



The Great Debate™
Carpet or hard floors
 Click here to read The Great Debate™ and cast your vote.

Featured Product

HILLYARD C2™

Touch-Free
 Cleaning Simplified
 and
 More Affordable
 Than Ever Before!



[Click here for today's breaking news](#)

Ads by Google

Ban The Flush
 Envirolet Waterless
 Toilets are an
 environmental
 solution to septic.
 envirolet.com

Keyword Search of CMM Online's

Archives:

[Email this article to a colleague](#)

[Print this page](#)

THIS MONTH'S
NoTouchCleaning Tip
CLICK HERE

Working with waterless

Is your custodial crew ready for the challenge posed by those unusual looking urinals?

Related Information

[Getting a handle on the numbers](#)

By Jack Gresham & Klaus Reichardt

From the August 2006 edition of Cleaning & Maintenance Management magazine. For a free introductory subscription, [click here](#).

News and Article Topics

- [Archives](#)
- [Building Service Contract Cleaning](#)
- [Carpet/Floor Cleaning](#)
- [Distribution/Warehouse Issues](#)
- [e-Commerce](#)
- [Environmental Issues](#)
- [In-house Cleaning](#)
- [Industry Trends](#)
- [Labor/Employees/Training](#)
- [Legal/Government/Compliance Issues](#)
- [Manufacturers](#)
- [Quick Hits](#)
- [Sales and Marketing](#)
- [Specialized News/How To Tips](#)**
 - [Cleaning Equipment](#)
 - [Cleaning for Health®](#)
 - [Commercial Carpet Care](#)
 - [Contract Cleaning](#)
 - [Facilities Carpet Care](#)
 - [Floor Care](#)
 - [Green Cleaning](#)
 - [Green Cleaning Equipment](#)
 - [Greening Your Facility](#)
 - [Mold Remediation](#)
 - [No-Touch Cleaning](#)
 - [The Great Debate](#)
 - [Upright Vacuum](#)

Water is a precious resource with a price tag to prove it. Pumping it to, through and from a building requires fuel and energy. In fact, it can cost anywhere from 80 cents to as much as \$2 per gallon for water to be delivered, used and then drained from a large facility.

Because of this, and to save on expensive plumbing and construction costs, many building owners and facility managers are looking for alternative restroom fixtures that will help conserve this natural resource.

For several years, low-flow toilets and sensor-controlled sinks have been used to help minimize energy use and water waste.

More recently, waterless urinals joined the front lines in this battle and are now viewed as among the most significant and promising ways to conserve water.

It is estimated that there are approximately 75,000 waterless urinals installed throughout the United States, with many more in Europe and other countries worldwide where they have been common for a much longer time.

And, experts believe that, as awareness of these resource-conserving fixtures increases, they will become even more common.

Because of this, building service contractors (BSCs) and in-house facility managers will have to know how waterless urinals work and how to clean and maintain them.

Waterless basics

In the 1950s, urinals used massive amounts of water, as much as seven gallons per flush (gpf).

[Click HERE for more info](#)

Never Clean Gutters Again
 Keep leaves & branches out of your gutters forever. Call to save \$300
 www.gutterhelmetpro

Chicago Carpet Cleaning
 Stain Removal and Protection. 24 Hour Emergencies. Online Special!
 www.supersteamclea

Cleaning Drains
 Complete Plumbing & Drain Cleaning Services - Learn More & Get Quotes
 www.RescueRooter.c

Site Menu

[Home](#)
[i-Focus Info Centers](#)
[CMI® Events](#)
[Cleaning Management Institute](#)
[Article Archives](#)
[Buyers Guide to Suppliers](#)
[Supplier Search](#)
[CM Jobs Board™](#)
[New Products](#)
[Calendar](#)
[Classifieds](#)
[Bulletin Board](#)
[Email Forum](#)
[Web Links](#)
[Rent Our Mailing Lists](#)
[Headline News Service](#)
[Advertising](#)
[About Us](#)
[Poll Archives](#)
[Edit Member Info](#)
[Subscriber Services](#)

This Month's Issue:

2006 Person of the Year -
 Steve Spencer
 The 2006 CM/Cleaning and
 Maintenance Management
 Dream Team
 The Great Debate™
 Don't be uptight about
 uprights

Sign up today for your
 free subscription


This has been reduced significantly over the years, and today's average urinal uses one to one-and-a-half gpf.

However, this is still a considerable amount of water. In fact, it is estimated that approximately 20 percent of the water available for drinking in the world is instead flushed down the drain.

Instead of flushing away urine, waterless urinals allow gravity to drain away the urine, which then flows into a trap/cylinder unit filled with a thin layer of liquid sealant that sits atop the drain area of the urinal.

Urine passes through the trap/cylinder and sealant, which prevents odors from being released into the air. As it fills, the urine overflows into a conventional drainpipe — much the same way a traditional urinal works.

Benefits and differences

In addition to savings on water and electricity usage, building owners and people who service and maintain those buildings have found that waterless urinals offer other benefits as well:

- Savings in plumbing and installation costs because the urinals do not need to be plumbed for water, only drainage.
- Lower sewer charges because no water is used.
- Fewer installation requirements because flush valves or electric sensors are unnecessary.
- Reduced vandalism in educational settings.
- Relatively quick and easy installation.
- Less bacterial growth because bacteria need moisture to grow.
- Relatively simple cleaning and maintenance.

Many experts also believe waterless urinals are *healthier* than conventional urinals because they do not need to be *touched*.

Touching soiled restroom fixtures and handles can transmit germs and bacteria and studies indicate that many people still do not wash their hands after using the restroom.

Where's the handle?

