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GROHE FREEFLUSH

Shower and bath water flushing system
www.grohe.com



GROHE
ENJOY WATER®

GROHE FREEFLUSH SHOWER AND BATH WATER FLUSHING SYSTEM

A CLEAN SOLUTION, A DOUBLE BENEFIT

Water is mankind's single most important nutrient; therefore, economical use of this natural resource is imperative. As a global company, we live up to our responsibility and continue to develop new solutions which create awareness of this issue and help consumers manage their water consumption in a sustainable way.

GROHE FreeFlush is a completely innovative system which re-uses shower and bath water for WC flushing without performing complex water treatment functions. This smart re-use of shower and bath water relieves the environment and our fresh water resources. In addition, it helps reduce utility bills on a sustainable basis.

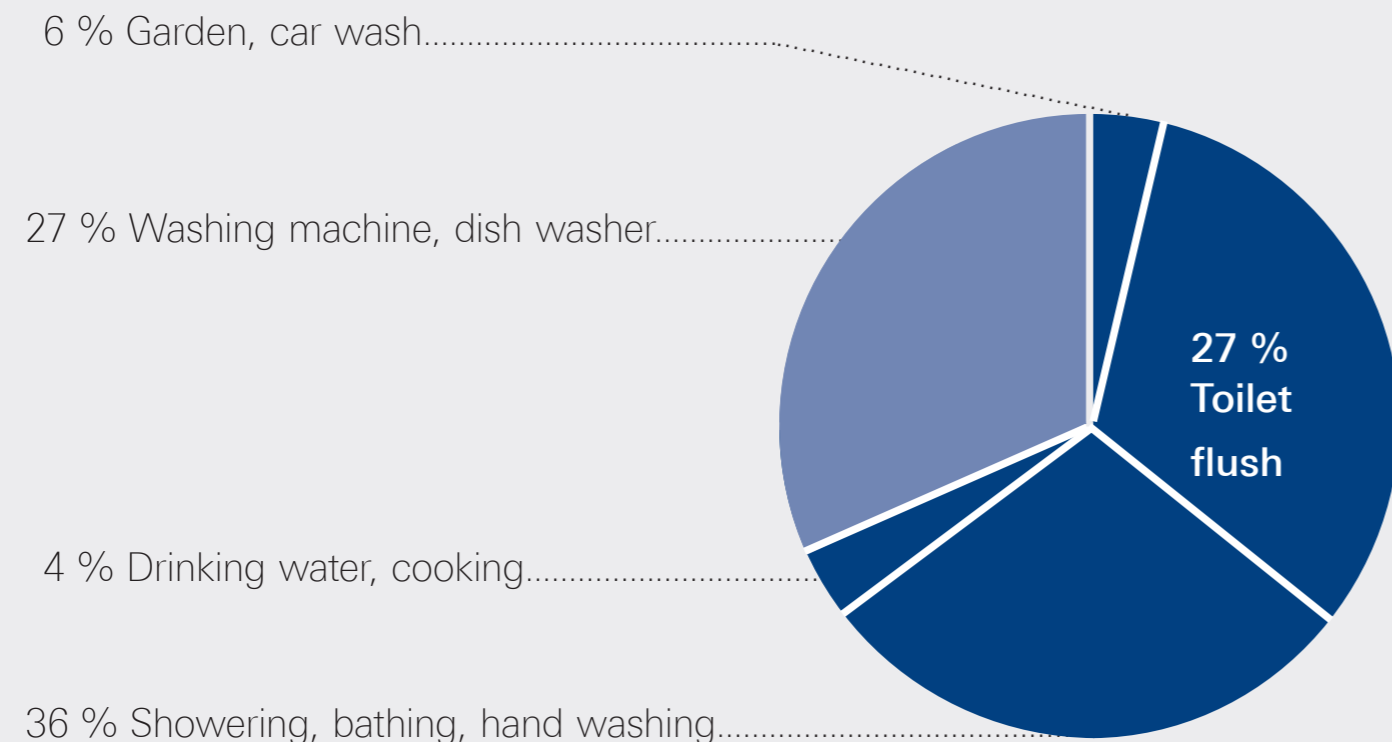
GROHE FREEFLUSH: THE SMART SOLUTION

Only some 4 percent of the domestic water consumed in an average German household is actually used for cooking and drinking purposes while bathing and showering account for a whopping 36 percent (source: *BDEW Bundesverband der Energie- und Wasserwirtschaft e.V., federal association of energy and water companies, as at Nov. 15, 2010). Approximately 40 litres of bath or shower water per person go down the drain every day.

