

Maximum Performance (MaP) of Toilet Fixtures - Flushometer Valve/Bowl Combinations

IMPORTANT NOTE: The evaluation and MaP measurement of the flushometer bowl/valve combinations shown below was performed using the existing MaP protocol designed for residential applications. A more rigorous MaP protocol for non-residential (public restroom) applications is under development. Note that the results may change if the combinations shown below are re-tested using a (proposed) new commercial protocol.

**Updated
October 1, 2010**

MaP Report No.	Manufacturer(s) of the Components of Fixture Combination	Bowl Model Name	Bowl Model Number	Flushometer Valve Manufacturer and Model Number	MaP Performance Score	6-L (1.6-gal) Commercial Combination	4.8-L (1.28-gal) HET Commercial Combination	Round (R) or Elongated (E) bowl	ADA Height Bowl	Rear Discharge (Back Outlet)	Floor- (F) OR Wall-Mounted (W)
10-135	American Standard/Toto	Afwall EL	3351.160 OR 3351.001 (top spud)	Toto TET 1 DNCR (1-1/2")	1,000	ULF		F	ADA	R	W
10-135	American Standard/Toto	Afwall EL	3352.160 OR 3352.001 (top spud; w/bedpan lugs)	Toto TET 1 DNCR (1-1/2")	1,000	ULF		F	ADA	R	W
17-031	American Standard	Afwall EL ADA	3351.001 (UPC bar code 3305683100)	American Std 6065121.002 (piston type)	1,000		HET	F	ADA	R	W
17-034	American Standard	Afwall EL ADA	3351.001 (UPC bar code 3305683100)	American Std 6065161.002 (piston type)	1,000	ULF		F	ADA	R	W
10-134	American Standard/Sloan	Afwall FloWise EL	3351.128 OR 3351.001 (top spud)	Sloan 111-1.2 (1-1/2")	800		HET	F	ADA	R	W
10-134	American Standard/Sloan	Afwall FloWise EL	3352.128 OR 3352.001 (top spud; w/bedpan lugs)	Sloan 111-1.2 (1-1/2")	800		HET	E	ADA	R	W
17-028	American Standard	Huron EL ADA (12-inch rough-in)	3312.001 OR 3313.001 (bed pan lugs) (UPC bar code 3305683469)	American Std 6065121.002 (piston type)	500		HET	E	ADA	R	F
17-026	American Standard	Madera EL (10-inch rough-in)	3451.001 (UPC bar code 3303583063)	American Std 6065161.002 (piston type)	1,000	ULF		F			F
17-032	American Standard	Madera EL (10-inch rough-in)	3451.001 (UPC bar code 3303583063)	American Std 6065121.002 (piston type)	1,000		HET	F			F
10-129	American Standard/Toto	Madera EL (10-inch rough-in)	3451.160 OR 3451.001 (top spud)	Toto TET 1 DNCR (1-1/2") (piston-type)	1,000	ULF		F			F
10-129	American Standard/Toto	Madera EL (10-inch rough-in)	3452.160 OR 3452.001 (top spud; w/bedpan lugs)	Toto TET 1 DNCR (1-1/2") (piston-type)	1,000	ULF		F			F
10-130	American Standard/Toto	Madera EL (10-inch rough-in)	3453.160 OR 3453.001 (back spud)	Toto TET 1 DNCR (1-1/2") (piston-type)	1,000	ULF		F			F
