GEBERIT

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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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.

SYSTEM 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

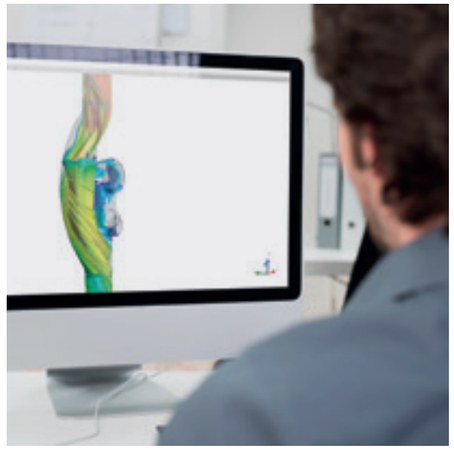
The success of a product or technology goes hand in hand with its practicality at the building site and its economic efficiency. For this reason, the feedback and suggestions provided by plumbers from across the globe are taken into account for all new innovations and further developments.

- 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.

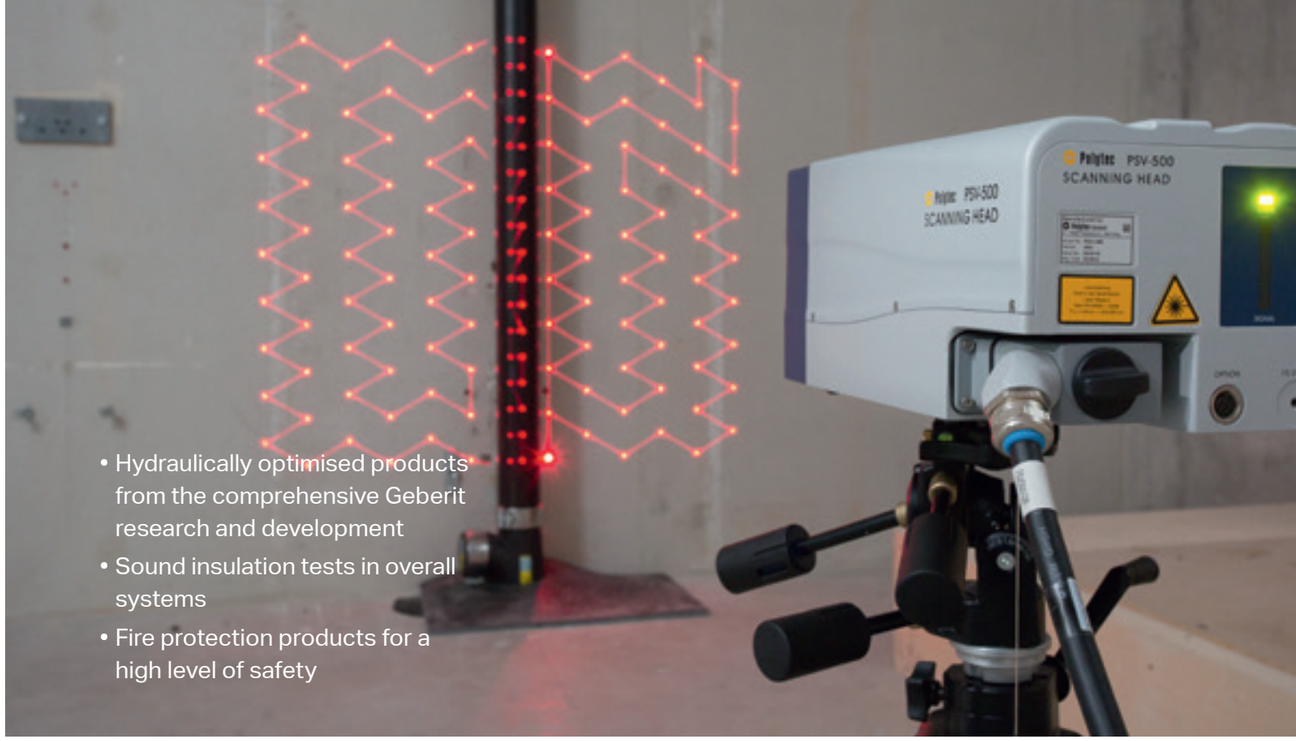


COMPREHENSIVE TESTING AND CONSISTENT DEVELOPMENT

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

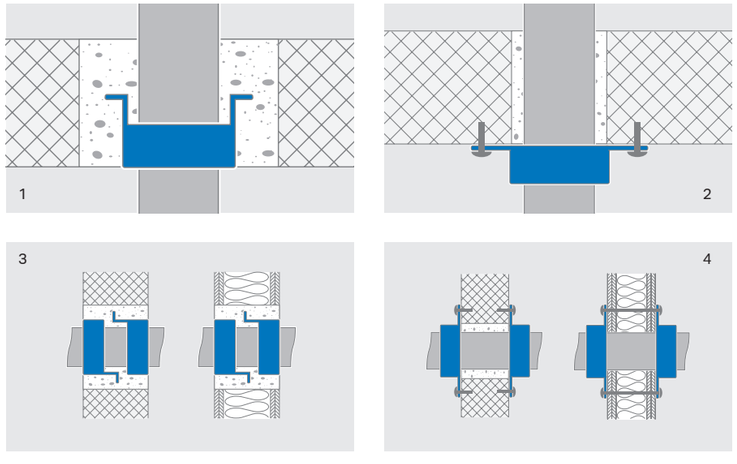
SOUND INSULATION FROM A SINGLE SOURCE

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-db20, the Geberit sound insulation mat Isol Flex, the insulation hose comprised of HDPE 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

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

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

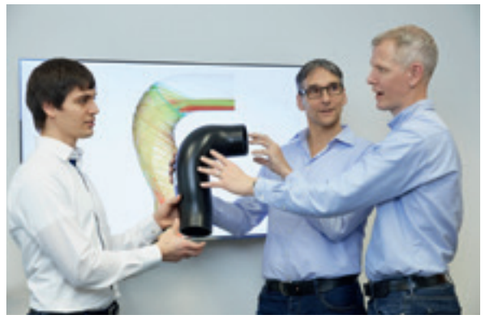
Waste water hydraulics in stacks demand extra attention during the planning process. Depending on the constructional situation, additional ventilation pipes or larger pipe diameters may need to be planned to prevent overpressure or negative pressure in the system. An additional vent pipe may also be 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

