

HANDBOOK OF

Water Use AND Conservation

Homes

Landscapes

Businesses

Industries

Farms

AMY VICKERS

TABLE 2.2

Estimated water use and savings by low-volume toilets in households

Years Manufactured or Installed*	Toilet Water-Use Rate	Frequency of Toilet Use	Estimated Water Use		Estimated Water Savings With a 1.6 gpf Toilet†			
		Daily	Daily		Daily		Yearly	
		Per Person	Per Capita	Per Household‡	Per Capita	Per Household‡	Per Capita	Per Household‡
	gpf	number of uses	gal	gal	gal	gal	gal	gal
1994-present	1.0	5.1	5.1	13.5				
1997-present§	1.6	5.1	8.2	21.5				
1994-present**	1.6	5.1	8.2	21.5				
1980-1994	3.5	5.1	17.9	47.1	9.7	25.6	3,537	9,337
	4.0	5.1	20.4	53.9	12.2	32.3	4,468	11,794
	4.5	5.1	23.0	60.6	14.8	39.0	5,398	14,252
1950s-1980	5.0	5.1	25.5	67.3	17.3	45.8	6,329	16,709
	5.5	5.1	28.1	74.1	19.9	52.5	7,260	19,166
Pre-1950s	7.0	5.1	35.7	94.2	27.5	72.7	10,052	26,538

* Time periods are approximate. Dates in state and local jurisdictions may vary somewhat from dates shown except when they are superseded by the Jan. 1, 1994, federal requirement (shown in bold) allowing a maximum of 1.6 gpf for most toilets installed after that date, per the Energy Policy Act.

† Excludes water used for cleaning and losses attributable to leaks

‡ Based on the average of 2.64 persons per occupied U.S. household

§ Flushometer-valve fixtures and gravity-tank, white, two-piece fixtures labeled "Commercial Use Only" (most common in nonresidential settings)

** Gravity-tank, flushometer-tank, and electromechanical hydraulic fixtures (most common in residential and small office and commercial settings)

gpf = gallons per flush

number of uses = average number of times per day toilet is flushed

gal = gallon

Sources: Amy Vickers & Associates, Inc.; References 26, 29, 37, and 52

Water Use by Toilets

Average water use by low-volume and high-volume toilets (estimated according to their flush volume) is shown in Table 2.2. Low-volume toilets designed to use 1.5 gpf, 1.1 gpf, and 1.0 gpf are available, but fixtures that use less than 1.0 gpf are uncommon in the United States. Moderate- to high-volume toilets have flush rates of 3.5 gpf (referred to as "water-saver toilets" when introduced in the late 1970s), 4.0 gpf, 4.5 gpf, 5.0 gpf, 5.5 gpf, and up to 7.0 gpf for pre-1950 fixtures. In addition to the 1.6 gpf fixture, there are some fixtures in this classification that use about 2.0 gpf, but these are not common. The actual volume of water used by flush toilets sometimes varies from the manufacturer's reported flow rate for reasons that include improper mechanical adjustments to fixture components at the time of installation (e.g., not properly setting the water used by a gravity-flush fixture to the factory-marked water level inside the tank); manufacturing defects; low or high supply line pressure, particularly for nongravity-flush fixtures; previous adjustments to the fixture flow rate; and leakage.

Exceptions allowed by EPA and local and state authorities may be granted for special uses and circumstances that require higher flow volumes, although such conditions are uncommon. Toilets designed for prisons are allowed to use up to 3.5 gpf, but most manufacturers of these specialty fixtures also offer 1.6 gpf models.

