

PLANNING GUIDE

GEBERIT

INSTALLATION SYSTEMS

**KNOW
HOW
INSTALLED**





BENEFITS OF A GEBERIT INSTALLATION SYSTEM



EASY TO CLEAN

Lifting the toilet off the floor makes it easy to clean the entire floor with a mop, with no bending or kneeling.



SAVES SPACE

A wall-hung toilet takes up less space than a standard toilet, giving you more design flexibility and enhancing safety and comfort, even in the smallest spaces.



STRONG AND DURABLE

This sturdy system supports up to 880 lbs. The impact resistant high-density one-piece tank is guaranteed not to leak.



SAVES WATER

Built-in 1.6/0.8 GPF (6/3 LPF) or 1.28/0.8 GPF (4.8/3 LPF) dual-flush lowers water bills. You can even qualify for EPA WaterSense rebates or green building points.



EASY TO MAINTAIN

The Geberit valve eliminates problematic chains and flappers that corrode and fail. All working parts are easily accessed through the stylish flush and cover plates.



FLEXIBLE

The adjustable-height carrier allows you to position the toilet 15" to 19" off the floor to meet personal preference or local ADA guidelines including ANSI A117.1.

This guide is intended for anyone involved in selling, planning, or installing Geberit installation systems. It outlines typical design scenarios, including specification considerations, as well as recommended installation methods and products for each. This guide is not designed to demonstrate solutions to every possible scenario and all installation steps—please consult Geberit as needed.

Geberit Installation Systems information and installation instruction manuals are available at www.geberit.us.



GEBERIT NOW - TECHNICAL - INSTALL INSTRUCTIONS
<http://www.geberitnow.com/resource/html/install-technical-installation.html>



GEBERIT KNOW-HOW INSTALLED - YOUTUBE
<https://www.youtube.com/playlist?list=PLI9xW3EYLkBMwl-gvajqHGjQOBmBGnoqk>



SOUND INSULATION - GEBERIT
<http://www.geberit.com/know-how/sound-insulation/>



GEBERIT PRO - A COMPREHENSIVE RESOURCE FOR TECHNICAL DOCUMENTATION.
http://www.geberitnorthamerica.com/en_us/head_structure/download_center_2/geberit_pro/geberit_pro.html



GEBERIT REP LOCATOR - FIND A SALES REPRESENTATIVE
<http://locator.geberitnow.com/rep/>

SYSTEM COMPONENTS

A. WALL AND CARRIERS

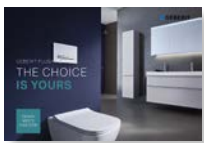
- Bathroom wall configurations such as full height in-wall, partial height pre-wall (aka pony wall), free-standing walls or corner installations—either within stud walls or in front of solid walls
- Framed in wood or steel stud wall depths to common sizes, like 2x4 and 2x6 which defines carrier product selected
- Adaptable to a variety of finished wall thickness and materials

B. ACTUATORS

- Location and type of actuation—front, top, remote and manual or touch free
- Design, finish, color and actuation

C. TOILETS

- Over twelve manufacturers offer more than 175 compatible wall-hung toilets, ADA, comfort height, elongated, round and square bowls
- Two water saving flush volume choices
- Fixture layout—single or bank installs (back-to-back for example)



Refer to our website or Geberit publication GNA7181 for our full line of actuators.



Refer to our website or Geberit publication GNA7087 for a selection of compatible toilets.

PRELIMINARY CONSIDERATIONS

Geberit installation system parts and plumbing are interdependent with each other and with the toilet seat height, type of framing and finished wall thickness as noted below.

FINISHED WALL

Finished wall material, number of layers, desired final thickness and actuator selection should be kept in mind when determining overall finished wall thickness during the design phase.

Typically, actuators are intended for finished wall thickness from 3/4" to 3-1/2" (20 to 90mm), and wall materials including drywall, gypsum, green board, tile, stone and paneling. Mirror and glass wall materials are not recommended!

