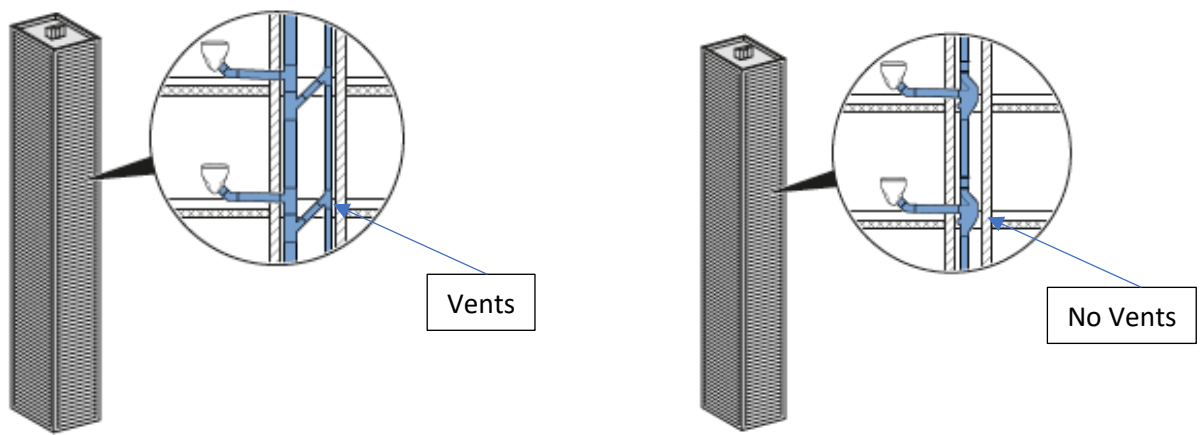


FAQ's for Geberit SuperTube

Q. How does SuperTube work?

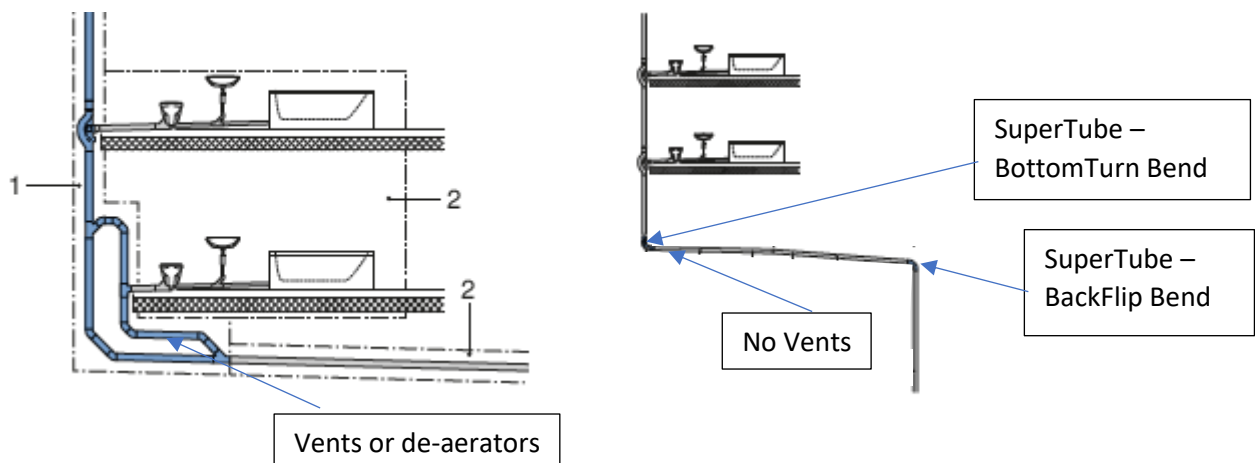
The special design of the fitting and patented Geberit SuperTube technology produces a continuous column of air in the stack. The discharge rate of the stack increases as a result of the continuous column of air, meaning that there is no longer any need to install a ventilation pipe running in parallel and the stack dimensions can be smaller in many applications.

i A continuous column of air facilitates pressure compensation and increases the discharge rate.



