ERRATA SHEET FOR ASHRAE Guideline 14-2014
Measurement of Energy, Demand, and Water Savings

April 8, 2024

The corrections listed in this errata sheet apply to all copies of ASHRAE Guideline 14-2014. Shaded items have been added since the previously published errata sheet dated July 24, 2019 was distributed.

Page	Erratum
13	**4.2.11 Savings Uncertainty Calculations.** In the equation for the correlation coefficient ρ (second equation in the right-hand column of page 13) switch the numerator and denominator inside of the brackets so the equation reads as follows. $$\rho = \sqrt{1 - \left[\frac{\sum_{i=1}^{n}(y_i - \hat{y}_i)^2}{\sum_{i=1}^{n}(y_i - \bar{y})^2}\right]}$$
15	**4.2.11.4 Computing Savings Uncertainty.** In Equation 4-7 delete the second equals sign "=" immediately following *t/F* and change "RSME" to "RMSE".
15	**4.2.11.4 Computing Savings Uncertainty.** In Equation 4-8 add "× 100" at the end so the U-value is expressed as a percentage.
15	**4.2.5.11 Managing Uncertainty.** In the second sentence change the reference to "Equations 5-6 or 5-7" to "Equations 4-6 or 4-7" so it reads as follows. Equations 4-6 or 4-7 can then be used to evaluate feasible combinations of model CV (RMSE), instrument error, sample size, postretrofit period length, and expected savings fraction.
44	**Table 7-3 Water Use Standard (SI).** Correct the water usage values for residential clothes washers and dishwashers in Table 7-3 (SI) as shown in the attached, highlighted in yellow.

TABLE 7-3 Water Use Standard (SI)

Item	Water Flow					Use								
	Std Pre-1990	Std	Energy Policy Act 1997	Low Post-2000	Unit[a]	Male Use	Female Use	Male Visitor Use	Female Visitor Use	Unit[a]	Cleaning	Unit[a]	Time (Minutes)	Units
Symbol		S	L	VL		M	F	MV	FV		C		T	
Sanitation														
Water closet tank type	17.03[b]	13.25[b]	6.06[b]	3.79[b]	LPF	1.0[c]	3.0[c]	0.1[c]	0.5[c]	FPDPP	1	FPD		
Water closet dual flush tank type (low flush)		6.06[b]	4.16[b]	3.03	LPF	1.0[c]	2.0	0.1[c]	0.5[c]	FPDPP	1	FPD		
Water closet flush valve	17.03[b]	13.25[b]	6.06[b]	3.79[b]	LPF	1.0[c]	3.0[c]	0.1[c]	0.5[c]	FPDPP	1	FPD		
Water closet flush valve dual flush type (low flush)		6.06[b]	4.16[b]	3.03	LPF	1.0[c]	2.0	0.1[c]	0.5[c]	FPDPP	1	FPD		
Urinal	13.25[b]	5.68[b]	3.79[b]	0	LPF	2.0[c]		0.4[c]		FPDPP	1	FPD		
Urinal (high efficiency)		3.79	3.79[b]	1.89	LPF	2.0[c]		0.4[c]		FPDPP	1	FPD		
Lavatory faucet (cold water [CW] only)	0.38[b]	0.25[b]	0.16[b]	0.03[b]	LPS	3.0[c]	3.0[c]	0.5[c]	0.5[c]	UPD	1.89	LPD	0.15[c]	MPU
Lavatory faucet (tempered CW component)	0.19	0.13	0.08	0.02	LPS	3.0[c]	3.0[c]	0.5[c]	0.5[c]	UPD	1.89	LPD	0.15[c]	MPU
Lavatory faucet automatic (CW only)		3.79	0.95[b]	0.95[b]	LPV	3.0[c]	3.0[c]	0.5[c]	0.5[c]	UPD	1.89	LPD	0.15[c]	MPU
Lavatory faucet automatic (tempered CW component)		0.5	0.13	0.13	LPV	3.0[c]	3.0[c]	0.5[c]	0.5[c]	UPD	1.89	LPD	0.15[c]	MPU
Sink faucet (CW only)	0.16	0.16	0.06	0.06	LPS	1.0[c]	1.0[c]			UPD	1.89	LPD	0.25[c]	MPU
Sink Faucet (tempered)	0.08	0.08	0.03	003	LPS	1.0[c]	1.0[c]			UPD	1.89	LPD	0.25[c]	MPU
Shower (CW only)	0.41[b]	0.22[b]	0.16[b]	0.09[b]	LPS	0.1[c]	0.1[c]			UPD	1.89	LPD	5.0[c]	MPU
Shower (tempered)	0.21	0.11	0.08	0.05	LPS	0.1[c]	0.1[c]			UPD	1.89	LPD	5.0[c]	MPU
Trap primer	15.14[d]	1.89[e]	1.89[e]	1.89[e]	LPD									
Hot Water														
Lavatory faucet (hot water HW] only)	0.38[b]	0.25[b]	0.16[b]	0.03[b]	LPS	3.0[c]	3.0[c]	0.5[c]	0.5[c]	UPD	1.89	LPD	0.15[c]	MPU
Lavatory faucet (tempered HW component)	0.19	0.13	0.08	0.02	LPS	3.0[c]	3.0[c]	0.5[c]	0.5[c]	UPD	1.89	LPD	0.15[c]	MPU
Lavatory faucet automatic (tempered HW component)		0.5	0.13	0.13	LPV	3.0[c]	3.0[c]	0.5[c]	0.5[c]	UPD	1.89	LPD	0.15[c]	MPU
Sink faucet (HW only)	0.16	0.16	0.06	0.06	LPS	1.0[c]	1.0[c]			UPD	1.89	LPD	0.25[c]	MPU
Sink faucet (tempered HW component)	0.08	0.08	0.03	0.03	LPS	1.0[c]	1.0[c]			UPD	1.89	LPD	0.25[c]	MPU

Shower	0.41[b]	0.22[b]	0.16[b]	0.09[b]	LPS	0.1[c]	0.1[c]			UPD	1.89	LPD	5.0[c]	MPU
Shower (tempered HW component)	0.21	0.11	0.08	0.05	LPS	0.1[c]	0.1[c]			UPD	1.89	LPD	5.0[c]	MPU
Clothes washer (residential)		189	170	94.6	LPU	1.0	1.0			UPD				
Dishwasher (residential)		49.2	49.2	22.7	LPU	0.2	0.2			UPD				