Note: Actuator selection can be a determining factor regarding finish wall thickness. Refer to specific carrier and actuator installation instruction manuals on our website for details, especially if considering Sigma60, Omega60 and concealed remote button actuators!

FRAMING

Each carrier model has different framing requirements according to the wall configurations needed: full height in-wall or partial height pre-wall examples are shown in the illustrations on the following pages. Additionally, carrier selection, seat height and types of actuators are interdependent and should be planned together.

SEAT HEIGHT

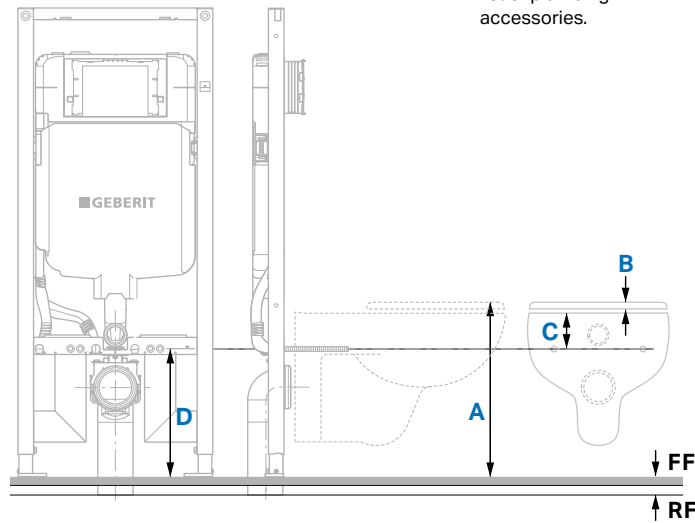
Seated height above finished floor requirements vary, for example by comfort request or ADA applications. Therefore setting the proper height of the carrier at installation is critical.

To calculate the proper carrier mounting rod height above finished floor requires specific information: required seat height, the bowl model, seat model, and finished floor thickness and whether the carrier mounting feet are above, at or below the finished floor level.

In the example below, the carrier feet are mounted directly onto the finished floor level:

- A** Seat height
- B** Thickness of seat
- C** Dimension from mounting hole centers to rim height (from bowl spec sheet)
- D** Carrier mounting rod height above finished floor.

After the calculation, mark the rod height on a framing stud for reference. Adjust carrier legs and feet to make up height as needed to compensate.



Here's the formula:

$$\begin{array}{ccccccc}
 \mathbf{A} & - & \mathbf{B} & - & \mathbf{C} & = & \mathbf{D} \\
 \text{Target} & & \text{Seat} & & \text{Distance} & & \text{Carrier rod} \\
 \text{Height} & & \text{Thickness} & & \text{from rim/} & & \text{height above} \\
 & & & & \text{bolts} & & \text{finished floor}
 \end{array}$$

PLUMBING

Water supply piping must be 3/8" minimum with working pressures as low 2 psi up to 125 psi.

For renovation, plan to modify DWV layouts to work with the Geberit installation system.

Accessories are available for cast iron or plastic piping with optional connections to suit a variety of DWV configurations. Examples shown on following pages.

Refer to our website or Geberit publication GNA7089 for a complete list of plumbing accessories.



INSTALLATION EXAMPLES

Construction/framing details

Installation examples shown on these pages are a sampling of standard water closet framing.

If remodeling, framing and plumbing (and electrical access if touch-free) will need modification to work with carrier installation.

