

Super Bowls

Today's toilets are more than just efficiency experts

There's a reason why when we talk toilets, we talk numbers or, more specifically, gallons per flush (gpf). According to statistics released by the American Water Works Foundation in 1999 and still widely quoted throughout cyberspace (and on the EPA's website), toilets account for 26.7 percent of all residential indoor water use, making them the main source of water consumption in the home. Sure, today's toilets offer more than just sophisticated flushing systems, but when asked about trends, industry experts agree efficiency is king.

UPPING THE STANDARD

So where are we in terms of loo efficiency? The national standard is currently 1.6 gpf, but California and Texas, as well as municipalities such as New York City, have upped the ante, passing legislation that will require all toilets sold and installed on or after a certain date—in many cases, January 1, 2014—to be high-efficiency with a flush rate of 1.28 gpf. Most industry insiders predict it's just a matter of time before that becomes the benchmark for the country, but until then, WaterSense-labeled models are already there and come in a variety of styles and price points, taking the pain and guesswork out of selection. With water shortages anticipated in 36 states by next year, making the transition should be a no-brainer for consumers. However, those scarred by the poor flushing performance of low-flow toilets from the 1990s may require some convincing.

Not a problem, noted industry members. Recent engineering and design developments have resulted in high-efficiency toilets (HETs) that out-flush their water-guzzling predecessors, said Bill Strang, SVP of operations, TOTO USA, and have the test scores to prove it. While WaterSense requires the ability to clear at least 350 grams of bulk waste with 1.28 gallons of water in a single flush, many qualified HETs have achieved Maximum Performance (MaP) scores beyond that, handling as much as 1,000 grams—which is significant for manufacturers and, hopefully, consumers. As Brian Hedlund, senior product manager, Kohler, noted, the MaP score "is kind of the arms race of the toilet industry because it's the only third-party way we have of talking about toilet performance."

BEYOND NUMBERS

MaP scores aside, manufacturers are finding other ways of touting performance, citing conveniences such as ease of cleaning, which "is the next big trend," said Gray Uhl, design director for American Standard Brands. On this front, a bowl shaped to maximize the water spot is ideal, noted Kevin McJoynt, VP of marketing, Gerber Plumbing Fixtures. The larger the water spot, the less exposed vitreous china there is for waste to cling to. Companies have also introduced glazes to ensure a super-smooth surface on the bowl interior and reconfigured the rim and rim holes to create a more forceful rinse. On toilets with seats, soft-close functionality, improved seat attachment and easy removability for cleaning all contribute to a better user experience, as do comfort-height designs, which are ever popular. Space-saving wall-hung models are seeing an increase in sales, particularly in urban areas, but account for only a small portion of the market.

Naturally, no toilet discussion would be complete without a mention of bidet seats and toilets with bidet functions, which continue to grow their following. The latest not only





optimize user comfort and hygiene but also help with cleaning by, for example, spritzing electrolyzed water on the bowl to protect against bacteria and marking or employing UV light to disinfect wands. Many experts point to the benefits of bidet seats for the aging population but note that more education is necessary for adoption.

These types of products may also help lighten the burden on our infrastructure if and when HETs become the national standard. With less water running through our homes to carry away waste, washing may be preferable to wiping, especially as more consumers are turning to thick disinfecting wipes, instead of toilet paper, to clean themselves. Notably, the issue of drain-line carry was recently the focus of an industry-wide study, for which results are imminent. Simply put, how low can we go? Testing is being conducted to determine that magic number, but for now, 1.28 HETs offer a simple way for consumers to cut their water use, save a little money and do their share for the planet.

-Alice Liao

Opposite page:

With its 3-in. flush valve and siphonic $2^1/\epsilon$ -in. trapway, **American Standard**'s WaterSense-certified 1.28-gpf Cadet PRO toilet can clear 1,000 grams of solid waste in a single flush, achieving the highest possible MaP score. Cleaning is made easier with PowerWash, which scrubs the bowl with pressurized water from the rim, and EverClean, a permanent finish that inhibits the growth of bacteria, mold and mildew on the bowl's surface. The toilet is available in five bowl shapes and two tank sizes. **Circle No. 200**

Duravit's SensoWash C incorporates the conveniences of its predecessor, the SensoWash shower toilet seat, into a cleaner design that conceals all water and electric connections. Created by Philippe Starck and intended for use with the Starck 2, Starck 3 and Darling New toilets, it includes such features as individual temperature control of water, air and seat; wireless remote control; a child safety feature; wash options differentiated by gender; and an LED night light. **Circle No. 201**

Icera's WaterSense-certified Cadence is available in a 1.28-gpf or a 1.0-gpf model in white, bisque and black. Offered with various metal finish options, it incorporates Hyperion flushing technology and has a MaP score of 1,000. Its fully glazed 21/8-in. trapway is skirted for easy cleaning, and its chair-height, ADA-compliant bowl is elongated for user comfort. Other features include precision rim jets, a generous water spot and a non-staining, antimicrobial MicroGlaze on the bowl interior. **Circle No. 202**

This page:

Gerber's floor-mounted, rear-outlet Maxwell 1.28 toilet delivers the comfort of an elongated bowl in a compact, space-saving design. It is ideal for small bathrooms that previously could only accommodate round-front toilets and is ADA-compliant. The toilet features a 3-in. flush valve, is WaterSense-certified and is offered in white with a color-matched tank lever. **Circle No. 203**

