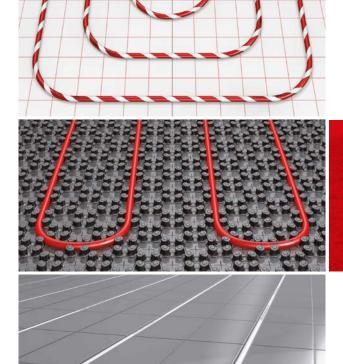


UNDERFLOOR HEATING SYSTEMS





DETAILS THAT WORK BETTER FOR YOU



UNDERFLOOR HEATING SYSTEMS

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ADDED VALUE IN DETAIL

FLOORTEC underfloor heating systems by VOGEL&NOOT are packed with innovation, flexibility and efficiency - all important ingredients to a high-quality complete solution.



"SERVICE, COMPETENCE AND INNOVATIVE COMPLETE SOLUTIONS ARE ESSENTIAL COMPONENTS OF A SOLID COOPERATION."



VOGEL&NOOT is Europe's leading technology partner and offers progress on the highest level, paired with a broad product portfolio, covering radiators, panel heating and chimney systems.

Fitters, planners as well as end customers enjoy our continued developments and complete system solutions with functional or extravagant design. They confirm the long-standing success of VOGEL&NOOT.

ENERGY EFFICIENCY AS CORE PRINCIPAL

As an innovative pioneer VOGEL&NOOT has a leading role in the industry and presents future-based heat supply technologies for convenient thermal systems in combination with sustainable protection of the environment.

EXTRAVAGANT DESIGN VARIETY

The design radiators by VOGEL&NOOT set new standards and upgrade modern rooms with their diverse, distinctive appearance and customised workmanship.

INTEGRATED PRODUCT SELECTION AND HIGH-QUALITY SERVICE

As a complete system supplier for heat supply solutions, VOGEL&NOOT not only offers a diversified selection of different product segments, but it also focuses strongly on customised and competent service in all areas.

INGREDIENTS FOR SUPERIOR QUALITY

VOGEL&NOOT invests heavily in competence and innovation. That way, both fitters and customers greatly benefit from high-performance, premium-quality pro-

ducts. The quality and power ratings of underfloor heating systems are subject to permanent testing by renowned and independent European institutes.



PROGRESS ON A GLOBAL LEVEL





WORKING TOWARDS A SUSTAINABLE FUTURE

The importance of climate protection and environmentally friendly products is increasing day by day. Therefore VOGEL&NOOT constantly works on the development of resource-saving heat distribution solutions to be a able to guarantee efficiency in terms of climate protection. After all, optimal indoor heat distribution is a significant and essential contribution to effective climate protection.

SUSTAINING AND IMPROVING THE ECOBALANCE

VOGEL&NOOT acts as pioneer in the field of renewable energy, using the resources of our planet the best possible way, e.g. by following a strict ECO course, concentrating on low-temperature heat distribution and compatibility with renewable energy as well as constant product optimisation and product development. Since 2011, VOGEL&NOOT has been a member of Climate Alliance Austria.

FLOORTEC UNDERFLOOR HEATING SYSTEMS – DETAILS THAT WORK BETTER FOR YOU

Essential, flexible and innovative - underfloor heating systems are simply indispensable for new buildings or converted buildings today. VOGEL&NOOT offers seven different underfloor heating systems for all sorts of requirements and needs. This enables heating system planners and fitters to develop smooth workflows for conceptual design and laying. In addition, VOGEL&NOOT not only extends and improves their product range continuously, but also provides a plus in terms of efficiency by way of its FLOORTEC complete system guarantee.









5 STRONG ADVANTAGES:

- 1. Solvent-free
- 2. No added chemical substances
- 3. Highest degree of stability
- 4. Guaranteed quality
- 5. System compatibility

QUALITY AND PERFECTION MUST MEET HIGH STANDARDS - BUT IF THEY ARE ACHIEVED AND RESULTS ARE COM-PELLING, YOU KNOW YOU HAVE DONE EVERYTHING RIGHT.

