



**Table 7.4.9.3.
 Minimum Permitted Size of Fixture Outlet Pipe
 and Hydraulic Loads for Fixtures**

Fixture	Min. Size of Fixture Outlet Pipe, in.	Hydraulic Load, fixture units
Autopsy table	1½	2
Bathroom group		
a) with flush tank		6
b) with direct flush valve		8
Bathtub (with or without shower)	1½	1½
Bathtub: foot, sitz, or slab	1½	1½
Bed pan washer	3	6
Beer cabinet	1½	1½
Bidet	1¼	1
Chinese range	1½	3
Clothes washer		
a) domestic	N/A	1½ with 2 in. trap
b) commercial	N/A	2 with 2 in. trap
Cup Sink	1¼	½
Dental unit or cuspidor	1¼	1
Dishwasher		½
a) domestic	1½	1 (no load when connected to garbage grinder or domestic sink)
b) commercial type	2	3
Drinking fountain	1¼	½
Fish tank or tray	1½	1½
Floor drain	2	2 with 2 in. trap 3 with 3 in. trap
Garbage grinder	2	3
Icebox	1¼	1
Laundry tray		
a) single or double units or 2 single units with common trap	1½	1½
b) 3 compartments	1½	2
Lavatory		
a) barber or beauty parlor	1½	1½
b) dental	1¼	1
c) domestic type single, or 2 single with common trap	1¼	1 with 1¼ in. trap 1½ with 1½ in. trap
d) multiple or industrial type	1½	3
Macerating Toilet System	¾	4
Potato Peeler	2	3
Shower Drain		
a) from 1 head	1½	1½
b) from 2 or 3 heads	2	3
c) from 4 to 6 heads	3	6
Sink		
a) domestic and other small type with or without garbage grinders, single, double, or 2 single with a common trap	1½	1½
b) other sinks	1½	1½ with 1½ in. trap 2 with 2 in. trap 3 with 3 in. trap
Urinal		
a) pedestal, siphon jet or blowout type	2	4
b) stall, washout type	2	2
c) wall		
i) washout type	1½	1½
ii) other types	2	3
Water closet		
a) with flush tank	3	4
b) with direct flush	3	6

**Table 8.2.1.3.A.
 Residential Occupancy**

Residential Occupancy	Volume (litres)
Apartments, Condominiums, Other Multi-family Dwellings - per person ¹	275
Boarding Houses	
a) Per person,	
i) with meals and laundry facilities, or	200
ii) without meals or laundry facilities, and	150
b) Per non-resident staff per 8 hour shift	40
Boarding School - per person	300
Dwellings	
a) 1 Bedroom Dwelling	750
b) 2 Bedroom Dwelling	1100
c) 3 Bedroom Dwelling	1600
d) 4 Bedroom Dwelling	2000
e) 5 Bedroom Dwelling	2500
f) Additional flow for ⁽²⁾	
i) each bedroom over 5,	500
ii) A) each 10 m ² (or part thereof) over 200 m ² up to 400 m ² ⁽³⁾ ,	100
B) each 10 m ² (or part thereof) over 400 m ² up to 600 m ² ⁽³⁾ , and	75
C) each 10 m ² (or part thereof) over 600 m ² ⁽³⁾ , or	50
iii) each fixture unit over 20 fixture units	50
Hotels and Motels (excluding bars and restaurants)	
a) Regular, per room	250
b) Resort hotel, cottage, per person	500
c) Self-service laundry, add per machine	2500
Work Camp/Construction Camp, semi-permanent per worker	250

**Table 8.2.1.5.
 Clearance Distances for Sewage Systems**

Clearance Distances for Class 1, 2 and 3 Sewage Systems				
		Minimum horizontal distance in metres from a spring used as a source of potable water or well other than a well with a watertight casing to a depth of at least 6 m.	Minimum horizontal distance in metres from a lake, river, pond, stream, reservoir, or a spring not used as a source of potable water.	Minimum horizontal distance in metres from a Property Line.
Earth Pit Privy	15	30	15	3
Privy Vault	10	15	10	3
Pail Privy				
Greywater System	10	15	15	3
Cesspool	30	60	15	3

