PLUMBING FIXTURE UNIT TABLES

HOTELS/MOTELS

Type of Fixture	*Fixture Units*
Barber Basin	2.0
Beauty Parlor Basin	2.5
Private Lavatory	0.75
Public Lavatory	1.0
Shower and Tub	1.5
Private Shower	1.5
Domestic Kitchen Sink	1.5
Slop Sink	2.5
Domestic Clothes Washer	1.2

NURSING HOMES, ASSISTED LIVING

Type of Fixture	*Fixture Units*
Janitor Drop	2.0
Private Lavatory	0.75
Public Lavatory	1.0
Shower and Tub	1.5
Private Shower	1.5
Domestic Kitchen Sink	1.5
Slop Sink	2.0
Domestic Clothes Washer	2.0
Domestic Dish Washer	1.5

UNIVERSITY/COLLEGE DORMITORIES

Type of Fixture	*Fixture Units*
Private Lavatory	0.75
Public Lavatory	1.0
Shower and Tub	1.5
Private Shower	1.5
Public Shower	1.5
Domestic Kitchen Sink	1.5
Slop Sink	2.5
Domestic Clothes Washer	2.0
Domestic Dish Washer	2.0

OFFICE, COMMERCIAL, RETAIL

Type of Fixture	*Fixture Units*
Janitor Drop	2.5
Private Lavatory	0.75
Public Lavatory	1.0
Private Shower	1.5
Slop Sink	2.5
Wash Fountain, 36" Half	1.0
Wash Fountain, 36" Full	1.5

APARTMENT COMPLEXES/CONDOMINIUMS

Type of Fixture	*Fixture Units*
Laundry Tray	1.5
Private Lavatory	0.75
Public Lavatory	1.0
Shower and Tub	1.5
Private Shower	1.5
Public Shower	1.5
Domestic Kitchen Sink	0.75
Pantry Sink	1.5
Slop Sink	1.5
Domestic Clothes Washer	1.2
Domestic Dish Washer	1.5

SCHOOLS - ELEMENTARY, MIDDLE , HIGH SCHOOLS, &

Type of Fixture	*Fixture Units*
Janitor Drop	1.5
Laundry Tray	2.0
Private Lavatory	0.75
Public Lavatory	1.0
Shower and Tub	1.7
Private Shower	1.5
Public Shower	3.0
Domestic Kitchen Sink	0.75
Laboratory Sink	1.5
Pantry Sink	2.5
Slop Sink	1.5
Domestic Clothes Washer	2.0
Domestic Dish Washer	2.0

HEALTH CLUBS, SPAS, AND COUNTRY CLUBS

Type of Fixture	*Fixture Units*
Foot Basin	1.2
Laundry Tray	2.5
Private Lavatory	0.75
Public Lavatory	1.0
Shower and Tub	1.5
Private Shower	1.5
Public Shower	1.7
Domestic Kitchen Sink	1.5
Pantry Sink	1.5
Slop Sink	2.5
Wash Fountain, 36" Half	1.0
Wash Fountain, 36" Full	2.0
Wash Fountain, 54" Half	1.5
Wash Fountain, 54" Full	2.5
Domestic Clothes Washer	2.0

PLUMBING FIXTURE UNIT TABLES

HOSPITALS, MEDICAL FACILITIES, PSYCHIATRIC CENTERS

Type of Fixture	*Fixture Units*
Therapeutic Bath	5.0
Private Lavatory	0.75
Public Lavatory	1.0
Private Shower	1.5
Semi Private Shower	1.5
General Purpose Sink	1.0
Domestic Kitchen Sink	3.0
Laboratory Sink	1.5
Pantry Sink	2.5
Slop Sink	2.5
Autopsy, Sink & Table	2.5
Autopsy Table	2.0
Bath, Arm	4.0
Continuous Flow Fill Bath	2.0
Continuous Flow Operate Bath	1.5
Emergency Bath	2.0
Bath, Foot	3.0
Bath, Leg	6.0
Private Bath	1.5
Sitz Bath	3.0
Ward Bath	2.0
Hubbard Tank	4.0
Hydrotheraputic Shower, #1 Head	8.0
Hydrotheraputic Shower, #2 Spray	12
Ward Shower	2.5
Flushing Rim Sink	2.0
Scrub-Up Sink	1.5

PRISONS AND CORRECTIONAL FACILITIES

Type of Fixture	*Fixture Units*
Janitor Drop	2.0
Private Lavatory	0.75
Public Lavatory	1.0
Shower and Tub	1.5
Private Shower	1.5
Public Shower	3.0
Slop Sink	2.0
Wash Fountain, 36" Half	1.0
Wash Fountain, 36" Full	2.0
Wash Fountain, 54" Half	1.5
Wash Fountain, 54" Full	2.5

YMCA/YWCA

Type of Fixture	*Fixture Units*
Therapeutic Bath	6.0
Janitor Drop	2.0
Laundry Tray	2.0
Private Lavatory	0.75
Public Lavatory	1.0
Shower and Tub	1.7
Private Shower	1.5
Public Shower	3.0
Domestic Kitchen Sink	3.0
Pantry Sink	2.5
Slop Sink	2.5
Wash Fountain, 36" Half	1.0
Wash Fountain, 36" Full	1.5
Domestic Clothes Washer	2.0

GYMNASIUMS , FIELD HOUSE, STADIUM, ARENA, MILITARY

Type of Fixture	*Fixture Units*
Foot Basin	1.2
Therapeutic Bath	6.0
Private Lavatory	0.75
Public Lavatory	1.0
Shower and Tub	1.5
Private Shower	1.5
Public Shower	3.0
Wash Fountain, 36" Half	1.0
Wash Fountain, 36" Full	2.0
Wash Fountain, 54" Half	1.5
Wash Fountain, 54" Full	2.5
Domestic Clothes Washer	1.2

INDUSTRIAL PLANT

Type of Fixture	*Fixture Units*
Private Lavatory	0.75
Public Lavatory	2.0
Private Shower	1.5
Public Shower	3.0
General Purpose Sink	2.5
Domestic Kitchen Sink	3.0
Slop Sink	2.5
Wash Fountain, 36" Half	1.5
Wash Fountain, 36" Full	3.0
Wash Fountain, 54" Half	2.0
Wash Fountain, 54" Full	4.0

RESTAURANT

Type of Fixture	*Fixture Units*
Private Lavatory	0.75
Public Lavatory	2.0
Private Shower	1.5
Public Shower	1.7
Pantry Sink	2.5
Slop Sink	2.0
Wash Fountain, 36" Half	1.0
Wash Fountain, 36" Full	1.5
Baine Marie	1.0
Coffee Urn	1.2
Bar Sink	2.5
Kitchen Sink	3.0
Single Pot Sink	2.5
Double Pot Sink	3.5
Triple Pot Sink	5.5
Vegetable Sink	2.0
Can Washer	3.0
Pre-Rinse Dish Washer	2.5
Glass Washer	2.0
Pot & Pan Washer	2.0
Pre-Scaper Washer	2.0
Pre-Scraper Conveyor	2.5
Silver Washer	2.0

TEMPERATURE CORRECTION FACTOR

AERCO sizing guidelines for selecting the number of gas fired units are based on 40°F entering cold water, 110°F mixed temperature at the fixtures, and no greater than 140°F heater set point. To select properly for alternate cold water inlet temperatures, a temperature correction factor may be applied:

Tc	40°F	45°F	50°F	55°F	60°F	65°F	70°F	75°F	80°F
TCF	1	0.98	0.95	0.92	0.89	0.86	0.82	0.77	0.71

Example: An apartment building has a total calculated fixture unit count of 400. The operating conditions will be 50 to 130°F and the system design should incorporate 100% redundant capacity.

Step 1: Go to the table on Page D300.17 "APARTMENT COMPLEXES/CONDOMINIUMS, Domestic Water Inlet - Outlet Conditions: 40-130 °F" and determine the total heater capacity required for 400 fixture units @ "200% Design Load" (100% redundant capacity). The required system flow is **59.7** GPM @ 40 -130 °F.

Step 2: From the chart above multiply the temperature correction factor (TCF) for 50°F by 59.7 GPM to determine the corrected required system flow at the higher inlet water temperature; .95 X 59.7 = **56.7** GPM

Step 3: Determine the number of INNOVATION heaters required to meet this demand - 56.7 GPM @ 50 to 130°F. Since this is an 80°F temperature rise, go to the lower table on Page D300.30 labeled "Maximum Unit Capacity (GPM), 40-120 °F" to find the lowest quantity of multple units required to meet this load. The table shows that 3 **- INN800's** meet the requirment of this application.