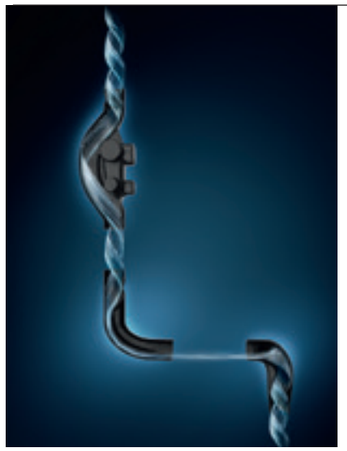
SuperTube technology uses the flow behaviour produced by the fittings to hydraulically generate a permanent, unbroken column of air in the discharge pipe. This means the ventilation is automatically built into the system without the need for an additional bypass.



← The hydraulics specialists at Geberit develop and optimise product solutions and systems that can take on the task of draining safely and reliable over long distances effortlessly. Many years of experience in flow engineering, comprehensive physical know-how, and unparalleled simulation and testing opportunities also establish firm foundations in this regard.

GEBERIT SUPERTUBE

OPTIMISED **HYDRAULICS**

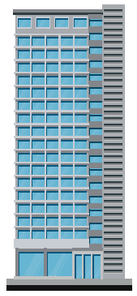


GEBERIT HDPE SUPERTUBE

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

APPLICATIONS

- High-rise buildings

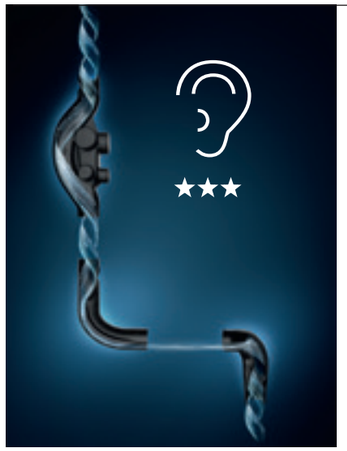


FITTINGS

Geberit HDPE Sovent fitting

Geberit HDPE BottomTurn bend

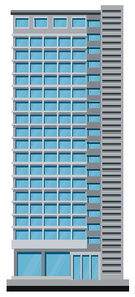
Geberit HDPE BackFlip bend



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

- More residential and floor space
- Simple planning and installation
- Consistently smaller pipe dimensions
- No additional ventilation pipe required
- Horizontal pipelines of up to 6 metres without slope

Geberit Silent-db20 SuperTube
Fittings with SuperTube technology available for a discharge capacity of 12 l/s.