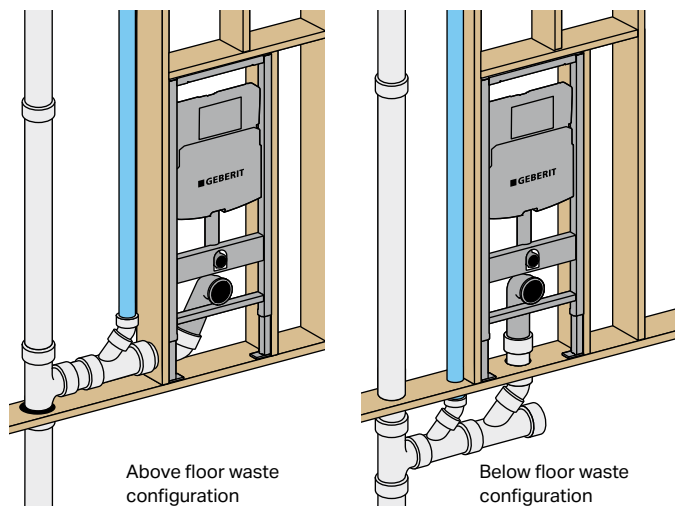
IMPORTANT: IT IS INCUMBENT UPON THE DESIGNER/INSTALLER TO CONSULT WITH LOCAL BUILDING AND PLUMBING CODES TO INSURE PROPER INSTALLATION OF SYSTEM AND COMPONENTS.

The chart below shows framing depth required depending on the carrier model or waste location you require.

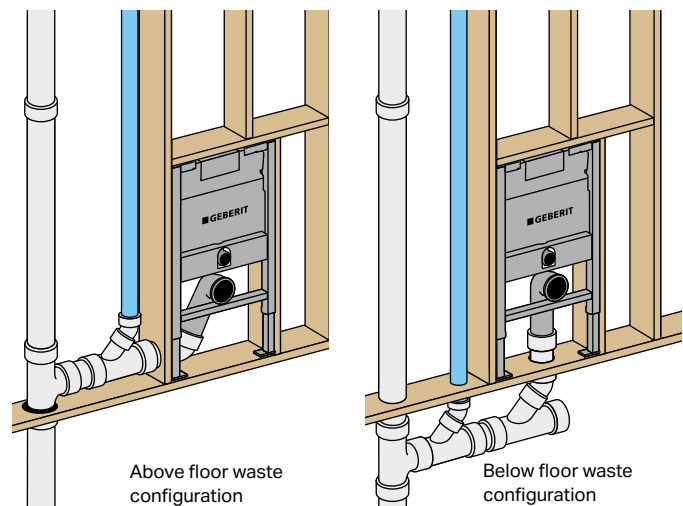
Carrier Model Number	Flush Volume	DWV Location/Framing			
		Above Floor		Below Floor	
		2x6	2x4	2x6	2x4
111.335.00.5	1.6/0.8 GPF	YES	NO	YES	NO
111.902.00.5	1.28/0.8 GPF	YES	NO	YES	NO
111.798.00.1	1.6/0.8 GPF	YES	NO	YES	YES
111.597.00.1	1.28/0.8 GPF	YES	NO	YES	YES
111.012.00.1	1.6/0.8 GPF	YES	NO	YES	NO
111.018.00.1	1.28/0.8 GPF	YES	NO	YES	NO

2X6 IN-WALL INSTALLATION WITH WOOD STUDS

MODEL NOS. **111.335.00.5, 111.902.00.5, 111.798.00.1, 111.597.00.1**



MODEL NOS. **111.012.00.1, 111.018.00.1**



IMPORTANT: CARRIER FRAME MUST BE MOUNTED FLUSH WITH WALL FRAMING FOR PROPER INSTALLATION.

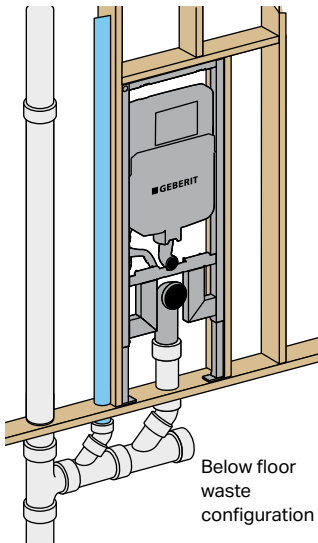
Custom Considerations

For corner, free standing walls, custom installation configurations or questions not covered in this planning guide, please contact your Geberit sales representative.

Call **800/566-2100** or go to **www.geberit.us**.