HOTELS/MOTELS - MIXED OCCUPANCY

Domestic Water Inlet - Outlet Conditions: 40-140 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	10.1	1				15.2	2				20.3	2			
50	13.2		1			19.8	2				26.4		2		
100	18.2			1		27.4		2			36.5			2	
150	20.3			1		30.4		2			40.6			2	
200	23.1				1	34.6			2		46.1				2
250	25.3				1	38.0			2		50.6				2
300	27.2		2			40.8			2		54.5			3	
350	29.3		2			44.0				2	58.7			3	
400	30.8		2			46.2				2	61.2			3	
550	36.1			2		54.1			3		72.1				3
700	40.6			2		60.9			3		81.2			4	
1000	50.6				2	75.8				3	101.1				4
1200	52.4				2	78.6				3	104.8				4
1500	63.8				3	95.8				4	131.0				5*
1800	74.4				3	104.8				4*	131.0				5*
2200	78.6				3	104.8				4*	131.0				5*
3000	102.0				4	131.0				5*	157.2				6*

Maximum Unit Capacity (GPM), 40-140 °F				
# Units	INN600	INN800	INN1060	INN1350
1	11.6	15.4	20.4	26.2
2	23.2	30.8	40.8	52.4
3	34.8	46.2	61.2	78.6
4	46.4	61.6	81.6	104.8
5	58	77	102	131
6	69.6	92.4	122.4	157.2
7	81.2	107.8	142.8	183.4
8	92.8	123.2	163.2	209.6
9	104.4	138.6	183.6	235.8
10	116	154	204	262

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

****See GF-5080 for commercial laundry system sizing guidelines.

HOTELS/MOTELS - CONVENTION CENTER/BUSINESS MEETING

Domestic Water Inlet - Outlet Conditions: 40-140 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	14.4		1			21.5	2				28.7		2		
50	18.7			1		28.1		2			37.4			2	
100	25.8		2			38.8			2		51.7				2
150	30.3		2			45.4				2	60.5			3	
200	33.2			2		49.9				2	66.5				3
250	35.9			2		53.8			3		71.7				3
300	38.6			2		57.9			3		77.2				3
350	40.8			2		61.2			3		81.6			4	
400	44.7				2	67.1				3	89.4				4
550	51.1				2	76.6				3	102.2				4
700	59.5			3		89.3				4	119.0				5
1000	72.8				3	104.8				4*	131.0				5*
1200	78.6				3	104.8				4*	131.0				5*
1500	90.4				4	131.0				5*	157.2				6*
1800	104.8				4	131.0				5*	157.2				6*
2200	119.0				5	157.2				6*	183.4				7*
3000	149.8				6	183.4				7*	209.6				8*

Maximum Unit Capacity (GPM), 40-140 °F				
# Units	INN600	INN800	INN1060	INN1350
1	11.6	15.4	20.4	26.2
2	23.2	30.8	40.8	52.4
3	34.8	46.2	61.2	78.6
4	46.4	61.6	81.6	104.8
5	58	77	102	131
6	69.6	92.4	122.4	157.2
7	81.2	107.8	142.8	183.4
8	92.8	123.2	163.2	209.6
9	104.4	138.6	183.6	235.8
10	116	154	204	262

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

****See GF-5080 for commercial laundry system sizing guidelines.

APARTMENT COMPLEXES/CONDOMINIUMS

Domestic Water Inlet - Outlet Conditions: 40-140 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	8.6	1				12.9	2				17.2	2			
50	11.4	1				17.1	2				22.8	2			
100	15.1		1			22.6	2				30.2		2		
150	18.0				1	27.0		2			36.0			2	2
200	20.1				1	30.1		2			40.2			2	2
250	21.8				1	32.8			2		43.7				2
300	23.0				1	34.5			2		46.0				2
350	25.0				1	37.4			2		49.9				2
400	26.9		2			40.4			2		53.8			3	
550	32.2			2		48.3				2	64.4				3
700	36.8			2		55.2			3		73.6				3
1000	40.8			2		61.2			3		81.6			4	
1200	47.8				2	71.8				3	95.7				4
1500	52.4				2	78.6				3	104.8				4
1800	58.5			3		87.8				4	117.0				5
2200	64.9				3	97.3				4	129.7				5
3000	84.4				4	126.6				5	157.2				6*

Maximum Unit Capacity (GPM), 40-140 °F				
# Units	INN600	INN800	INN1060	INN1350
1	11.6	15.4	20.4	26.2
2	23.2	30.8	40.8	52.4
3	34.8	46.2	61.2	78.6
4	46.4	61.6	81.6	104.8
5	58	77	102	131
6	69.6	92.4	122.4	157.2
7	81.2	107.8	142.8	183.4
8	92.8	123.2	163.2	209.6
9	104.4	138.6	183.6	235.8
10	116	154	204	262

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

NURSING HOMES, ASSISTED LIVING

Domestic Water Inlet - Outlet Conditions: 40-140 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	14.4		1			21.5	2				28.7		2		
50	18.7			1		28.1		2			37.4			2	
100	25.8		2			38.8			2		51.7				2
150	30.3		2			45.4				2	60.5			3	
200	33.2			2		49.9				2	66.5				3
250	35.9			2		53.8			3		71.7				3
300	38.6			2		57.9			3		77.2				3
350	40.8			2		61.2			3		81.6			4	
400	44.7				2	67.1				3	89.4				4
550	51.1				2	76.6				3	102.2				4
700	59.5			3		89.3				4	119.0				5
1000	72.8				3	104.8				4*	131.0				5*
1200	78.6				3	104.8				4*	131.0				5*
1500	90.4				4	131.0				5*	157.2				6*
1800	104.8				4	131.0				5*	157.2				6*
2200	119.0				5	157.2				6*	183.4				7*
3000	149.8				6	183.4				7*	209.6				8*

Maximum Unit Capacity (GPM), 40-140 °F				
# Units	INN600	INN800	INN1060	INN1350
1	11.6	15.4	20.4	26.2
2	23.2	30.8	40.8	52.4
3	34.8	46.2	61.2	78.6
4	46.4	61.6	81.6	104.8
5	58	77	102	131
6	69.6	92.4	122.4	157.2
7	81.2	107.8	142.8	183.4
8	92.8	123.2	163.2	209.6
9	104.4	138.6	183.6	235.8
10	116	154	204	262

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

****See GF-5080 for commercial laundry system sizing guidelines.

HOSPITALS, MEDICAL FACILITIES, PSYCHIATRIC CENTERS

Domestic Water Inlet - Outlet Conditions: 40-140 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	14.4		1			21.5	2				28.7		2		
50	18.7			1		28.1		2			37.4			2	
100	25.8		2			38.8			2		51.7				2
150	30.3		2			45.4				2	60.5			3	
200	33.2			2		49.9				2	66.5				3
250	35.9			2		53.8			3		71.7				3
300	38.6			2		57.9			3		77.2				3
350	40.8			2		61.2			3		81.6			4	
400	44.7				2	67.1				3	89.4				4
550	51.1				2	76.6				3	102.2				4
700	59.5			3		89.3				4	119.0				5
1000	72.8				3	104.8				4*	131.0				5*
1200	78.6				3	104.8				4*	131.0				5*
1500	90.4				4	131.0				5*	157.2				6*
1800	104.8				4	131.0				5*	157.2				6*
2200	119.0				5	157.2				6*	183.4				7*
3000	149.8				6	183.4				7*	209.6				8*

Maximum Unit Capacity (GPM), 40-140 °F				
# Units	INN600	INN800	INN1060	INN1350
1	11.6	15.4	20.4	26.2
2	23.2	30.8	40.8	52.4
3	34.8	46.2	61.2	78.6
4	46.4	61.6	81.6	104.8
5	58	77	102	131
6	69.6	92.4	122.4	157.2
7	81.2	107.8	142.8	183.4
8	92.8	123.2	163.2	209.6
9	104.4	138.6	183.6	235.8
10	116	154	204	262

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

****See GF-5080 for commercial laundry system sizing guidelines.

SCHOOLS - ELEMENTARY, MIDDLE , HIGH SCHOOLS, AND COLLEGES

Domestic Water Inlet - Outlet Conditions: 40-140 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	7.4	1				11.1	2				14.8	2			
50	10.0	1				15.0	2				20.0	2			
100	14.3		1			21.5	2				28.6		2		
150	17.6			1		26.3		2			35.1			2	
200	19.9			1		29.8		2			39.8			2	
250	21.2				1	31.9			2		42.5				2
300	22.1				1	33.2			2		44.3				2
350	23.0				1	34.6			2		46.1				2
400	24.8				1	37.1			2		49.5				2
550	29.6		2			44.4				2	59.2			3	
700	33.9			2		50.9				2	67.9				3
1000	40.6			2		60.9			3		81.2				4
1200	45.5				2	68.3				3	91.1				4
1500	51.0				2	76.5				3	102.1				4
1800	54.3				3	81.4				4	108.5				5
2200	60.8				3	91.1				4	121.5				5
3000	76.6				3	104.8				4*	131.0				5*

Maximum Unit Capacity (GPM), 40-140 °F				
# Units	INN600	INN800	INN1060	INN1350
1	11.6	15.4	20.4	26.2
2	23.2	30.8	40.8	52.4
3	34.8	46.2	61.2	78.6
4	46.4	61.6	81.6	104.8
5	58	77	102	131
6	69.6	92.4	122.4	157.2
7	81.2	107.8	142.8	183.4
8	92.8	123.2	163.2	209.6
9	104.4	138.6	183.6	235.8
10	116	154	204	262

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

****If this facility has sustained peak shower loads where 80-100% of the showers are typically on at the same time; use the "Group Shower Load" sizing chart.

