

FOR RESIDENTIAL USE  
**FIXTURE COUNT CALCULATION CHART**

Use the fixture count chart below to determine the total number of fixture units in the home. **Check the corresponding box on the system design flow chart based on your fixture count or number of bedrooms whichever is greater.** The box that is checked is the row where you'll find your minimum tank size and system design flow. Enter the information at the bottom of the page, and submit this form with your application.

Residential Fixture Type	Existing # Fixtures	Proposed # Fixtures	Multiply by	Fixture Units	Equals	Total # PROPOSED Fixtures
Bathtub			X	2	=	
Bidet			X	2	=	
Dishwasher, outside kitchen			X	2	=	
Clothes washer			X	2	=	
Utility tub or sink separate from clothes washer			X	2	=	
Kitchen Sink (may include dishwasher)			X	2	=	
Shower, single stall			X	2	=	
Sink, bar			X	1	=	
Sink, service			X	3	=	
Lavatory, single or double (bathroom sink)			X	1	=	
*Toilet, 1.6 gallons per flush (gpf)			X	3	=	
*Toilet, 1.6 - 3.2 gpf			X	4	=	
*Toilet >3.2 gpf			X	6	=	
<b>FIXTURE COUNT TOTAL</b>					=	
<b>Physical # Bedrooms</b>					=	

\*Toilets currently available in Arizona are 1.6 gallons per flush. Older fixtures may not use the same amount of gallons per flush.

**SYSTEM DESIGN FLOW CHART**

✓	No. of Bedrooms	Fixture Count	Minimum Tank Size (gallons)	System Design Flow (gpd)
<input type="checkbox"/>	1	7 or less	1000	150
<input type="checkbox"/>		More than 7 less than 14	1000	300
<input type="checkbox"/>	2	14 or less	1000	300
<input type="checkbox"/>		More than 14 less than 21	1000	450
<input type="checkbox"/>	3	21 or less	1000	450
<input type="checkbox"/>		More than 21 less than 28	1250	600
<input type="checkbox"/>	4	28 or less	1250	600
<input type="checkbox"/>		More than 28 less than 35	1500	750
<input type="checkbox"/>	5	35 or less	1500	750
<input type="checkbox"/>		More than 35 less than 42	2000	900
<input type="checkbox"/>	6	42 or less	2000	900
<input type="checkbox"/>		More than 42 less than 49	2500	1050
<input type="checkbox"/>	7	49 or less	2500	1050
<input type="checkbox"/>		More than 49 less than 56	3000	1200
<input type="checkbox"/>	8*	56 or less	3000	1200
<input type="checkbox"/>		More than 56*	3000	1350

**\*NOTE: For a single residence with more than 8 bedrooms or more than 56 fixture units, use R18-9-A314 (D) (2) as the basis for determining minimum septic tank size and system design flow.**

## For Commercial Use

(or dwelling over 8 bedrooms or 56 fixture units)

Wastewater Source	Applicable Unit	Sewage Design Flow per Applicable Unit.
Airport	Passenger (average daily number) Employee	4 15
Auto Wash	Facility	Per manufacturer, if consistent with this
Bar/Lounge	Seat	30
Barber Shop	Chair	35
Beauty Parlor	Chair	100
Bowling Alley (snack bar only)	Lane	75
Camp Day camp, no cooking facilities Campground, overnight, flush toilets Campground, overnight, flush toilets and Campground, luxury Camp, youth, summer, or seasonal	Camping unit Camping unit Camping unit Person Person	30 75 150 100-150 50
Church Without kitchen With kitchen	Person (maximum attendance) Person (maximum attendance)	5 7
Country Club	Resident Member Nonresident Member	100 10
Dance Hall	Patron	5
Dental Office	Chair	500
Dog Kennel	Animal, maximum occupancy	15
Dwelling For determining design flow for sewage treatment facilities under R18-9-B202(A)(9)(a) and sewage collection systems under R18-9-E301(D) and R18-9-B301(K), excluding peaking factor.	Person	80
Dwelling For on-site wastewater treatment facilities per R18-9-E302 through R18-9-E323: Apartment Building 1 bedroom 2 bedroom 3 bedroom 4 bedroom  Seasonal or Summer Dwelling (with recorded seasonal occupancy restriction)  Single Family Dwellings  Other than Single Family Dwelling, the greater flow value based on: Bedroom count 1-2 bedrooms Each bedroom over 2 Fixture count	Apartment Apartment Apartment Apartment  Resident  see R18-9-A314(D)(1)  Bedroom Bedroom Fixture unit	200 300 400 500  100  see R18-9-A314(D)(1)  300 150 25
Fire Station	Employee	45
Hospital All flows Kitchen waste only Laundry waste only	Bed Bed Bed	250 25 40
Hotel/motel Without kitchen With kitchen	Bed (2 person) Bed (2 person)	50 60

## Department of Environmental Quality – Water Pollution Control

Industrial facility Without showers	Employee	25
With showers	Employee	35
Cafeteria, add	Employee	5
Institutions		
Resident	Person	75
Nursing home	Person	125
Rest home	Person	125
Laundry		50
Self service	Wash cycle	Per manufacturer, if consistent with this Chapter
Commercial	Washing machine	
Office Building	Employee	20
Park (temporary use)		
Picnic, with showers, flush toilets	Parking space	40
Picnic, with flush toilets only	Parking space	20
Recreational vehicle, no water or sewer	Vehicle space	75
Recreational vehicle, with water and sewer connections	Vehicle space	100
Mobile home/Trailer	Space	250
Restaurant/Cafeteria	Employee	20
With toilet, add	Customer	7
Kitchen waste, add	Meal	6
Garbage disposal, add	Meal	1
Cocktail lounge, add	Customer	2
Kitchen waste disposal service, add	Meal	2
Restroom, public	Toilet	200
School		
Staff and office	Person	20
Elementary, add	Student	15
Middle and High, add	Student	20
with gym & showers, add	Student	5
with cafeteria, add	Student	3
Boarding, total flow	Person	100
Service Station with toilets	First bay	1000
	Each additional bay	500
Shopping Center, no food or laundry	Square foot of retail space	0.1
Store	Employee	20
Public restroom, add	Square foot of retail space	0.1
Swimming Pool, Public	Person	10
Theater		
Indoor	Seat	5
Drive-in	Car space	10

Note: Unit flow rates published in standard texts, literature sources, or relevant area or regional studies are considered by the Department, if appropriate to the project.