WC flushes account for the second largest water usage at 27 percent. But does it really make sense to flush the WC with drinking-quality water? Re-using your own shower and bath water would seem to be a much smarter idea.

Rather than flushing the bath and shower water down the drain right away, GROHE FreeFlush stores this water in a 100-litre cistern. The innovative system then re-uses this water to flush the WC. Suitable for residential and hotel bathrooms, GROHE FreeFlush can be fitted not only as part of a first-time installation but also when remodelling or refurbishing a bathroom. Water savings of up to 90 percent are possible!

Average Domestic Water Consumption
(Germany, %)



THE NUMBERS ADD UP

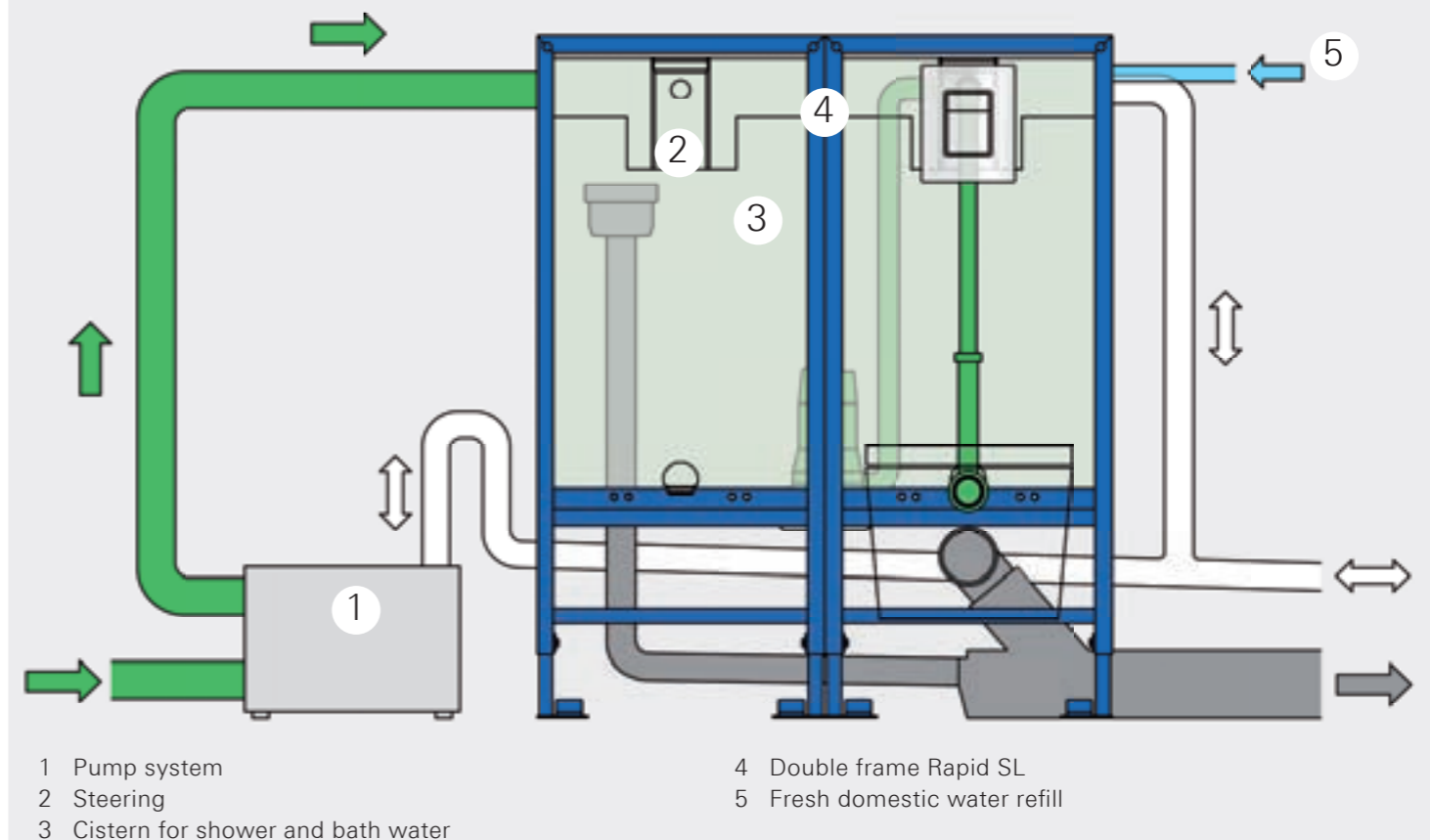
Environmental friendliness is a virtue in itself but GROHE FreeFlush makes economical sense as well! GROHE FreeFlush will pay for itself within three to eight years, depending on local rates charged for domestic water and sewage as well as the size of the individual household. The savings can be tracked on an electronic display. GROHE FreeFlush helps cut utility bills on a sustainable and sustained basis!