UNIVERSITY/COLLEGE DORMITORIES

Domestic Water Inlet - Outlet Conditions: 40-140 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	15.2		1			22.8	2				30.4		2		
50	19.8			1		29.7		2			39.6			2	
100	27.2		2			40.8			2		54.4			3	
150	30.6		2			45.9				2	61.2			3	
200	35.0			2		52.4				2	69.9				3
250	38.0			2		57.0			3		76.0				3
300	40.8			2		61.2			3		81.6			4	
350	44.0				2	66.0				3	88.0				4
400	47.3				2	71.0				3	94.7				4
550	54.1			3		81.1			4		108.2				5
700	61.2			3		91.8				4	122.4				5
1000	77.1				3	104.8				4*	131.0				5*
1200	85.1				4	127.7				5	157.2				6*
1500	95.8				4	131.0				5*	157.2				6*
1800	111.6				5	157.2				6*	183.4				7*
2200	122.4				5	157.2				6*	183.4				7*
3000	157.2				6	183.4				7*	209.6				8*

Maximum Unit Capacity (GPM), 40-140 °F				
# Units	INN600	INN800	INN1060	INN1350
1	11.6	15.4	20.4	26.2
2	23.2	30.8	40.8	52.4
3	34.8	46.2	61.2	78.6
4	46.4	61.6	81.6	104.8
5	58	77	102	131
6	69.6	92.4	122.4	157.2
7	81.2	107.8	142.8	183.4
8	92.8	123.2	163.2	209.6
9	104.4	138.6	183.6	235.8
10	116	154	204	262

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

HEALTH CLUBS, SPAS, YMCA/YWCA, AND COUNTRY CLUBS

Domestic Water Inlet - Outlet Conditions: 40-140 °F

Fixture Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	8.2	1				12.3	2				16.4	2			
50	11.1	1				16.7	2				22.2	2			
100	15.4		1			23.1	2				30.8		2		
150	19.5			1		29.3		2			39.0			2	
200	22.1				1	33.2			2		44.2				2
250	23.1				1	34.7			2		46.2				2
300	24.6				1	36.9			2		49.2				2
350	25.6				1	38.4			2		51.2				2
400	27.2		2			40.8			2		54.5			3	
550	32.9			2		49.4				2	65.8				3
700	37.7			2		56.6			3		75.4				3
1000	45.9				2	68.9				3	91.8				4
1200	50.6				2	75.9				3	101.2				4
1500	56.7			3		85.1				4	113.4				5
1800	60.3			3		90.5				4	120.6				5
2200	67.5				3	101.3				4	131.0				5*
3000	85.1				4	127.7				5	157.2				6*

Maximum Unit Capacity (GPM), 40-140 °F				
# Units	INN600	INN800	INN1060	INN1350
1	11.6	15.4	20.4	26.2
2	23.2	30.8	40.8	52.4
3	34.8	46.2	61.2	78.6
4	46.4	61.6	81.6	104.8
5	58	77	102	131
6	69.6	92.4	122.4	157.2
7	81.2	107.8	142.8	183.4
8	92.8	123.2	163.2	209.6
9	104.4	138.6	183.6	235.8
10	116	154	204	262

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

****If this facility has sustained peak shower loads where 80-100% of the showers are typically on at the same time; use the "Group Shower Load" sizing chart.

****See GF-5080 for commercial laundry system sizing guidelines.

PRISONS AND CORRECTIONAL FACILITIES

Domestic Water Inlet - Outlet Conditions: 40-140 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	15.2		1			22.8	2				30.4		2		
50	19.8			1		29.7		2			39.6			2	
100	27.2		2			40.8			2		54.4			3	
150	30.6		2			45.9				2	61.2			3	
200	35.0			2		52.4				2	69.9				3
250	38.0			2		57.0			3		76.0				3
300	40.8			2		61.2			3		81.6			4	
350	44.0				2	66.0				3	88.0				4
400	47.3				2	71.0				3	94.7				4
550	54.1			3		81.1			4		108.2				5
700	61.2			3		91.8				4	122.4				5
1000	77.1				3	104.8				4*	131.0				5*
1200	85.1				4	127.7				5	157.2				6*
1500	95.8				4	131.0				5*	157.2				6*
1800	111.6				5	157.2				6*	183.4				7*
2200	122.4				5	157.2				6*	183.4				7*
3000	157.2				6	183.4				7*	209.6				8*

Maximum Unit Capacity (GPM), 40-140 °F				
# Units	INN600	INN800	INN1060	INN1350
1	11.6	15.4	20.4	26.2
2	23.2	30.8	40.8	52.4
3	34.8	46.2	61.2	78.6
4	46.4	61.6	81.6	104.8
5	58	77	102	131
6	69.6	92.4	122.4	157.2
7	81.2	107.8	142.8	183.4
8	92.8	123.2	163.2	209.6
9	104.4	138.6	183.6	235.8
10	116	154	204	262

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

****If this facility has sustained peak shower loads where 80-100% of the showers are typically on at the same time; use the "Group Shower Load" sizing chart.

****See GF-5080 for commercial laundry system sizing guidelines.

OFFICE, COMMERCIAL, RETAIL

Domestic Water Inlet - Outlet Conditions: 40-140 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	6.6	1				9.8	2				13.1	2			
50	8.9	1				13.3	2				17.8	2			
100	12.7		1			19.1	2				25.4		2		
150	15.4		1			23.1	2				30.8		2		
200	17.7			1		26.5		2			35.4			2	
250	18.9			1		28.3		2			37.8			2	
300	19.7			1		29.5		2			39.4			2	
350	20.4			1		30.6		2			40.8			2	
400	22.0				1	33.0			2		44.0				2
550	26.2				1	39.3			2		52.4				2
700	30.2		2			45.2				2	60.3			3	
1000	36.7			2		55.1			3		73.4				3
1200	39.3			2		59.0			3		78.6				3
1500	45.4				2	68.0				3	90.7				4
1800	48.2				2	72.4				3	96.5				4
2200	52.4				2	78.6				3	104.8				4
3000	68.0				3	102.0				4	131.0				5*

Maximum Unit Capacity (GPM), 40-140 °F				
# Units	INN600	INN800	INN1060	INN1350
1	11.6	15.4	20.4	26.2
2	23.2	30.8	40.8	52.4
3	34.8	46.2	61.2	78.6
4	46.4	61.6	81.6	104.8
5	58	77	102	131
6	69.6	92.4	122.4	157.2
7	81.2	107.8	142.8	183.4
8	92.8	123.2	163.2	209.6
9	104.4	138.6	183.6	235.8
10	116	154	204	262

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

INDUSTRIAL PLANT

Domestic Water Inlet - Outlet Conditions: 40-140 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	6.6	1				9.8	2				13.1	2			
50	8.9	1				13.3	2				17.8	2			
100	12.7		1			19.1	2				25.4		2		
150	15.4		1			23.1	2				30.8		2		
200	17.7			1		26.5		2			35.4			2	
250	18.9			1		28.3		2			37.8			2	
300	19.7			1		29.5		2			39.4			2	
350	20.4			1		30.6		2			40.8			2	
400	22.0				1	33.0			2		44.0				2
550	26.2				1	39.3			2		52.4				2
700	30.2		2			45.2				2	60.3			3	
1000	36.7			2		55.1			3		73.4				3
1200	39.3			2		59.0			3		78.6				3
1500	45.4				2	68.0				3	90.7				4
1800	48.2				2	72.4				3	96.5				4
2200	52.4				2	78.6				3	104.8				4
3000	68.0				3	102.0				4	131.0				5*

Maximum Unit Capacity (GPM), 40-140 °F				
# Units	INN600	INN800	INN1060	INN1350
1	11.6	15.4	20.4	26.2
2	23.2	30.8	40.8	52.4
3	34.8	46.2	61.2	78.6
4	46.4	61.6	81.6	104.8
5	58	77	102	131
6	69.6	92.4	122.4	157.2
7	81.2	107.8	142.8	183.4
8	92.8	123.2	163.2	209.6
9	104.4	138.6	183.6	235.8
10	116	154	204	262

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

****If this facility has sustained peak shower loads where 80-100% of the showers are typically on at the same time; use the "Group Shower Load" sizing chart.