10-130	American Standard/Toto	Madera EL (10-inch rough-in)	3455.160 OR 3455.001 (back spud; w/bedpan lugs)	Toto TET 1 DNCR (1-1/2") (piston-type)	1,000	ULF		F			F
17-027	American Standard	Madera EL ADA (10-inch rough-in)	3461.001 (UPC bar code 3305683071)	American Std 6065161.002 (piston type)	1,000	ULF		E	ADA		F
17-033	American Standard	Madera EL ADA (10-inch rough-in)	3461.001 (UPC bar code 3305683071)	American Std 6065121.002 (piston type)	1,000		HET	E	ADA		F
10-131	American Standard/Toto	Madera EL ADA (10-inch rough-in)	3461.160 OR 3461.001 (top spud)	Toto TET 1 DNCR (1-1/2") (piston-type)	1,000	ULF		E	ADA		F
10-131	American Standard/Toto	Madera EL ADA (10-inch rough-in)	3462.160 OR 3462.001 (top spud; w/bedpan lugs)	Toto TET 1 DNCR (1-1/2") (piston-type)	1,000	ULF		E	ADA		F
10-132	American Standard/Sloan	Madera FloWise EL (10-inch rough-in)	3451.128 OR 3451.001 (top spud)	Sloan 111-1.2 (1-1/2")	1,000		HET	E			F
10-132	American Standard/Sloan	Madera FloWise EL (10-inCH rough-in)	3452.128 OR 3452.001 (top spud; w/bedpan lugs)	Sloan 111-1.2 (1-1/2")	1,000		HET	F			F
10-133	American Standard/Sloan	Madera FloWise EL ADA (10-in rough)	3461.128 OR 3461.001 (top spud)	Sloan 111-1.2 (1-1/2")	1,000		HET	F	ADA		F
10-133	American Standard/Sloan	Madera FloWise EL ADA (10-in rough)	3462.128 OR 3462.001 (top spud; w/bedpan lugs)	Sloan 111-1.2 (1-1/2")	1,000		HET	F	ADA		F
13-094	American Standard/Toto	Priolo EL ADA	3695.016 OR 3695.001 (top spud)	Toto TET 1 DNCR (1-1/2") (piston-type)	1,000	ULF		E	ADA	R	F
13-092	American Standard/Sloan	Priolo EL ADA	3695.128 OR 3695.001 (top spud)	Sloan 111-1.2 (1-1/2")	1,000		HET	E	ADA	R	F
13-094	American Standard/Toto	Priolo EL ADA	3696.016 OR 3696.001 (top spud; w/ bed pan lugs)	Toto TET 1 DNCR (1-1/2") (piston-type)	1,000	ULF		E	ADA	R	F
13-092	American Standard/Sloan	Priolo EL ADA	3696.128 OR 3696.001 (top spud; w/bed pan lugs)	Sloan 111-1.2 (1-1/2")	1,000		HET	E	ADA	R	F
13-094	American Standard/Toto	Priolo EL ADA	3697.016 OR 3697.001 (back spud)	Toto TET 1 DNCR (1-1/2") (piston-type)	1,000	ULF		E	ADA	R	F
13-092	American Standard/Toto	Priolo EL ADA	3697.128 OR 3697.001 (back spud)	Toto TET 1 DNCR (1-1/2") (piston-type)	1,000		HET	E	ADA	R	F
13-094	American Standard/Toto	Priolo EL ADA	3698.016 OR 3698.001 (back spud; w/ bed pan lugs)	Toto TET 1 DNCR (1-1/2") (piston-type)	1,000	ULF		E	ADA	R	F
13-092	American Standard/Toto	Priolo EL ADA	3698.128 OR 3698.001 (back spud; w/ bed pan lugs)	Toto TET 1 DNCR (1-1/2") (piston-type)	1,000		HET	E	ADA	R	F