Conventional drainage of high-rise buildings with an additional ventilation pipe (secondary ventilation)

Drainage of high-rise buildings with Geberit HDPE Sovent



Q. When can one use SuperTube?

Due to its high capacity and excellent performance Geberit Sovent is an ideal drainage system for:

- High-rise office buildings
- Hotels
- Multi-storey residential buildings

It makes economic sense to use Geberit SuperTube System (Sovent, BottomTurn & Backflip Bend) on high rise buildings exceeding 5 storeys.

Q. Can Geberit Sovent be installed as an AS3500.2 compliant RVASS system?

- Yes, installers can choose to install Geberit Sovent to comply with AS3500.2 Section 11.
- Please contact your local Geberit Piping Specialist for further information or advice.

Q. Is Geberit SuperTube compliant with AS3500.2?

- Currently, it is not. However, Geberit SuperTube is a Performance Based Alternative Solution type system complying with Geberit SuperTube design rules.
- It carries a full Geberit warranty. Please refer to Geberit Terms & Conditions of trade for warranty conditions.
- A full Alternative Performance Solution compliant to NCC Guidelines is available.
- Please contact your local Geberit Piping Specialist for further information or advice.

Q. Can I choose to use bits and pieces from one system and not the entire Geberit SuperTube system?

- No, neither system will be compliant with either AS3500.2 or Geberit Alternate Performance Solution or Geberit design rules.
- Geberit warranty gets void too.

Q. Can I use Geberit Sovent /SuperTube with another manufacturers piping?

- No, Geberit Sovent and Geberit SuperTube are designed around the known performance characteristics of Geberit HDPE piping.
- Geberit warranty is void.

Q. Can Geberit Sovent be installed as an AS3500.2 compliant RVASS system?

- Yes, installers can choose to install Geberit Sovent to comply with AS3500.2 Section 11 or as a Performance Based System complying with Geberit SuperTube design rules but not as a combination of both.
- SuperTube components - BottomTurn and Backflip bends must not be used in AS3500.2 compliant RVASS systems.

Q. What are the main components of a Geberit SuperTube Stack?

- Geberit Sovent 110mm / 12l/s.
- Geberit BottomTurn bend (base of stack and offset).
- Geberit BackFlip bend (offset to stack transition).
- Geberit HDPE pipe, fittings and welders.



Sovent



BottomTurn Bend



BackFlip Bend

Q. Are de-aerators required at the base of stack or at the base of offsets?

- De-aerators are not required at the base of a SuperTube stack.
- De-aerators are also not required at the base of an offset in a SuperTube stack.

De-aerators and pressure relief bypass pipes provide a means by which unstable pressure conditions caused by a change in direction and velocity at the base of stacks and offsets may equalise between the vertical stack and horizontal pipe sections. BottomTurn bends in SuperTube systems allow stable hydraulic flow patterns and air flow between the vertical stack and horizontal pipe therefore negating the requirement for de-aerators.

Q. What is a DU or Discharge Unit?

- 1 DU equals 1 litre per second of discharge to the sanitary drainage system.
- Discharge Units are the standard unit of measurement of flow rate assigned to plumbing fixtures at the point of discharge to the sanitary drainage system as prescribed by European Plumbing Code DIN EN 12056-2:2001-01.
- There is no reliable method of converting Discharge Units to Fixture Units as per AS3500.2.

Q. Why must I use Discharge Units (DU) instead of Fixture Units (FU) for calculating Geberit Sovent/SuperTube systems?

- Discharge Units are the standard unit of measurement of flow rate assigned to plumbing fixtures at the point of discharge to the sanitary drainage system as prescribed by DIN EN 12056-2:2001-01. This is the code around which both Geberit Sovent and SuperTube systems have been designed.
- In many applications this allows for a greater loading on the stack than it is possible using AS3500.2 and FUs.

Q. How do you calculate drainage loads using the DU method?

- Drainage loads are calculated from a DU total of all fixtures connected, a frequency factor specific to the building in use is then applied to calculate a total theoretical flow rate in litres per second.
- The maximum theoretical flow rate of a 110mm SuperTube stack is 12l/s.
- Please contact your local Geberit Piping Specialist for assistance with Discharge Unit Stack calculations.

Q. What is the maximum Fixture Units (FU) or Discharge Units (DU) allowed in a SuperTube stack?

- Fixture Units must only be applied to designs compliant with AS3500.2 Section 11. Maximum load is 500FU.
- When designing to Geberit SuperTube rules, Discharge Units (DU) must be applied as the unit of measurement. The maximum load for a residential building is 576DU.
- Please contact your local Geberit Piping Specialist for further information or advice.

