

NEW

■ GEBERIT

GEBERIT SILENT-PRO SUPERTUBE

# WE MASTER SPACE SAVING



**KNOW  
HOW**  
INSTALLED



With the new Geberit Silent-Pro SuperTube fittings, the drainage of apartment buildings can be realised without prohibited connection zones. Bypasses are no longer required and horizontal pipes with d110 up to 6 metres or with d90 up to 4 metres in length can be laid without a slope. This creates space and new scope for planning and design.

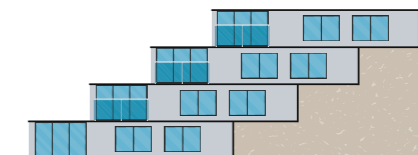


## STRAIGHT TO THE TARGET

Hydraulically sound drainage installations in relatively tall buildings are complex to plan and demanding in terms of their space requirements. The reason for this is the need for bypasses, which require a certain duct size. To simplify planning and enable more efficient building utilisation in the future, Geberit has developed Geberit Silent-Pro fittings with SuperTube technology for the highly sound-insulated drainage system. This simplifies the discharge stack even in higher buildings.



**Ideal for**  
apartment buildings with  
discharge stacks > 10 m



Houses with multiple distorted  
discharge stacks e.g. terraced houses

GEBERIT SILENT-PRO SUPERTUBE

# THE SYSTEM THAT OFFERS **MORE FREEDOM**

The simple, hydraulically optimised structure provides numerous advantages in planning and installation and ensures smooth processes in building operation.

## PLANNING WITHOUT BOTTLENECKS

Even when space is tight in the supply duct, Geberit Silent-Pro SuperTube allows for an efficient planning process without obstacles, as the technology ensures a slim drainage system that copes well with tight spaces. Since prohibited connection zones are eliminated, the system does not require bypasses.

## FLEXIBLE PLANNING

There is no need for time-consuming coordination rounds during the planning phase, as the system can be planned easily and securely with all common tools. Incorrect planning and thus unpleasant surprises on the construction site can be avoided from the outset and the domestic water connection is achieved more easily.

- Simplified planning
- Lean system structure
- Higher discharge capacity
- Easier installation process
- Less material used

## SIMPLIFIED INSTALLATION

Geberit Silent-Pro SuperTube makes installation easier: the elimination of the bypass means that less material is required and the expense of additional breakthroughs and the associated fire protection measures is eliminated. Installation is possible with just a few fittings. Slopes can be dispensed with in the case of an offset.