16-045	Briggs/Sloan	Carlton EL	7711 (top spud)	Sloan Royal 111-1.28	800		HET	E			F
16-166	Briggs/Sloan	Sultan EL ADA	7781 (top spud)	Sloan Royal 111-1.28	800		HET	E	ADA	R	W
15-105	Conrac/Sloan	Clark Commercial EL (wall mount-ADA possible)	4762CEX (top spud)	Sloan 111-1.2	800		HET	E	ADA	R	W
15-107	Conrac/Sloan	Clay Commercial EL ADA	4762BOX (top spud)	Sloan 111-1.2	800		HET	E	ADA		F
15-106	Conrac/Sloan	Colter Commercial EL	4762BEX (top spud)	Sloan 111-1.2	850		HET	E			F
16-137	Conrac/Sloan	Clark EL (wall mount-ADA possible)	4762CEU (back spud)	Sloan Royal 111-1.2	550		HET	E	ADA	R	W
16-138	Conrac/Sloan	Clay EL	4762BOU (back spud)	Sloan Royal 111-1.2	550		HET	E			F
16-139	Conrac/Sloan	Colter EL	4762BEU (back spud)	Sloan Royal 111-1.2	600		HET	E			F
11-041	Crane/Sloan	EcoWhirlton EL	3325	Sloan WES 111	800		HET	F			F
11-044	Crane/Sloan	Hymont RF ADA	3H701	Sloan WES 111	350	ULF		R	ADA		F
17-079	Crane/Sloan	Eco Hymont EL ADA	3H701	Sloan 111-1.2	600		HET	E	ADA		F
17-080	Crane/Sloan	EcoWhirlton EL	3325	Sloan 111-1.2	800		HET	E			F
11-043	Crane/Sloan	Placidus RF ADA	3446	Sloan WES 111	350	ULF		R	ADA	R	W
11-035	Crane/Sloan	San Walton EL	3480	Sloan WES 111	800	ULF		E			F
11-033	Crane/Sloan	San Walton EL	3481	Sloan WES 111	500	ULF		E			F
11-032	Crane/Sloan	San Walton EL	3484	Sloan WES 111	500	ULF		E			F
11-031	Crane/Sloan	San Walton EL ADA	31080	Sloan WES 111	600	ULF		E	ADA		F
11-034	Crane/Sloan	San Walton EL ADA	31082	Sloan WES 111	800	ULF		E	ADA		F
11-036	Crane/Sloan	San Walton EL ADA	31083	Sloan WES 111	800	ULF		E	ADA		F
11-042	Crane/Sloan	Whirlton RF	3327	Sloan WES 111	400	ULF		R			F
18-002	Kohler	Anglesey EL ADA	K-4352	Kohler K-10956-CP (piston type)	1,000		HET	E	ADA		F
10-143	Kohler	Wellworth EL	K-4406	Kohler K-10956 (piston type)	1,000		HET	E			F
16-007	Kohler/Toto	Wellcomme EL	K-4350 (top spud)	Toto TMT 1HNCR (piston type)	800	ULF		E			F
16-008	Kohler/Toto	Highcliffe EL	K-4368 (top spud)	Toto TMT 1HNCR (piston type)	800	ULF		E			F
14-116	Kohler	Kingston EL	K-4325	Kohler K-10956 (piston type)	1,000		HET	E	ADA	R	W
15-167	Kohler	Kingston EL	K-4323	Kohler K-10956 (piston type)	1,000		HET	E	ADA	R	W
16-006	Kohler/Toto	Kingston EL ADA	K-4330 (top spud)	Toto TMT 1HNCR (piston type)	1,000	ULF		E	ADA	R	W
12-001	Kohler	Highline EL ADA	K-4405 and K-4405L bowls	Kohler K-10956 (piston type)	1,000		HET	E	ADA		F

MaP Report No.	Manufacturer(s) of the Components of Fixture Combination	Bowl Model Name	Bowl Model Number	Flushometer Valve Manufacturer and Model Number	MaP Performance Score	6-L (1.6-gal) Commercial Combination	4.8-L (1.28-gal) HET Commercial Combination	Round (R) or Elongated (E) bowl	ADA Height Bowl	Rear Discharge (Back Outlet)	Floor- (F) OR Wall-Mounted (W)
