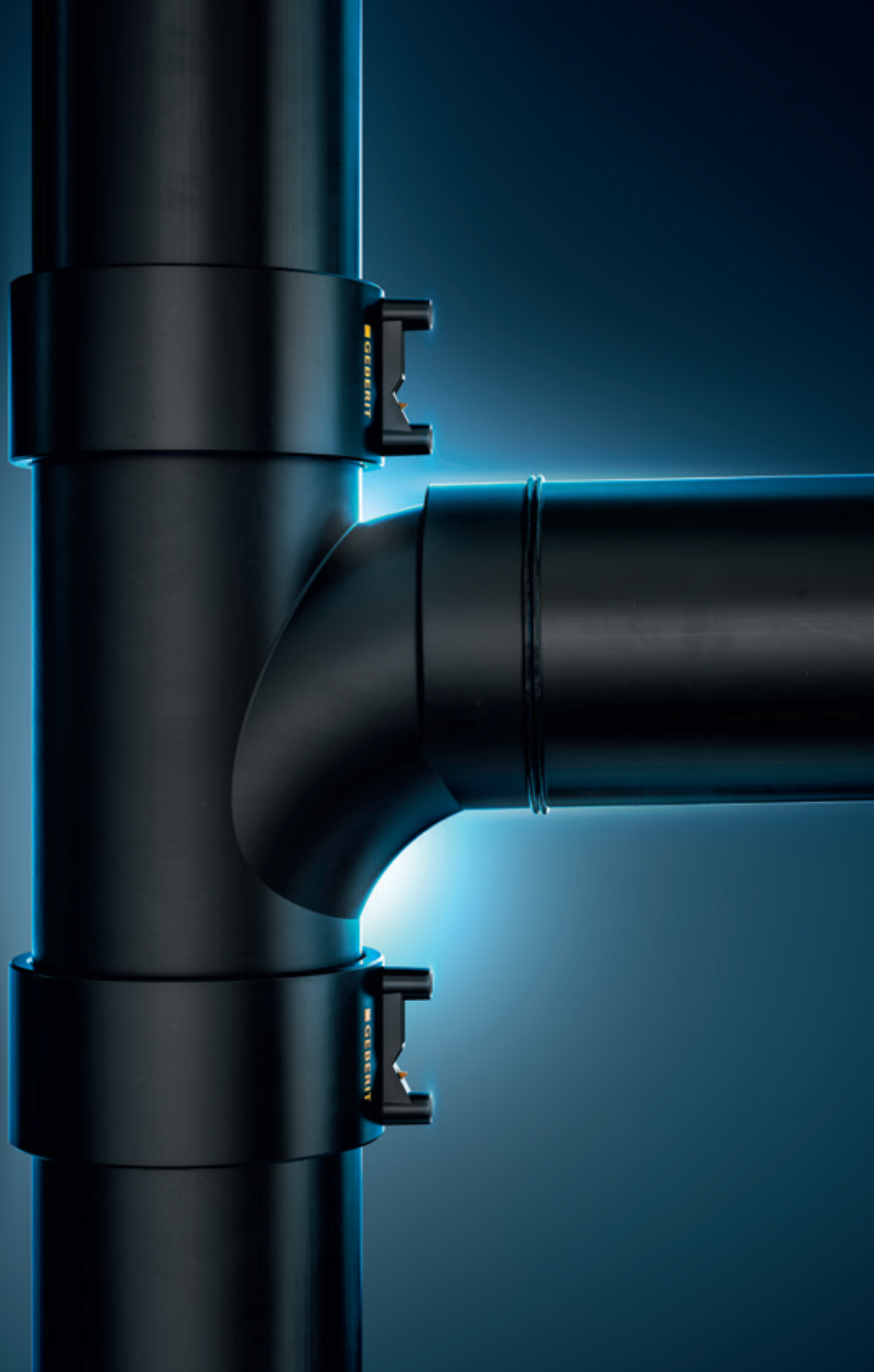


GEBERIT DRAINAGE SYSTEMS

CONSISTENTLY **BETTER DRAINAGE**

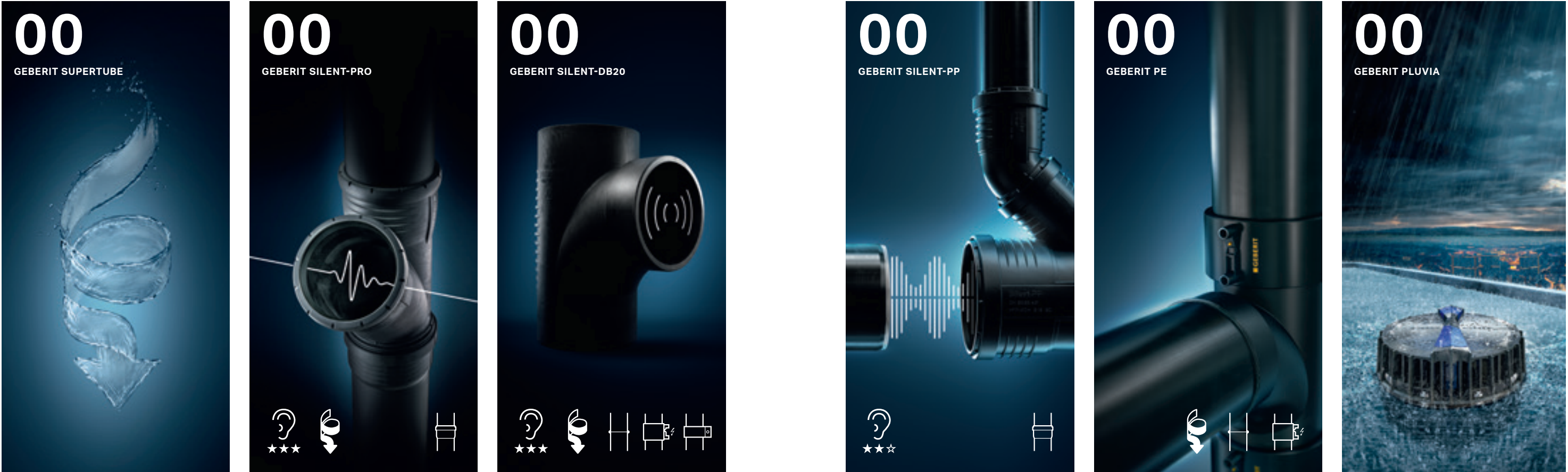
**KNOW
HOW**
INSTALLED



PLAY IT **SAFE**

The piping systems of Geberit stand for know-how in the field of sanitary technology. From the connection to the water supply through to the distribution on the floor to the consumers, all the way to the drainage of roofs and buildings into the public sewage system, you can rely on Geberit systems.

With Geberit, you can provide your customers with state-of-the-art technological solutions in the areas of hydraulics, fire protection and sound insulation, reliability and environmental properties.



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Convenience safely installed		Robust resistance no matter what	
GEBERIT SUPERTUBE	00	GEBERIT PLUVIA	00
Space-saving waste water hydraulics		Syphonic roof drainage	
GEBERIT SERVICES	00	GEBERIT ERV	00
A reliable partner for every task		Keeping the energy balance in check	
GEBERIT BIM PLUG-IN	00	GEBERIT CAST-IN CONCRETE BRACKET	00
Plug in and plan		The permanent fixture	
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Geberit SuperTube



★★★ Highly sound-insulating



★★★ Sound-optimised



Butt welding



Electrofusion coupling



Clamping connector



Ring seal socket

GEBERIT'S SYSTEMATIC APPROACH TO TECHNOLOGY WHEN EVERYTHING MATCHES AND FITS

Drainage means more than simply draining off water – at least for Geberit. To ensure that its drainage technology can keep up with reality on the building site and with the high fire protection and sound insulation requirements, Geberit invests lots of know-how into developing innovative products.

ALWAYS ROOM FOR IMPROVMENT

Geberit is the market leader in the area of sanitary technology in Europe. This is particularly true in the field of building drainage. Hardly any other company in this sector invests as much year after year in continually optimising existing systems and in developing new technologies and products as Geberit.

SAFETY IN THE SYSTEM

The fire protection and sound insulation of a drainage system are only ever as good as their weakest component. If you combine elements from different manufacturers, you risk compromises at the interfaces. This also makes it more difficult to comply with current standards and regulations. Geberit therefore provides complete systems with a warranty and the necessary documentation for your project. You can therefore offer your customers a proven high degree of protection against the spread of fire through the discharge pipes. Furthermore, with the sound insulation expertise of Geberit, you can ensure that waste water noise is minimised in private houses, public buildings, hotels and business premises.

SYSTEMY SOLUTIONS WITH HIGH FLEXIBILITY

For Geberit, the waste fittings are the visible part of the waste water installation, which, together with the Geberit piping systems, form a homogeneous unit with simple interfaces. Geberit waste fittings also form perfect connections with the sanitary appliances. Regardless of whether the bathroom design needs to fulfil the highest expectations, barrier-free applications are required or the construction simply needs to be as space-saving as possible: Geberit has the right solution.