Ironically, because the systems use no water and don't need to be touched, users and those who maintain them are often a bit confused as to how they work.

In fact, one major office building had to install signs above each waterless urinal, instructing men to "use as usual; then simply walk away".

Five manufacturers produce waterless urinals in the United States. Although they are quite similar in look, design and operation, each one uses a different system, which can affect maintenance requirements and operational costs.

For instance, the trap inserts on some models require more frequent replacement than on others, or need to be cleaned, which can be a messy job.

And on some models, the trap/cylinders can be quite expensive, eliminating the monetary savings building owners might achieve

by installing waterless urinals and minimizing water use.

Cleaning and maintenance

Generally, waterless urinals are cleaned the same way as conventional urinals.

A mild, properly diluted cleaner or disinfectant is misted onto either the surface of the waterless urinal or a cleaning cloth, and the area is wiped clean.

Harsh chemicals are usually not necessary since they could possibly harm the trap/cylinder on some systems.

(For a more exact look at how to clean and maintain waterless urinals, see *Don't reach for the handle*, sidebar.)

Waterless urinals also have highly finished, liquid-repellant surfaces.

Because urine is essentially soft water and does not adhere to these surfaces — and because no water is used in their operation — there are fewer deposits or stains left on the urinals, and therefore, less scrubbing is necessary compared with water-flushed urinals.

One of the big concerns custodial workers often have about waterless urinals is that they will increase malodors and affect restroom air quality.

However, the trap/cylinder system on most waterless urinals has proved to be effective at eliminating this problem. In fact, studies have shown that no-flush urinals have about the same or less odor as conventional urinals.

Still, it is a must that the urinal and surrounding areas be cleaned and well-maintained, as in all restrooms with traditional urinals.

Jack Gresham is executive director of Facilities for Floyd County Schools, Rome, GA.

Don't reach for the handle

Trap/cylinder replacement is major difference when cleaning & maintaining waterless urinals.

By Klaus Reichardt

A waterless urinal looks very much like a conventional urinal.

In fact, about all that is different is that the flush valve or piping that normally sits above the unit is missing.

This is because waterless urinals, as the name implies, do not need water to operate.

Instead, waterless systems have a vertical trap design that incorporates a cylinder or trap filled with a thin layer of liquid sealant sitting atop the drain area of the urinal.

Urine passes through the cylinder and sealant, and as the cylinder fills, it flows under the barrier layer and into the waste line, where it is drained — much the same way as in a conventional urinal.

Since the urinal surface is dry, it helps inhibit bacteria growth as well as odors and makes the unit easier to clean.

Additionally, there are no water deposits or rust stains that can build up, as often happens with a water-based urinal.

Although there are some differences between manufacturers of these fixtures, cleaning a waterless urinal follows most of the same steps and procedures custodians are used to for a conventional urinal. These include:

- Wear gloves (and goggles) as you would to clean any restroom fixture.
- Remove any foreign objects in the urinal. The trap is designed to prevent larger objects from entering the drain area.
- Do not use abrasive cleaners, towels or brushes.
- Mist all urinal surfaces with a neutral or all-purpose cleaner, or use a Johnny Mop with water and cleaner on all surfaces.
- Allow for dwell time if indicated by the chemical manufacturer.
- Wipe clean with a soft sponge, Johnny Mop dipped in a bucket of clean water, or a cleaning cloth.
- Dry the surfaces with a soft cloth.
- Do not pour excess or soiled water down the waterless urinal trap because it can flush the sealant out of the trap insert.

Sealant and trap replacement

In most cases, cleaning professionals are also asked to handle the traps maintenance.

Although maintenance requirements may differ depending on the manufacturer of the waterless urinal, they usually involve replenishing the liquid sealant and/or replacing the cylinder as necessary.

As the urinal is used, small amounts of the sealant will be drained into the waste line and the sealant needs to be replenished, usually after 1,500 uses.

In a typical school, for example, this amounts to two refills per month.

To add sealant, use the "portion aid" device that comes with the sealant — this will accurately measure out the three ounces of sealant needed, which is poured directly into the cylinder.

The cylinder on some brands of waterless urinals lasts several months and may only need to be changed two to four times per year.

To replace the cylinder:

- Take the metal tool provided by the manufacturer to

- remove the trap.
- Insert it into the trap, gently pulling it out using a back-and-forth motion.
 - Drain any excess liquids from the cylinder down the drain, and then discard in a locally appropriate manner.
 - With the trap removed, pour a bucket of hot water down the drain to flush any sediment in the line.
 - Insert a new trap, add about 12 ounces of water, and fill with three ounces of sealant.
 - For some manufacturers, the trap cannot be replaced and the trap needs to be taken apart and cleaned.

This completes the process and both procedures usually take only a few seconds to a couple of minutes.

For custodial workers, replenishing the sealant is often equated with replenishment of soap and paper supplies, yet usually takes less time.

Although the cleaning techniques are similar, some cleaning professionals find that performing maintenance on a waterless urinal also takes less time because there are no metal areas to clean, rust stains, or water deposits.

Klaus Reichardt is co-inventor of the waterless urinal technology. He is also a managing partner for Waterless Co. which has been serving the U.S. waterless urinal market since 1991. He may be reached at: Waterless Co., 1050 Joshua Way, Vista, CA 92081; phone: 888-NOFLUSH (888-663-5874); or e-mail: sales@waterless.com.

From the August 2006 edition of Cleaning & Maintenance Management magazine. For a free introductory subscription, [click here](#).

All Content Copyright 2006
National Trade Publications Inc.

[Click Here](#) for details on our [Privacy Policy](#)

This site best viewed with: [NETSCAPE 4.7](#) or [Internet Explorer](#) .