gabotherm®

Special Solutions for Floor Heating Systems

gabo-swing Bouncing Floor Heating System:

Gym floors with elastic surfaces, so-called bouncing floors, are used in particular for sports gyms. As radiators cause too great a risk of injury in gyms, the gyms are often equipped with floor heating systems.

In this form of floor heating system, the bouncing floor heating system, the heating pipes are located in the free spaces between the bouncing beams. The floor heating pipes are fastened to the thermal insulation of the unfinished floor using clamping strips and are laid in meanders.

The laying spacing depends on the available spacing between the bouncing beams and is determined differently depending on the floor manufacturer.

The following pipe dimensions are available for the gabo-swing system:

- round pipe 20 x 2.0
- round pipe 25 x 2.3

The temperature is controlled using an underfloor thermostat that measures the temperature in the air space. The floor manufacturer determines the limiting values.

gabo-industry Industrial Floor Heating:

Depending on the requirements, the heating pipes for the industrial floor heating system can be bedded in one of the various layers of the floor slab made from reinforced, pre-stressed or steel fibre concrete. The execution of the floor slab depends on its usage and the loads resulting from it and is dimensioned by a structural engineer according to these prerequisites.

There are thus 3 different design alternatives:

- Pipes fastened on the lower reinforcement (e.g. for reinforced concrete)
- Pipes fastened on the upper reinforcement (e.g. for reinforced concrete)
- Pipes fastened on the substructure using a clamping strip (steel fibre concrete)

The following pipe dimensions are available for the above-mentioned design alternatives:
- round pipe 20 x 2.0
- round pipe 25 x 2.3

The pipes are laid in meanders for different laying systems (individual heating circuits or heating circuits in parallel).

In places where the heating pipes traverse expansion, contraction, dummy, building or end-of-day joints, the heating pipes have to be protected by a protective pipe or an insulation tube.

gabo-outdoor Open Surface Heating:

This system is used to keep e.g. garage entrances, parking spaces, footpaths or even heliports ***free from ice and snow***.

The pipes are bedded either in a concrete slab or in a sand layer. Depending on the design alternative, the ***pipes are fastened*** either to the ***reinforcement steel*** or ***using a clamping strip***.

The meander-shaped pipe laying can be carried out using the following pipe dimensions:
- round pipe 20 x 2.0
- round pipe 25 x 2.3

The layout design depends on the prevailing weather conditions at the individual project location, with consideration of the use of anti-freeze (greater pressure loss).

gabo-green Lawn Heating:

This special system of the open surface heating is used to keep large lawn areas, e.g. football fields, ***free from ice and snow***.

The ***pipes are laid*** in the lawn course ***using a pipe clamping strip***. The individual heating circuits are connected to a manifold.

The following pipe dimensions are suitable for this system:
- round pipe 20 x 2.0
- round pipe 25 x 2.3

The layout design depends on the prevailing weather conditions at the individual project location, with consideration of the use of anti-freeze (greater pressure loss).

---------- Prices upon request ! ----------

Should you have any questions concerning these special solutions, please contact our application technology department.