

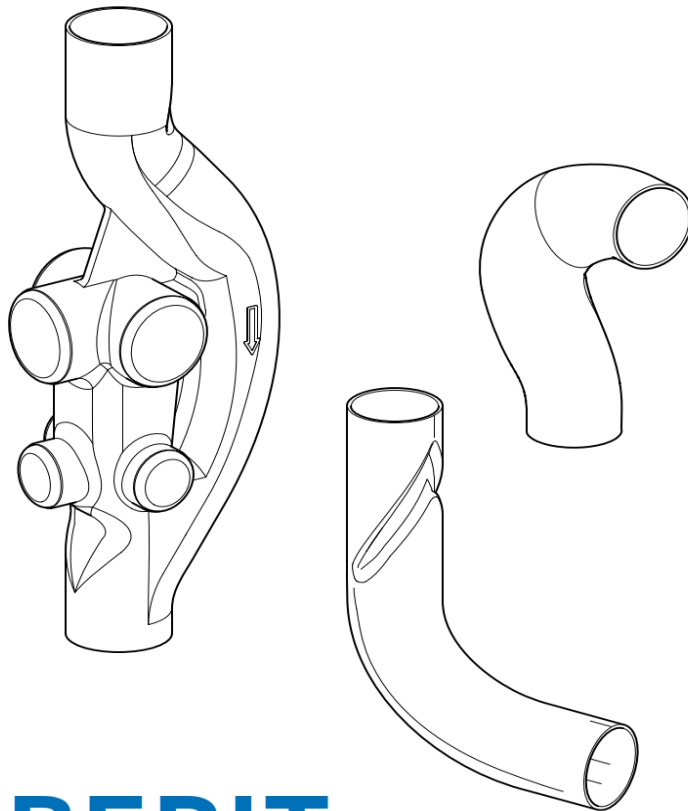
INSERT COMPANY LOGO HERE

DATE

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# PROJECT TITLE

GEBERIT SUPERTUBE SANITARY PLUMBING SYSTEM  
PERFORMANCE SOLUTION



# GEBERIT SUPERTUBE

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## PROJECT NAME

Rev #	Date	Description of Change

## APPROVALS

Rev #	Author	Status	Reviewer

PREPARED BY:

INSERT COMPANY NAME

INSERT COMPANY ADDRESS

INSERT COMPANY CONTACT DETAILS

INSERT COMPANY LOGO

PREPARED FOR:

INSERT COMPANY NAME

INSERT COMPANY ADDRESS

INSERT COMPANY CONTACT DETAILS

INSERT COMPANY LOGO

# DESIGNER

This performance solution has been prepared by:

**Designer/Engineer:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Qualifications:** \_\_\_\_\_

**Contact:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

NOTE: This performance solution is limited in scope and does not cover sanitary drainage systems, class 1 or 10 buildings, or sanitary plumbing systems other than the Geberit SuperTube system. The extent of the system that this performance solution applies to is shown diagrammatically in blue below, which includes the vertical and graded sections of the stack. If branch discharge and collector pipes are planned according to a standard that differs from AS3500.2.2021, they shall also be included in the performance solution.