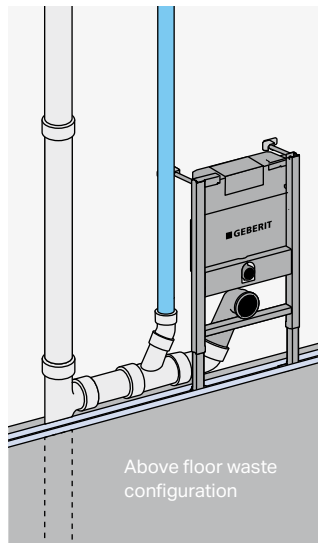
2X4 IN-WALL INSTALLATION WITH WOOD STUDS

MODEL NOS.
111.798.00.1, 111.597.00.1



2X6 PRE-WALL INSTALLATION TO SOLID (CONCRETE OR BRICK) WALL

MODEL NOS.
111.012.00.1, 111.018.00.1

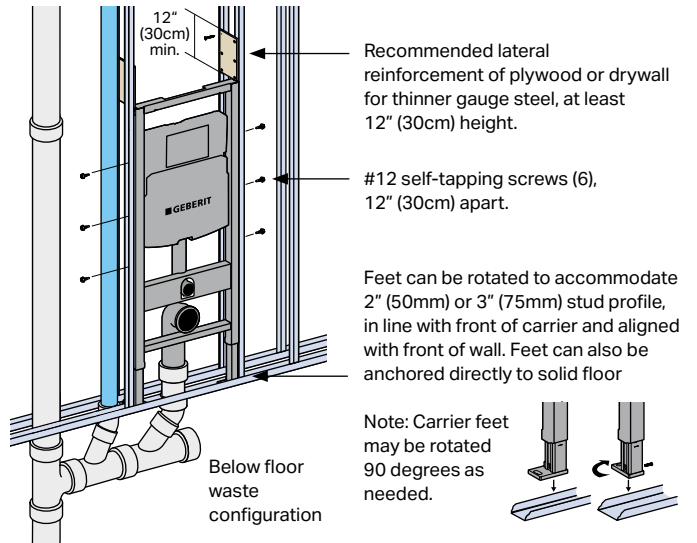


Note: All carriers can be installed as pre-wall (in front of solid wall) and can also accommodate both above and below floor waste lines.

For pre-wall installation mounting accessories or for other specific carrier installation accessories, refer to Geberit publication GNA7089 or visit our web site.

STEEL STUD INSTALLATION

MODEL NOS. 111.335.00.5, 111.902.00.5, 111.798.00.1, 111.597.00.1,
111.012.00.1, 111.018.00.1




12ga studs 2" (50mm) or 3" (75mm) wide recommended for optimal support, connected to the floor and ceiling with mounting brackets.

For studs thinner than 12ga, additional 12" (30cm) lateral plywood or drywall reinforcement is recommended (see above).

Recommended gauge for wall heights: 20ga -18ga studs for 8 foot height; 16ga -14ga studs for 10 foot height. For taller walls consult a structural engineer.

Attach carrier frame to steel studs using #12 self-tapping screws (see above).



Layout examples shown on the following pages are a sampling of multiple water closet configurations using the 111.335.00.5 Geberit Duofix Carrier.

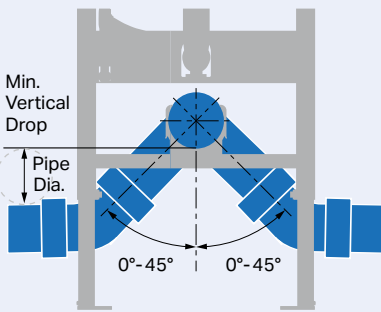
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ALL GEBERIT SUPPLIED COMPONENTS ARE COMPLIANT WITH APPLICABLE CODES.