RESTAURANT

Domestic Water Inlet - Outlet Conditions: 40-140 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
5	15.3		1			22.9	2				30.5		2		
15	19.9			1		29.8		2			39.8			2	
25	23.2				1	34.9			2		46.5				2
50	30.6		2			45.9				2	61.2			3	
75	37.5			2		56.3			3		75.0				3
100	40.8			2		61.2			3		81.6			3	
150	47.9				2	71.9				3	95.9				4
200	52.4				2	78.6				3	104.8				4
250	58.5			3		87.8				4	117.0				5
300	61.2			3		91.8				4	122.4				5
350	66.5				3	99.7				4	131.0				5*
400	69.9				3	104.8				4	131.0				5*
550	89.7				4	131.0				5*	122.4				6*
700	104.3				4	131.0				5*	142.8				6*
900	122.0				5	157.2				6*	183.4				7*
1100	138.0				6	183.4				7*	209.6				8*
1500	166.1				7	209.6				8*	235.8				9*

Maximum Unit Capacity (GPM), 40-140 °F				
# Units	INN600	INN800	INN1060	INN1350
1	11.6	15.4	20.4	26.2
2	23.2	30.8	40.8	52.4
3	34.8	46.2	61.2	78.6
4	46.4	61.6	81.6	104.8
5	58	77	102	131
6	69.6	92.4	122.4	157.2
7	81.2	107.8	142.8	183.4
8	92.8	123.2	163.2	209.6
9	104.4	138.6	183.6	235.8
10	116	154	204	262

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

GROUP SHOWER LOAD : GYMNASIUM, FIELD HOUSE, SPORTS ARENA, STADIUM, MILITARY BARRACKS, AND PRISONS

Domestic Water Inlet - Outlet Conditions: 40-140 °F

Shower Count	Design Load (GPM)	Design Load				Design Load W/N+1 Excess Capacity				Stratified Storage Tank (GAL.)		
		INN600	INN800	INN1060	INN1350	INN600	INN800	INN1060	INN1350	210	340	505
5	8.8	1				2						
10	17.5			1				2				
15	26.3		2				3					
20	35.0			2				3				
25	43.8				2				3			
30	52.4				2				3			
40	70.0				2				3			1
50	87.5			3				4				1
60	105.0				3				4			1

Maximum Unit Capacity (GPM), 40-140 °F				
# Units	INN600	INN800	INN1060	INN1350
1	11.6	15.4	20.4	26.2
2	23.2	30.8	40.8	52.4
3	34.8	46.2	61.2	78.6
4	46.4	61.6	81.6	104.8
5	58	77	102	131
6	69.6	92.4	122.4	157.2
7	81.2	107.8	142.8	183.4
8	92.8	123.2	163.2	209.6
9	104.4	138.6	183.6	235.8
10	116	154	204	262

NOTES:

* This sizing is based on 2.5 GPM shower heads, 110°F fixture outlet temperature, all showers are on full for 15 minutes, and the tank recovery time (when employed) can be up to 20 minutes.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

HOTELS/MOTELS - MIXED OCCUPANCY

Domestic Water Inlet - Outlet Conditions: 40-130 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	11.3	1				16.9	2				22.5	2			
50	14.7		1			22.0	2				29.3		2		
100	20.2			1		30.4		2			40.5			2	
150	22.5			1		33.8		2			45.0			2	
200	25.6				1	38.4			2		51.2				2
250	28.1				1	42.2			2		56.2				2
300	30.2		2			45.4			2		60.5			3	
350	32.6		2			48.9				2	65.1			3	
400	34.2		2			51.2				2	68.1			3	
550	40.0			2		60.0			3		80.1				3
700	45.1			2		67.6			3		90.1			4	
1000	56.1				2	84.2				3	112.2				4
1200	63.0			3		94.5				4	126.0				5
1500	70.9				3	106.3				4	141.7				5
1800	82.6				3	116.4				4*	145.5				5*
2200	87.3				3	116.4				4*	145.5				5*
3000	113.4				4	145.5				5*	174.6				6*

Maximum Unit Capacity (GPM), 40-130 °F				
# Units	INN600	INN800	INN1060	INN1350
1	12.8	17.1	22.7	29.1
2	25.6	34.2	45.4	58.2
3	38.4	51.3	68.1	87.3
4	51.2	68.4	90.8	116.4
5	64	85.5	113.5	145.5
6	76.8	102.6	136.2	174.6
7	89.6	119.7	158.9	203.7
8	102.4	136.8	181.6	232.8
9	115.2	153.9	204.3	261.9
10	128	171	227	291

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

HOTELS/MOTELS - CONVENTION CENTER/BUSINESS MEETING

Domestic Water Inlet - Outlet Conditions: 40-130 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	15.9		1			23.9	2				31.9		2		
50	20.8			1		31.1		2			41.5			2	
100	28.7		2			43.0			2		57.4				2
150	33.6		2			50.4				2	67.2			3	
200	36.9			2		55.3				2	73.8				3
250	39.8			2		59.7			3		79.6				3
300	42.8			2		64.3			3		85.7				3
350	45.3			2		67.9			3		90.5			4	
400	49.6				2	74.4				3	99.3				4
550	56.7				2	85.1				3	113.4				4
700	66.0			3		99.1				4	132.1				5
1000	80.9				3	116.4				4*	145.5				5*
1200	87.3				3	116.4				4*	145.5				5*
1500	100.4				4	145.5				5*	174.6				6*
1800	116.3				4	145.5				5*	174.6				6*
2200	132.1				5	174.6				6*	203.7				7*
3000	159.1				6	203.7				7*	232.8				8*

Maximum Unit Capacity (GPM), 40-130 °F				
# Units	INN600	INN800	INN1060	INN1350
1	12.8	17.1	22.7	29.1
2	25.6	34.2	45.4	58.2
3	38.4	51.3	68.1	87.3
4	51.2	68.4	90.8	116.4
5	64	85.5	113.5	145.5
6	76.8	102.6	136.2	174.6
7	89.6	119.7	158.9	203.7
8	102.4	136.8	181.6	232.8
9	115.2	153.9	204.3	261.9
10	128	171	227	291

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

APARTMENT COMPLEXES/CONDOMINIUMS

Domestic Water Inlet - Outlet Conditions: 40-130 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	9.5	1				14.3	2				19.0	2			
50	12.6	1				18.9	2				25.3	2			
100	16.7		1			25.1	2				33.5		2		
150	20.0			1		30.0		2			40.0			2	
200	22.3			1		33.4		2			44.6			2	
250	24.2				1	36.4			2		48.5				2
300	25.5				1	38.3			2		51.1				2
350	27.7				1	41.6			2		55.4				2
400	29.9		2			44.8			2		59.7			3	
550	35.7			2		53.6				2	71.4				3
700	40.8			2		61.3			3		81.7				3
1000	45.4			2		68.1			3		90.8			4	
1200	53.1				2	79.7				3	106.2				4
1500	59.4				2	89.1				3	118.8				4
1800	64.9			3		97.4				4	129.9				5
2200	72.0				3	108.0				4	144.0				5
3000	93.7				4	140.5				5	174.6				6*

Maximum Unit Capacity (GPM), 40-130 °F				
# Units	INN600	INN800	INN1060	INN1350
1	12.8	17.1	22.7	29.1
2	25.6	34.2	45.4	58.2
3	38.4	51.3	68.1	87.3
4	51.2	68.4	90.8	116.4
5	64	85.5	113.5	145.5
6	76.8	102.6	136.2	174.6
7	89.6	119.7	158.9	203.7
8	102.4	136.8	181.6	232.8
9	115.2	153.9	204.3	261.9
10	128	171	227	291

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

NURSING HOMES, ASSISTED LIVING

Domestic Water Inlet - Outlet Conditions: 40-130 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	15.9		1			23.9	2				31.9		2		
50	20.8			1		31.1		2			41.5			2	
100	28.7		2			43.0			2		57.4				2
150	33.6		2			50.4				2	67.2			3	
200	36.9			2		55.3				2	73.8				3
250	39.8			2		59.7			3		79.6				3
300	42.8			2		64.3			3		85.7				3
350	45.3			2		67.9			3		90.5			4	
400	49.6				2	74.4				3	99.3				4
550	56.7				2	85.1				3	113.4				4
700	66.0			3		90.8				4	132.1				5
1000	80.9				3	116.4				4*	145.5				5*
1200	87.3				3	116.4				4*	145.5				5*
1500	100.4				4	145.5				5*	174.6				6*
1800	116.3				4	145.5				5*	174.6				6*
2200	132.1				5	174.6				6*	203.7				7*
3000	159.1				6	203.7				7*	232.8				8*

Maximum Unit Capacity (GPM), 40-130 °F				
# Units	INN600	INN800	INN1060	INN1350
1	12.8	17.1	22.7	29.1
2	25.6	34.2	45.4	58.2
3	38.4	51.3	68.1	87.3
4	51.2	68.4	90.8	116.4
5	64	85.5	113.5	145.5
6	76.8	102.6	136.2	174.6
7	89.6	119.7	158.9	203.7
8	102.4	136.8	181.6	232.8
9	115.2	153.9	204.3	261.9
10	128	171	227	291