NEW

GEBERIT SUPERTUBE

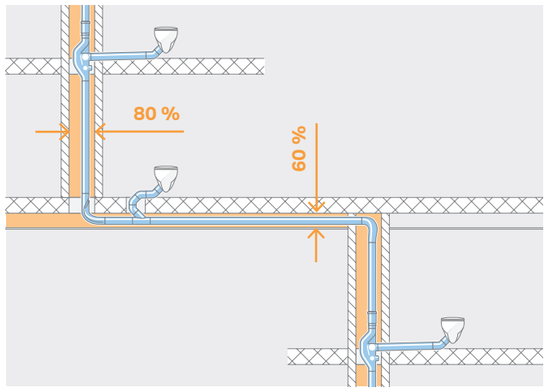
THE SPACE GAINING SYSTEM

Geberit SuperTube offers space savings in all directions – both vertical and horizontal – by accommodating smaller pipe dimensions and doing away with additional ventilation pipes. Horizontal pipelines of up to 6 metres can be installed without a slope.

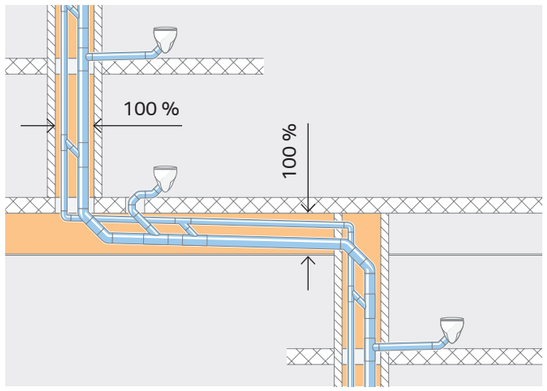
1 GEBERIT HDPE SOVENT FITTING
The optimised geometry of the Geberit HDPE Sovent fitting guides the water within the stack, sets it in rotation and thereby causes it to press against the pipe wall. The resulting annual flow creates a stable, consistent column of air inside, which facilitates a high discharge capacity.

2 GEBERIT HDPE BOTTOMTURN BEND
With the Geberit HDPE BottomTurn bend, a change in direction causes the wall of water to break and the annular flow to become a layered flow without disrupting the column of air. This change significantly reduces impulse losses compared with conventional solutions.

3 GEBERIT HDPE BACKFLIP BEND
The twisted Geberit HDPE BackFlip bend guides the layered flow back into a swirling, offset annular flow so that the air column is maintained throughout the remaining stack.



GEBERIT SUPERTUBE
This technology facilitates a consistent discharge capacity of 12 l/s with a pipe dimension of d110 without a parallel ventilation pipe. Horizontal pipelines of up to 6 metres can be installed without a slope.



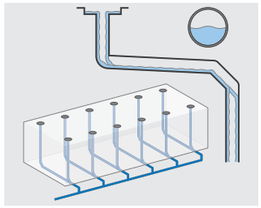
CONVENTIONAL SYSTEMS
A conventional discharge pipe with a pipe dimension of d160 and the additional d90 ventilation pipe for a discharge capacity of 12.4 l/s. Horizontal pipelines must be installed with a slope of 0.5–5%.