MULTIPLE CONFIGURATIONS

ALL EXAMPLES ASSUME

- 2" vent
- 3" discharge from toilet
- 4" vertical stacks
- 4" horizontal run for gang fixtures (maximum 20 feet horizontal run to stack)
- Geberit fittings have 90mm inlet (requires included connection kit when trimming out bowl) and 3" discharge
- Geberit fittings cut to fit and connected using supplied banded transition fitting or other flexible coupling
- Waste elbow offset must be no more than 45° right or left with a minimum vertical drop of one pipe diameter before transitioning to horizontal pitch for proper function as shown below



DWV DETAIL ABOVE FLOOR WASTE

Accessories

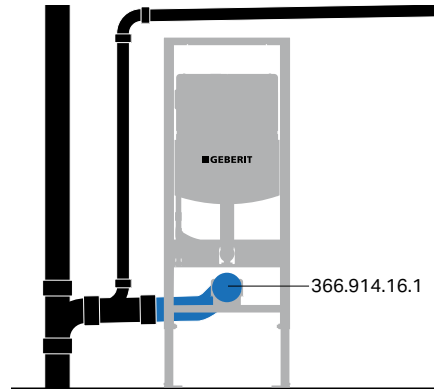
366.061.16.1 HDPE waste elbow (included)



366.914.16.1 HDPE RH horizontal waste fitting (right-hand)



366.913.16.1 HDPE LH horizontal waste fitting (left-hand)



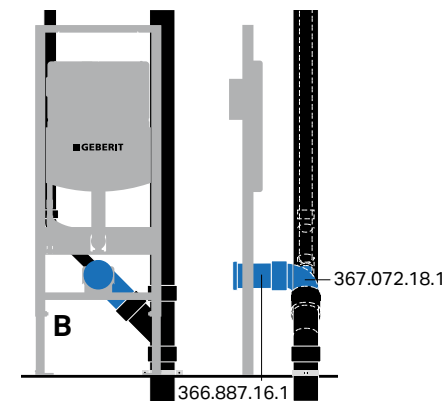
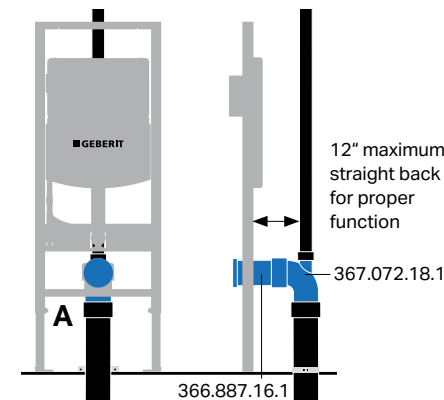
3X2 LHO OR 3" SANITARY TEE

Accessories (depending on vent requirements)

366.887.16.1 HDPE straight connector



367.072.18.1 Cast iron elbow with 2" heel outlet



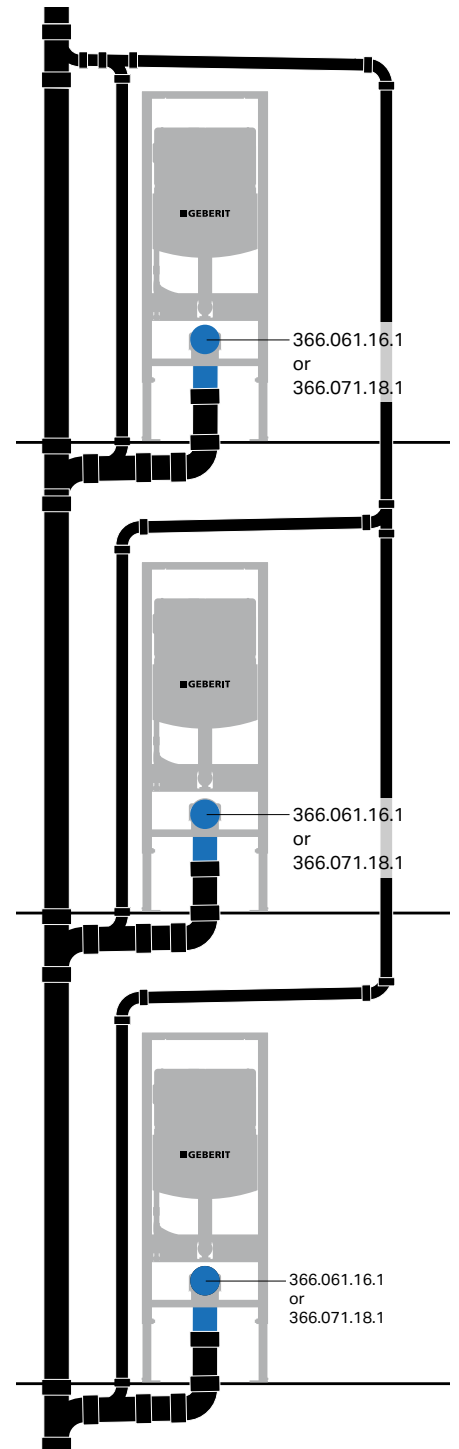
MULTIPLE VERTICAL DWV DETAIL BELOW FLOOR WASTE