GO WITH THE PROS

The success of a product or technology goes hand in hand with its practicality at the building site and its economic efficiency. For this reason, the feedback and suggestions provided by plumbers from across the globe are taken into account for all new innovations and further developments. This means that Geberit products

- Future-proof drainage systems
- Reliable compliance with sound insulation and fire protection standards
- Safe connection technology and waste fittings
- Suitable solutions for almost every application range

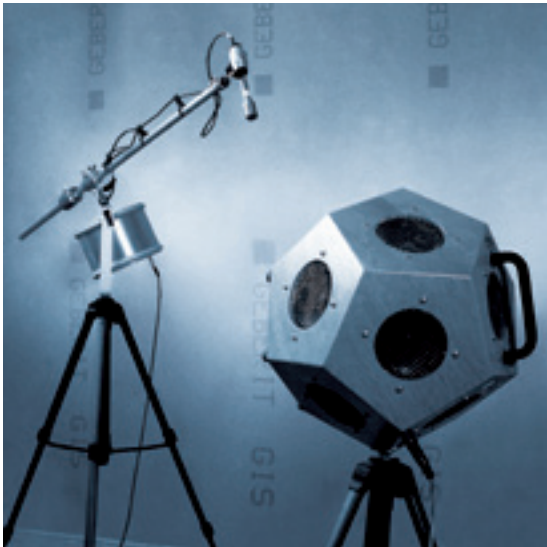


SOUND INSULATION, FIRE PROTECTION AND HYDRAULICS

CONVINIENCE SAFELY

INSTALLED

Contemporary buildings are setting ever-higher requirements, including for drainage systems. To ensure convenience and safety at all times, including during peak loads, Geberit develops hydraulically optimised, innovative products and solutions, which fulfil the requirements for safe installations, fire protection, sound insulation and saving resources to ensure that you and your customers have peace of mind.



COMPREHENSIVE TESTING AND CONSISTENT DEVELOPMENT
In addition to laboratories for sanitary technology and materials development, Geberit also operates a unique Building Technology and Acoustics Laboratory for testing components and entire drainage systems with respect to their hydraulics and acoustics. Thus, for example, the sound transmission of discharge stacks through several floors can be tested under realistic conditions. For the subject of fire protection, Geberit works closely with external testing laboratories. Both prototypes and series products are subjected to realistic fire tests. Country- specific fire protection requirements are thereby taken into account in full during product development.



WASTE WATER HYDRAULICS CHALLENGE
Empty traps or highly fluctuating water levels in the WC, as well as oversized systems or unnecessary ventilation ducts, are all indications of inadequate planning or installation. This can result in user complaints and significant costs. Geberit anticipates these problems with hydraulically optimised products that are the result of in-house research in the laboratory and on the computer. With the practical training of sanitary engineers and plumbers on Geberit drainage towers, Geberit contributes to knowledge transfer in the area of hydraulics.

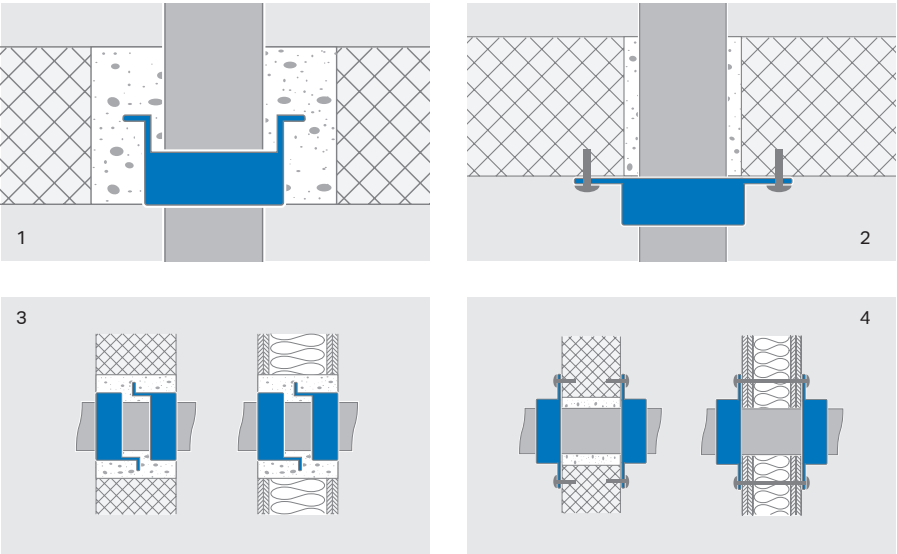


- Hydraulically optimised products from the comprehensive Geberit research and development
- Sound insulation tests in overall systems
- Fire protection products for a high level of safety

SOUND INSULATION FROM A SINGLE SOURCE
In addition to the piping system with sound insulation, intelligent fastening and insulation technologies ensure that the development of noise from waste water is kept to a minimum. The system pipe brackets for Geberit Silent-Pro and Geberit Silent-db20, the Geberit sound insulation mat Isol Flex, the insulation hose comprised of PE and the self-adhesive sealing tape complete the sound insulation system.

SAFER PROTECTION AGAINST FIRE SPREAD
Wall and ceiling openings as well as installation ducts can make it easier for fires in buildings to spread if they are not sealed in a proper, standard-compliant way. The Geberit fire protection sleeve RS90 Plus seals the pipe opening in case of fire and prevents smoke, fire and heat spreading to other rooms or parts of the building. The fire protection sleeve RS90 Plus can be used with all Geberit drainage systems.

PROOF OF FIRE PROTECTION FOR A LARGE NUMBER OF DIFFERENT CONTRUCTION SITUATIONS



- EXAMPLES**
- 1 Installed flush with the ceiling
 - 2 Mounted outside on ceiling
 - 3 In-wall installation
 - 4 Mounted outside of the wall



GEBERIT SUPERTUBE CREATES MORE SPACE

In places where both space and housing are at a premium, the construction of multi-storey buildings and high-rises is booming. This is where Geberit SuperTube technology ticks all the boxes as a space-saving solution for building drainage that represents a cutting-edge alternative to conventional drainage systems. As for the planning and installation effort, this is significantly easier to manage.

THE WASTE WATER CHALLENGE

Waste water hydraulics in stacks demand extra attention during the planning process. Depending on the constructional situation, additional ventilation pipes or larger pipe diameters may need to be planned to prevent overpressure or negative pressure in the system. An additional vent pipe may also be required, particularly in the case of direction changes, such as in the case of an offset or when connecting to the collector pipe. If there are any horizontal pipelines, these have to be laid with a slope. All of this combines to complicate the planning process, especially if there is only limited space available for the technology.

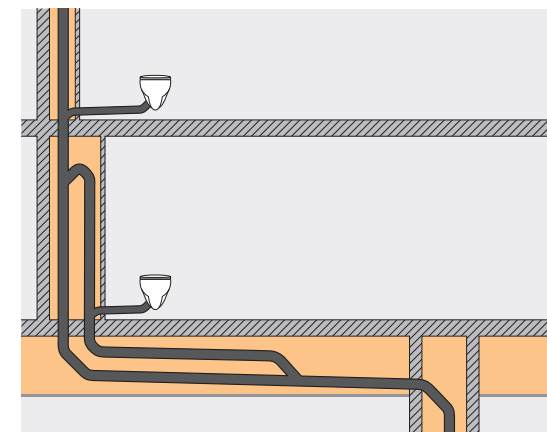
STACKS REIMAGINED

With SuperTube technology, there is no need for an additional ventilation pipe or a slope in horizontal pipelines. There are also no prohibited connection zones for discharge pipes. Not only does this make the overall system significantly leaner, but it also simplifies planning, cuts down on material consumption, and streamlines the entire installation.

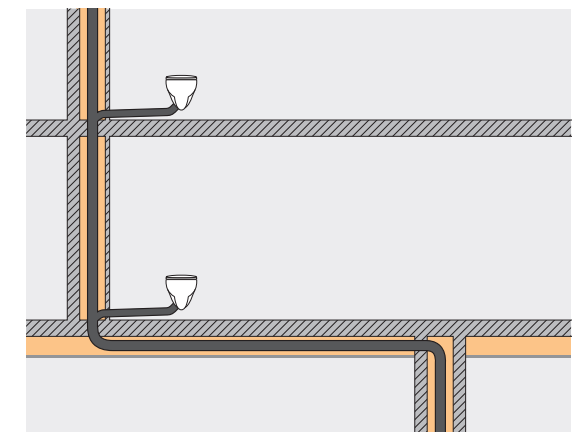
INTEGRATED VENTILATION

SuperTube technology uses the flow behaviour produced by the fittings to hydraulically generate a permanent, unbroken column of air in the discharge pipe. This means the ventilation is automatically built into the system without the need for an additional bypass.

