

With deviflex™ heating cables installed in football fields or golf courses the soil can be heated and the growth of grass can start in the early spring. The area will then be ready up to two months earlier than usual.

Furthermore, the season can be prolonged in autumn when the period until the grass stops growing can be extended by means of heating the roots.

Installed output

The required output for soil heating is normally 50 -100 W/m² depending on the geographic location, the nature of the soil, and the relevant season.

In football fields with international measures (70 x 110 m) an output of 400-750 kW (50-100 W/m²) is typically installed.

Example 1

A football field of 70 m x 110 m is to be heated with deviflex $^{\text{m}}$ heating cables.

An output of 90 W/m² is installed amounting to a total of 693 kW.

Example 2

On a golf course a number of greens with a total area of 975 m² are to be heated with deviflex[™] heating cables.

An output of 80 W/m² is installed amounting to a total of 78 kW.

Installation

DEVI's deviflex™ heating cables can be installed both when the grass is laid and when the grass is renewed. The latter installation takes place by ploughing the heating cables directly into the ground.

The grass area must be level and have a good drainage.

The installation is performed with a special plough designed to hold 1-3 cable drums at a time and place them in the correct depth.

The distance between the cables naturally depends on the output per metre and the desired output per m², typically 20-40 cm. The area will not be damaged and will be completely ready for use 10-12 days after the installation.

The heating cables are installed 25-30 cm below the surface to avoid damages to the cables in connection with the use of e.g. javelins.

When the above output values are installed, the temperature in the root zone, approx. 10 cm below the surface, will be 6-10°C.

In order to keep the soil warm and moist the area should be covered with plastic or a similar material when it is not being used.

Product choice

The deviflex[™] heating cables with an output of 17-20 W/m, 230/400 V can

Heating of grass areas

be used for applications in grass areas.

Besides, a devireg[™] thermostat (the devireg[™] 316 or devireg[™] 330) should be used to measure the temperatures in the root zone, approx. 10 cm below the surface.

The heated area can be divided into a number of zones, each with a separate regulation unit.
For heating cable systems of this size, 400 V heating cables are often used.

When major stadiums are concerned the required output is often easily accessed. In such stadiums powerful lighting systems are normally installed which are only used when the field is used. It is rather uncomplicated to change such installations so the power access can be used for the cable installation when the lighting system is not used.

The heating cables should be switched on 4-6 weeks in the spring before the field can be used as the root net must have started growing before the field can be used without any risks of damaging the grass.

For safety reasons heating cables in grass areas should be screened and earthed with a RCD-relay.