TOTO USA's Drake II 1G uses Double Cyclone technology to deliver a powerful flush with only one gallon of water. Instead of conventional rim holes, dual water jets positioned on each side of the bowl's interior create strong swirls of water to flush away waste while also cleansing the bowl and rim. A SanaGloss coating on the bowl and rim helps maintain cleanliness by sealing the porcelain, repelling waste matter and bacteria. The toilet measures 17 in. from base to seat for optimal ergonomic comfort. **Circle No. 204**

Kohler's Cavata dual-flush toilet features a flush actuator located on the side of the tank, clearing the top for storing items, a common practice in bathrooms. Users can choose between 1.1 gpf for liquid waste by depressing the tip of the lever or 1.6 gpf for solid waste by pressing down on its base. The flush actuator is lever-shaped, making it easier to grasp for those with physical limitations. **Circle No. 205**



Merit Award

Cabrits

by Victoria +Albert

A dramatic illustration of how "form follows function," as one judge noted, this shapely tub gets its striking contours from a concern for the environment and for ergonomic comfort. It requires a discreet 461/2 gallons of water to fill yet still allows a bather's body to be fully submerged. The upward curve in the bottom no doubt contributes to water savings while supporting the bather and lending the Cabrits its "one-of-a-kind look." Circle No. 209

Honorable Mention



Best Sorpresa Intrigue Range Hood

by Broan-NuTone

The ventilation hood as art and focal point is not a new concept but the Best Sorpresa Intrigue exemplifies it with a shape that is sculptural and, well, intriguing. The unit features a 460-cfm blower, four speeds, halogen lighting and a telescopic flue that accommodates 9-ft. ceilings. Available in a ducted or non-ducted recirculation model, it adds "softness to the kitchen, where hard lines and right angles [tend to] dominate," said one judge.

Circle No. 210





Custom lava stone kitchen sinks are now available from **Pyrolave**. The sinks are seamlessly integrated into the countertop, eliminating unsightly seams or joints, and can be specified in virtually any shape, bowl configuration—with or without an integral drain board—and color, including yellow. **Circle No. 219**



Julien has introduced a sleek, new topmount sink formed of 16-gauge corrosion-resistant 304-series stainless steel. It features a 3-in.-wide faucet platform in the rear and a ³/₄-in level edge on the sides and front. It is available with a variety of accessories and comes in a brushed finish. Circle No. 221

Black is beautiful in **Schock-Houzer**'s latest, Nero. The pitch-black color is now available as a standard option on Cristalite Plus quartzgranite sinks in 13 models, including Madison 50/50 and 60/40 (shown) double-bowl designs in top-mount and undermount styles. The sinks can be outfitted with color-matched strainers and custom-fit stainless-steel bottom grids.





Crystalline by **Blanco** makes the most of valuable kitchen space with an integrated opaque safety glass cover that conceals the sink when it's not in use and doubles as a cutting board and/or additional counter space. The 17½-in. x 20½-in. x 7½-in. basin is made of 18-gauge stainless steel and 18/10 chrome-nickel content and has a satin polished finish. **Circle No. 222**





Kim Nadel's Top Product Picks



Although Kim Nadel, CID, LEED AP, principal of Niche Design in Cardiff-by-the-Sea, CA, may not subscribe to a particular style, she describes her work as "eco-luxurious interiors." "There's always some kind of green component," said Nadel, who takes a more holistic approach to design. "It's about balancing comfort and luxury." This past November, people had the opportunity to see eco-luxury in action when Nadel's home was featured in the Dwell Home Tour. A 2,000-sq.-ft. new construction, it was designed by local architect Brett Farrow as part of a larger green development and features a contemporary exterior that "fits the vernacular of the old-style homes in Cardiff," Nadel said. "It's an interesting kind of architecture,"

No less spectacular is its interior, which Nadel created not only for her personal use but also to provide a showcase for local artists and designers and to

illustrate how a green home "can be sophisticated." Sliding glass doors throughout take advantage of California's sunny weather and, in the living room, open to a beautifully landscaped garden that includes an 80-year-old avocado tree. An open plan enhances the home's contemporary vibe, as do many of the kitchen and bath products, which also happen to be Nadel's favorites.

While local and regional sourcing is important when Nadel selects products, she acknowledges "not everything in my home is as green as I'd want it to be—sometimes you just want something." One such product is Kohler's Stages (2), which Nadel specified in the 45-in. undermount model. Not only does it complement the kitchen aesthetically, its myriad accessories and the way they're integrated pack a lot of functionality into a limited space, which means it will be around for a very long time.

Another space-saver is Kohler's Karbon (3), which tucks into itself when not in use, allowing the kitchen and surrounding living spaces to blend visually. Moreover, the control lever can be placed to the right or left of the faucet, which is a boon for left-handed Nadel.

Because modern architecture can be very rectilinear, Nadel likes to offset it with products that have a soft, organic form: "It's like balancing feminine and masculine," she said. Victoria+Albert's Napoli 57 basin (1), for example, has an appealing egg shape and can be oriented with its narrowed end to the left or right. "It's beautiful and very easy to clean," Nadel added.

The designer's favorite dual-flush toilet is Inax' Dover (4), an elongated one-piece model with a 0.8/1.28gpf flush system. Elegant with clean lines, its versatile design accommodates a variety of bathrooms.

For her master bathroom, Nadel chose Hansgrohe's Axor Massaud lav faucet (5), which doubles as a shelf and produces a calming "waterfall experience." That the collection's designer, Jean-Marie Massaud, is French is perhaps not that surprising, as Nadel admits to "a little French influence" in her work,

While Nadel's list of favorites is far more extensive, they can all be seen at her home, which is perhaps a product's best endorsement. "I still love everything I use," she said. "When you love something, you want to recommend it."

-Alice Ligo