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

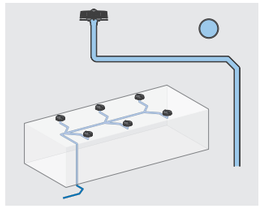
GEBERIT PLUVIA

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

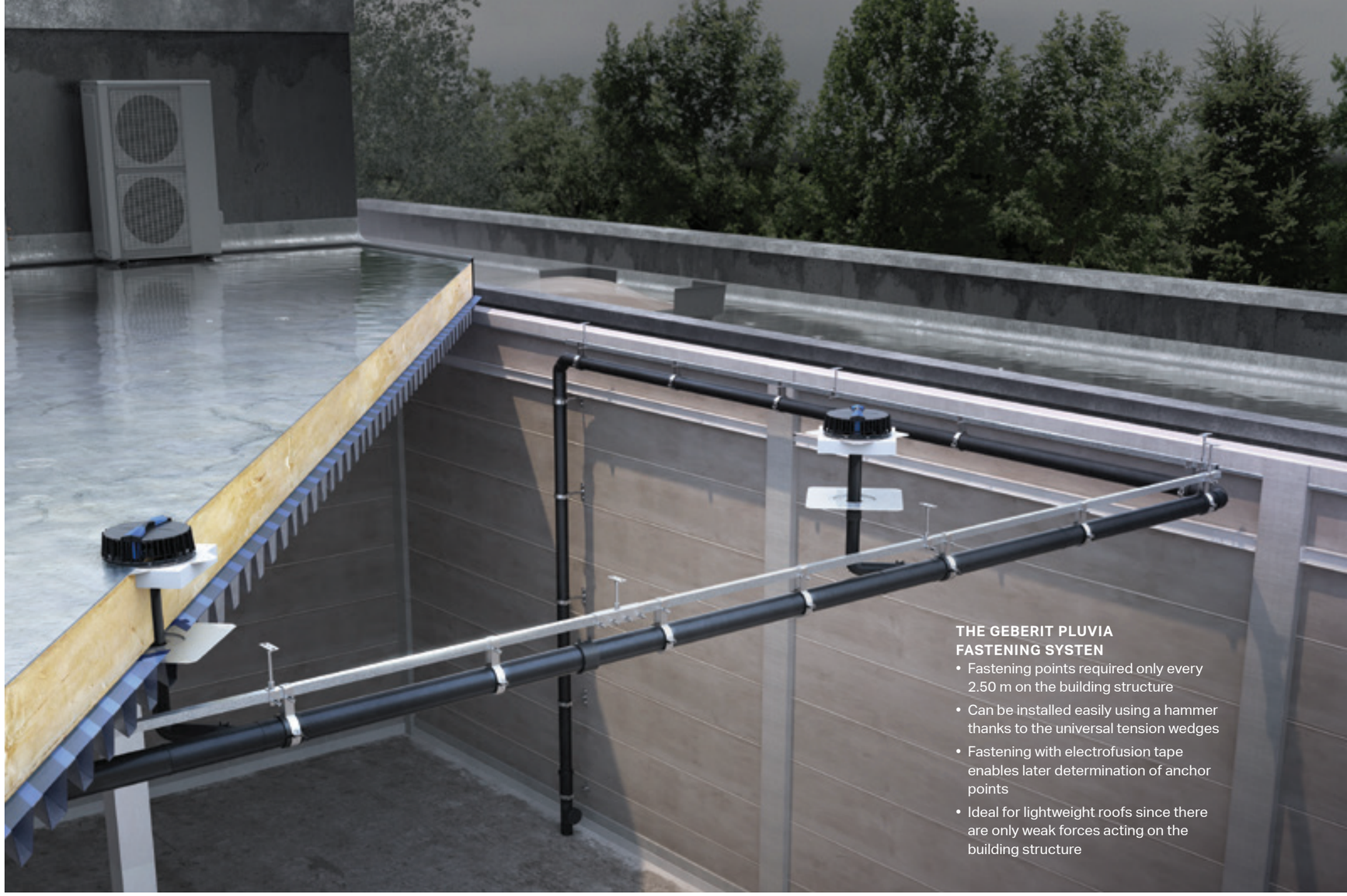
Perfectly matched components ensure that the overall system functions flawlessly. Sophisticated details and a consistently high level of material quality reliably ensure durability, safety and smooth operation.

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
- Geberit ProPlanner software for hydraulic calculation
- Complete BIM content available



THE GEBERIT PLUVIA FASTENING SYSTEN

- 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

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

GEBERIT HDPE

ROBUST RESISTANCE NO MATTER WHAT

The Geberit HDPE 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 HDPE is perfectly suitable for prefabrication and thereby cost-effective production of series.

DEFIES EXTREME TEMPERATURES

The high density of the material makes Geberit HDPE 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 AN 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.

- 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.

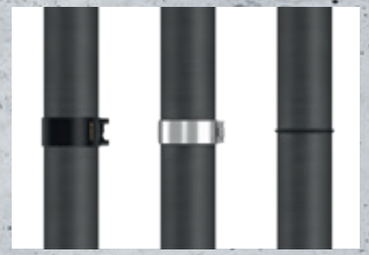
SPACE-SAVING CONSTRUCTION

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

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.

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

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.