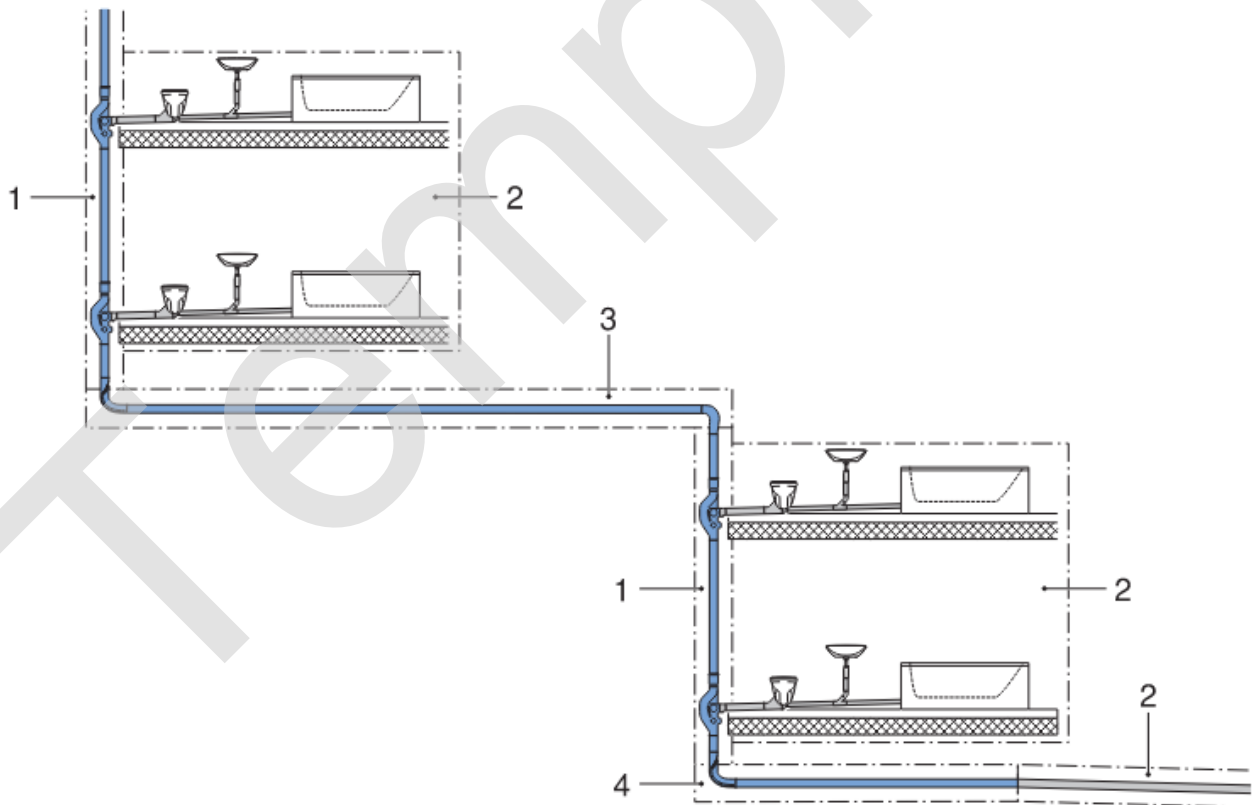


Figure : Discharge pipe with Geberit SuperTube: pipe sections and rules

- 1 Stack: planning in accordance with the rules for Geberit HDPE Sovent fittings
- 2 Branch discharge pipes, collector pipe: planning in accordance with local standards
- 3 Stack offset: planning in accordance with the rules for Geberit SuperTube
- 4 Transition to the collector pipe: planning in accordance with the rules for Geberit SuperTube and local standards

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# 1. GENERAL

**COMPANY NAME** have been engaged by **CLIENT** (the client is the owner of the property) to design and undertake a performance solution for the sanitary plumbing system at **PROJECT NAME AND ADDRESS**. A performance solution is required due to the Deemed to Satisfy (DTS) provisions within the respective Australian Standard being limited in capacity, information, and not being fit for purpose in relation to this system style. The performance solution will meet the performance requirements within the provisions **C1P1 to C1P7 of the Plumbing Code of Australia (PCA) (2022)** as referenced in the National Construction Code (NCC) (2022) via the provided verification methods of **C1V1 to C1V5** wherever relevant in combination with relevant Deemed to Satisfy (DTS) Solutions. The year of the Plumbing Code of Australia that this report has been based on, is the Plumbing Code of Australia in use on the day that the Accredited Certifier receives, and date stamps the construction certificate application as received.

The design of the sanitary plumbing system has used the Geberit SuperTube Planning Manual Version August 2019 which is based on the testing depicted in Appendix C of this report and has been shown based on the testing in Appendix C to have met the relevant Performance Requirements of the Plumbing Code of Australia.