A COHERENT CONCEPT

GROHE FreeFlush brings a fresh approach to water recycling systems, which tend to involve complex water treatment processes. Compared to other types of household waste water, shower and bath water is only slightly polluted and is completely harmless when used for WC flushing. The residual fragrance of the bath and shower soaps is a welcome side effect.

This new system simply retains the bath and shower water for a maximum of 24 hours. If no flush is required within this period, GROHE FreeFlush drains the cistern automatically and refills it with six litres of fresh domestic water. This ensures that the flushing water is always of good quality and remains odour-free.

FreeFlush
(Simplified drawing)



GROHE FREEFLUSH SHOWER AND BATH WATER FLUSHING SYSTEM

TRIED-AND-TESTED GROHE TECHNOLOGY

The WC experience as such does not really change at all. While GROHE FreeFlush replaces the conventional flushing equipment, it uses the same intuitive user interface as before. A large range of dual-flush actuation plates in modern designs is available and let the user to decide when to use the large flush or the small flush.

WELL THOUGHT-THROUGH SYSTEM

GROHE FreeFlush is controlled digitally via a small display screen which allows the user to customise its functionality. The cistern is emptied daily at a user-specified time of the day. A weekly fresh water flush can be programmed for prolonged periods of absence, e.g. when residents are away on vacations. Whenever the water level inside the cistern drops below the minimum level, the system refills it automatically with fresh domestic water.

NO MAINTENANCE HASSLES

Built around tried-and-tested flushing technology, GROHE FreeFlush does not use any sieves or filters and consequently requires no complex cleaning or maintenance work. A visual inspection of the cistern is recommended once a year. Any soap deposits can be removed easily through the wide inspection openings in the cistern.

SIMPLE AND SAFE INSTALLATION

GROHE FreeFlush recommends itself for installation in WCs used by a clearly defined circle of users, as is the case in residential bathrooms and hotel rooms. This innovative shower and bath water recycling system can be installed in newly constructed bathrooms as well as being retrofitted in existing bathrooms. It merely requires a little additional space for the pumping system and the electrical connection.