Table 8.2.1.6.A.
Minimum Clearances for Treatment Units

Structure	1.5 m
Well	15 m
Lake	15 m
Pond	15 m
Reservoir	15 m
River	15 m
Spring	15 m
Stream	15 m
Property Line	3 m

Table 8.2.1.6.B.
Minimum Clearances for Distribution Pipe*

Structure	5 m
Well with a watertight casing to a depth of 6 m	15 m
Any other well	30 m
Lake	15 m
Pond	15 m
Reservoir	15 m
River	15 m
A spring not used as a source of potable water	15 m
Stream	15 m
Property Line	3 m

Note:

1. All clearance distances are increased by twice the height that the leaching bed/filter bed is raised above the original ground.
2. Clearances may be increased by municipal bylaws.

Table 8.2.1.6.C.
Minimum Clearances for Holding Tanks

Structure	1.5 m
Well with a watertight casing to a depth of at least 6 m	15 m
Any other well	15 m
A spring	15 m
Property Line	3 m

Table 2.
Soil Percolation Rates

Soil Type (unified soil classification)	Coefficient of Permeability K - cm/sec.	Percolation Time - T mins/cm.	Comment
Coarse Grained - More than 50% larger than #200			
G.W. - Well graded gravels, gravel-sand mixtures, little or no fines.	10 ⁻¹	<1	very permeable unacceptable
G.P. - Poorly graded gravels, gravel-sand mixtures, little or no fines.	10 ⁻¹	<1	very permeable unacceptable
G.M. - Silty gravels, gravel sand-silt mixtures.	10 ⁻² -10 ⁻⁴	4-12	Permeable to medium permeable depending on amount of silt.
G.C. - Clayey gravels, gravel-sand-clay mixtures.	10 ⁻⁴ -10 ⁻⁶	12-50	Important to estimate amount of silt and clay.
S.W. - Well-graded soils, gravelly sands, little or no fines.	10 ⁻¹ -10 ⁻⁴	2-12	medium permeability
S.P. - Poorly graded sands, gravelly sand, little or no fines.	10 ⁻¹ -10 ⁻³	2-8	medium permeability
S.M. - Silty sands, sand-silt mixtures.	10 ⁻³ -10 ⁻⁵	8-20	medium to low permeability
S.C. - Clayey sands, sand-clay mixtures.	10 ⁻⁴ -10 ⁻⁶	12-50	medium to low permeability (depends on amount of clay)

Table 3.
Approximate Relationship of Soil Types to Permeability and Percolation Time

Soil Type (unified soil classification)	Coefficient of Permeability K - cm/sec.	Percolation Time - T mins/cm.	Comment
Fine Grained - More than 50% passing #200			
M.L. - Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, clayey silts with slight plasticity.	10 ⁻⁵ - 10 ⁻⁶	20 - 50	medium to low permeability
C.L. - Inorganic clays of low to medium plasticity gravelly clays, sandy clays, silty clays, lean clays.	10 ⁻⁶ and less	over 50	unacceptable
O.L. - Organic silts, organic silty clays of low plasticity; liquid limit less than 50	10 ⁻⁵ and less	20 - over 50	acceptable depends on clay content
M.H. - Inorganic silts, micaceous or diatomaceous fine sandy soil or silty soils, elastic silts	10 ⁻⁶ and less	over 50	unacceptable
C.H. - Inorganic clays of medium to high plasticity, organic silts	10 ⁻⁷ and less	over 50	unacceptable
O.H. - Organic clays of medium to high plasticity-organic silt; liquid limit over 50	10 ⁻⁶ and less	over 50	unacceptable

NOTE: Greywater systems must be maintained at least 5 metres from any structure.