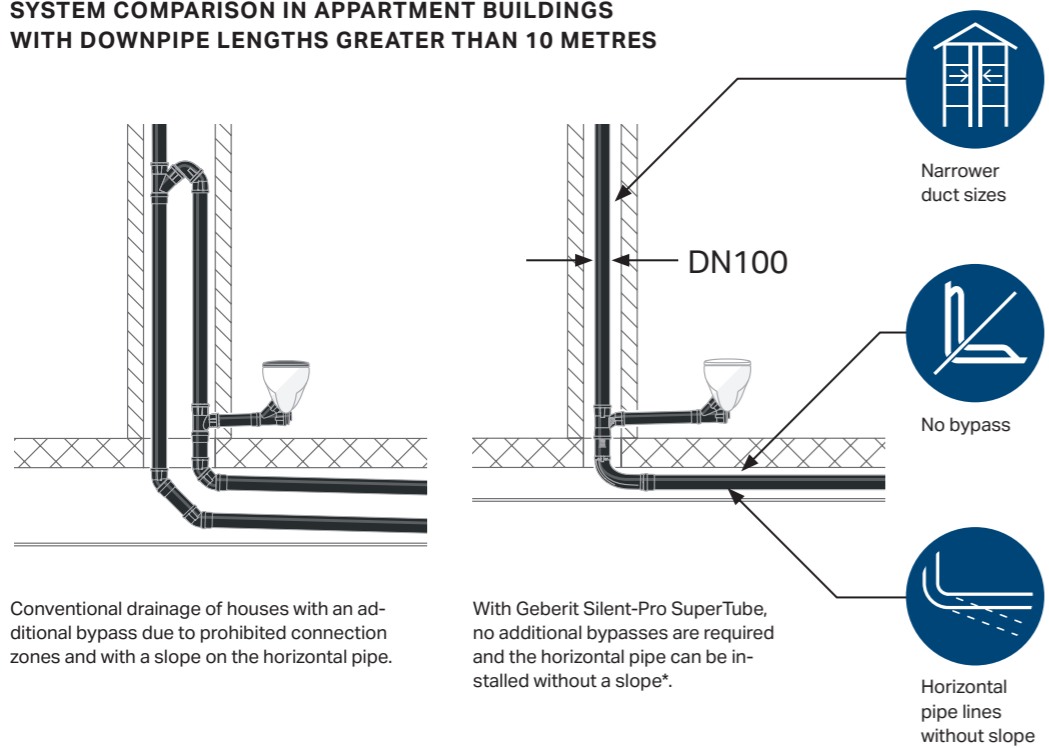
## EVERYTHING REMAINS POSSIBLE

Geberit Silent-Pro SuperTube achieves an up to 15% higher discharge capacity in the downpipe. For d90 this increases from 3.5 l/s to 4.0 l/s and for d110 from 5.2 l/s to 6.0 l/s. This makes the system flexible with regard to possible adjustments in the construction process or a later conversion of the building.

## BETTER USE OF SPACE

In the basement or underground car park, the best possible use can be made of the room height, as the horizontal pipe does not require a slope\* and the Geberit Silent-Pro BottomTurn bend can be installed very close to the ceiling. This makes it easier to comply with prescribed minimum room heights.

### SYSTEM COMPARISON IN APARTMENT BUILDINGS WITH DOWNPIPE LENGTHS GREATER THAN 10 METRES



\* Up to 6 metres for d110 and up to 4 metres for d90

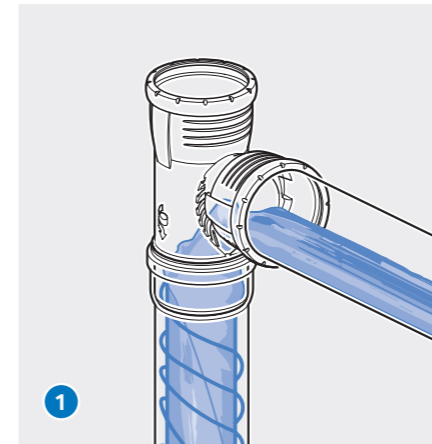


THE NEW GENERATION OF DRAINAGE SYSTEMS  
**DISCHARGE STACKS**  
 CAN BE THIS SIMPLE



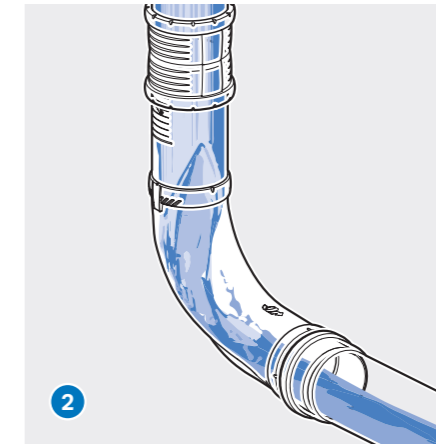
With Geberit Silent-Pro SuperTube, Geberit has succeeded in developing a technologically innovative system that ensures hydraulically optimal drainage. The special feature is that the air bleed is already integrated into the pipe via a continuous air column and makes bypasses superfluous. The flawless function and high performance of the innovative system have been confirmed by TÜV Rheinland LGA Products. Tests are available for comparison with conventional drainage systems in accordance with DIN EN 12056-2.

The system consists of three functional elements, each available in the dimensions d90 and d110. More complex solutions for the installation of direction changes with two 45° bends are no longer necessary.