**INSERT AERIAL PICTURE OF SITE**

Figure 1: Aerial view of the (**INSERT SITE NAME**)

**INSERT AERIAL PICTURE OF SITE**

Figure 2: **INSERT BUILDING LOCATION DRAWING**

## 2. REASON FOR THE PERFORMANCE SOLUTION

Due to the limits of the DTS provisions AS 3500.2:2021 described above, the design options are limited when the standard is applied to the **PROJECT NAME** sanitary plumbing design. The information contained within AS3500.2:2021 contain the following items which have been improved within the testing and transient air modelling undertaken by Geberit:

Deviation from AS3500.2 DTS Solution	AS3500.2:2021 describing DTS Solution	Geberit SuperTube Performance Solution	Applies to Project?
Geberit SuperTube stacks can take a greater volume of fixture loads than a DTS stack of the same diameter.	Clause 11.3	SuperTube loads are 12l/s for 110mm and 17l/s for 160mm stacks when calculated according to method from DIN EN 12056-2:2001. This calculation method has been adopted in verification methods C1V1, Determination of sanitary plumbing wastewater flowrate, in PCA (2022).	
An unvented branch drain connecting to a Geberit SuperTube stack can take a greater volume of fixtures than the DTS provisions for the same diameter.	Clause 11.8	Geberit SuperTube Planning Manual August 2019 Section 4.1.4.	
Geberit SuperTube rules around opposed connections to the same aerator fitting are more clearly defined than the DTS provisions.	Clause 11.6.2	Geberit SuperTube Planning Manual August 2019 Section 4.1.3, Figure 17.	
The Geberit SuperTube system can exceed 5m in distance between aerator fittings.	Clauses 11.5.1(a) and 11.9	No restrictions apply to distances between aerator junctions or between de-aerators and aerator junctions.	
The Geberit SuperTube 110mm system does not require a de-aerator at the base of the stack or offset.	Clauses 11.2, 11.5.1(b), 11.5.2 and 11.9	Geberit SuperTube Planning Manual August 2019 Section 4.1.2, 4.1.7, 4.1.9 and 4.1.10.	
A Geberit SuperTube 110mm stack may be offset without grade (fall/slope) on the horizontal section.	Clause 11.5.1(c)	Geberit SuperTube Planning Manual August 2019 Section 4.1.7.	
There are no non-connection zones on horizontal sections of Geberit SuperTube 110mm stacks.	Clauses 11.5.1, 11.9 and Figure 11.5.1(B).	Geberit SuperTube Planning Manual August 2019 Section 4.1.9.	

Sanitary plumbing vents specific to the fixtures connected to the Geberit SuperTube stack can be connected back into the Geberit SuperTube stack in lieu of going to atmosphere separately; the DTS provisions do not provide guidance on how the system is to be vented;	Clause 11.2	Geberit SuperTube Planning Manual August 2019 Section 4.1.4, Figure 24.	
Connections can be made to the graded offset of the SuperTube stack on any level, the DTS provisions only allow connections to be made on the first four floor levels above the connection to the boundary trap riser;	Clause 10.11 and Figure 11.5.1(B)	Geberit SuperTube Planning Manual August 2019 Section 4.1.9, Figure 34.	
Condensate drains may connect directly to Geberit SuperTube stacks between aerator fittings.	Clause 11.6.1	Geberit SuperTube Planning Manual August 2019 Section 4.1.3, Figure 19.	
The Geberit aerator fitting has been designed and manufactured to the requirements of the Swiss SN 592000:2012 standard; the relevant Australian Standard provides no manufacturing requirements for the fitting required to be used in a reduced velocity system; and	No DTS provisions		
The DTS provisions are unclear on connecting stacks to another stack mid-level within a building; the Geberit SuperTube system provides clear details on allowing this.	No DTS provisions	Geberit SuperTube Planning Manual August 2019 Section 4.1.3, Figure 16.	
DTS provisions state that stacks shall connect to sanitary drainage or above-ground (elevated) pipework within 4 floor levels of the connection point to the boundary trap riser. Geberit SuperTube allows connection to collector pipes as described in EN12056-2:2001 with no such height restriction.	Clause 10.11	Geberit SuperTube Planning Manual August 2019 Section 4.1.10, 4.3.2.	

Utilising a Geberit SuperTube sanitary plumbing system, the above issues are resolved. The performance solution for the sanitary plumbing system will justify the proposed system, demonstrate the efficacy of the proposed design, and as such, ensure the building meets its required function.

*This concludes the preview of the Geberit SuperTube Performance Solution template. For the full template, please contact your local Geberit representative:*

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*Thank you for your interest in Geberit SuperTube.*