FLOORTEC PE-XCELLENT <u>5</u>

The PE Excellent 5 tube by VOGEL&NOOT takes the simple and safe handling of FLOORTEC complete underfloor heating system to an entirely new level. Convenient handling, extremely low wear and corrosion resistance are the most remarkable features of this compelling product that combines the benefits of homogeneous production, 5 layers and an internal oxygen barrier layer. In addition, FLOORTEC underfloor heating systems stand

out due to its compatibility within the variety of available products. Great importance is of course attached to sustainable production and an ecological approach, so the PE-Xcellent 5 tube by VOGEL&NOOT fulfils all standards in an exemplary way through its harmless processing by way of beta-sterilisation and without using any chemical additives or industrial by-products.



COMPLETE SYSTEM GUARANTEE

The FLOORTEC complete underfloor heating systems by VOGEL&NOOT are pioneering products for a simple and efficient workflow. They offer everything from a single source. That way, they are superior to all systems consisting of components put together individually. The improper combination with third-party components has repeatedly led to quality issues which largely have to be borne by the installing company due to the prevailing legal norms. VOGEL&NOOT helps to prevent such situations by providing complete systems and therefore creates a basis of trust for a reliable cooperation.

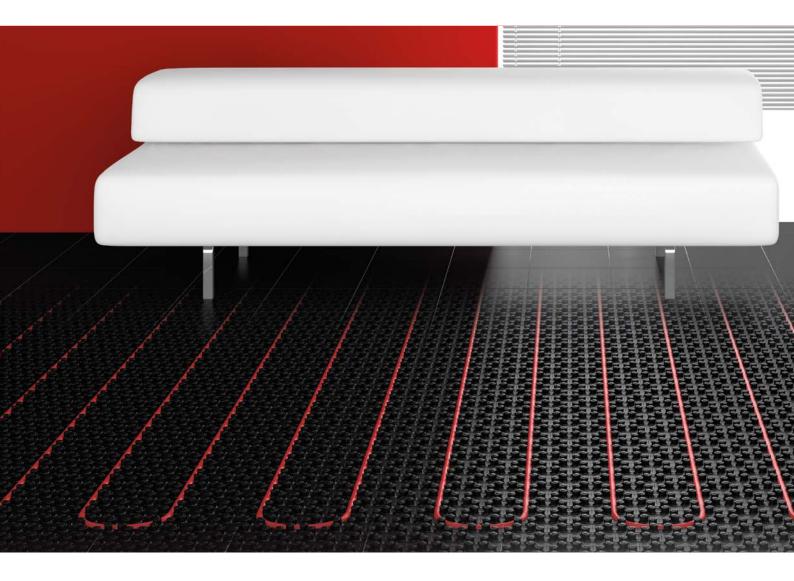
PREMIUM SERVICE

What good are the best products without competent advice and customer-based service? VOGEL&NOOT regards service to be an inseparable part of the products it supplies. Great importance is attached to a close and fair partnership with our target groups. Therefore VOGEL&NOOT guarantees everything "from a single source".

Customer service that is available all over the country and reacts promptly in case of requests, on-site service and support for all matters of concern - all of that is part of our service standard. For more difficult cases regarding the dimensioning of a underfloor heating system, the VOGEL&NOOT Service Centre provides reliable assistance for all sorts of issues - with many decades of experience for various different applications and a strong, service-based team.







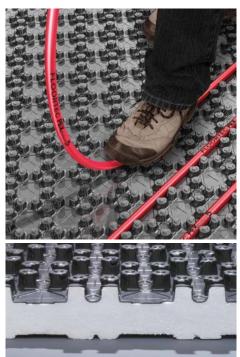
FLOORTEC PREFORMED PLATE SYSTEM UNI

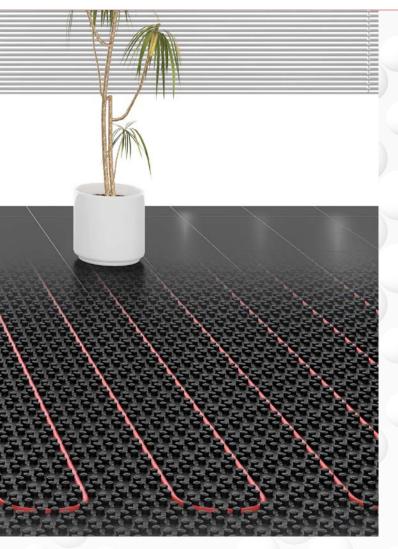
Simple, quick, safe and convenient - all good arguments in favour of the FLOORTEC preformed plate system UNI. Install an underfloor heating system in only 4 simple steps - without having to use any tools.