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 the Geberit website **www.geberit-global.com/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 br ought 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

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 HDPE and Geberit Silent-db20 are the ideal piping systems for laying in this way.

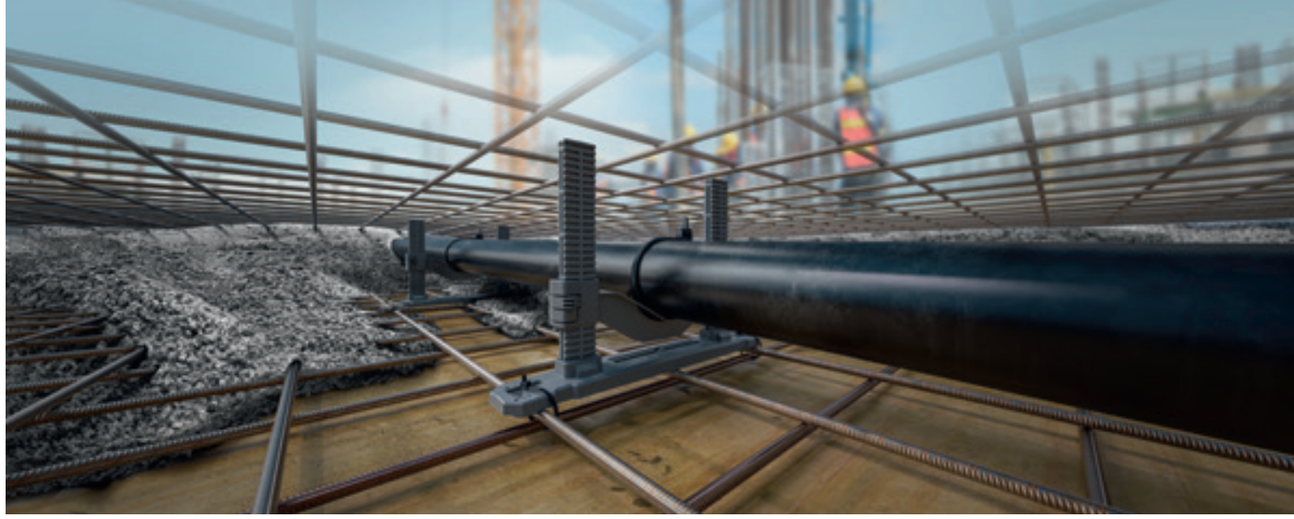
PREFABRICATE TO SAVE TIME

Geberit HDPE 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.

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.

→ Not only can Geberit HDPE 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.



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.

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 HDPE 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

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 HDPE 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.

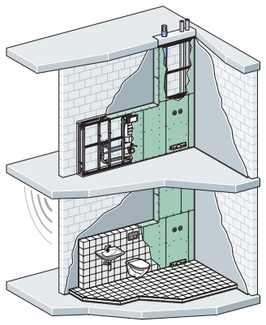
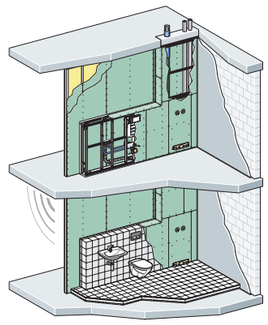
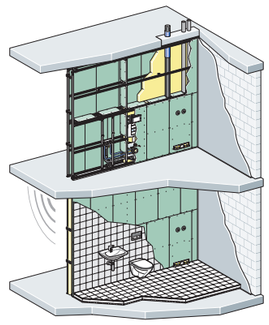
GEBERIT ELECTROFUSION MACHINE AT A GLANCE

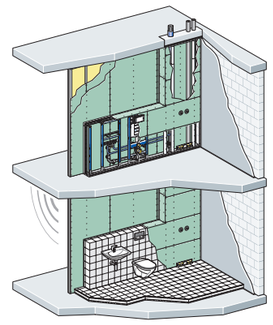
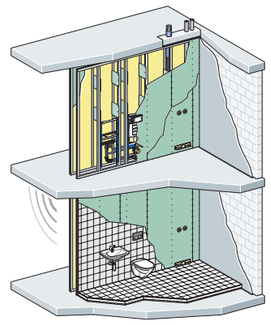
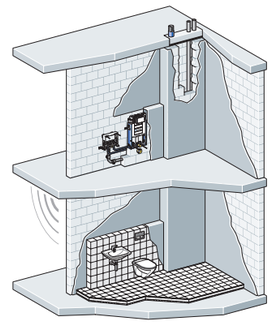
GEBERIT ELECTROFUSION MACHINE ESG 3	BENEFITS
Electrofusion couplings	✓
Electrofusion tapes	✓
Electrofusion couplings with integrated thermal fuse	✓
Quick exchange of the connecting cable for electrofusion	✓
coupling	✓
Fall impact cushioning	✓
Right angle plug	✓
Remote control	✓
Simultaneous welding of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

