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# InstalSmart
## – free app for the underfloor heating installation calculations!
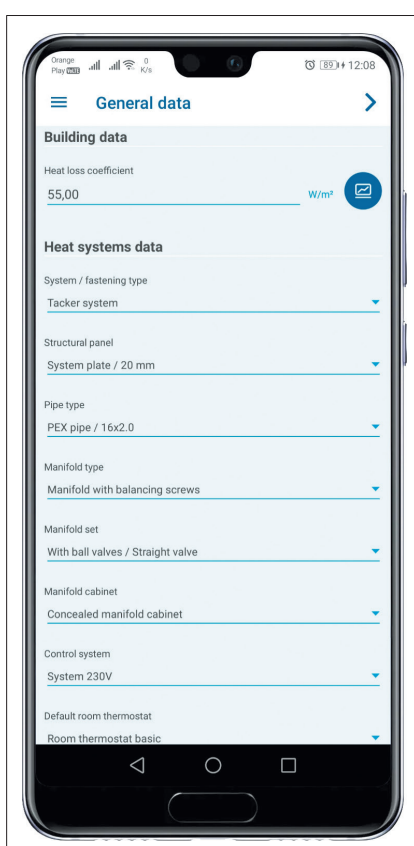
**Underfloor heating installations are the dominant solution in newly built and modernized single-family houses, as well as in various development investments. Having a tool that allows you to define the parameters of the underfloor heating installation in just a few minutes, optimize it, next generate a list of elements necessary for its construction, and finally send the whole to the investor in PDF files, can prove the professionalism of the installer or technical advisor.**

nstalSmart is a new free application available for Android and iOS platforms. It has a simple interface that allows you to quickly enter the necessary data and perform calculations in reply to inquire or during a meeting with an investor. What is most important, the **InstalSmart** application uses the same calculation engine as the programs of the **InstalSystem** package – available on the



**Pic. 1.** InstalSmart – startup screen

market for over 20 years and proven by thousands of designers from around the world, professional software for designing underfloor, wall, ceiling and radia-
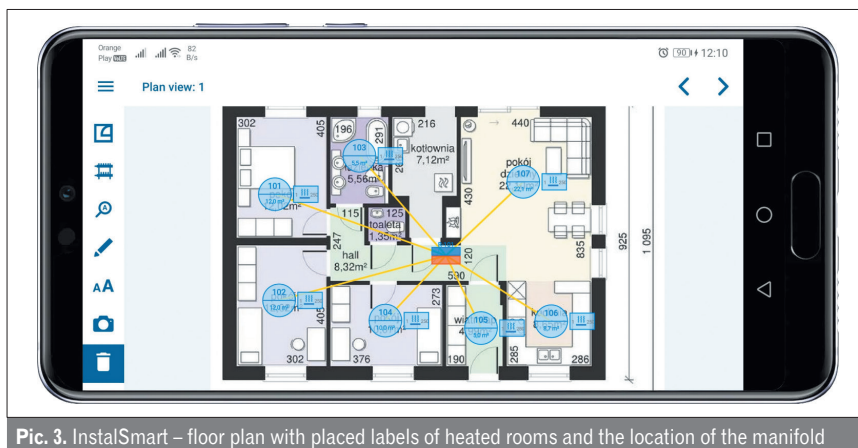


**Pic. 2.** InstalSmart – general data

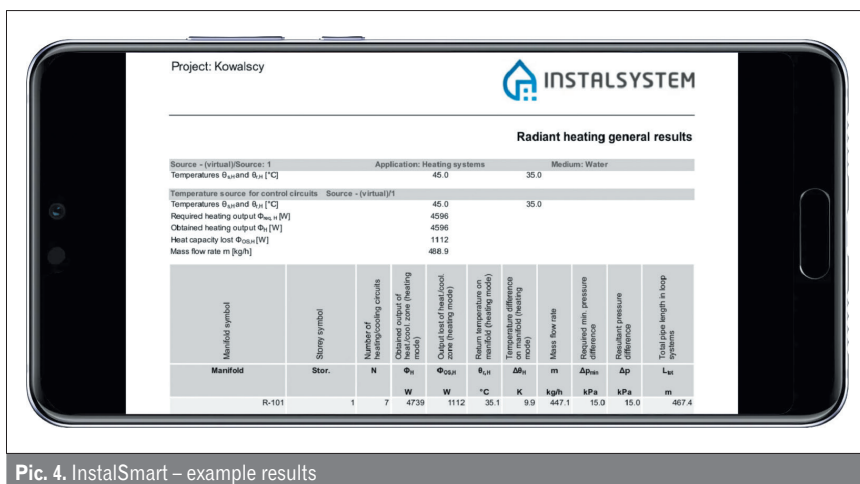tor heating systems, as well as cooling installations, water supply and sewage systems.

In the first step, basic data should be entered. The heat loss is estimated, the pipe fastening system can be chosen from among several typical solutions. Other basic installation elements and parameters of the installation should be verified or modified.

Next, on imported drawing of floor plan, provided in graphic file by the investor or photographed directly at the investor's site, the rooms in which the underfloor heating system is to be installed and the planned location of the manifold should be indicated.

