7 cm.) of a sand-soil mixture for planting. Water should be added to keep the bottom soil/mixture moist and conducting heat. The water should simply pass through the sand-soil mixture.

NOTE: Sand is basically an insulating material and it will not conduct heat as effectively as soil or sand-soil mixture.

CAUTION:



The heating cable has limited heating capacity. When the air temperature drops below 60°F (16°C), protection should be provided over and around the planting flat to conserve the cable heat. If such protection is not provided, all of the heat generated by the cable will be lost to the surrounding air, and the temperature of the soil and air could drop to the point where the plantings will be damaged. Without protection from cool air, the plant roots may stay warm enough to survive but the leaves and stems may be damaged.

After harvesting, disconnect the cable and remove the upper layers of soil and gently lift out the cable and hardware cloth assembly. Wash the soil off the cable being careful to keep the cord plug dry. Inspect the cable for damage or deterioration. The cable is NOT repairable and must be replaced if damaged.