15-078	Mansfield/American Std	None EL ADA	1319BPL (with bedpan lugs)	American Std 6065.121	1,000		HET	E	ADA		F
15-079	Mansfield/American Std	None EL ADA	1319	American Std 6065.121	1,000		HET	E	ADA		F
15-080	Mansfield/Zurn	Erie EL (wall mount-ADA possible)	1301	Zurn ZTS6200EV	1,000		HET	E	ADA	R	W
15-081	Mansfield/Zurn	Erie EL (wall mount-ADA possible)	1301BPL (with bedpan lugs)	Zurn ZTS6200EV	1,000		HET	E	ADA	R	W
18-055	Mansfield/Sloan	Huron EL (rear outlet)	1312 (rear outlet)	Sloan Royal 111-1.28	1,000		HET	E		R	F
16-128	Penguin/Sloan	None EL ADA	016-1.28 (top spud)	Sloan Royal 111-1.28	1,000		HET	E	ADA		F
16-129	Penguin/Sloan	None EL ADA	015-1.6 (top spud)	Sloan Royal 111-1.6	1,000		HET	E	ADA		F
13-057	Pro-Flo/Sloan	None EL	PF1721 (top spud)	Sloan Royal 111-1.2 valve	900	ULF	HET	E			F
13-059	Pro-Flo/Sloan	None EL (wall mount-ADA possible)	PF1731 (top spud)	Sloan Royal 111-1.2 valve	850		HET	E	ADA	R	W
13-055	Pro-Flo/Sloan	None EL ADA	PF1723 (top spud)	Sloan Royal 111-1.2 valve	900		HET	E	ADA		F
16-058	Sloan Valve	Efficiency Series EL	ST2000 (top spud) UPC bar code 671254348493	Sloan Royal 111-1.28	1,000		HET	E			F
16-060	Sloan Valve	Efficiency Series EL	ST2003A-WC 1.6gpf (top spud) ¹ UPC bar code 671254356344	Sloan Royal 111-1.6 ¹	1,000	ULF		E			F
16-064	Sloan Valve	Efficiency Series EL	ST2050A (top spud) ² UPC bar code 671254371224	Sloan Royal 111-1.28 ²	1,000		HET	E		R	W
16-066	Sloan Valve	Efficiency Series EL	ST2053 (top spud) UPC bar code 671254370753	Sloan Royal 111-1.6 ³	1,000	ULF		E		R	W
16-059	Sloan Valve	Efficiency Series EL (dual-flush)	ST2002 (top spud) UPC bar code 671254356337	Sloan Dual Flush WES 111	1,000		HET	E			F
16-061	Sloan Valve	Efficiency Series EL ADA	ST2020A (top spud) UPC bar code 671254350878	Sloan Royal 111-1.28	1,000		HET	E			F
16-062	Sloan Valve	Efficiency Series EL ADA	ST2022A (top spud) UPC bar code 671254356351	Sloan Royal Uppercut 1.6 / 1.1 dual flush	1,000		HET	E			F
16-063	Sloan Valve	Efficiency Series EL ADA	ST2023A (top spud) UPC bar code 671254356368	Sloan Royal 111-1.6	1,000	ULF		E			F
16-065	Sloan Valve	Efficiency Series EL ADA	ST2052-1.6/1.1 (top spud) ³ UPC bar code 671254378421	Sloan Royal Uppercut 1.6 / 1.1 dual flush	1,000		HET	E		R	W
17-083	Sloan Valve	None EL (wall mount-ADA possible)	NT6053-1.6gpf (top spud)	Sloan Royal 111-1.6	1,000	ULF		E	ADA	R	W
17-084	Sloan Valve	None EL (wall mount-ADA possible)	NT6052A-HET-1.6/1.1gpf (top spud)	Sloan Royal Uppercut 1.6 / 1.1 dual flush	1,000		HET	E	ADA	R	W