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

HOSPITALS, MEDICAL FACILITIES, PSYCHIATRIC CENTERS

Domestic Water Inlet - Outlet Conditions: 40-130 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	15.9		1			23.9	2				31.9		2		
50	20.8			1		31.1		2			41.5			2	
100	28.7		2			43.0			2		57.4				2
150	33.6		2			50.4				2	67.2			3	
200	36.9			2		55.3				2	73.8				3
250	39.8			2		59.7			3		79.6				3
300	42.8			2		64.3			3		85.7				3
350	45.3			2		67.9			3		90.5			4	
400	49.6				2	74.4				3	99.3				4
550	56.7				2	85.1				3	113.4				4
700	66.0			3		90.8				4	132.1				5
1000	80.9				3	116.4				4*	145.5				5*
1200	87.3				3	116.4				4*	145.5				5*
1500	100.4				4	145.5				5*	174.6				6*
1800	116.3				4	145.5				5*	174.6				6*
2200	132.1				5	174.6				6*	203.7				7*
3000	159.1				6	203.7				7*	232.8				8*

Maximum Unit Capacity (GPM), 40-130 °F				
# Units	INN600	INN800	INN1060	INN1350
1	12.8	17.1	22.7	29.1
2	25.6	34.2	45.4	58.2
3	38.4	51.3	68.1	87.3
4	51.2	68.4	90.8	116.4
5	64	85.5	113.5	145.5
6	76.8	102.6	136.2	174.6
7	89.6	119.7	158.9	203.7
8	102.4	136.8	181.6	232.8
9	115.2	153.9	204.3	261.9
10	128	171	227	291

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

SCHOOLS - ELEMENTARY, MIDDLE , HIGH SCHOOLS, AND COLLEGES

Domestic Water Inlet - Outlet Conditions: 40-130 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	8.2	1				12.3	2				16.4	2			
50	11.1	1				16.6	2				22.2	2			
100	15.9		1			23.8	2				31.8		2		
150	19.5			1		29.2		2			39.0			2	
200	22.1			1		33.1		2			44.2			2	
250	23.6				1	35.4			2		47.2				2
300	24.6				1	36.9			2		49.2				2
350	25.6				1	38.4			2		51.1				2
400	27.5				1	41.2			2		54.9				2
550	32.9		2			49.3				2	65.7			3	
700	37.7			2		56.5				2	75.3				3
1000	45.1			2		67.6			3		90.2				4
1200	49.7				2	74.6				3	99.4				4
1500	55.7				2	83.5				3	111.4				4
1800	59.2				3	88.9				4	118.5				5
2200	66.3				3	99.5				4	132.6				5
3000	83.6				3	116.4				4*	145.5				5*

Maximum Unit Capacity (GPM), 40-130 °F				
# Units	INN600	INN800	INN1060	INN1350
1	12.8	17.1	22.7	29.1
2	25.6	34.2	45.4	58.2
3	38.4	51.3	68.1	87.3
4	51.2	68.4	90.8	116.4
5	64	85.5	113.5	145.5
6	76.8	102.6	136.2	174.6
7	89.6	119.7	158.9	203.7
8	102.4	136.8	181.6	232.8
9	115.2	153.9	204.3	261.9
10	128	171	227	291

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

****If this facility has sustained peak shower loads where 80-100% of the showers are typically on at the same time; use the "Group Shower Load" sizing chart

UNIVERSITY/COLLEGE DORMITORIES

Domestic Water Inlet - Outlet Conditions: 40-130 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	16.9		1			25.3	2				33.8		2		
50	22.0			1		33.0		2			44.0			2	
100	30.2		2			45.3			2		60.4			3	
150	34.0		2			51.0				2	68.0			3	
200	39.1			2		58.6				2	78.1				3
250	42.2			2		63.2			3		84.3				3
300	45.4			2		68.0			3		90.7			4	
350	48.9				2	73.3				3	97.7				4
400	51.1				2	76.6				3	102.2				4
550	60.0			3		90.1			4		120.1				5
700	68.1			3		102.2				4	136.3				5
1000	85.6				3	116.4				4*	145.5				5*
1200	94.5				4	141.8				5	174.6				6*
1500	106.3				4	145.5				5*	174.6				6*
1800	123.9				5	174.6				6*	203.7				7*
2200	135.8				5	174.6				6*	203.7				7*
3000	174.6				6	203.7				7*	232.8				8*

Maximum Unit Capacity (GPM), 40-130 °F				
# Units	INN600	INN800	INN1060	INN1350
1	12.8	17.1	22.7	29.1
2	25.6	34.2	45.4	58.2
3	38.4	51.3	68.1	87.3
4	51.2	68.4	90.8	116.4
5	64	85.5	113.5	145.5
6	76.8	102.6	136.2	174.6
7	89.6	119.7	158.9	203.7
8	102.4	136.8	181.6	232.8
9	115.2	153.9	204.3	261.9
10	128	171	227	291

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

HEALTH CLUBS, SPAS, YMCA/YWCA, AND COUNTRY CLUBS

Domestic Water Inlet - Outlet Conditions: 40-130 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	9.1	1				13.7	2				18.2	2			
50	12.3	1				18.5	2				24.6	2			
100	17.0		1			25.5	2				34.1		2		
150	21.6			1		32.5		2			43.3			2	
200	24.5				1	36.8			2		49.1				2
250	25.6				1	38.4			2		51.2				2
300	27.3				1	41.0			2		54.6				2
350	28.4				1	42.6			2		56.8				2
400	30.2		2			45.3			2		60.4			3	
550	36.5			2		54.8				2	73.0				3
700	41.8			2		62.8			3		83.7				3
1000	50.9				2	76.4				3	101.9				4
1200	56.2				2	84.2				3	112.3				4
1500	62.9			3		94.4				4	125.9				5
1800	66.9			3		100.4				4	133.9				5
2200	74.9				3	112.4				4	145.5				5*
3000	90.8				4	136.2				5	174.6				6*

Maximum Unit Capacity (GPM), 40-130 °F				
# Units	INN600	INN800	INN1060	INN1350
1	12.8	17.1	22.7	29.1
2	25.6	34.2	45.4	58.2
3	38.4	51.3	68.1	87.3
4	51.2	68.4	90.8	116.4
5	64	85.5	113.5	145.5
6	76.8	102.6	136.2	174.6
7	89.6	119.7	158.9	203.7
8	102.4	136.8	181.6	232.8
9	115.2	153.9	204.3	261.9
10	128	171	227	291

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

****If this facility has sustained peak shower loads where 80-100% of the showers are typically on at the same time; use the "Group Shower Load" sizing chart.

****See GF-5080 for commercial laundry system sizing guidelines.

PRISONS AND CORRECTIONAL FACILITIES

Domestic Water Inlet - Outlet Conditions: 40-130 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	16.9		1			25.3	2				33.8		2		
50	22.0			1		33.0		2			44.0			2	
100	30.2		2			45.3			2		60.4			3	
150	34.0		2			51.0				2	68.0			3	
200	39.1			2		58.6				2	78.1				3
250	42.2			2		63.2			3		84.3				3
300	45.4			2		68.0			3		90.7			4	
350	48.9				2	73.3				3	97.7				4
400	51.1				2	76.6				3	102.2				4
550	60.0			3		90.1			4		120.1				5
700	68.1			3		102.2				4	136.3				5
1000	85.6				3	116.4				4*	145.5				5*
1200	94.5				4	141.8				5	174.6				6*
1500	106.3				4	145.5				5*	174.6				6*
1800	123.9				5	174.6				6*	203.7				7*
2200	135.8				5	174.6				6*	203.7				7*
3000	174.6				6	203.7				7*	232.8				8*

Maximum Unit Capacity (GPM), 40-130 °F				
# Units	INN600	INN800	INN1060	INN1350
1	12.8	17.1	22.7	29.1
2	25.6	34.2	45.4	58.2
3	38.4	51.3	68.1	87.3
4	51.2	68.4	90.8	116.4
5	64	85.5	113.5	145.5
6	76.8	102.6	136.2	174.6
7	89.6	119.7	158.9	203.7
8	102.4	136.8	181.6	232.8
9	115.2	153.9	204.3	261.9
10	128	171	227	291

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

****If this facility has sustained peak shower loads where 80-100% of the showers are typically on at the same time; use the "Group Shower Load" sizing chart.

