



Project report
All plastic pipe PE-Xc-02

Swissporarena Lucerne
CH-6005 Lucerne / Horwerstrasse 91

Project description

The new arena was opened on the Allmend in 2011. At the same time, a turf heating system with 25 mm PE-X pipes was also commissioned. The terrain on the Allmend in Lucerne was unstable – the grass level of the pitch sank by up to 20 cm over the years in some places. Comprehensive renovation was unavoidable. The still-intact old turf heating system had to be decommissioned, and a new turf heating system was installed over the existing pipes.



Image 1: PE-Xc-O2 heating pipes are laid on the sand bed

The new and innovative system from rasenplan GmbH was used. The lower installation depth of the pipes allows for more efficient and flexible use of the heating system. The newly installed pipes were connected to the existing PE distributor (DE180).



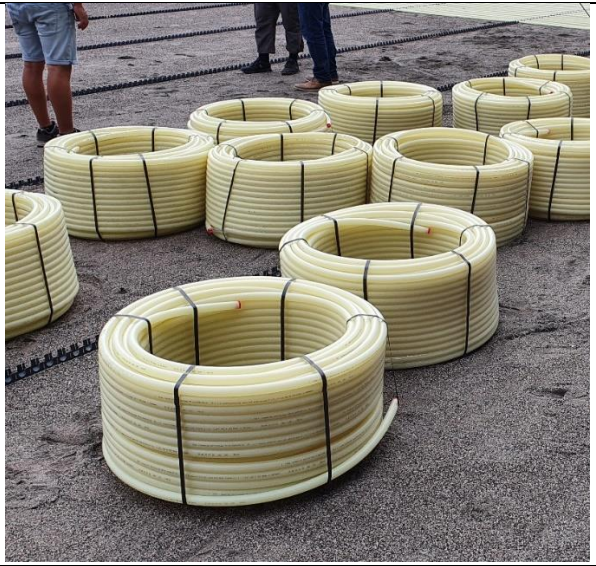
Existing turf heating



The old cut-off pipes underground – a new layer of quartz-lava sand mixture was laid on top. The existing distributor over the length of the pitch remained unchanged. The new connection pieces were welded into the existing D180 PE. pipe from HakaGerodur, and the pipe was connected with the press fitting.



Delivery/storage/provision of pipes



Assembly technology



Installed in a meander system – spacing 15 cm



Omega bends – no kinking



The installation rails were attached to the sand with special nails



In the bends, the pipes were additionally fastened

Additional impressions



Project details

Construction site

Swisspor Arena
CH-6005 Lucerne

Client

Stadion Luzern AG

Construction period

23.05. – 15.07.2022

Heated area

70 x 105 m

Planning and execution

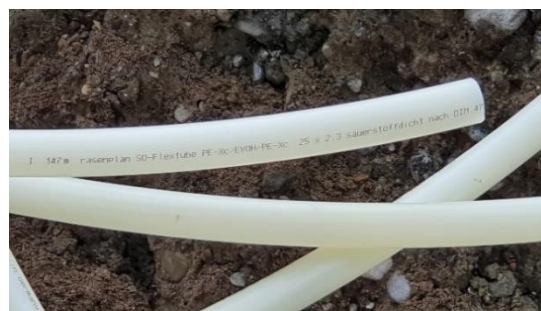
rasenplan GmbH
CH-4125 Riehen
www.rasenplan.com

Installation

Höhn
Kunststoffverarbeitung
DE-97295 Waldbrunn

Products used

- All-plastic pipes PE-Xc-O2 25 × 2.3 mm
52,096 m – 352 heating circuits of 148 m
- D25 brass press fittings
- Installation rails for Dim 25



HakaGerodur AG
Mooswiesstrasse 67
CH-9201 Gossau SG
T +41 (0)71 388 94 94
www.hakagerodur.ch