- Simplified planning
- Leaner system structure
- Easier installation process
- Less material used



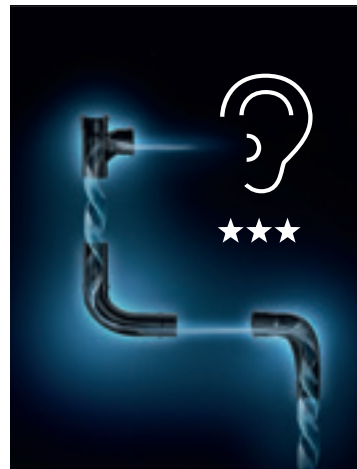
Conventional system with ventilation pipe and slope in the horizontal pipeline



Since SuperTube systems have no prohibited connection zones, bypasses are not required. As for horizontal pipelines, these can be laid without a slope.



GEBERIT SUPERTUBE OPTIMISED HYDRAULICS

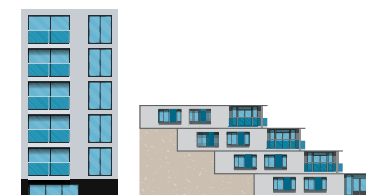


GEBERIT SILENT-PRO SUPERTUBE

- Geberit Silent Pro SuperTube generates a continuous discharge capacity of 6 l/s with d110 dimensions
- Highly sound-insulating properties
- The horizontal pipeline can be installed close to the ceiling
- The system is also available in d90 dimensions

APPLICATIONS

- Multi-storey residential buildings with sound insulation for stacks > 10 m
- Terraced houses with multiple offset stacks with high sound insulation requirements



FITTINGS



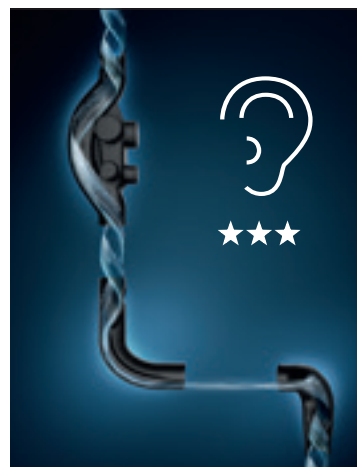
Geberit Silent-Pro
Carve branch fitting



Geberit Silent-Pro
BottomTurn bend



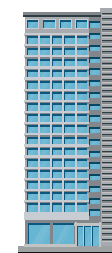
Geberit Silent-Pro
BackFlip bend



GEBERIT SILENT-DB20 SUPERTUBE

- Geberit Silent-db20 SuperTube features a continuous discharge capacity of 12 l/s with d110 dimensions
- Highly sound-insulating properties

- High-rise buildings with high sound insulation requirements



Geberit Silent db20 Sovent
fitting



Geberit Silent db20
BottomTurn bend



Geberit Silent db20
BackFlip bend



GEBERIT PE SUPERTUBE

- Geberit PE SuperTube generates a continuous discharge capacity of 12 l/s with d110 dimensions

- High-rise buildings



Geberit PE Sovent
fitting



Geberit PE
BottomTurn bend



Geberit PE BackFlip
bend

GEBERIT SERVICES

A STRONG PARTNER FOR EVERY TASK

Quality and innovation are worth a great deal. Equally valuable are reliability, partnership and personal advice. We operate at full steam not only in the development of high-quality products, but also in offering you the services and support you need for your success – even at the building site if necessary.



PERSONEL ADVICE AND SERVICES

We are happy to help. Regardless of whether you need us on the service telephone, in a personal meeting or on site – Geberit is available to you with advice and action everywhere. Whether it be specialist information or technical advice or support for all planning issues, we offer you comprehensive and uncomplicated help. We go the extra mile for your project and also supervise entire building projects on request. And even if something should happen not to work on occasion, you can rely on Geberit's support.

OUR KNOW-HOW FOR YOU

With the comprehensive training courses it offers, Geberit supports the sanitary industry in preparing for the challenges of the future. In our own seminars, via webinar or directly at your building site, we share our knowledge with you and thereby contribute to our shared success. We provide you with helpful media for a large number of questions and tasks, from manuals to installation videos.

DIGITAL PLANNING SUPPORT

Successful sanitary projects start with good planning. With the Geberit ProPlanner planning software, the practical app Geberit Pro and numerous other tools, we support you in your day-to-day operations.



GEBERIT BIM PLUG-IN PLUG-IN AND PLAN



GEBERIT BIM PLUG-IN FOR AUTODESK REVIT®

The Geberit BIM Plug-in can be downloaded free of charge from any Geberit website www.geberit.xy/bim or from the Autodesk app store www.apps.autodesk.com.



PLUVIA MODULE

For calculating the hydraulic certification and dimensioning for roof drainage with Geberit Pluvia directly in Autodesk Revit®.

Digital planning and construction using the BIM method has brought about fundamental changes in the construction industry. The holistic and model-based approach means that planning and construction processes can also be optimised and accelerated within the sanitary industry. Geberit's aim is to create simple and innovative solutions that offer sanitary engineers, architects and contractors added safety and greater cost-effectiveness. And with the new Geberit BIM Plug-in for Autodesk Revit®, another important step has been taken in the right direction.

STRAIGHTFORWARD SANITARY PLANNING

Finding up-to-date, complete and valid BIM content that is easy to manage is often a challenge in itself. The Geberit BIM Plug-in offers a reliable, integrated solution that meets all the needs for a straightforward and correct planning process.

AS CURRENT AS IT GETS

The direct connection to the Geberit product information management (PIM) system ensures that the user only uploads tested and approved BIM objects. This prevents the opportunity for planning errors caused by faulty or invalid BIM content.

WORLDWIDE PLANNING APPLICATIONS

The ability to select a specific language and region allows the Geberit BIM Plug-in to be used worldwide. What's more, local product catalogues also ensure that only products that are available locally are used.

MANUFACTURER-NEUTRAL TENDERS

Public projects are often tendered on a manufacturer-neutral basis. This is why Geberit BIM content can be changed to generic designations with a simple click in the built-in parameters. Once the tender is over, this can be reset so that the time-consuming replacement of objects in the BIM model is no longer necessary.

LIGHTWEIGHT AND HANDY BIM OBJECTS

Geberit relies on highly simplified, parametric geometries with all the metadata that is relevant for planning in the background. This avoids overloading CAD systems from the outset and allows for efficient planning. Despite their highly simplified geometry, Geberit BIM objects meet the requirements of all planning and construction phases, right through to facility management.



FLEXIBLE INSTALLATION

The Geberit BIM plug-in offers a whole host of advantages for efficient, model-based prefabrication with the greatest possible freedom when it comes to the arrangement of the components to be prefabricated:

- All fittings equipped with the article-specific Z-dimensions
- Segmenting length wizard for splitting the pipe runs into deliverable lengths
- Numbering wizard for the free designation of components and individual section
- Model-based tendering with Geberit article numbers possible
- Exportable overview list for easy labelling and connection of parts on the building site

- Noise-reducing design
- Compact fittings
- Visual inspection of insertion depth
- Visibly and noticeably of high quality

GEBERIT SILENT-PRO **STRONG SOUND INSULATION** EASY PLUG-IN

The Geberit Silent-Pro drainage system audibly reduces unwanted noise annoyance from neighbours' bathrooms. Plumbers and sanitary engineers also hear nothing more after installation: Plan, install and then enjoy peace of mind, because Geberit Silent-Pro fulfills all relevant sound insulation and fire protection requirements. Geberit Silent-Pro – and peace at home has a system.

NOISE REDUCING DESIGN

Geberit Silent-Pro is highly sound-insulating – thanks to its great own weight and its special, noise-reducing design on the impact zones of the fittings.

EASY PLUG-IN WITH A SECURE HOLD

Geberit Silent-Pro is easily inserted and has a secure hold, because the whole range of pipes and fittings fit perfectly. By the way: The seals are already slightly lubricated for easier processing.

COMPACT FITTINGS

If the installation space is limited, Geberit Silent-Pro offers additional benefits, because all fittings convinced with their compact design.

HIGH DISCHARGE RATE

Geberit Silent-Pro can handle high volumes – thanks to swept-entry branch fittings. The large swept-entry increases the discharge capacity, and the system can therefore be given smaller dimensions.



GEBERIT SILENT-PRO SUPERTUBE

Fittings with SuperTube technology available for a discharge capacity of 6 l/s with d110 dimensions and 4.5 l/s with d90 dimensions.



Sound-decoupled system pipe brackets prevent the transmission of structure-borne sound and help to improve sound insulation.



Perfectly equipped for nearly all tasks: Geberit Silent-Pro has a very wide assortment with more than 100 fittings and more than 60 article numbers for pipes from DN50 to DN150.

GEBERIT SILENT-PRO



TIME SAVING ALIGNMENT

The 30° markings on the fittings of Geberit Silent-Pro enable a quick and precise alignment of the fittings.