The basis of the foamed tube-retaining knobs provides a solid foundation for pressing in heating tubes with your feet easily and quickly. An effortless, compelling argument in favour of the FLOORTEC preformed plate system UNI.

YOUR BENEFIT:

The exact installation layout in a 60mm grid provides smooth heat distribution due to an analogue physical calculation.





FLOORTEC PREFORMED PLATE LIGHT

FLOORTEC preformed plate LIGHT is your reliable product if an insulation is already in place.

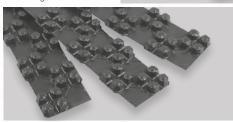
YOUR BENEFIT:

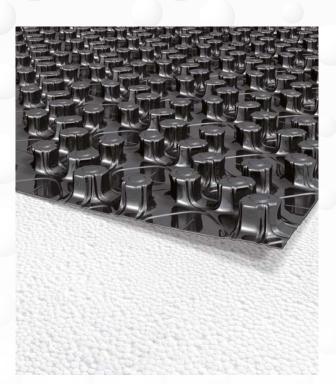
It can be used flexibly and independent of the below installed insulation. FLOORTEC preformed plate LIGHT offers all the convenience of the preformed plate system UNI





FLOORTEC Connecting element







FLOORTEC SELF ATTACHING SYSTEM

COMBINED ADDED VALUE

All in one and much more - this is what the FLOORTEC self attaching system offers you. A connection of practical features, such as swift fastening, easy laying and little offcut - as with the stapler system - as well as tool-free assembly and efficient work as with the preformed plate system make the FLOORTEC self attaching system a highlight among underfloor heating systems.

3 STEPS TO SUCCESS

This is the fastest way to achieve your goal: 1. Roll out the insulation boards, 2. Apply the joint tape, 3. Lay the tubes - and the FLOORTEC self attaching system installation is finished. Discover how remarkably simple this model works and learn more about the numerous benefits compared to other installation methods.



YOUR BENEFIT:

- Fast and easy installation
- Intelligent roll-off assistance
- Self-adhesive joint tape
- For plastic and aluminium composite tubes
- All parts can be combined with FLOORTEC underfloor heating systems (system guarantee).









One great benefit of the FLOORTEC 3D stapler system is its simple installation and flexible handling. It has a predefined installation layout with 50mm steps and can be stapled precisely to the relevant footfall sound insulation by using U-clips.

The FLOORTEC 3D stapler system also features first-rate footfall and heat insulation properties. Through the integrated tape fabric the insulation provides extreme retention power for the heating tube holders as well as high footfall impact stability during installation. The unique FLOORTEC 3D stapler system fixes the heating tubes with special heating tube holders and the use of the stapler gun. That way, this method guarantees optimal hold and can also be used for larger surfaces.