Q. What if the stack loading exceeds 576DU/12 litres per sec in my single 110 diameter SuperTube stack?

- One can either;
 - Split stack into two SuperTube 110 diameter stacks.

Or

- Upsize the stack to 160 diameter HDPE thereby changing to “standard” Sovent design rules with NO SuperTube elements or components.

Q. Does a graded offset in a SuperTube stack reduce the maximum stack load above the offset?

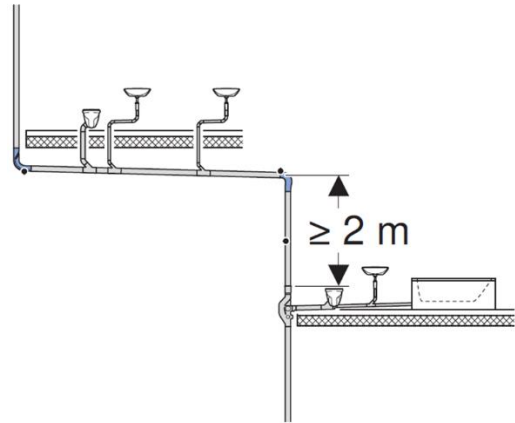
- Straight offsets up to 6 metres do not reduce the load above.
- Grade or fall needs to be applied after 6 metres or a change in direction, reductions in maximum load also apply.
- Please contact your local Geberit Piping Specialist for further information or advice.

Q. What are the grade or fall requirements for the base of stack or graded offset in a SuperTube stack?

- The first 6 metres of straight pipe at the base of stack or offset require no fall.
- Fall must be applied after 6 metres or a horizontal or vertical change in direction.
- Please contact your local Geberit Piping Specialist for further information or advice.

Q. What are the restricted zones for branch connections to a graded offset?

- Connections are allowed anywhere on the graded pipe.
- No connections or offsets are allowed for 2 metres below a Backflip bend.

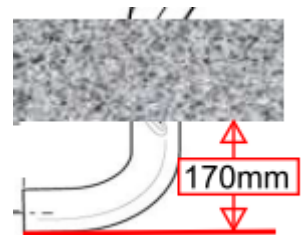


Q. What are the restricted zones for branch connections at the base of a SuperTube stack?

- There are no restricted zones at the base of a SuperTube stack.

Q. What is the minimum distance below slab at the base of a SuperTube stack?

- 170mm.

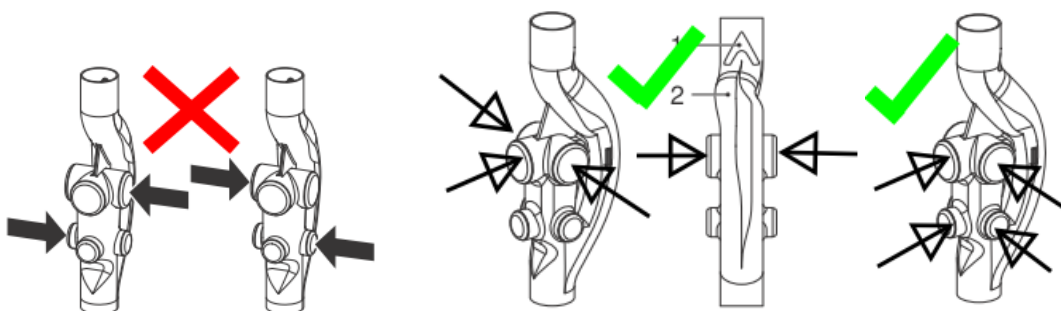


Q. What vertical stack duct size is required for a SuperTube stack?

- SuperTube stacks require a maximum duct space of 200mm x 300mm.
- Duct sizes may be reduced by placement of the Sovent fitting into the ceiling space in some cases.

Q. What rules apply to opposed connections to a Sovent fitting in a SuperTube stack?

- Horizontally opposite connections are permitted without restriction.
- Diagonally opposite connections are not permitted.



Q. Can a 45degree offset be installed in the vertical stack within the 2m restricted zone downstream of a BackFlip bend?

- No, no connections or offsets are permitted in this zone.