Stealth® Bottom Outlet Toilet

FEATURES AND BENEFITS

N7714, N7716, N7717, 77000WHA1, 77001RWHA1

The Revolutionary Toilet that Saves More Water than any Other on the Market



Stealth Toilet

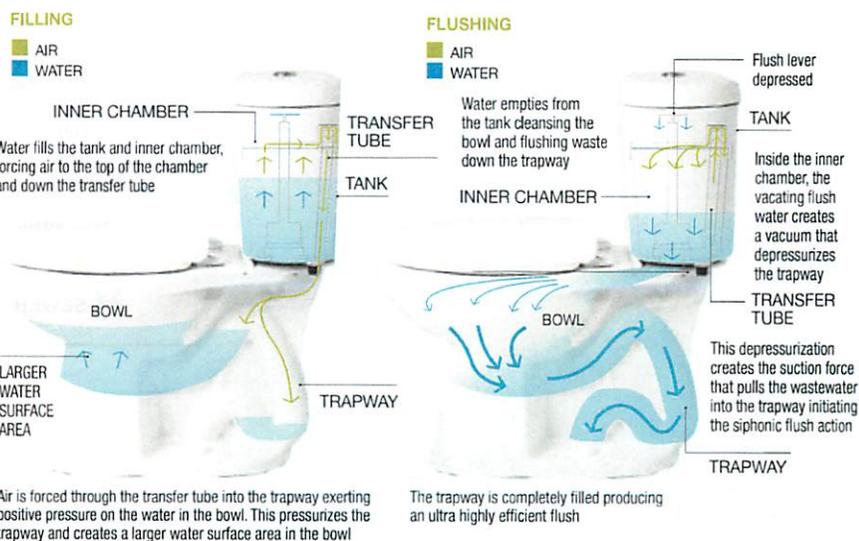
Quietest Flushing Toilet on the Market

- Powerful flush delivered with a patented Stealth flush chamber and air transfer system
- Uses just 0.8 gallons per flush (0.8 GPF)
- One flush thoroughly evacuates the bowl every time – no need for double flushing
- Bowl cleared every time due to smooth, low friction ceramic surface
- Stylish, inconspicuous and durable flush button
- Meets EPA WaterSense® criteria
- Elongated bowl meets ADA height requirements.
- Fully glazed 2" trapway for enhanced flush performance
- Limited Lifetime Warranty*

Stealth Vacuum-Assist Power Chamber Inside



STEALTH FLUSH TECHNOLOGY



Corporate HQ

4200 Diplomacy Road
Fort Worth, TX 76155 USA
Toll Free: 800.831.8383
Phone: 817.391.0800 Fax: 817.391.0801

© 2013 Niagara Conservation MSS7714-02



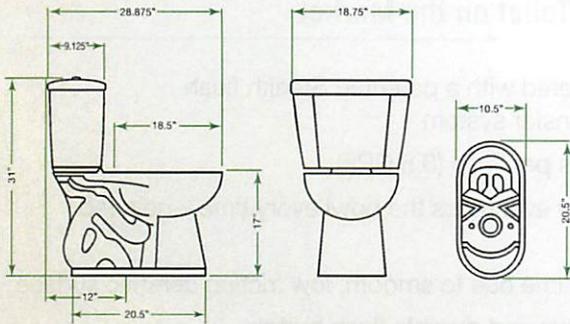
For more information please visit: www.NiagaraConservation.com

Stealth® Bottom Outlet Toilet

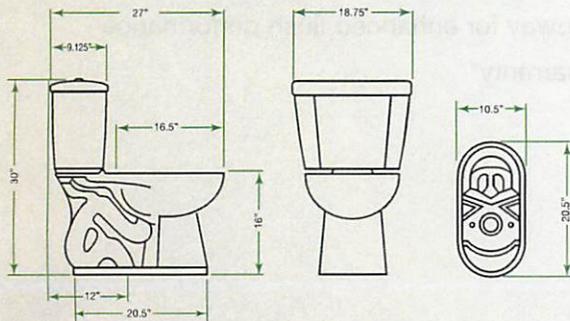
SPECIFICATIONS

N7714, N7716, N7717, 77000WHA1, 77001RWHA1

N7717/N7714 Elongated Bowl Specs



N7716/N7714 Round Bowl Specs

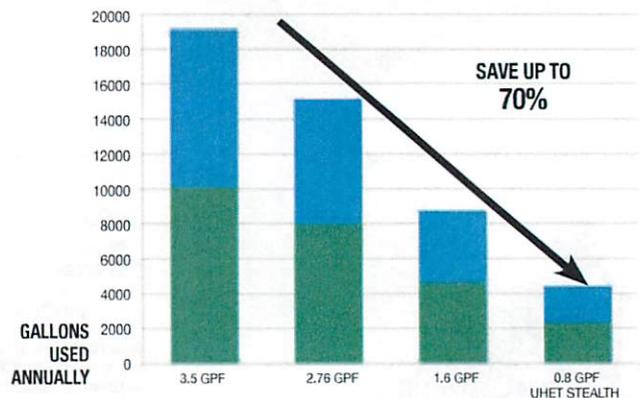


*Dimensions are subject to change

Overall Dimensions	Elongated: 17" high bowl Round: 16" high bowl
Footprint	20.5" x 10.25", Water Area 8" x 6"
Assembled Dimensions	Elongated: Width 18 3/4" Height 31" Depth 28 7/8" Round: Width 18 3/4" Height 30" Depth 27"
Rough In	12"
Materials	Vitreous China – White Finish Polished chrome top-mount flush actuator
Certifications	Meets or exceeds the following: ASME A112.19.2 /CSA B45.1, Watersense certified



Potential Water Savings with Stealth Toilet



Above estimates assume an average of 3 persons per household. Toilet is flushed 5 times per day per person.

SEWER WATER

*LIMITED LIFETIME WARRANTY on vitreous china products. Toilet tank trim: fill valve and flush valve assembly and plumbing fittings are warranted for a period of ten years to the purchaser from the date of purchase. For complete warranty details, call Niagara Conservation at 1-800-831-8383.

Corporate HQ

4200 Diplomacy Road
Fort Worth, TX 76155 USA
Toll Free: 800.831.8383
Phone: 817.391.0800 Fax: 817.391.0801

© 2013 Niagara Conservation MSS7714-02



For more information please visit: www.NiagaraConservation.com