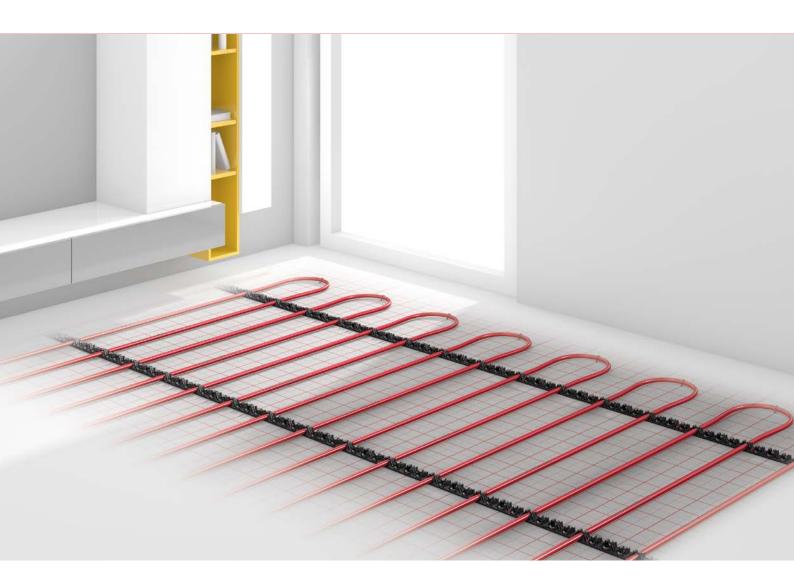


FLOORTEC clips are available in 3 different sizes and can be universally used with a stapler bar.



YOUR BENEFIT:

The FLOORTEC 3D stapler system is suitable for all types of rooms. It is versatile and flexible. Installation is easily done with a stapler gun.



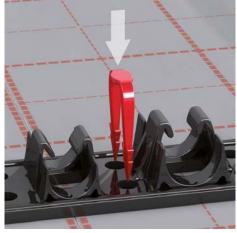
FLOORTEC RAIL-MOUNTED SYSTEM

The FLOORTEC rail-mounted system stands out for its simple method with 1m long elements that can be extended as required due to the so-called "click system". Holding needles retain the laying rails on the ground above the covering film and guarantee secure hold.

YOUR BENEFIT:

It can be used flexibly and independent of the underlying insulation. Therefore the FLOORTEC rail-mounted system can be used for large surfaces as well as high loads. It is designed with 50mm steps and can therefore be used for all tubes with dimensions of 14, 16, 17 and 20 mm.





FLOORTEC GRID MAT SYSTEM

No matter what type of insulation you have in place - the FLOORTEC grid mat system can always be installed independently and rapidly. The grid mat is fixed above a covering film, and the tube can be conveniently fastened by way of grid mat clips. Mat connectors strengthen the bond of the grid mats.

- Clips for tube dimension 16/17
- Installation is possible in upright posture.
- Swift and efficient laying process.

YOUR BENEFIT:

This innovative mat connection technology and the grid mat design with a 50x50mm or 100x100mm or 150x150mm grid is suitable for realising all conventional laying distances.







FLOORTEC DRY SYSTEM

WHENEVER TIME IS OF THE ESSENCE

The construction system of the VOGEL&NOOT dry system ensures a trouble-free and less time-consuming workflow at the construction site. This method works without cement screed, allowing a quick and clean laying process. This prevents the formation of construction moisture, and no screed expansion joints are necessary.

COMPACT AND RELIABLE

The FLOORTEC dry system allows an extremely thin floor structure and is compatible with all top flooring types. Quick response to heat regulation and short heating-up times are some of the benefits, just as the quick installation of the underfloor heating system due to its compact dimensions.



THE REVOLUTIONARY UNDERFLOOR HEATING SYSTEM

YOUR BENEFIT:

Due to the low floor structure, the FLOORTEC dry system is an excellent choice for older buildings. This way VOGEL&NOOT helps you to save energy and to create a healthy and comfortable room atmosphere. Do yourself and your environment some good!

FACTS:

- Low structural height of about 50mm
- Optimal heat distribution across the floor
- Low mass per unit area
- Reduction of drying time
- Shortest possible response time due to slim floor structure



DYNAMIC PROGRESS

The constant development and innovation of the system and its additional products ensure reliable handling in the long term as well as service quality without any major time consumption or extra cost. Saving time is a crucial benefit of this system in an ever more active construction business.





The FLOORTEC stainless steel manifold, the centre of every underfloor heating system, has a compact design that can be used for all systems. The integrated flow rate controller (top meter) allows the regulation of the heating output in response to the relevant room temperature.

