



Comfort Heating and cooling system



Why the Comfort system?

- heating and cooling in one optimal system
- noise-free operation
- maintenance-free
- economical and efficient
- cooling, non-blowing neither swirling dust
- for peaceful sleep in every season
- long-life service (designed for 50 years)
- project preparation and customizing
- high quality Czech production
- many years of experience

Are you thinking about the heating and cooling in one system already from the moment of planning construction of your house?

Using the COMFORT system in combination with thermal pump you get one unique, simple and the only system that provides you thermal comfort during the whole year.



Optimal thermal comfort

Water flows in pipe registers, radiant energy then heats or cools not only people, but also furniture, floors and walls and creates a pleasant environment with an even temperature.

Cooling is ideal in living spaces. Where you don't want cooling, you just use underfloor heating.

It is a very effective system due to the single source of heating and cooling water (heat pump). Thanks to this combination of surface heating and cooling is always working in the most efficient mode.

The system offers a professional solution with lasting value and longer service life.

Floor system



Ceiling system



The company FV - Plast is a manufacturer of MULTIPERT-5 pipes (modern 5-layer PERT pipe) and MULTIPERT-AL pipes (PERT/ AL/ PERT construction) = tubes with an inner aluminum layer

PE-RT TYP II (outer layer)

Adhesive —

Aluminum layer (oxygen barrier)

Adhesive -



PE-RT TYP II (outer layer)

Adhesive ——— EVOH ——— (oxygen barrier)

Adhesive -

PE-RT TYP II ______

(increased temperature resistance)

Ceiling cooling system

Surface heating / cooling as required ideal air conditioning

Cooling water flows in registers with integrated pipes built into the ceiling structure and removes the energy of the cooled space. Thanks to the high percentage radiant energy primarily cools the floor and walls, thereby creating a pleasant room climate with uniform temperature.

Ceiling cooling system

CoolFLEX

Innovative system – universal for all rooms, where could be placed plasterboard or other soffits. In the aluminium registres are integrated 8 mm pipes.

- easy assembly
- high efficiency
- easy coordination of construction works

CoolPLATE

Suitable for fragmented space that has a ceiling plan with many construction elements. There are milled grooves in the plasterboard where are placed 8 mm pipes. Tailor-made production.

 for non-standard spaces with fragmented ceiling layout plans



CoolGRID

Individual solution. Concealed system. The pipes are installed directly on the construction site.

 for spaces where it is not possible to install plasterboard ceiling (renovation, round ceilings)



Heating and cooling system COMFORT

The main advantages of underfloor heating

- It is comfortable. It ensures a perfectly even heat distribution in the room and in large spaces.
- It is economical. Saves heating costs. People feel the radiant heat better, and especially that from the feet.
- Therefore, the actual air temperature may be lower than in the case of radiators. Required water temperature in the underfloor heating circuits is max. 40 °C.
- Acquisition costs are the same as other hot water systems.
- Easy to adjust.
- It is universal. It can be used for all floors coverings and heating sources.
- It is suitable for new constructions and reconstructions of houses and apartments and companies.
- It is reliable. The minimum service life is 50 years.
- Easy to assemble. High quality workmanship of system pipes, plates and accessories allows installation of a complete system in three simple work steps.
- Project design done by our construction project software.



Why choose a ceiling cooling system?

- The cooling system offers a solution for all types of ceiling constructions.
- It is energy-saving and environmentally friendly.
- You maximize the efficiency of using energy from renewable sources.
- Thanks to their low inertia, they are an ideal solution for saving energy heating and cooling for passive houses.
- The system is hidden in the soffit thus creates no restrictions on the current or future room design.
- Creates a comfortable and healthy environment without overheated and undercooled zones.
- Comprehensive heating/cooling system without unpleasant drafts and noise to improve concentration and work performance.
- For all types of radiant large-area systems for the ceiling, wall or floor.



Kozovazská 1049/3, 250 88 Čelákovice Czech Republic T: +420 326 706 711 E: fv-plast@fv-plast.cz www.fvplast.com | www.alcapipe.com FV - Plast is a Czech manufacturer of plastic pipe systems with 30 years of experience. We export our products to 50 countries around the world. We always offer a comprehensive system to cover the most diverse customer requirements and the diversity of individual building structures.

Our solution systems are designed as a complete system, this applies especially to the COMFORT system, in which ceiling cooling/heating can be optimally designed for all types of ceilings.

- Production and distribution of material
- Projects
- Customer service
- Education
- Consulting
- Atypical solutions