SAFE HANDLE

With Geberit Silent-Pro, a safe installation is also possible in places in the building that are difficult to access, because even in the event of large pipe diameters, Geberit Silent-Pro lies safely in the plumber's hand thanks to its grasping ribs.

VISUAL INSPECTION OF THE INSERT DEPTH

If fittings are not inserted deep enough by mistake, leaks and severe subsequent damage may occur. The correct insertion depth can be identified immediately with the stop ring, without any measuring and marking.



UV-RESISTENT

The high proportion of sooty particles in the piping material and the high-quality seals made of EPDM make the pipelines resistant for outside storage.



ADDITIONAL SAFETY

Geberit Silent-Pro is leakproof, because a generously dimensioned insertion depth means that the system is generally forgiving, even if pipe ends by mistake have an oblique cut or components are not inserted fully.



SEALS MADE FROM EPDM

They remain leakproof for decades. Even under severe operating conditions, e.g. in the event of increased water temperatures or exposure to household chemicals, the seals made of EPDM ensure longevity and safety.



PROTECTION FROM SCRATCHES

In the rough building site environment, the fittings' sealing surfaces can easily get scratched. The protruding stop ring also offers effective protection for the sealing surfaces – that is smart design.

- Effective sound insulation
- High discharge capacity
- Varied options of use
- Available in all standard dimensions

GEBERIT SILENT-DB20

ROBUST CONNECTION FOR STRONG SOUND INSULATION

Be it in a residential estate, a hotel or a meeting room: Noisy drainage pipes are a nuisance. This problem does not even occur with the Geberit Silent-db20 drainage system. The sound and hydraulically optimised pipes and fittings are suitable not only for stacks but also for floor connections and ensure quiet and effective drainage in any building.

EFFECTIVE SOUND INSULATION

The high inherent weight of Silent-db20 means that its natural vibrations are reduced and the sound is noticeably absorbed. The product design with special sound insulation ribs also reduces the noise on the impact zones.

SPACE-SAVING CONSTRUCTION

The hydraulically optimised product geometry of the fittings enables a cost-effective dimensioning of the product with a high discharge rate. This creates new free spaces, as a space-saving configuration is also sufficient for the pipe ducts of the stacks.



Geberit Silent-db20 SuperTube

Fittings with SuperTube technology available for a discharge capacity of 12 l/s.

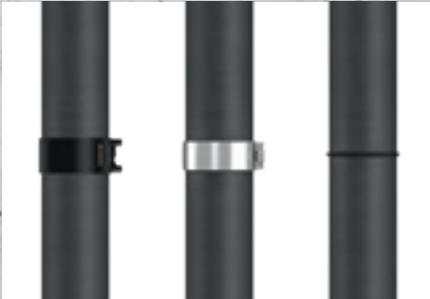
NEW



GEBERIT SILENT-DB20

SOLUTIONS FOR EVERY TYPE OF BUILDING

With the Geberit Silent-db20 drainage system, practically any building drainage can be solved perfectly and without compromise. Geberit Silent-db20 is available in all standard pipe diameters between d56 and d160. What's more, the assortment of fittings and accessories on offer caters to virtually all requirements.



INNOVATIVE FITTINGS

Geberit continuously develops its piping systems. The floor height, for instance, can be reduced with the combined branch fitting, swept-entry for toilet and shower element.

TIME-SAVING INSTALLATION

The Geberit Silent-db20 drainage system enables efficient operation on the building site thanks to a comprehensive assortment of fittings and tools that have all undergone practical trials. Furthermore, the Geberit Silent-db20 is also suitable for prefabrication in your own repair shop. This pays off for serial production in particular.

CONNECTIONS FOR ALL CIRCUMSTANCES

You have all of the options: The system can be connected in three different ways, whether that's with a quick electrofusion welding process, a clamping connector, or butt welding if lower sound insulation requirements are sufficient.

SAFE ADAPTER CONNECTION

When it comes to connecting Geberit PE or Geberit Silent-PP floor drainages to Geberit Silent-db20 stacks, Geberit offers special adapters that ensure permanent connection thanks to retaining claws made of stainless steel.



TENSION-FREE INSTALLATION DESPITE AXIAL OFFSET

It is not always possible to avoid inaccuracies during construction. With the Geberit Silent-db20 Offset fitting, stacks can be connected efficiently and tension-free with an axial offset of up to 10 cm. This makes it possible to reduce the installation time to as little as a third compared to an installation with 15°, 30° or 45° bends. The smoother direction changes mean the water flows more quietly and the sound values are similar to those of a straight stack without offset*. As a sliding bracket is no longer necessary, the transmission of structure-borne sound is also reduced.



RESISTANT TO UV RADIATION

The polyethylene (PE) used by Geberit contains special additives that offer effective protection against UV radiation. The weatherproof Geberit Silent-db20 pipes can therefore be stored outdoors for months.



SHOCKPROOF AND FLEXIBLE

Geberit Silent-db20 pipes are nearly indestructible at normal room temperatures. The tough polyethylene (PE) even remains shockproof at icy temperatures of -20°C. Most notably, this robustness provides a guarantee during the construction phase that the pipelines will remain intact despite possible mechanical influences.



*Measured with the acoustic camera at a flow rate of 2 m/s with Geberit Silent-db20 installations.



process

- More power, less sound
- Hydraulically optimised for a high drainage capacity
- Simple push-fit connection system

GEBERIT SILENT-PP

QUIET DRAINAGE

EASY PLUG-IN

The Geberit Silent-PP drainage plug-in system made up of robust three-layer pipes is ideal for use in the stack and for quick, cost-efficient and sound-optimised floor connection in multiple-storey residential construction or comprehensively in one-family and two-family homes. In combination with Geberit Silent-Pro and Silent-db20 as stack, Silent-PP achieves very good sound insulation values.

SOUND-OPTIMISED CONSTRUCTION

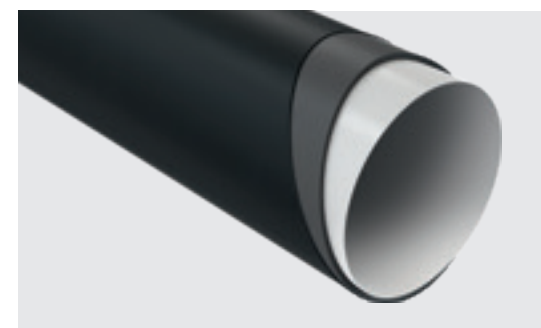
Geberit Silent-PP ensures less sound resulting from waste water. This is ensured by the mineral-reinforced three-layer construction of the material and the hydraulically optimised fittings.

HIGH RING STIFFNESS AND RELIABLE LEAK-PROOF MATERIAL

The high ring stiffness of the Geberit Silent-PP system pipes and the tried-and-tested lip seals from EPDM in the sockets of the pipes and fittings ensure the reliable and permanent seal of the drainage system.

SILENT-PP PIPE WITH TWO SOCKETS

Precut mat turns one pipe section into two fully usable parts. This generates fewer scraps and waste, and space requirements in the warehouse, during transport and at the site of use are also reduced. This means less capital commitment, more cost-effectiveness and a more environmentally friendly



Mineral-reinforced three-layer construction



Geberit Silent-PP pipe with two sockets



GEBERIT SILENT-PP

LARGE ASSORTMENT

Geberit Silent-PP is available in seven lengths and more than 100 fittings. For the connection of toilets and low shower drains (e.g. Geberit shower element), a double branch fitting is available that makes the joint installation of toilet and floor-even shower easier, more efficient and more space-saving.

LOW LINEAR EXPANSION

The minor expansion of the three-layer pipes in the Geberit Silent-PP plug-in system means that the entire drainage system can be fitted without expansion sockets. Linear expansion is thereby compensated for in the sockets. This contributes to cost saving and reduction of the assembly time.

SYSTEM COMPATIBILITY

Compatible with the highly sound-insulating drainage systems of Geberit Silent-Pro and Geberit Silent-db20. Adapter sockets create a reliably sealed connection to the stacks from the Silent-db20. Silent-PP and Silent-Pro are compatible without the use of adapters.



COLD IMPACT STRENGTH

Because Geberit Silent-PP features robust product materials which have cold impact strength, the pipes and fittings can even be safely processed as before at low temperatures, unproblematically and without risk of breakage.



UV-RESISTENT

The high proportion of sooty particles in the piping material and the high-quality seals made of EPDM make the system resistant to sunlight for outside storage for up to two years.



EASY ALIGNMENT

All fittings of the pluggable Geberit Silent-PP drainage system have a 30° marking for quick and easy alignment of the entire drainage system. The rib-enforced fittings enable easy handling of the fittings.

CONTROLABLE INSERTION DEPTH

The insertion depth marking serves as the stop position and is used for simple control of correct insertion depth. This is an added bonus for you in terms of even more safety and permanent tightness in all your discharge pipes.