****See GF-5080 for commercial laundry system sizing guidelines.

OFFICE, COMMERCIAL, RETAIL

Domestic Water Inlet - Outlet Conditions: 40-130 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	7.3	1				10.9	2				14.6	2			
50	9.9	1				14.8	2				19.7	2			
100	14.1		1			21.2	2				28.2		2		
150	17.1		1			25.6	2				34.2		2		
200	19.6			1		29.4		2			39.2			2	
250	21.0			1		31.4		2			41.9			2	
300	21.8			1		32.8		2			43.7			2	
350	22.7			1		34.1		2			45.5			2	
400	24.4				1	36.6			2		48.8				2
550	29.2				1	43.8			2		58.4				2
700	33.5		2			50.2				2	67.0			3	
1000	40.8			2		61.1			3		81.5				3
1200	44.9			2		67.4			3		89.9				3
1500	50.3				2	75.5				3	100.7				4
1800	53.5				2	80.3				3	107.1				4
2200	59.9				2	89.9				3	116.4				4*
3000	75.6				3	113.4				4	145.5				5*

Maximum Unit Capacity (GPM), 40-130 °F				
# Units	INN600	INN800	INN1060	INN1350
1	12.8	17.1	22.7	29.1
2	25.6	34.2	45.4	58.2
3	38.4	51.3	68.1	87.3
4	51.2	68.4	90.8	116.4
5	64	85.5	113.5	145.5
6	76.8	102.6	136.2	174.6
7	89.6	119.7	158.9	203.7
8	102.4	136.8	181.6	232.8
9	115.2	153.9	204.3	261.9
10	128	171	227	291

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

INDUSTRIAL PLANT

Domestic Water Inlet - Outlet Conditions: 40-130 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	7.3	1				10.9	2				14.6	2			
50	9.9	1				14.8	2				19.7	2			
100	14.1		1			21.2	2				28.2		2		
150	17.1		1			25.6	2				34.2		2		
200	19.6			1		29.4		2			39.2			2	
250	21.0			1		31.4		2			41.9			2	
300	21.8			1		32.8		2			43.7			2	
350	22.7			1		34.1		2			45.5			2	
400	24.4				1	36.6			2		48.8				2
550	29.2				1	43.8			2		58.4				2
700	33.5		2			50.2				2	67.0			3	
1000	40.8			2		61.1			3		81.5				3
1200	44.9			2		67.4			3		89.9				3
1500	50.3				2	75.5				3	100.7				4
1800	53.5				2	80.3				3	107.1				4
2200	59.9				2	89.9				3	116.4				4*
3000	75.6				3	113.4				4	145.5				5*

Maximum Unit Capacity (GPM), 40-130 °F				
# Units	INN600	INN800	INN1060	INN1350
1	12.8	17.1	22.7	29.1
2	25.6	34.2	45.4	58.2
3	38.4	51.3	68.1	87.3
4	51.2	68.4	90.8	116.4
5	64	85.5	113.5	145.5
6	76.8	102.6	136.2	174.6
7	89.6	119.7	158.9	203.7
8	102.4	136.8	181.6	232.8
9	115.2	153.9	204.3	261.9
10	128	171	227	291

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

****If this facility has sustained peak shower loads where 80-100% of the showers are typically on at the same time; use the "Group Shower Load" sizing chart.

RESTAURANT

Domestic Water Inlet - Outlet Conditions: 40-130 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
5	17.1		1			25.6	2				34.0		2		
15	22.1			1		33.1		2			44.1			2	
25	25.6				1	38.4			2		51.2				2
50	34.2		2			51.3				2	68.4			3	
75	41.6			2		62.4			3		83.3				3
100	45.3			2		67.9			3		90.6			3	
150	53.2				2	79.8				3	106.4				4
200	59.0				2	88.5				3	118.0				4
250	64.9			3		97.4				4	129.9				5
300	68.0			3		102.0				4	136.0				5
350	73.8				3	110.6				4	145.5				5*
400	79.2				3	116.4				4*	145.5				5*
550	99.6				4	145.5				5*	174.6				6*
700	115.8				4	145.5				5*	174.6				6*
900	135.4				5	174.6				6*	203.7				7*
1100	153.2				6	203.7				7*	232.8				8*
1500	184.3				7	232.8				8*	227.0				9*

Maximum Unit Capacity (GPM), 40-130 °F				
# Units	INN600	INN800	INN1060	INN1350
1	12.8	17.1	22.7	29.1
2	25.6	34.2	45.4	58.2
3	38.4	51.3	68.1	87.3
4	51.2	68.4	90.8	116.4
5	64	85.5	113.5	145.5
6	76.8	102.6	136.2	174.6
7	89.6	119.7	158.9	203.7
8	102.4	136.8	181.6	232.8
9	115.2	153.9	204.3	261.9
10	128	171	227	291

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

GROUP SHOWER LOAD : GYMNASIUM, FIELD HOUSE, SPORTS ARENA, STADIUM, MILITARY BARRACKS, AND PRISONS

Domestic Water Inlet - Outlet Conditions: 40-130 °F

Shower Count	Design Load (GPM)	Design Load				Design Load W/N+1 Excess Capacity			
		INN600	INN800	INN1060	INN1350	INN600	INN800	INN1060	INN1350
5	9.7	1				2			
10	19.4			1				2	
15	29.2		2				3		
20	38.9			2				3	
25	48.6				2				3
30	58.2				2				3
35	67.9			3				4	
40	77.6				3				4
45	87.3				3				4

Maximum Unit Capacity (GPM), 40-130 °F				
# Units	INN600	INN800	INN1060	INN1350
1	12.8	17.1	22.7	29.1
2	25.6	34.2	45.4	58.2
3	38.4	51.3	68.1	87.3
4	51.2	68.4	90.8	116.4
5	64	85.5	113.5	145.5
6	76.8	102.6	136.2	174.6
7	89.6	119.7	158.9	203.7
8	102.4	136.8	181.6	232.8
9	115.2	153.9	204.3	261.9
10	128	171	227	291

NOTES:

* This sizing is based on 2.5 GPM shower heads, 110°F fixture outlet temperature, all showers are on full for 15 minutes, and the tank recovery time (when employed) can be up to 20 minutes.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

**** When storage tanks are employed, 140 °F is the minimum domestic hot water setpoint. See pg. D300.14 for sizing recommendation above 30 shower heads.

HOTELS/MOTELS - MIXED OCCUPANCY

Domestic Water Inlet - Outlet Conditions: 40-120 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	12.7	1				19.0	2				25.4	2			
50	16.5		1			24.8	2				33.0		2		
100	22.8			1		34.2		2			45.6			2	
150	25.4			1		38.0		2			50.7			2	
200	28.8				1	43.3			2		57.7				2
250	31.7				1	47.5			2		63.3				2
300	34.1		2			51.1			2		68.1			3	
350	36.7		2			55.0				2	73.4			3	
400	38.5		2			57.7				2	76.9			3	
550	45.1			2		67.6			3		90.2				3
700	50.8			2		76.1			3		101.5			4	
1000	63.2				2	94.8				3	126.4				4
1200	71.0			3		106.4				4	141.9				5
1500	79.8				3	119.7				4	159.6				5
1800	93.0				3	131.2				4*	164.0				5*
2200	105.0				4	157.5				5	196.8				6*
3000	131.2				4	164.0				5*	196.8				6*

Maximum Unit Capacity (GPM), 40-120 °F				
# Units	INN600	INN800	INN1060	INN1350
1	14.5	19.3	25.6	32.8
2	29	38.6	51.2	65.6
3	43.5	57.9	76.8	98.4
4	58	77.2	102.4	131.2
5	72.5	96.5	128	164
6	87	115.8	153.6	196.8
7	101.5	135.1	179.2	229.6
8	116	154.4	204.8	262.4
9	130.5	173.7	230.4	295.2
10	145	193	256	328

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

HOTELS/MOTELS - CONVENTION CENTER/BUSINESS MEETING

Domestic Water Inlet - Outlet Conditions: 40-120 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	18.0		1			26.9	2				35.9		2		
50	23.4			1		35.1		2			46.8			2	
100	32.3		2			48.5			2		64.6				2
150	37.8		2			56.7				2	75.7			3	
200	41.5			2		62.3				2	83.1				3
250	44.8			2		67.3			3		89.7				3
300	48.2			2		72.4			3		96.5				3
350	51.0			2		76.5			3		102.0			4	
400	55.9				2	83.8				3	111.8				4
550	63.9				2	95.8				3	127.7				4
700	74.4			3		111.6				4	148.8				5
1000	91.1				3	131.2				4*	164.0				5*
1200	100.5				4	128.0				5*	196.8				6*
1500	113.1				4	164.0				5*	196.8				6*
1800	131.2				4	164.0				5*	196.8				6*
2200	148.8				5	196.8				6*	229.6				7*
3000	179.1				6	229.6				7*	262.4				8*

Maximum Unit Capacity (GPM), 40-120 °F				
# Units	INN600	INN800	INN1060	INN1350
1	14.5	19.3	25.6	32.8
2	29	38.6	51.2	65.6
3	43.5	57.9	76.8	98.4
4	58	77.2	102.4	131.2
5	72.5	96.5	128	164
6	87	115.8	153.6	196.8
7	101.5	135.1	179.2	229.6
8	116	154.4	204.8	262.4
9	130.5	173.7	230.4	295.2
10	145	193	256	328