17-085	Sloan Valve	None EL (wall mount-ADA possible)	NT6050A-HET-1.28gpf (top spud)	Sloan Royal 111-1.28	1,000		HET	E	ADA	R	W
13-042	Toto	None EL ADA	CT708EV (rear spud)	Toto TET 11N-32 (piston type)	1,000		HET	E	ADA	R	W
13-039	Toto	None EL	CT705EN (G) (top spud)	Toto TET 11N-32 (piston type)	1,000		HET	E			F
13-040	Toto	None EL ADA	CT705ELN (G) (top spud)	Toto TET 11N-32 (piston type)	1,000		HET	E	ADA		F
13-041	Toto	None EL ADA	CT708E (top spud)	Toto TET 11N-32 (piston type)	1,000		HET	E	ADA	R	W
13-056	Tynan/Sloan	None EL	7501 (top spud)	Sloan Royal 111-1.2 valve	900		HET	E			F
13-058	Tynan/Sloan	None EL (wall mount-ADA possible)	7503 (top spud)	Sloan Royal 111-1.2 valve	850		HET	E	ADA	R	W
13-054	Tynan/Sloan	None EL ADA	7502 (top spud)	Sloan Royal 111-1.2 valve	900		HET	E	ADA		F
17-059	Vitra/Toto	Evergreen Flushometer HET EL (wall mount-ADA possible)	5425 (top spud)	Toto TMT 1HNCR (piston type)	600		HET	E	ADA	R	W
16-026	Vortens/Toto	Atenas EL ADA	3108 (top spud)	Toto TMT 1HNCR (piston type)	600		HET	E	ADA	R	W
16-123	Vortens/Toto	Vienna EL Flux	3115-V (top spud)	Toto TMT 1HNCR (piston type)	1,000	ULF		E			F
16-122	Vortens/Toto	Vienna H Flux EL ADA	3114-V (top spud)	Toto TMT 1HNCR (piston type)	1,000	ULF		E	ADA		F
17-019	Vortens/Toto	Vienna EL Flux	3115-V (top spud)	Toto TMT 1HNCR (piston type) adjusted as HET	1,000	ULF	HET	E			F
17-018	Vortens/Toto	Vienna H Flux EL ADA	3114-V (top spud)	Toto TMT 1HNCR (piston type) adjusted as HET	1,000	ULF	HET	E	ADA		F
16-027	Vortens/Toto	Atenas EL ADA	3108 (top spud)	Toto TMT 1HNCR (piston type)	1,000	ULF		E	ADA	R	W
12-041	Zurn	None EL	Z5655-BWL HET	Zurn ZTS6200EV	1,000		HET	E			F
12-042	Zurn	None EL ADA	Z5665-BWL HET	Zurn ZTS6200EV	1,000		HET	E	ADA		F
12-043	Zurn	None EL (wall mount-ADA possible)	Z5615-BWL HET	Zurn ZTS6200EV	800		HET	E	ADA	R	W
17-042	Zurn/Vortens	Vienna H Flux EL ADA	3114-V (top spud)	Zurn Z6000AV-WS1-DF Dual Flush (6 & 4.1L)	1,000		HET	E	ADA		F
17-043	Zurn/Vortens	Vienna H Flux EL ADA	3114-V (top spud)	Zurn Z6000AV-WS1-DF Single Flush (6L)	1,000	ULF		E	ADA		F

- 1-Combination of valve and bowl sold as Model WETS 2003.1001-1.6
2-Combination of valve and bowl sold as Model WETS 2050.1001-1.28
3-Combination of valve and bowl sold as Model WETS 2052.1002-1.6/1.1 WES
4-Combination of valve and bowl sold as Model WETS 2053.1001-1.6

Notes: RF - Round-front toilet bowl
EL - Elongated-front toilet bowl
ADA-Meets bowl-height requirements of Americans with Disabilities Act; does NOT imply that fixture meets any other ADA requirements.
G - Gallons per Flush
L - Litres per Flush