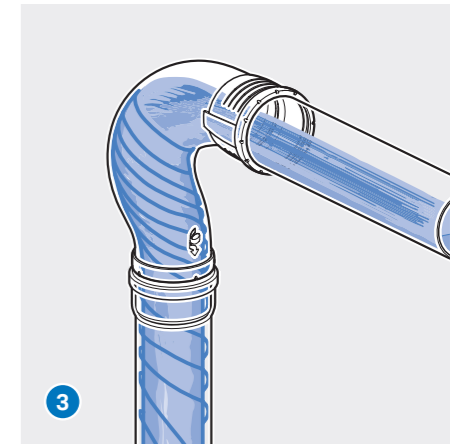
**GEBERIT SILENT-PRO CARVE BRANCH FITTING**

The optimised product geometry directs the inflowing waste water tangentially into the downpipe. The resulting annular flow leaves room inside for a stable, continuous column of air. The Geberit Silent-Pro Carve branch fitting thus achieves a 15% higher drainage capacity compared to a conventional branch fitting, swept-entry.



**GEBERIT SILENT-PRO BOTTOMTURN BEND**

With the Geberit Silent-Pro BottomTurn bend the wall of water breaks at the change in direction and the annular flow becomes a layered flow without disrupting the column of air. This direction change results in a significantly lower pulse loss than with conventional solutions and the horizontal pipe can be installed without a slope\*.



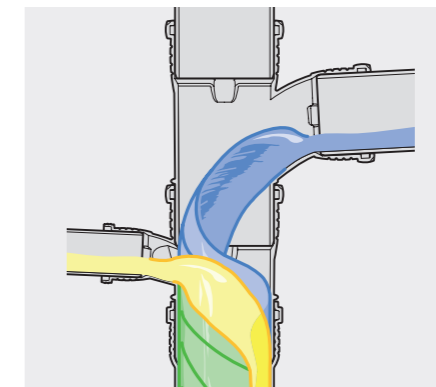
**GEBERIT SILENT-PRO BACKFLIP BEND**

The Geberit Silent-Pro BackFlip bend converts the layered flow back into an annular flow without creating a hydraulic seal. The optimal direction change in the specifically shaped swirl zone avoids critical negative pressures in the drainage system.

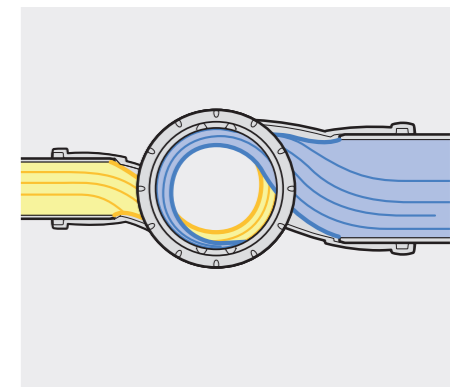
**CLEAN DRAIN WITHOUT CROSS-FLOW**

Geberit Silent-Pro Carve branches are allowed to be placed directly on top of each other without having to consider

a pipe base distance. Cross-flow can be avoided thanks to the hydraulic properties of the product.



Clean drainage without cross-flow.



Injections into the discharge stack are offset in rotation.

\* up to 6 metres for d110 and up to 4 metres for d90

## PRODUCT CHARACTERISTICS

# HIGH SOUND INSULATION

# EASY TO PLUG IN



Geberit Silent-Pro SuperTube is the hydraulically optimised supplement to the highly sound-insulated Geberit Silent-Pro plug-in drainage system. The system is the ideal solution for downpipes and floor connections in construction projects with high sound insulation requirements. The SuperTube technology fittings for multi-storey buildings and terrace houses have the same product and material properties as the other system components. In terms of sound insulation, the new fittings are equivalent to the conventional structure.

### 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.

### DESIGNED TO BE HANDY

Thanks to the gripping ribs, the components lie comfortably in the hand and ensure safe installation even in hard-to-reach places in the building.

### PLUG IN SAFELY

With its generously dimensioned insertion depth, the Geberit Silent-Pro provides a high degree of safety – even if pipe ends have been cut at an angle or parts have not been fully inserted by mistake.

### MORE PRECISE THANKS TO 30° MARKINGS

The 30° markings mean the fittings can be aligned quickly and precisely.