After completing the data of the rooms, mainly the area, the required internal temperature and the covering (parquet, carpet, tiles, etc.), calculations can be made. The program determines all the most important parameters of the installation, including pipe spacing, flows, pressure losses and settings on rotameters or thermostatic valves of the manifold. Supply temperature for the installation can be optimized by the program



**Pic. 3.** InstalSmart – floor plan with placed labels of heated rooms and the location of the manifold
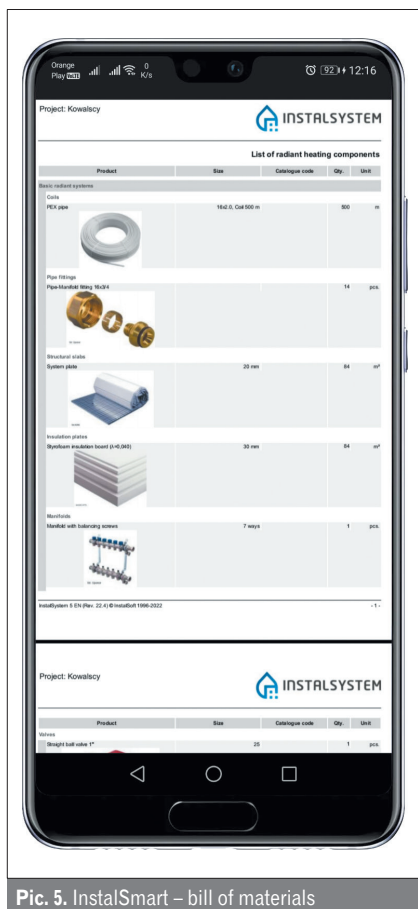
**Pic. 4.** InstalSmart – example results

or it can be imposed. The program enables quick modification of assumptions and verification of its influence on the results. For example, you can check how the use of different heat sources with different flow temperature values (e.g. heat pump vs gas boiler) will affect the investment costs.



**Pic. 5.** InstalSmart – bill of materials

Next to thermal and hydraulic calculations results, a list of required elements of the installation is also generated in PDF format, including the length of pipes, type and size of the manifold, quantities of fastening elements, system board, foil, insulation, fittings, automation elements and others.
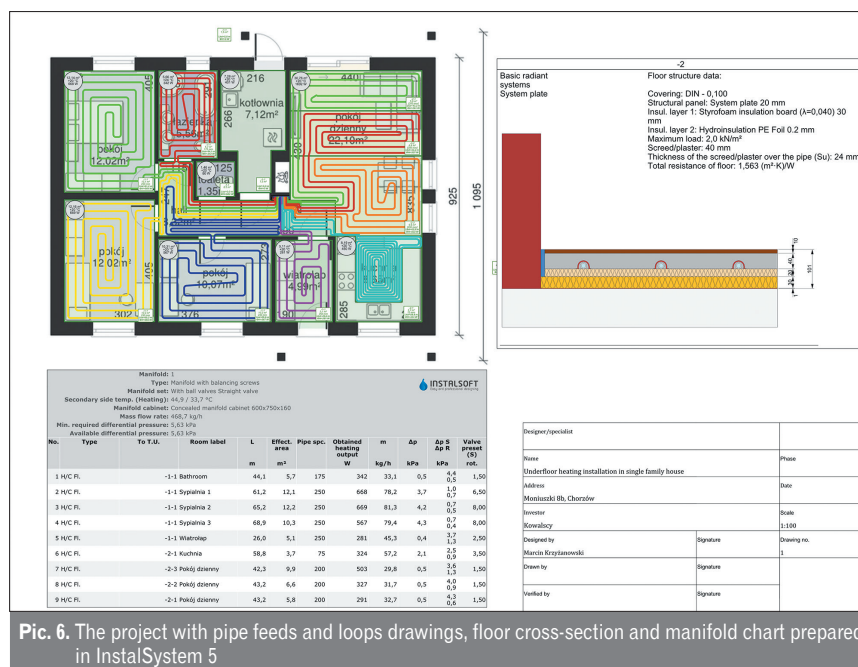
ler himself, because the **InstalSystem 5** package has intuitive and easy-to-use interface. It is also possible to obtain such support from some manufacturers of underfloor heating systems, who also use the **InstalSystem 5** package.

**InstalSmart** in a neutral InstalSoft version, containing a neutral database of underfloor heating systems, can be downloaded for free from Google Play and the App Store.





**Pic. 6.** The project with pipe feeds and loops drawings, floor cross-section and manifold chart prepared in InstalSystem 5

A feature that distinguish **InstalSmart** application, compared to other similar applications for mobile devices, is the possibility of continuing work on the project in the **InstalSystem** package. The project file generated by the **InstalSmart** can be sent directly to the indicated e-mail addresses. Thanks to that, after downloading and opening it in the **InstalSystem 5** package, it will be possible to quickly supplement the project with other elements of the installation (e.g. boiler, heat buffer, balancing valves, shut-off valves, filters, etc.), generate complete drawings with the layouts of the loops and the pipe feeds, more detailed results and a bill of materials. All this can be done by the instal-

☛ **ATTENTION!** If you are a manufacturer of an underfloor heating systems, we can prepare **InstalSmart** application in a dedicated company version, containing only the library of your products. Contact our sales department for more details.



**INSTALSOFT**
Easy and professional designing

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