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

APARTMENT COMPLEXES/CONDOMINIUMS

Domestic Water Inlet - Outlet Conditions: 40-120 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	10.7	1				16.1	2				21.5	2			
50	14.2	1				21.3	2				28.4	2			
100	18.9		1			28.3	2				37.7		2		
150	22.5				1	33.8		2			45.0			2	
200	25.1				1	37.7		2			50.2			2	
250	27.3				1	41.0			2		54.6				2
300	28.8				1	43.1			2		57.5				2
350	31.2				1	46.8			2		62.4				2
400	33.6		2			50.5			2		67.3			3	
550	40.2			2		60.3				2	80.4				3
700	46.0			2		69.0			3		92.0				3
1000	51.2			2		76.8			3		102.4			4	
1200	59.8				2	89.7				3	119.6				4
1500	65.6				2	98.4				3	131.2				4
1800	73.1			3		102.4				4	146.3				5
2200	81.1				3	121.6				4	162.2				5
3000	105.5				4	158.2				5	196.8				6*

Maximum Unit Capacity (GPM), 40-120 °F				
# Units	INN600	INN800	INN1060	INN1350
1	14.5	19.3	25.6	32.8
2	29	38.6	51.2	65.6
3	43.5	57.9	76.8	98.4
4	58	77.2	102.4	131.2
5	72.5	96.5	128	164
6	87	115.8	153.6	196.8
7	101.5	135.1	179.2	229.6
8	116	154.4	204.8	262.4
9	130.5	173.7	230.4	295.2
10	145	193	256	328

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

NURSING HOMES, ASSISTED LIVING

Domestic Water Inlet - Outlet Conditions: 40-120 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	18.0		1			26.9	2				35.9		2		
50	23.4			1		35.1		2			46.8			2	
100	32.3		2			48.5			2		64.6				2
150	37.8		2			56.7				2	75.7			3	
200	41.5			2		62.3				2	83.1				3
250	44.8			2		67.3			3		89.7				3
300	48.2			2		72.4			3		96.5				3
350	51.0			2		76.5			3		102.0			4	
400	55.9				2	83.8				3	111.8				4
550	63.9				2	95.8				3	127.7				4
700	74.4			3		111.6				4	148.8				5
1000	91.1				3	131.2				4*	164.0				5*
1200	100.5				4	128.0				5*	196.8				6*
1500	113.1				4	164.0				5*	196.8				6*
1800	131.2				4	164.0				5*	196.8				6*
2200	148.8				5	196.8				6*	229.6				7*
3000	179.1				6	229.6				7*	262.4				8*

Maximum Unit Capacity (GPM), 40-120 °F				
# Units	INN600	INN800	INN1060	INN1350
1	14.5	19.3	25.6	32.8
2	29	38.6	51.2	65.6
3	43.5	57.9	76.8	98.4
4	58	77.2	102.4	131.2
5	72.5	96.5	128	164
6	87	115.8	153.6	196.8
7	101.5	135.1	179.2	229.6
8	116	154.4	204.8	262.4
9	130.5	173.7	230.4	295.2
10	145	193	256	328

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

HOSPITALS, MEDICAL FACILITIES, PSYCHIATRIC CENTERS

Domestic Water Inlet - Outlet Conditions: 40-120 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	18.0		1			26.9	2				35.9		2		
50	23.4			1		35.1		2			46.8			2	
100	32.3		2			48.5			2		64.6				2
150	37.8		2			56.7				2	75.7			3	
200	41.5			2		62.3				2	83.1				3
250	44.8			2		67.3			3		89.7				3
300	48.2			2		72.4			3		96.5				3
350	51.0			2		76.5			3		102.0			4	
400	55.9				2	83.8				3	111.8				4
550	63.9				2	95.8				3	127.7				4
700	74.4			3		111.6				4	148.8				5
1000	91.1				3	131.2				4*	164.0				5*
1200	100.5				4	128.0				5*	196.8				6*
1500	113.1				4	164.0				5*	196.8				6*
1800	131.2				4	164.0				5*	196.8				6*
2200	148.8				5	196.8				6*	229.6				7*
3000	179.1				6	229.6				7*	262.4				8*

Maximum Unit Capacity (GPM), 40-120 °F				
# Units	INN600	INN800	INN1060	INN1350
1	14.5	19.3	25.6	32.8
2	29	38.6	51.2	65.6
3	43.5	57.9	76.8	98.4
4	58	77.2	102.4	131.2
5	72.5	96.5	128	164
6	87	115.8	153.6	196.8
7	101.5	135.1	179.2	229.6
8	116	154.4	204.8	262.4
9	130.5	173.7	230.4	295.2
10	145	193	256	328

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

SCHOOLS - ELEMENTARY, MIDDLE , HIGH SCHOOLS, AND COLLEGES

Domestic Water Inlet - Outlet Conditions: 40-120 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	9.2	1				13.8	2				18.5	2			
50	12.5	1				18.7	2				25.0	2			
100	17.9		1			26.8	2				35.8		2		
150	21.9			1		32.9		2			43.9			2	
200	24.9			1		37.3		2			49.7			2	
250	26.6				1	39.8			2		53.1				2
300	27.7				1	41.5			2		55.4				2
350	28.8				1	43.2			2		57.6				2
400	30.9				1	46.4			2		61.9				2
550	37.0		2			55.5				2	74.0			3	
700	42.4			2		63.6				2	84.8				3
1000	51.1			2		76.6			3		102.1				4
1200	56.9				2	85.4				3	113.9				4
1500	63.8				2	95.7				3	127.6				4
1800	67.8			3		101.8			4		135.7				5
2200	75.9			3		113.9				4	151.9				5
3000	95.7				3	131.2				4*	164.0				5*

Maximum Unit Capacity (GPM), 40-120 °F				
# Units	INN600	INN800	INN1060	INN1350
1	14.5	19.3	25.6	32.8
2	29	38.6	51.2	65.6
3	43.5	57.9	76.8	98.4
4	58	77.2	102.4	131.2
5	72.5	96.5	128	164
6	87	115.8	153.6	196.8
7	101.5	135.1	179.2	229.6
8	116	154.4	204.8	262.4
9	130.5	173.7	230.4	295.2
10	145	193	256	328

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

****If this facility has sustained peak shower loads where 80-100% of the showers are typically on at the same time; use the "Group Shower Load" sizing chart

UNIVERSITY/COLLEGE DORMITORIES

Domestic Water Inlet - Outlet Conditions: 40-120 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	19.0		1			28.5	2				38.0		2		
50	24.8			1		37.1		2			49.5			2	
100	34.0		2			51.0			2		68.0			3	
150	38.3		2			57.4				2	76.5			3	
200	44.0			2		66.0				2	88.0				3
250	47.5			2		71.2			3		95.0				3
300	51.1			2		76.6			3		102.2			4	
350	55.0				2	82.5				3	110.0				4
400	59.2				2	88.8				3	118.4				4
550	65.6				2	98.4				3	131.2				4
700	76.8			3		115.2				4	153.6				5
1000	96.4				3	131.2				4*	164.0				5*
1200	106.4				4	159.6				5	196.8				6*
1500	119.7				4	164.0				5*	196.8				6*
1800	139.5				5	196.8				6*	229.6				7*
2200	153.0				5	196.8				6*	229.6				7*
3000	196.7				6	229.6				7*	262.4				8*

Maximum Unit Capacity (GPM), 40-120 °F				
# Units	INN600	INN800	INN1060	INN1350
1	14.5	19.3	25.6	32.8
2	29	38.6	51.2	65.6
3	43.5	57.9	76.8	98.4
4	58	77.2	102.4	131.2
5	72.5	96.5	128	164
6	87	115.8	153.6	196.8
7	101.5	135.1	179.2	229.6
8	116	154.4	204.8	262.4
9	130.5	173.7	230.4	295.2
10	145	193	256	328

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

HEALTH CLUBS, SPAS, YMCA/YWCA, AND COUNTRY CLUBS

Domestic Water Inlet - Outlet Conditions: 40-120 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	10.3	1				15.4	2				20.5	2			
50	13.9	1				20.8	2				27.8	2			
100	19.3		1			28.9	2				38.6		2		
150	24.4			1		36.6		2			48.8			2	
200	27.6				1	41.4			2		55.3				2
250	29.0				1	43.5			2		58.0				2
300	30.8				1	46.1			2		61.5				2
350	32.0				1	48.0			2		64.0				2
400	34.4		2			51.6			2		68.8			3	
550	41.1			2		61.7				2	82.3				3
700	47.1			2		70.7			3		94.3				3
1000	57.4				2	86.1				3	114.8				4
1200	63.3				2	94.9				3	126.5				4
1500	70.9			3		106.3				4	141.8				5
1800	75.4			3		113.1				4	150.8				5
2200	84.4				3	126.6				4	164.0				5*
3000	106.4				4	159.6				5	196.8				6*

Maximum Unit Capacity (GPM), 40-120 °F				
# Units	INN600	INN800	INN1060	INN1350
1	14.5	19.3	25.6	32.8
2	29	38.6	51.2	65.6
3	43.5	57.9	76.8	98.4
4	58	77.2	102.4	131.2
5	72.5	96.5	128	164
6	87	115.8	153.6	196.8
7	101.5	135.1	179.2	229.6
8	116	154.4	204.8	262.4
9	130.5	173.7	230.4	295.2
10	145	193	256	328

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

****If this facility has sustained peak shower loads where 80-100% of the showers are typically on at the same time; use the "Group Shower Load" sizing chart.