### SECURE FIT, EASY INSTALLATION

The fixed placement prevents the seal ring from loosening – however, it can be easily removed by hand if needed, for example, in order to insert a pipe section as a test.

### PROPERLY LEAKPROOF

High-quality EPDM seals ensure secure sealing of the connections for decades. Even under demanding operating conditions, such as high water temperatures or exposure to household chemicals, they remain securely closed.

### STRONG DESIGN WITH FUNCTION



Installation that points the way: the Geberit Silent-Pro SuperTube signet always points in the direction of drainage.



Striking distinction: only the Carve branch has the ribbed optics at the transition into the downpipe.



Helpful details: gripping ribs and 30° markings facilitate installation.



PLANNING

# MORE ROOM FOR MANOEUVRE

Geberit Silent-Pro SuperTube gives planning more scope and more time. Because with the right planning tools, the system can quickly be modelled and validated without errors. Planning discharge pipes has never been easier.

**SIMPLE RULES**

Geberit Silent-Pro SuperTube follows clear planning rules. In addition to the generally applicable rules, the following points must be taken into account according to Geberit: Geberit Silent-Pro Carve branches are to be planned where curved branches were previously planned in downpipes. The respective planning rules for Geberit Silent-Pro SuperTube must be observed for the transition of the discharge stack into a horizontal collector pipe or for the design of an offset.

**TESTED FUNCTION**

The hydraulic performance and function of Geberit Silent-Pro SuperTube have been confirmed by a test report from TÜV Rheinland LGA Products. A technical statement from Fraunhofer IBP is available on the comparability of the acoustic behaviour with conventional Geberit Silent-Pro elements.

## GEBERIT PLANNING TOOLS



**GEBERIT BIM PLUG-IN FOR AUTODESK REVIT®**

BIM data is available in the catalogue for Geberit Silent-Pro SuperTube. A dedicated SuperTube wizard is available for planning. This validates the system modelled in the BIM.



**GEBERIT PROPLANNER**

Geberit Silent-Pro SuperTube can be easily planned and validated with the Geberit ProPlanner. **More information on our planning support tools at [www.geberit.xy/apps](http://www.geberit.xy/apps)**

Detailed planning rules for Geberit Silent-Pro SuperTube at [www.geberit.xy/silent-pro\\_supertube](http://www.geberit.xy/silent-pro_supertube)

Geberit Silent-Pro SuperTube BIM and 2D/3D CAD data are also available for modelling and validation software from the following third-party suppliers



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## PLANNING CLOSE TO THE CEILING WITH FIRE PROTECTION

Fire protection with the Geberit fire protection sleeve RS90 Plus EN and the Geberit Silent-Pro BottomTurn was tested and approved in different cases.

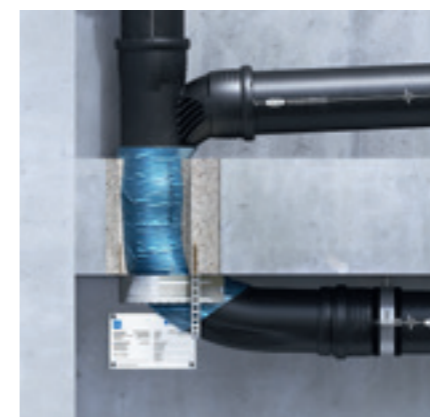
Geberit fire protection sleeve RS90 Plus EN recessed flush with the ceiling



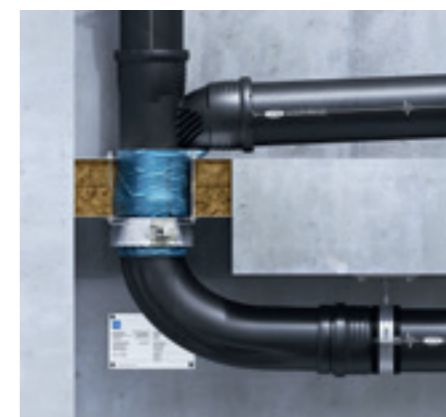
Geberit fire protection sleeve RS90 Plus EN recessed in the ceiling with necessary EPS/XPS insulation for minimum ceiling distance.