YOUR BENEFIT:

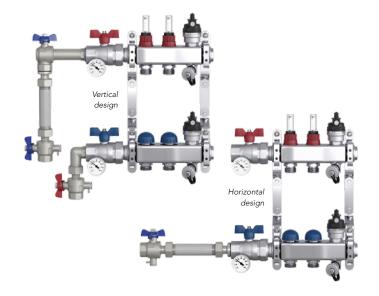
Due to the ¾" Eurocone connection, the FLOORTEC stainless steel manifold offers excellent compatibility and easy installation.



HEAT METER SETS

In modern residential buildings, individuality and flexibility become more and more important, especially in the multi-family home segment. In response to this important requirement, VOGEL&NOOT offers two different models of heat meter sets: a horizontal and a vertical model.

Innovative accessory models further improve the simple processing of heat volume accounting. They can be used for the entire FLOORTEC underfloor heating system. In addition, the ball valves and immersion sleeves can be combined with the most conventional heat counter suppliers.



PRESSURE DIFFERENCE CONTROL MODULE

The control valve ensures an exact, automatic balance of the individual heating circuit manifolds, which is highly relevant and effective in multi-family homes. This guarantees an optimal and balanced heat supply for all individual homes. It also reduces any noises by keeping the pressure difference at a constantly low level and it prevents any potential oversupply. The module features a 130mm 1" and a 110mm ¾" adaptor for the installation of the heat meter as well as an angle ball valve and 2 ball valves with a retainer for directly immersed temperature sensors.





FLOORTEC INDUSTRIAL FLOOR SYSTEM

In the near future, FLOORTEC underfloor heating systems will be enhanced by an additional new development. With the industrial floor system, VOGEL&NOOT is developing an underfloor heating system that is especially suitable for large commercial spaces such as warehouses or open plan offices, etc. This system is designed for all applications where normal surface heating systems would not be suitable due to increased loads.

The industrial floor system can be compared with the FLOORTEC grid mat system. One special feature of this new development is the PE-Xcellent heating tube in the dimension 20x2mm. The 5mm grid mat is laid on the floor construction on site. The PE-Xcellent heating tube is fixed on it with so-called special grid mat clips.

FACTS:

- Quick and efficient laying process
- For all conventional laying distances
- Suitable for high loads and large surfaces

INDUSTRIAL FLOOR SYSTEM



FLOORTEC FLOOR CONTROL STATION

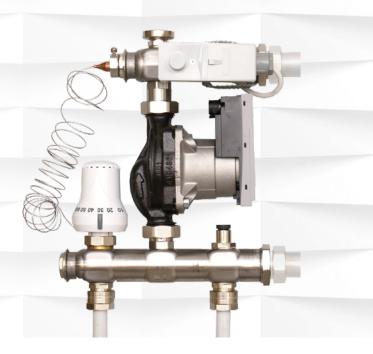
SIMPLIFIED HEAT REGULATION

The floor control station is used for constantly regulating the flow temperature of a low-temperature panel heating system connected to a high-temperature heating system.

The regulation module is designed with a 1" union nut for direction connection with the FLOORTEC stainless steel manifolds, but due to the 1" union nut it can also be used in connection with other manifolds.

FACTS:

- Integrated flow thermometer
- High-efficiency circulation pump
- Electric maximum temperature limiter
- Integrated check valve in the stainless steel bar



FLOORTEC ROOM CONTROLLER SYSTEM

In order to facilitate installation, the FLOORTEC room regulation system features wired room controls made of an in-wall base for fixed installation and a plug-on operation component that can be easily removed any time.

YOUR ADVANTAGE:

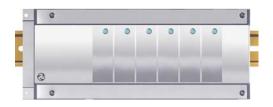
The FLOORTEC room controller system has invaluable advantages, especially in the field of renovation, such as paintwork or paperhanging work. With its removable controls, the system devices can be easily protected from dirt and damage. In addition, the supplied construction caps effectively ensure the protection of the in-wall bases.



Digital room thermostat



Room thermostat touch screen



Connection module



Analogue room thermostat



Actuator

PRODUCT DESCRIPTION & SCOPE OF SUPPLY

VOGEL&NOOT provides seven FLOORTEC systems to cover all sorts of requirements in new construction and renovation. As full-line provider we are able to guarantee maximum flexibility.

