



Tennis court heating: estimated consumption figures

Because of the fact that tennis court heating is relatively new, we have estimated its use in practice. This estimation is based on the results of the tennis court heating systems installed firstly in The Netherlands and on our experiences with football pitch heating.

Below mentioned list includes the number of ice and frost days. The data are the values measured by the KNMI (Royal Dutch Meteorological Service) from 1976 – 2005.

Location	Number of ice days (max .temp < 0° C)	Number of frost days (min. temp < 0° C)	Number of days heating on ice days	Number of days heating on frost days
De Kooy	9	41	9	32
De Bilt	9	59	9	50
Eelde	13	69	13	56
Vlissingen	5	25	5	20
Eindhoven	9	62	9	53
Maastricht	11	58	11	47
Average			9	43

Note: The available data from 2005 only include De Bilt.

We assume that the heating system is continuously in operation during ice days as far as gravel courts are concerned, on frost days this will be on average 40%. This will be less for other types of courts because these do not need to be kept 100% frost free.

The above means that there are on average 26 full heating days on a yearly basis. We assume that there will be 19 full heating days for the other court types. To heat one tennis court we need 30 kW of power. The price per kWh will depend on the contract with your energy supplier. In The Netherlands the expected price for one kWh will amount from € 0.07 to € 0.14.

With regard to the technical life of the heating systems we can inform you that the heating ribbons have a 15 year warranty. Other components are covered by the standard manufacturers' warranty. A technical life of 20 years however is realistic for the entire installation. Re-use of the system has recently been successfully proved; this means that there are no restrictions with regard to the renovation of courts.

We conducted tests in the last quarter of 2014 at temperatures as low as minus 10°C to determine the ideal depth of the heating ribbons and the highest efficiency of our heating system for gravel courts.