Accessories

366.061.16.1 HDPE waste elbow (included)



367.072.18.1 Cast iron elbow with 2" heel outlet



GANGED CONFIGURATIONS

GANGED DWV DETAIL FOR SHALLOW WALL

Accessories

366.061.16.1 HDPE waste elbow (included)



367.072.18.1 Cast iron elbow with 2" heel outlet



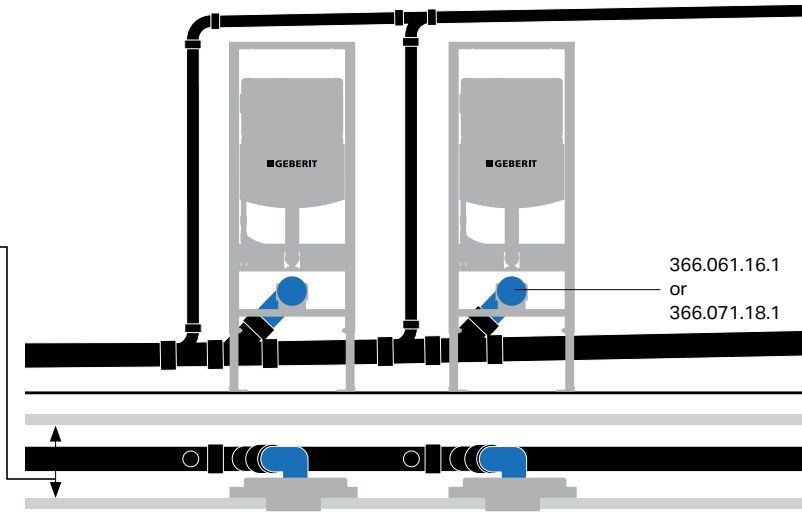
MINIMUM DISTANCE BETWEEN FINISHED WALLS:

For no-hub installation with 3" pipe horizontal run -> 5-1/2" (equal to 2x6)

For no-hub installation with 4" pipe horizontal run -> 6"

For hub and spigot installation with 3" pipe horizontal run -> 6-1/4"

For hub and spigot installation with 4" pipe horizontal run -> 6-3/4"



GANGED DWV DETAIL

Accessories

366.061.16.1 HDPE waste elbow (included)

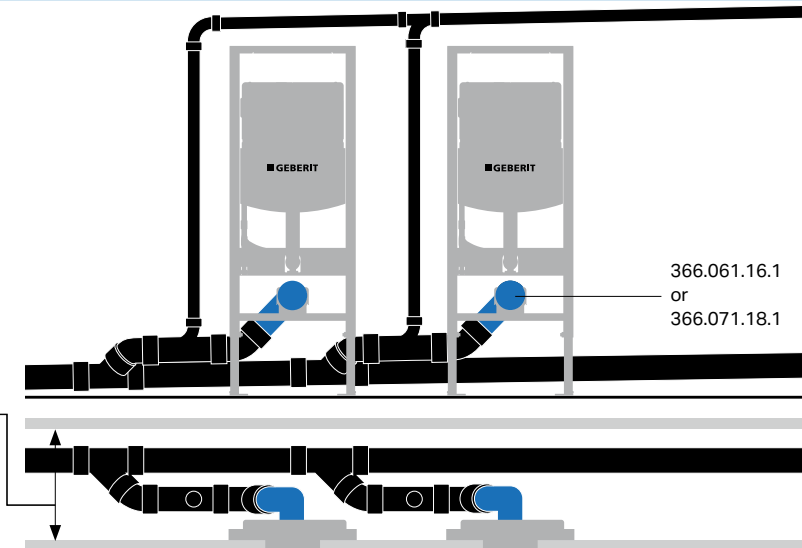


367.072.18.1 Cast iron elbow with 2" heel outlet



MINIMUM DISTANCE BETWEEN FINISHED WALLS:

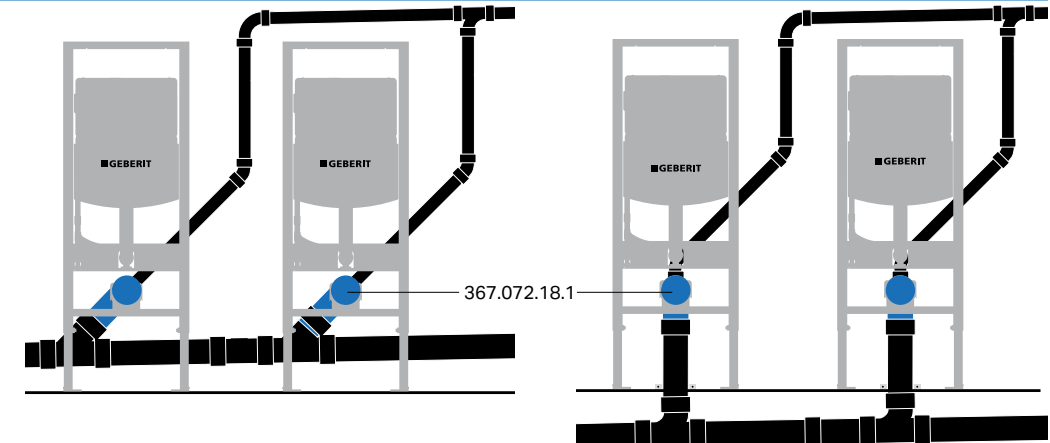
Typical for installations with 4" pipe horizontal run -> as per fitting choice and layout



GANGED DWV ALTERNATE VENTING DETAIL

Accessories

367.072.18.1 Cast iron elbow with 2" heel outlet



GANGED, BACK-TO-BACK DWV DETAIL FOR SHALLOW WALL

Accessories

367.485.16.1 HDPE
back-to-back
horizontal waste fitting



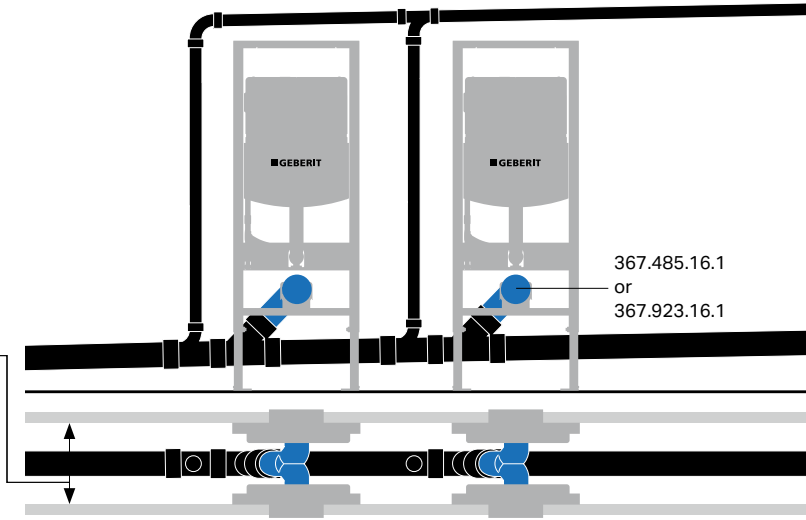
367.923.16.1 HDPE
back-to-back vertical
waste fitting



MINIMUM DISTANCE BETWEEN FINISHED WALLS:

Typical for installations with 4" pipe horizontal run and 2x6 carrier -> 11"

Typical for installations with 4" pipe horizontal run and 2x4 carrier -> 8-5/8"



GANGED, BACK-TO-BACK DWV DETAIL

Accessories

366.061.16.1 HDPE
waste elbow (included)

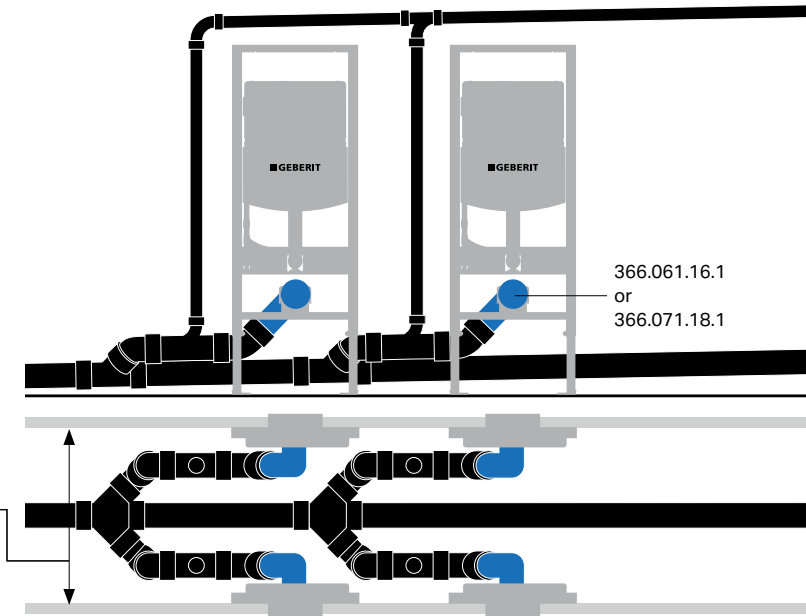


367.072.18.1 Cast iron
elbow with 2" heel outlet



MINIMUM DISTANCE BETWEEN FINISHED WALLS:

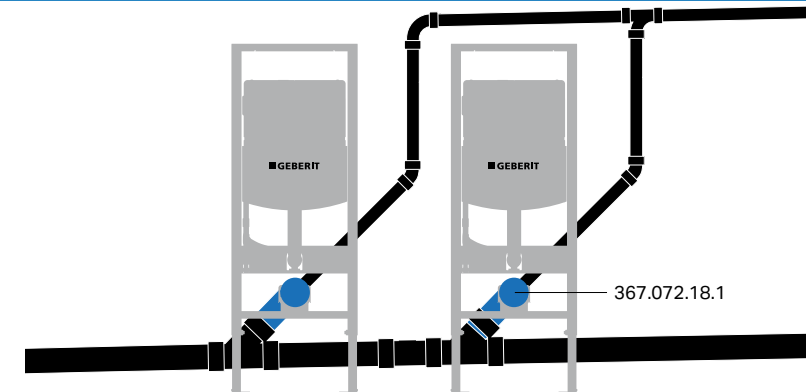
Typical for installations with 4" pipe horizontal run -> as per fitting choice and layout



GANGED DWV ALTERNATE VENTING DETAIL

Accessories

367.072.18.1 Cast iron
elbow with 2" heel outlet



Geberit

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www.geberit.us

Geberit North America is part of the Geberit Group, a European market leader and global provider of sanitary technology. Located in Des Plaines, Illinois, Geberit North America provides concealed tank and carrier systems for wall-hung and floor-mounted toilets and fixtures. Geberit systems improve the look of any bathroom by hiding the unsightly toilet tank. Replacing a standard tank and toilet with the Geberit system results in more usable space, improved hygiene and better accessibility. The unique dual-flush valve saves water and is practically maintenance free. Geberit also offers cable-controlled bath waste and overflows in a variety of designer finishes. Critical working parts are outside the waterway, ensuring years of trouble-free operation.

For more information, contact your Geberit sales representative, call 800/566-2100 or go to www.geberit.us

