

**PIPES AND SHAPES FOR CONSTRUCTING INSTALLATIONS OF
ARTIFICIAL ICE RINKS AND HEAT PUMPS
standards: PN-EN 12201-2,-3; PN-C-89222
SPECIFICATION AGREED WITH THE CUSTOMER**



Technical Reference

"ELPLAST+" Ltd. manufactures pipes and fittings for the construction of freezing systems for artificial ice rinks and smaller ice skating rinks in the fixed-plate version as well as demountable seasonal ice rinks.

Depending on the technical solutions of the freezing installation, we manufacture pipes from modified polyethylene, diameters of Ø10, Ø16, Ø20, Ø25, Ø32 mm, resistant to the effects of the cooling medium. The cooling medium in the aforementioned systems is a mixture of glycol and water in various concentrations. The system's operating range is between -20°C and +23°C. There are two types of pipes: single-layer and double-layer with an outer white layer. The freezing installations of a seasonal ice rink made of double-layer pipe are characterised by faster freezing of the slab. The primary method of joining pipes and fittings is polyfusion welding. The fittings required for the freezing installation include: tees, elbows, couplings, and threaded transition fittings. Pipes are usually produced in coils of a length agreed with the customer. At the customer's request, it is possible to manufacture a non-standard pipe as regards diameter, wall thickness or coil length, after prior consultation with ELPLAST+ Sp. z o.o. Pipe coils are subjected to 100% leakage checks.

Pipes manufactured by Elplast+ sp. z o.o. from modified polyethylene resistant to glycol are also recommended for use in **heat pump installations**, both for vertical boreholes and for horizontal probes. The most commonly used pipes for this purpose are SDR 11, with diameters of Ø32 and Ø 40 mm.

Advantages of polyethylene pipes in ice rink and heat pump installations:

- low unit weight of the pipes
- easy and quick installation
- low installation cost compared to aluminium and EPDM installations
- environmental non-toxicity of pipes and fittings
- ecological product, possibility to use the material for re-production
- completely corrosion-resistant

Attachments:

- Price list - prices on request