The installation process is similar to that of a conventional flushing system. In the case of full-height tiles, the ideal solution is to place GROHE FreeFlush behind a full-height tiled stud wall. The inspection flaps and tile frames are easy to integrate into most popular tile patterns. Additional options for concealing shut-off valves and water meters are created by placing the system behind a half-height wall topped by a detachable shelf in a tiled, wooden or natural stone design.

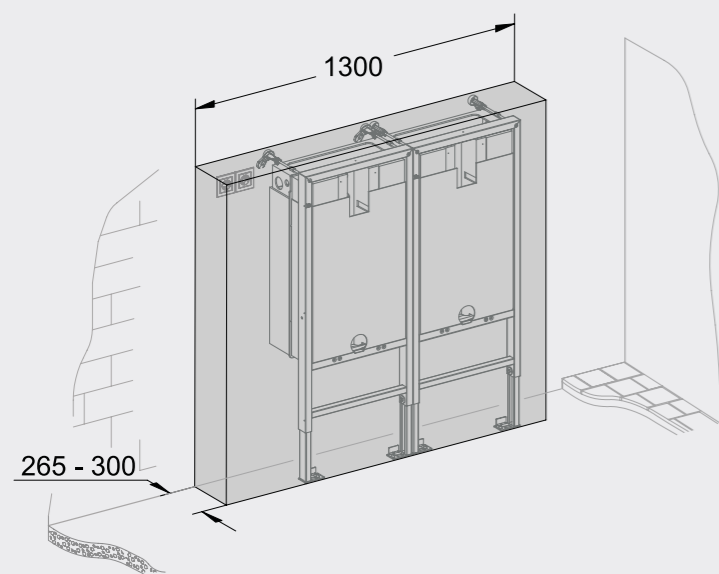
This new flushing system requires a minimum installation width of 1300 mm and the minimum installation depth is 265 mm. The system comes with the usual connections to the water supply and drainage pipes.

WALL OF CHOICE

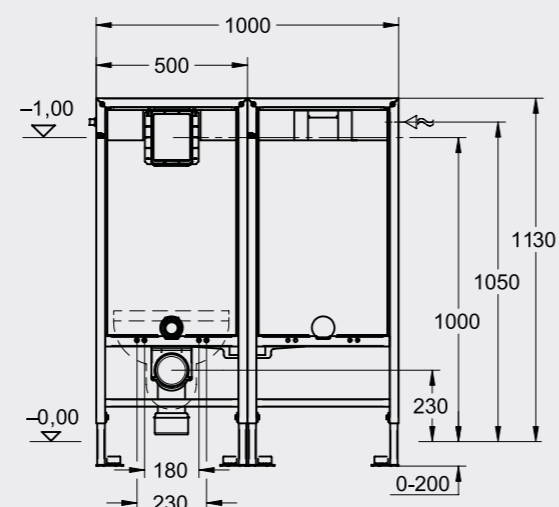
LARGE COLLECTION OF PLATES AVAILABLE



FreeFlush Minimum
Installation Space



FreeFlush Dimensional
Drawing



Stud wall installation



Pre wall installation



GROHE FREEFLUSH A CLEAN SOLUTION, A DOUBLE BENEFIT

- Shower and bath water flushing system for residential and hotel bathrooms.
- GROHE FreeFlush can cut the consumption of WC flushing water by as much as 90 percent.
- More than 35 percent of domestic water - some 40 litres per person per day - is used for bathing and showering.
- Rather than running straight down the drain, the bath and shower water is retained for a maximum of 24 hours during which time it is available for WC flushing.
- The cistern holds approximately 100 litres.
- GROHE FreeFlush requires a minimum installation width of 1300 mm and a minimum installation depth of 265 mm. Space for a pump system has to be provided.
- The installation area requires access to two electrical sockets.
- Noise protection to DIN 4109.
- Tiling to DIN EN 997.
- Flushing action conforms to DIN EN 12541 (WC and urinal flush valves).