****See GF-5080 for commercial laundry system sizing guidelines.

PRISONS AND CORRECTIONAL FACILITIES

Domestic Water Inlet - Outlet Conditions: 40-120 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	19.0		1			28.5	2				38.0		2		
50	24.8			1		37.1		2			49.5			2	
100	34.0		2			51.0			2		68.0			3	
150	38.3		2			57.4				2	76.5			3	
200	44.0			2		66.0				2	88.0				3
250	47.5			2		71.2			3		95.0				3
300	51.1			2		76.6			3		102.2			4	
350	55.0				2	82.5				3	110.0				4
400	59.2				2	88.8				3	118.4				4
550	65.6				2	98.4				3	131.2				4
700	76.8			3		115.2				4	153.6				5
1000	96.4				3	131.2				4*	164.0				5*
1200	106.4				4	159.6				5	196.8				6*
1500	119.7				4	164.0				5*	196.8				6*
1800	139.5				5	196.8				6*	229.6				7*
2200	153.0				5	196.8				6*	229.6				7*
3000	196.7				6	229.6				7*	262.4				8*

Maximum Unit Capacity (GPM), 40-120 °F				
# Units	INN600	INN800	INN1060	INN1350
1	14.5	19.3	25.6	32.8
2	29	38.6	51.2	65.6
3	43.5	57.9	76.8	98.4
4	58	77.2	102.4	131.2
5	72.5	96.5	128	164
6	87	115.8	153.6	196.8
7	101.5	135.1	179.2	229.6
8	116	154.4	204.8	262.4
9	130.5	173.7	230.4	295.2
10	145	193	256	328

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

****If this facility has sustained peak shower loads where 80-100% of the showers are typically on at the same time; use the "Group Shower Load" sizing chart.

****See GF-5080 for commercial laundry system sizing guidelines.

OFFICE, COMMERCIAL, RETAIL

Domestic Water Inlet - Outlet Conditions: 40-120 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	8.2	1				12.3	2				16.4	2			
50	11.1	1				16.7	2				22.2	2			
100	15.9		1			23.9	2				31.8		2		
150	19.3		1			28.9	2				38.5		2		
200	22.1			1		33.2		2			44.2			2	
250	23.6			1		35.4		2			47.2			2	
300	24.6			1		36.9		2			49.2			2	
350	25.6			1		38.4		2			51.2			2	
400	27.5				1	41.3			2		55.0				2
550	32.8				1	49.2			2		65.6				2
700	37.7		2			56.6				2	75.4			3	
1000	45.9			2		68.9			3		91.8				3
1200	50.6			2		75.9			3		101.2			4	
1500	56.7				2	85.1				3	113.4				4
1800	60.3				2	90.5				3	120.6				4
2200	65.6				2	98.5				3	131.2				4
3000	85.1				3	127.7				4	164.0				5*

Maximum Unit Capacity (GPM), 40-120 °F				
# Units	INN600	INN800	INN1060	INN1350
1	14.5	19.3	25.6	32.8
2	29	38.6	51.2	65.6
3	43.5	57.9	76.8	98.4
4	58	77.2	102.4	131.2
5	72.5	96.5	128	164
6	87	115.8	153.6	196.8
7	101.5	135.1	179.2	229.6
8	116	154.4	204.8	262.4
9	130.5	173.7	230.4	295.2
10	145	193	256	328

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

INDUSTRIAL PLANT

Domestic Water Inlet - Outlet Conditions: 40-120 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
25	8.2	1				12.3	2				16.4	2			
50	11.1	1				16.7	2				22.2	2			
100	15.9		1			23.9	2				31.8		2		
150	19.3		1			28.9	2				38.5		2		
200	22.1			1		33.2		2			44.2			2	
250	23.6			1		35.4		2			47.2			2	
300	24.6			1		36.9		2			49.2			2	
350	25.6			1		38.4		2			51.2			2	
400	27.5				1	41.3			2		55.0				2
550	32.8				1	49.2			2		65.6				2
700	37.7		2			56.6				2	75.4			3	
1000	45.9			2		68.9			3		91.8				3
1200	50.6			2		75.9			3		101.2			4	
1500	56.7				2	85.1				3	113.4				4
1800	60.3				2	90.5				3	120.6				4
2200	65.6				2	98.5				3	131.2				4
3000	85.1				3	127.7				4	164.0				5*

Maximum Unit Capacity (GPM), 40-120 °F				
# Units	INN600	INN800	INN1060	INN1350
1	14.5	19.3	25.6	32.8
2	29	38.6	51.2	65.6
3	43.5	57.9	76.8	98.4
4	58	77.2	102.4	131.2
5	72.5	96.5	128	164
6	87	115.8	153.6	196.8
7	101.5	135.1	179.2	229.6
8	116	154.4	204.8	262.4
9	130.5	173.7	230.4	295.2
10	145	193	256	328

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

****If this facility has sustained peak shower loads where 80-100% of the showers are typically on at the same time; use the "Group Shower Load" sizing chart.

RESTAURANT

Domestic Water Inlet - Outlet Conditions: 40-120 °F

Fixture Unit Count	Design Load (GPM)	Design Load				150% Design Load (GPM)	Mutliples @ 150% Design Load				200% Design Load (GPM)	Multiples @ 200% Design Load			
		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350		INN600	INN800	INN1060	INN1350
5	19.3		1			29.0	2				38.6		2		
15	24.8			1		37.3		2			49.7			2	
25	29.0				1	43.6			2		58.1				2
50	38.3		2			57.4				2	76.5			3	
75	46.9			2		70.3			3		93.8				3
100	51.0			2		76.5			3		102.0			3	
150	59.9				2	89.9				3	119.8				4
200	65.6				2	98.4				3	131.2				4
250	73.1			3		109.7				4	146.3				5
300	76.6			3		114.9				4	153.2				5
350	83.1				3	124.6				4	164.0				5*
400	89.2				3	131.2				4*	164.0				5*
550	112.1				4	164.0				5*	196.8				6*
700	130.4				4	164.0				5*	196.8				6*
900	152.5				5	196.8				6*	229.6				7*
1100	172.5				6	229.6				7*	262.4				8*
1500	207.6				7	262.4				8*	256.0				9*

Maximum Unit Capacity (GPM), 40-120 °F				
# Units	INN600	INN800	INN1060	INN1350
1	14.5	19.3	25.6	32.8
2	29	38.6	51.2	65.6
3	43.5	57.9	76.8	98.4
4	58	77.2	102.4	131.2
5	72.5	96.5	128	164
6	87	115.8	153.6	196.8
7	101.5	135.1	179.2	229.6
8	116	154.4	204.8	262.4
9	130.5	173.7	230.4	295.2
10	145	193	256	328

NOTES:

* When design load requires 3 or more units, an additional 1-2 units will provide sufficient excess capacity.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

GROUP SHOWER LOAD : GYMNASIUM, FIELD HOUSE, SPORTS ARENA, STADIUM, MILITARY BARRACKS, AND PRISONS

Domestic Water Inlet - Outlet Conditions: 40-120 °F

Shower Count	Design Load (GPM)	Design Load				Design Load W/N+1 Excess Capacity			
		INN600	INN800	INN1060	INN1350	INN600	INN800	INN1060	INN1350
5	11.0	1				2			
10	21.9			1				2	
15	32.9		2				3		
20	43.8			2				3	
25	54.8				2				3
30	65.6				2				3
35	76.7			3				4	
40	87.6				3				4
45	98.6				3				4

Maximum Unit Capacity (GPM), 40-120 °F				
# Units	INN600	INN800	INN1060	INN1350
1	14.5	19.3	25.6	32.8
2	29	38.6	51.2	65.6
3	43.5	57.9	76.8	98.4
4	58	77.2	102.4	131.2
5	72.5	96.5	128	164
6	87	115.8	153.6	196.8
7	101.5	135.1	179.2	229.6
8	116	154.4	204.8	262.4
9	130.5	173.7	230.4	295.2
10	145	193	256	328

NOTES:

* This sizing is based on 2.5 GPM shower heads, 110°F fixture outlet temperature, all showers are on full for 15 minutes, and the tank recovery time (when employed) can be up to 20 minutes.

** Selections for altitudes less than 5000'. For higher altitudes, find ACF (altitude correction factor) on pg. D300.0 and divide actual fixture count by ACF, then select based on calculated values.

***Based on 40 °F inlet and building recirculation. For alternate inlet temperatures, find TCF (temperature correction factor) on p. D300.1 and multiply actual fixture count by TCF, then select based on calculated values.

**** When storage tanks are employed, 140 °F is the minimum domestic hot water setpoint. See pg. D300.14 for sizing recommendation above 30 shower heads.