- Large range of products and wide range of dimensions
- High temperature and chemical resistance
- Robust and shockproof
- Various connection options
- Environmentally friendly plastic

GEBERIT PE

ROBUST RESISTANCE NO MATTER WHAT

The Geberit PE drainage system defies temperatures, pressure and aggressive media. The robust pipes are available in all common diameters from d32 to d315, and the range of fittings including the special fittings is nearly comprehensive. The polyethylene piping material is very light yet unbelievable tough, and the connection technologies guarantee permanent tightness and high tensile strength. The system includes detail-tested components and practical tools for the building site and workshop.



IDEAL FOR PREFABRICATION

Due to the fixed connection technology, Geberit PE is perfectly suitable for prefabrication and thereby cost-effective production of series.

DEFIES EXTREME TEMPERATURES

The high density of the material makes Geberit PE particularly robust. Hot water does not affect the material at temperatures of up to 80 °C – or even up to 100 °C in the short term and under certain conditions. In the event of cold, the tough material is even still shockproof at temperatures of - 40 °C.

SHOOKPROOF AND FLEXIBLE

The pipes and fittings withstand shocks, drops, impacts or pressures of up to 1.5 bar without breakage or permanent deformation. This robustness provides, most notably, a guarantee during the construction stage that the pipeline will remain intact despite possible mechanical influences.

GENTLE TO THE ENVIRONMENT

Polyethylene, the material used, is environmentally friendly, has a positive ecobalance and is 100 % recyclable. No toxic emissions whatsoever are released if processed correctly. Also, no problematic hydrochloric gases are created in the event of a fire.



GEBERIT PE SUPERTUBE

Fittings with SuperTube technology available for a discharge capacity of 12 l/s.



PERMANENT SEAL
The welding joints of Geberit PE pipes remain persistently leakproof for many years and offer building owners and plumbers a high degree of safety.

VARIED SOLUTIONS
The comprehensive assortment of fittings with special fittings and accessories makes Geberit PE the universal solution for numerous drainage tasks. It is suitable, among other things, for use in industry, commerce, laboratory, for buried ground pipes and for roof drainage with Geberit Pluvia.

IN THE WALL AND FLOOR
The extraordinarily tough and robust Geberit PE pipelines can be embedded in concrete or laid in the ground in accordance with static and other recognised technical regulations without any concern.

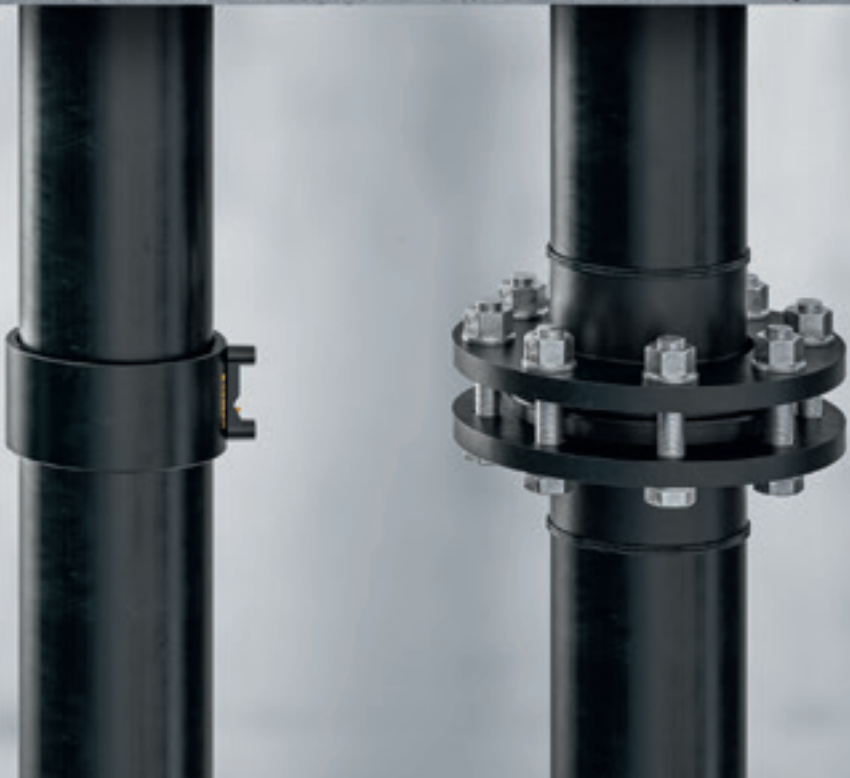


RESISTENT AGAINST CHEMICALS
The Geberit PE drainage system is suitable for a multitude of applications in industry or laboratories. The material is resistant against most standard alkalis, acids and chemicals.



UV-RESISTENT
The polyethylene (PE) used by Geberit contains special additives which effectively protect against UV radiation. The weatherproof pipes can therefore also be stored outdoors.

CONNECTIONS FOR ALL CIRCUMSTANCES
From butt welding to quick electrofusion sleeve coupling all the way to screw connection with flanges and pipe threads: Geberit PE pipes and fittings can be connected in a permanently sealed manner in many ways.

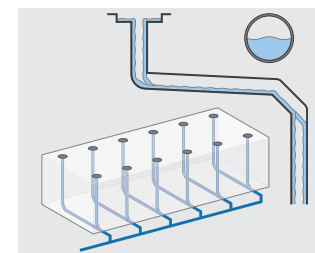


- High savings in materials
- Fast installation
- Optimal design freedom and use of space
- Less time spent on maintenance
- High performance and reliability

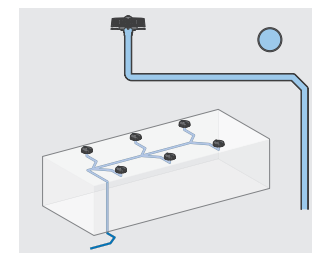
GEBERIT PLUVIA

SYPHONIC ROOF DRAINAGE

Geberit Pluvia drains roofs efficiently and reliably even under the heaviest rainfall. Because significantly less product material and space is required for syphonic roof drainage than for conventional systems, free space is opened up. More design freedom in planning, higher profitability during installation and in operation: Good reasons to opt for Geberit competence. Through tried-and-tested technology, innovative details and comprehensive service, Geberit Pluvia has been setting new standards for many years.



Conventional roof drainage system



Geberit Pluvia syphonic roof drainage

While conventional systems simply allow rain to run off through sloping pipes, the compact Geberit Pluvia pipe system fills up quickly and extracts the rainwater from the roof using the resultant negative pressure. The Geberit Pluvia roof outlets prevent air from being sucked in and guarantee reliable performance.

The result: Double the amount of rainwater discharge at half the pipe diameter. There is also greater design freedom in terms of planning, since there is no longer any need for pipelines that have to be laid with a slope.

SUITABLE FOR PRACTICALLY ANY ROOF SHAPE

Geberit Pluvia ensures architectonic freedom, as different roof shapes can be reliably drained with it. The syphonic roof drainage makes many things possible that would not be technically feasible with conventional systems.

FEWER ROOF OUTLETS

Thanks to the high discharge rate of the syphonic roof drainage system, fewer roof outlets are required. This results in savings in product material and the amount of work needed, while also preserving the roof.

FEWER DISCHARGE PIPES

Because the pipes are filled completely, fewer drains are required. The effect: more flexibility in planning.

FEWER UNDERGROUND PIPE CONNECTIONS

Fewer discharge stacks and fewer connections mean lower installation and material costs.

SMALLER PIPE DIAMETERS

Geberit Pluvia pipelines are designed for complete filling. This reduces the pipe diameter to the bare necessity.

SELF-CLEANING SYSTEM

The high flow velocity of more than 0.5 m/s when the pipeline is filled produces suction which contributes to the self-cleaning of the system. This ultimately means less time spent on maintenance.