PE-XCELLENT 5 - UNDERFLOOR HEATING TUBE

The 5-layer FLOORTEC safety heating tube is available in nominal widths of 14x2mm, 17x2mm or 20x2mm. For the nominal widths of 14x2mm and 17x2mm rolls from 200-600m are available, and for a nominal width of 20x2mm rolls with 200 and 500m are offered. The Pe-Xcellent 5 self attaching tube is available with a nominal width of 16x2mm in 200m and 600m rolls. It is helically wrapped in an adhesive type. The maximum operating temperature of FLOORTEC PE-Xcellent 5 heating tubes is 90°C at a maximum operating pressure of 8 bar. The FLOORTEC roll-off device is designed to make tube laying easy!

PREFORMED PLATE SYSTEM UNI

The FLOORTEC preformed plate system UNI is suitable for both cement screed and floating screed. The preformed boards are offered in thicknesses of 11mm and 30mm. The deep draw film of the fully foamed tube holding knobs with undercuts at the back ensures that the heating tube is fixed in an optimum way, both on straight sections and in curved areas. Doorway elements, distribution boards as well as preformed plates "light" can be ordered separately.

3D STAPLER SYSTEM

The 3D stapler system delivers extremely powerful retention and a convenient tube laying process. The lengths are cut diagonally at regular intervals on their lower sides. These cuts will close after tube laying, creating a homogeneous insulation layer. The film comes with woven tape and grid imprint. The U-clips are available in three sizes. These U-clips and the stapler gun can be ordered as accessories.

SELF ATTACHING SYSTEM

The FLOORTEC self attaching system allows tube laying at an unprecedented rate. The innovative laying support ensures the exact control of the tube guidance. The tube roll-off support and the joint tape roll-off device are important accessories for the tube laying process.

GRID MAT SYSTEM

The FLOORTEC grid mat system can be used independent of the insulation structure. These grid mats are available with 50mm, 100mm and 150mm grids. The FLOORTEC grid mat bar is an excellent support tool for the tube laying process. Mat connectors and tube fastening clips can be ordered as well.

RAIL-MOUNTED SYSTEM

The FLOORTEC rail mounted system resists even the greatest loads. The intelligent Easy-Click system can be laid flexibly and simply regardless of the insulation structure that is in place. The system can be installed with tube dimensions of 14x2mm, 16x2mm, 17x2mm and 20x2mm. Holding needles are available separately.

DRY SYSTEM

The FLOORTEC dry system is available with laying distances of 12,5 and 25cm. The unique FLOORTEC dry system features heat conduction plates across the entire surface, not only along straight elements but also in curved areas. They are made of 0,5mm thick aluminium that is bonded with supporting plates and insulation boards ex works.

INDUSTRIAL FLOOR SYSTEM

The FLOORTEC industrial floor system is a underfloor heating system that is particularly suitable for large commercial spaces, such as warehouses or open plan offices, etc. where normal surface heating systems would not be suitable due to increased load requirements. The new special feature: the 20x2mm PE-Xcellent heating tube.

STAINLESS STEEL MANIFOLD

Suitable for 2-12 heating cycles made of stainless steel with sanded finish, consisting of: Flow and return flow bars, two ball valves and one boiler cycle connection set. Comes with a labelling set and installation manual; connection either from the left or from the right (ex works with connection on the left). Air-bleeding plugs for manual air release as well as KFE valves and shut-off valves at the top meter outlet are part of the scope of supply.

HEAT METER SETS

Consisting of: Installation set WMZ, appropriate adapter nipples as well as spacers and flat seals. Suitable for G 3/4" heat meters with construction lengths of 110mm. The diameter for the sensor is 6mm, and the thread for the screw connection is an M10x1 model.

BRANDED PRODUCTS OF CERTIFIED QUALITY

VOGEL&NOOT is a synonym for premium branded products meeting the highest quality standards in manufacture and operation. The quality and performance data for the underfloor heating systems by VOGEL&NOOT are subject to constant testing by renowned and independent European institutes. They guarantee the highest level of safety in terms of our economic performance as well as outstanding product quality.







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