TECHNICAL DATA

SOUND INSULATION PROOF

TRIED-AN-TESTED SOLUTIONS FOR MANY STANDARD CONSTRUCTION SITUATIONS

	1 Geberit GIS prewall installation in front of solid partition (180 kg/m²)	2 Geberit GIS prewall installation in front of drywall partition (Knauf, W112)	3 Geberit GIS separating partitions
			
STACK	Silent-db20	Silent-db20	Silent-db20
COLLECTOR BRANCH PIPE	Silent-db20	Silent-db20	Silent-db20
SYSTEM SOUND PRESSURE LEVEL $L_{AFMAX, N}$	18 dB(A)	17 dB(A)	17 dB(A)
DIN 4109-1:2016-07	✓	✓	✓
DIN 4109/ SUPPLEMENT 2:1989-11	✓	✓	✓

	4 Geberit Duofix system wall prewall installation in front of drywall partition (Knauf, W112	5 Geberit Duofix installation elements in separating drywall partition (Knauf, W116)	6 Geberit Kombifix installation elements in masonry prewall installation in front of a solid partition (180 kg/m²)
			
STACK	Silent-db20	Silent-db20	Silent-db20
COLLECTOR BRANCH PIPE	Silent-db20	Silent-db20	Silent-db20
SYSTEM SOUND PRESSURE LEVEL $L_{AFMAX, N}$	20 dB(A)	21 dB(A)	27 dB(A)
DIN 4109-1:2016-07	✓	✓	✓
DIN 4109/ SUPPLEMENT 2:1989-11	✓	✓	

The acoustics information is based on measurements and calculations done by the Fraunhofer Institute for Building Physics in Stuttgart, Germany. The measurements were carried out in accordance with the German standards and directives under real-life conditions. All information refers to the structural setting in the installation test facility of the Building Technology and Acoustics Laboratory of Geberit AG under the described installation conditions. The test facility represents a section from a typical residential building and can be used directly for proving compliance with the sound insulation requirements 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.

TECHNICAL DATA

SUITABLE DRAINAGE SOLUTIONS FOR MANY APPLICATIONS

	GEBERIT SILENT-DB20	GEBERIT HDPE
Available dimensions	d56; d63; d75; d90; d110; d135; d160	d32; d40; d48; d50; d56; d63; d75; d90;d110; d125; d160; d200; d250; d315
DN nominal width	DN56; DN60; 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	HDPE-S2	HDPE
Coefficient of linear expansion	0,17 mm/(m·K)	0,17 mm/(m·K)
Absorption of linear expansion	Requires an expansion socket with double flange or a double sleeve coupling	Requires an expansion socket
Installation temperature	-20 to 40 °C	-20 to 40 °C
Permanent load application temperature	-20 to 60 °C	-20 to 80 °C
Chemical resistance	95 % of all standard alkalis, acids and 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

- As the market leader in sanitary technology Geberit is constanty setting new standards
- 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
- Close cooperation with plastic producers, universities and test institutes

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.

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 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 CO_2 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 HDPE pipes	d75 to d160	d110 to d315

SAVINGS	
Material weight for HDPE pipes and fittings	-73%
CO_2	-74%
Material costs* for HDPE pipes and fittings	-84%
Total installation time** including fastening	-55%

[1] Calculation in accordance with DIN 1986-100

EXAMPLE: GEBERIT 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 SUPERTUBE	CONVENTIONAL STACK
Floors	25	25
Dimensions of stack	d110	d160 + secondary ventilation d90
Material	Geberit HDPE	Geberit HDPE

SAVINGS	
Material weight for HDPE pipes and fittings	-51%
CO_2	-50%
Material costs for HDPE pipes and fittings*	-51%
Total installation time** including fastening	-60%

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

Geberit International Sales AG
CH-8640 Rapperswil
Switzerland

www.geberit-global.com