NO SLOPE

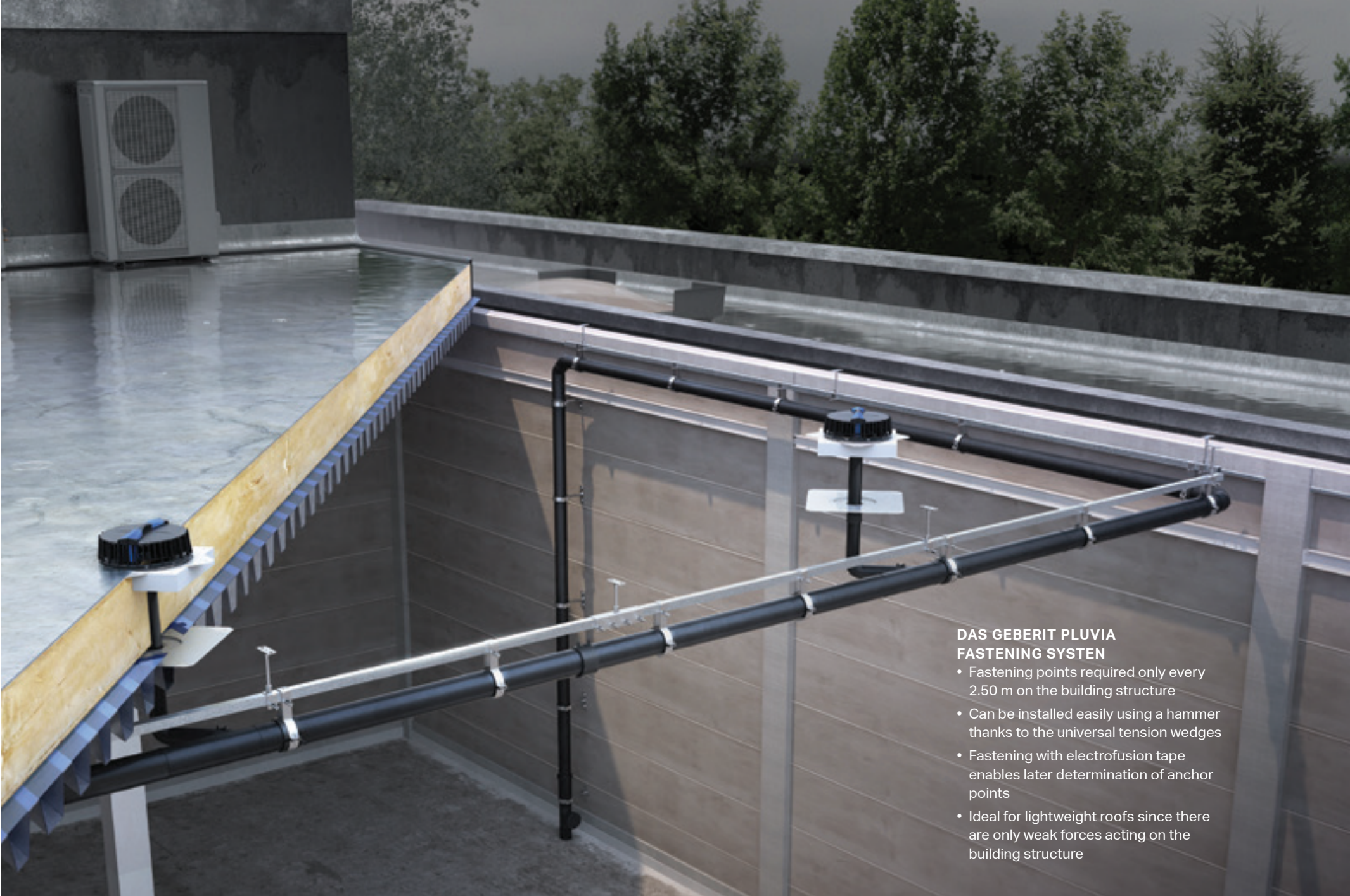
Because Geberit Pluvia pipelines are laid horizontally, the drainage system does not result in any loss of space.

GEBERIT PLUVIA

ALL-ROUND RELIABILITY
 Perfectly matched components ensure that the overall system functions flawlessly. Sophisticated details and a consistently high level of material quality reliably ensure durability, safety and smooth operation.

- THE GEBERIT PLUVIA ROOF OUTLETS**
- Geberit roof outlets for all roof types
 - Reliable sealing with the Geberit flange gasket made of EPDM
 - Each roof outlet is tested individually for tightness at the factory
 - Rotating lock bar sealing for easy installation
 - With the Pluvia emergency overflow, it is possible to convert to an emergency overflow system

- SIMPLER PLANNING AND CALCULATION**
- With a few clicks to the right solution for your design situation with the Geberit Pluvia Product Finder
 - Hydraulic calculation of the system directly in ProPlanner
 - Geberit ProPlanner software with plug-in for Autodesk Revit® for hydraulic calculation
 - Complete BIM content available



- DAS GEBERIT PLUVIA FASTENING SYSTEM**
- Fastening points required only every 2.50 m on the building structure
 - Can be installed easily using a hammer thanks to the universal tension wedges
 - Fastening with electrofusion tape enables later determination of anchor points
 - Ideal for lightweight roofs since there are only weak forces acting on the building structure



ROOF STRUCTURES – A SOLUTION FOR EVERY SITUATION



Example 1
 Concrete roof with bitumen roof foil



Example 2
 Lightweight roof, insulated with roof foil and the Geberit vapour barrier connection



Example 3
 Weight-bearing concrete roof with bitumen roof foil



Example 4
 Roof with steel gutter

LAYING IT SAFE IN CONCRETE

Embedding the connection lines in concrete floors allows for greater freedom in terms of bathroom design. To achieve a secure and permanent installation in the concrete floor, high standards are required for the pipe material, connection technology, and the fixation of the pipe installation during the embedding process. This is where Geberit offers not only the perfect product solutions, but also unparalleled support thanks to its extensive know-how and planning expertise.

SPACE-SAVING WITH EXCELLENT SOUND INSULATION

In addition to the space-saving benefits, since no further pipelines need to be installed below the ceilings, and the exceptional sound insulation properties, embedding pipes in concrete is an efficient solution in terms of both cost and time.

WELDED PIPELINES

When working with concrete, non-positive connections are essential. Geberit PE and Geberit Silent-db20 are the ideal piping systems for laying in this way.

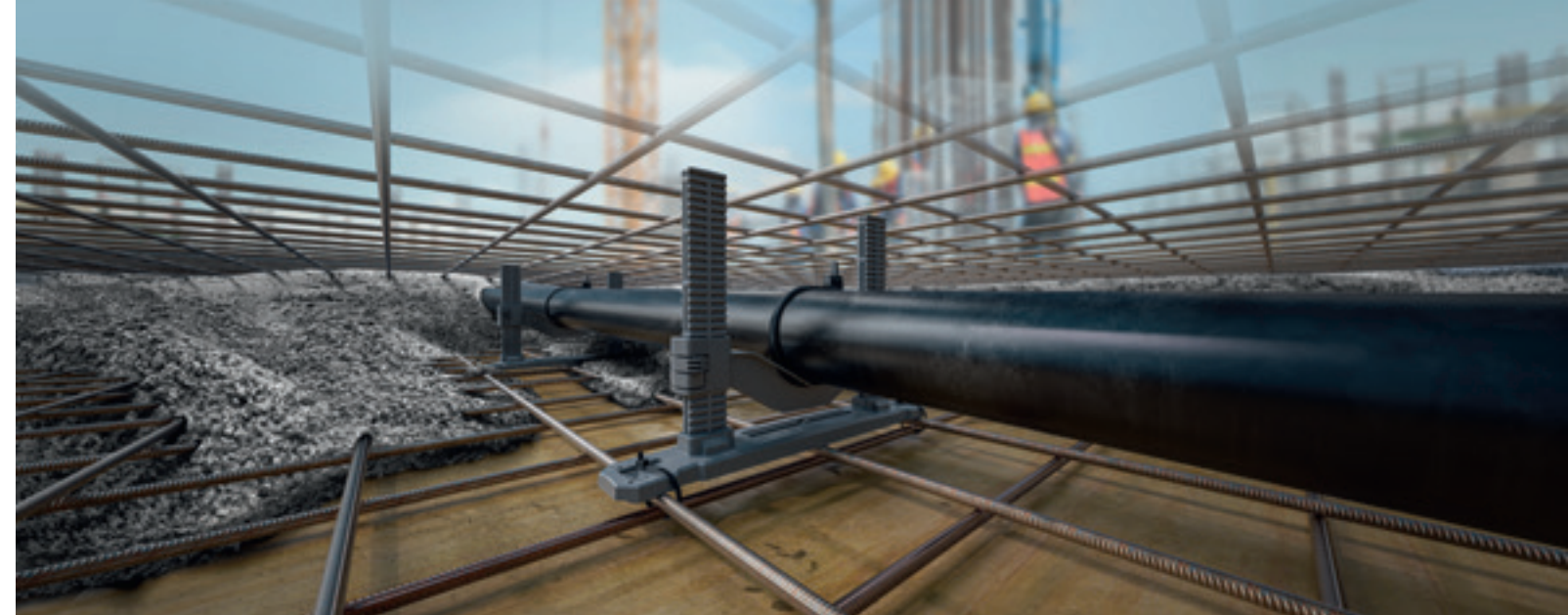
PREFABRICATE TO SAVE TIME

Geberit PE and Geberit Silent-db20 are perfect for prefabrication. This allows for more effective and efficient work, cutting down on the installation time on site. What's more, prefabrication can take place regardless of the progress at the construction site.

→ Not only can Geberit PE and Geberit Silent-db20 be prefabricated cost-effectively with mirror weld seams, but they can also be connected quickly and easily with Geberit electrofusion couplings on site if required.