Surface-mounted installation of the fire protection sleeve in a U-shape enables a minimum ceiling distance without increased installation effort. This option can also be retrofitted.



Surface-mounted installation of the fire protection sleeve in conjunction with a soft firestop. This option can also be retrofitted.



## INSTALLATION

# INSTALLING WITH CLEAR DIRECTION

The Geberit Silent-Pro with SuperTube technology is easier to install than conventional systems. Less material, better adapted fittings and a simple push-fit connection system reduce the amount of time and effort needed to run downpipes and connect storeys. The direction of flow is always clear: Follow the arrow!



### A GOOD SIGN

Geberit Silent-Pro SuperTube fittings are provided with a special pictogram showing the direction of flow. This way, the connection direction is always clearly and easily identifiable. Without a lot of searching and trial and error, one part fits seamlessly to the other and control is visibly easy.

### SIMPLIFIED FIRE PROTECTION INSTALLATION

Safe fire protection is easy to install with Geberit Silent-Pro SuperTube. Since only one pipe is routed through the ceiling and this runs vertically, safety is quickly ensured with the easy-to-install Geberit fire protection sleeve RS90 Plus EN.

### ADAPT TO ANY CEILING

Depending on the ceiling thickness, the BottomTurn bend is adjusted to the desired length. There is sufficient material available for shortening. A corresponding marking on the product marks the cutting range.

### ECONOMICAL INSTALLATION

The use of a SuperTube system takes cost and time pressure off the plumber, because the solution saves material and simplifies the work process. The well thought-out fittings provide suitable solutions in all common construction situations.

### WORKING WITHOUT SLOPE

Horizontal ducts can be installed up to 6 metres for d110 and up to 4 metres for d90 without a slope and thus close to the ceiling.



The Geberit Silent-Pro BottomTurn bend can be easily adapted to the ceiling thickness.



A drainage system with Geberit Silent-Pro SuperTube is plugged together.

- Fewer individual parts necessary
- Suitable fittings for all common construction situations
- Simple construction without restrictions
- Simplified installation of horizontal pipelines without slope





# GEBERIT HYDRAULICS EXPERTISE **INNOVATION** IS NO ACCIDENT

In its development work, Geberit constantly sets new standards for safe drainage technology. In more than 100 years of hydraulics expertise, a wealth of knowledge and experience in flow engineering has been accumulated that no other company can match. This is the basis, the motivation and the claim when it comes to questioning and further optimising existing systems and products.

## HYDRAULICALLY ADVANCED THINKING

The development of hydraulically optimised fittings that simplify the construction of drainage systems is a success story at Geberit that has been constantly updated for more than 60 years. The innovative Geberit Silent-Pro SuperTube system now adds a new chapter that makes optimum use of the hydraulic possibilities of piping systems.

## THE CHALLENGE OF MULTI-FAMILY HOUSING

With the branch fitting, swept-entry, Geberit began to make conventional drainage systems more powerful and efficient. The SuperTube technology is the next logical step for use in residential construction. The specific structural challenges therefore also formed the design framework for completely new types of fittings.

## TESTED IN REAL CONDITIONS

The theoretical-physical development was followed by an extensive test phase. The company's own drainage tower in Rapperswil-Jona was used for tests and underwent an expansion. The existing wall was broken through and enlarged to include an outdoor area for the horizontal, slope-free six-metre-long pipeline. This enabled the Geberit Silent-Pro SuperTube to be tested in real conditions in comparison with a conventional drainage system and confirmed by an external testing institute.



The test with transparent parts provides insights into the actual flow behaviour of the new fittings



With CFD (computational fluid dynamics) numerical flow simulation, variants can be tested virtually in advance...



... and the identical result is visible in real conditions in the Geberit drainage tower, which forms part of the test laboratory.



The focus of the development team: heavy-duty fittings that can be produced economically.

**Company**

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mail

[www.geberit.xy](http://www.geberit.xy)