EASIER PLANNING WITH GEBERIT PLANNING TOOLS

Familiar planning tools like Geberit ProPlanner and the Geberit BIM Plug-in make planning and visualising drainage systems a breeze. These tools are also helpful when planning piping systems for laying in concrete. In addition to listing the required fittings and pipe sections, the material list also includes the required number of Geberit cast-in concrete brackets for secure installation. The Autodesk® Revit® data for the Geberit cast-in concrete bracket is also available in the Geberit BIM plug-in.



GEBERIT CAST-IN CONCRETE BRACKET THE PERMANENT FIXTURE

Geberit pipes and fittings must be installed in such a way that they remain in position during the embedding process – for example, by fastening them to the formwork or directly to the bottom reinforcement. The correct positioning of the pipes can be achieved and ensured by the Geberit cast-in concrete bracket for dimensions d50 to d135.

HEIGHT-ADJUSTABLE

The support for the cast-in concrete bracket can be adjusted to different heights tool-free to ensure the required slope in the pipe. It locks into place on the bar and remains at the desired height, although adjustments can be made at any time.

TESTED QUALITY

During the development of the Geberit cast-in concrete bracket, including applications with cable ties and nails, different forces were simulated at the Geberit testing facilities to ensure unrestricted functionality. Every part offers the same benefits as metal solutions, yet only weighs half as much.



← The versatile Geberit cast-in concrete bracket can be used for all pipe diameters from d50 to d135 with and without insulation.

UNIVERSALLY APPLICABLE

The cast-in concrete bracket can be used flexibly for different applications and requirements on the building site, which also serves to streamline both the ordering process and storage.

NO REWORK NECESSARY

The Geberit cast-in concrete bracket can be secured to the reinforcement using cable ties without the need for any additional work. It is also possible to secure it in place with nails, which are easy to remove thanks to a predetermined breaking point on the base plate.

IDEAL FOR EXPOSED CONCRETE

The base plate facilitates secure mounting on the formwork so that there is no risk of visible marks in the concrete.



100% RECYCLED MATERIAL

The Geberit cast-in concrete bracket is made of 100% recycled plastic sourced from old cups, bowls and bottle caps.



GEBERIT ENERGY RETAINING VALVE ERV THE PINNACLE USAGETO A BETTER ENERGY EFFICIENCY

Energy-saving measures are a standard feature throughout modern buildings. They generally extend throughout an entire building, from the facade to the windows right through to the roof; however, they have never addressed the open ventilation pipe in a stack – until now. When a toilet is flushed, this kind of opening prevents negative pressure from forming and traps from being blown empty. The result is constant heat loss via the drainage system. The Geberit energy retaining valve ERV closes the open pipeline without impairing functionality.

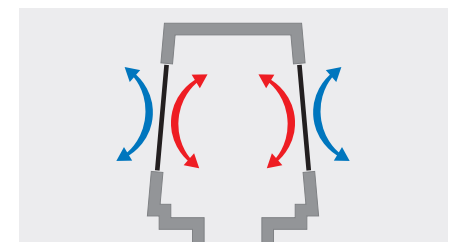
SEALS EVERY LAST LEAK

The Geberit energy retaining valve ERV seals the ventilation pipe for waste water above the roof using a patented magnetic diaphragm system. The diaphragms open automatically when pressure compensation is required. The rest of the time, the valve retains heat inside the building. Overpressure from the sewage system can escape via the ERV, as the diaphragms open in both directions. This is compliant with standard SN592000.

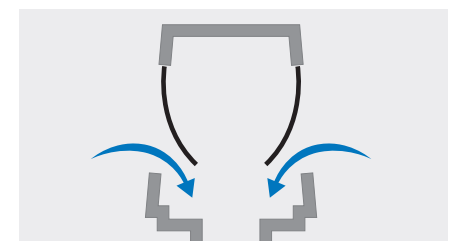
POSITIVE EFFECTS THAT PAY OFF

Depending on the building structure, location and weather conditions, an energy retaining valve ERV can pay for itself within five to ten years*.

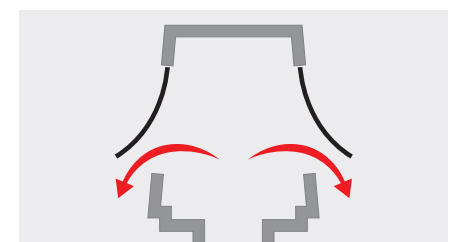
VENTILATION AS REQUIRED



When there is no waste water flowing through the stack, the diaphragms stay closed – preventing energy loss.



If negative pressure arises when a toilet is used, for instance, the diaphragms open and air flows into the system.



They also open if they need to compensate for high levels of overpressure from the sewage system.

- Save energy without losing ventilation functionality
- Can be mounted onto a diameter of d110 and adapted to suit common installation method
- Maintenance-free with protection against insects and frost resistance
- Can pay for itself within five to ten years
- Prevents unpleasant odours on roof terraces

*Based on the air temperatures in Lucerne for a multi-storey building and uninsulated stacks

TOOLS

DEVICES THAT WELD TOGETHER



GEBERIT PIPE SCRAPER
In a short period of time, a pipe or fitting can be prepared for welding with a Geberit electrofusion coupling.

- For Geberit PE and Geberit Silent-db20
- Can be used with standard cordless drill drivers
- Ideal in narrow areas or areas that are difficult to access
- Scraping knife that can be quickly and easily replaced
- Available for various diameters: d56, d63, d75, d90 and d110



GEBERIT WELDING MACHINES
Geberit Universal and Media welding machines are easy to operate and quick to retrofit. Thanks to their particular robustness, they are well suited to both prefabrication in the repair shop and use at the building site.



GEBERIT WELDING PLATE
Durable and ready for use in no time: This makes the Geberit welding plates a loyal and reliable companion both for prefabrication in the repair shop and even on building sites.

- Three models to choose from: KSS-160, KSS-200 and KSS-315
- Long service life and easy cleaning thanks to the optimised polymer coating
- Ergonomic grip options for safe welding work
- Ready for operation at 220 °C in just a few minutes



GEBERIT ELECTROFUSION MACHINE ESG 3
The Geberit electrofusion machine ESG 3 for Geberit PE and Geberit Silent-db20 piping systems is made for demanding everyday work at the building site. It is powerful and suitable for electrofusion welding or electrofusion couplings with integrated thermal fuse of all pipe dimensions from d40 to d315.



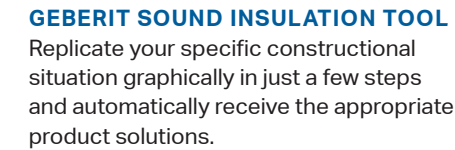
GEBERIT ELECTROFUSION MACHINE ESG LIGHT
The small Geberit electrofusion machine ESG light is the compact alternative to the ESG 3 and ensures easy handling at the building site. The ESG light makes it possible to connect Geberit PE and Geberit Silent-db20 pipes and fittings with the help of electrofusion couplings.

GEBERIT ELECTROFUSION MACHINES IN COMPARISON



GEBERIT ELECTROFUSION MACHINE	GEBERIT ESG 3	GEBERIT ESG LIGHT
d40–160	✓	✓
d200–315	✓	
Electrofusion couplings	✓	✓
Electrofusion tapes	✓	✓
Electrofusion couplings with integrated thermal fuse	✓	
Quick exchange of the connecting cable for electrofusion coupling	✓	✓
Fall impact cushioning	✓	✓
Right angle plug	✓	✓
Remote control	✓	
Simultaneous welding of up to three electrofusion couplings	✓	
Possible to interrupt the welding procedure	✓	✓
Operation with power generator	✓	
Weight in kg	5.9	2.0

SOUND INSULATION PROOF



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	<div>4</div> <div>Geberit Duofix system wall prewall installation in front of drywall partition (Knauf, W112)</div>			<div>5</div> <div>Geberit Duofix installation elements in separating drywall partition (Knauf, W116)</div>			<div>6</div> <div>Geberit Kombifix installation elements in masonry prewall installation in front of a solid partition (180 kg/m²)</div>		
STACK	Silent-db20 or Silent-Pro	Silent-db20 or Silent-Pro	Silent-PP	Silent-db20 or Silent-Pro	Silent-db20 or Silent-Pro	Silent-PP	Silent-db20 or Silent-Pro	Silent-db20 or Silent-Pro	Silent-PP
COLLECTOR BRANCH PIPE SYSTEM SOUND	Silent-db20 or Silent-Pro	Silent-PP	Silent-PP	Silent-db20 or Silent-Pro	Silent-PP	Silent-PP	Silent-db20 or Silent-Pro	Silent-PP	Silent-PP
PRESSURE LEVEL L <small>AFMAX, N</small>	20 dB(A)	22 dB(A)	23 dB(A)	21 dB(A)	25 dB(A)	26 dB(A)	27 dB(A)	30 dB(A)	30 dB(A)
DIN 4109-1:2016-07	✓	✓	✓	✓	✓	✓	✓	✓	✓
DIN 4109/ SUPPLEMENT 2:1989-11	✓	✓	✓	✓	✓				

stipulated by construction supervision authorities. Other building conditions can lead to deviating results. The Geberit Silent-db20 drainage system with pipe brackets type Silent-db20 are used for the measurements. Characteristic comparison measurements with the Geberit Silent-Pro drainage system with pipe brackets type Silent-Pro resulted in a comparable sound-insulation behaviour (technical statement of the Fraunhofer Institute for Building Technology IBP).

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TECHNICAL DATA

SUITABLE DRAINAGE SOLUTIONS FOR MANY APPLICATIONS

EPDS
Environmental Product Declarations (EPDs) for pipes and the most widely used fittings in Geberit drainage systems are available online.
For downloads and more information, visit [geberit.com/sustainability/green-building/](https://www.geberit.com/sustainability/green-building/)



	GEBERIT SILENT-DB20	GEBERIT SILENT-PRO
Available dimensions	d56; d63; d75; d90; d110; d135; d160	d50; d75; d90; d110; d125; d160
DN nominal width	DN56; DN60; DN70; DN90; DN100; DN125; DN150	DN50; DN70; DN90; DN100; DN125; DN150
Building drainage	✓	✓
Building drainage with SuperTube technology	✓	✓
Conventional interior roof drainage system	✓	✓ *
Additional applications	Geberit drainage systems are approved for various other application areas. Additional applications on request from Geberit.	
Material	PE-S2	PP-MX
Coefficient of linear expansion	0,17 mm/(m·K)	0,08 mm/(m·K)
Absorption of linear expansion	Requires an expansion socket with double flange or a double sleeve coupling	Takes place inside the ring seal socket and does not require any additional measures
Installation temperature	-20 to 40 °C	-10 to 40 °C
Permanent load application temperature	-20 to 60 °C	-10 to 90 °C
Chemical resistance	95 % of all standard alkalis, acids and chemicals	Standard household chemicals
Fire protection sleeve (approval in acc. with EN)	Geberit fire protection sleeve RS90 Plus EN	Geberit fire protection sleeve RS90 Plus EN

* With Geberit retaining claw for heights up to 20 m



	GEBERIT SILENT-PP	GEBERIT PE
Available dimensions	d32; d40; d50; d75; d90; d110; d125; d160	d32; d40; d48; d50; d56; d63; d75; d90; d110; d125; d160; d200; d250; d315
DN nominal width	DN30; DN40; DN50; DN70; DN90; DN100; DN125; DN150	DN30; DN40; DN40; DN50; DN56; DN60; DN70; DN90; DN100; DN125; DN150; DN200; DN250; DN300
Building drainage	✓	✓
Building drainage with SuperTube technology		✓
Conventional interior roof drainage system	✓ *	✓
Additional applications:	Geberit drainage systems are approved for various other application areas. Additional applications on request from Geberit.	
Material	PP-MD	PE-HD
Coefficient of linear expansion	0,08 mm/(m·K)	0,17 mm/(m·K)
Absorption of linear expansion	Takes place inside the ring seal socket and does not require any additional measures	Requires an expansion socket
Installation temperature	-10 to 40 °C	-20 to 40 °C
Permanent load application temperature	-10 to 90 °C	-20 to 80 °C
Chemical resistance	Standard household chemicals	95 % of all standard alkalis, acids and chemicals
Fire protection sleeve (approval in acc. with EN)	Geberit fire protection sleeve RS90 Plus EN	Geberit fire protection sleeve RS90 Plus EN

* With Geberit retaining claw for heights up to 20 m

IMPROVED CARBON FOOTPRINT THANKS TO
LOWER MATERIAL CONSUMPTION

SUSTAINABLE DRAINAGE

Geberit is renowned for its environmentally friendly, resource-saving and durable products. The company has been applying ecodesign principles to its new product development processes since 2007. This involves observing the product over its entire life cycle and ensuring it is better than its predecessor from an ecological perspective. This principle also applies to Geberit drainage systems. The lower material consumption and the energy-efficient production of Geberit products lead to an improved carbon footprint. By using energy-efficient solutions from Geberit, you are contributing to sustainable construction processes and the protection of the environment.



EXAMPLE: GEBERIT PLUVIA
Geberit provides efficient and sustainable roof drainage for flat roofs. Not only does the Geberit Pluvia roof drainage system require just half as many roof outlets as conventional drainage systems, it also offers impressively smaller pipe dimensions and can function with fewer connections to the sewage system. This allows Geberit to lower installation costs on one hand and reduce material consumption on the other. In turn, this has a positive effect on the CO₂ balance in the field of transport and with regard to raw material and energy consumption in the production process.

CALCULATIONS OF THE DIFFERENCES IN A PROJECT EXAMPLE	GEBERIT PLUVIA	CONVENTIONAL ROOF DRAINAGE SYSTEM
Roof area	3000 m ²	3000 m ²
Number of roof outlets	18	36
Diameter of Geberit PE pipes	d75 to d160	d110 to d315

SAVINGS	
Material weight for PE pipes and fittings	-73%
CO ₂	-74%
Material costs* for PE pipes and fittings	-84%
Total installation time** including fastening	-55%

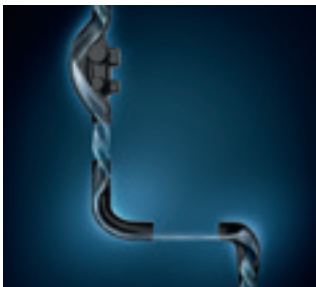
¹⁾ Calculation in accordance with
DIN 1986-100



PRODUCTION OF GEBERIT DISCHARGE PIPES

Geberit is constantly improving its production processes and implementing measures to reduce its ecological footprint at its production sites worldwide. Geberit discharge pipes are manufactured at the Villadose plant in Italy, where numerous energy-saving measures have been implemented in recent years. For example, the energy efficiency of the cooling systems has been increased by more than 50% thanks to new compressors. As for the office and training buildings,

these are predominantly heated with the waste heat from the compressed air systems. Another contributing factor to the reduction in energy consumption can be found in the state-of-the-art electric motors in the production lines. Furthermore, almost 100% of the waste created in the manufacturing process is recycled.




EXAMPLE: GEBERIT PE SUPERTUBE
A drainage system in high-rise projects with SuperTube technology offers a consistent discharge capacity of twelve litres per second with a pipe dimension of d110 without a parallel ventilation pipe. In comparison to the conventional solution, it offers shorter installation times and lower costs as well as significant material savings. This is reflected in a 50% improvement in the carbon footprint.

CALCULATIONS OF THE DIFFERENCES IN A PROJECT EXAMPLE	GEBERIT PE SUPERTUBE	CONVENTIONAL STACK
Floors	25	25
Dimensions of stack	d110	d160 + secondary ventilation d90
Material	Geberit PE	Geberit PE

SAVINGS	
Material weight for PE pipes and fittings	-51%
CO ₂	-50%
Material costs for PE pipes and fittings*	-51%
Total installation time** including fastening	-60%

* Calculated with average material prices
** According to the values recorded in the Geberit ProPlanner

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- Higher than average innovative capacity thanks to ongoing investment in our own development and research projects
 - Reputation for outstanding expertise in numerous fields
 - Uncompromisingly high quality and production standards

AN ORIGIN STORY FOR THE FUTURE FOR THE SANITARY TECHNOLOGY **OF TOMORROW**

Geberit aims to improve people's quality of life over the long term with innovative solutions in the area of sanitary technology. To do this, the company is constantly developing its products, systems and solutions and, as the market leader in sanitary technology, is continuously setting new standards.

On average, Geberit invests two percent of sales into its own research and development and applies for around 20 new patents every year. Geberit's innovative capacity is based on existing know-how and the ongoing research activities in fields such as hydraulics, statics, hygiene, acoustics, materials and fire protection.

SYSTEMATIC APPROACH

A customer requirement or brilliant idea is often the starting point for developing a new product. Meticulous, systematic work then follows, because the innovation process at Geberit does not leave anything to chance. This is why, for example, the required characteristics of the product material that will later go into series production are defined at a very early stage. If such a product material does not yet exist, the product material engineers get to work and – in close cooperation with plastic producers, universities and test institutes, of course – develop a new product material themselves. Although this involves a great deal of time and effort, this procedure has proven worthwhile in, for example, the development of the Geberit Silent-Pro highly sound-insulated drainage system or the Geberit PushFit piping system.

50 YEARS IN THREE MONTHS

As soon as the first prototypes for a new product are available, they are put through their paces. To do this, tough tests are carried out in the sanitation laboratory to simulate a product life of 50 years within three months. Only the best product solutions survive this hardness test. At the Building Technology and Acoustics Laboratory, the static and acoustic characteristics of individual products as well as whole systems are tested. Here, experts investigate how a particular innovation or improvement behaves in conjunction with other sanitary technology components.

Testing is carried out by the application engineers once the scientists and engineers have given a new innovation the green light. Series production is not contemplated until the product has proved successful in the market within the scope of numerous test installations.

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