

表 4-5 日本における浄化槽の算定基準 (1)

Estimation of Population for wastewater purifier (JOHKASOU) of buildings

Category	Type of Building			Design Population		Wastewater generation and BOD load per design population (n) (Reference)		Time for discharging (Reference)	
				Formula	Unit	Wastewater per capita (liter per capita day)	BOD load (gram per capita day)		
1	Public hall	i	Public hall / cinema / theater	$n = 0.08A$	n : Design population (person) A : Total area (m2)	200	30	Public hall: 8 Theater: 10 Cinema: 12	
		ii	Race course / bicycle racetrack	$n = 16C$	n : Design population (person) C ^{Note 1} : Number of lavatory basin	150	40	10	
		iii	Gymnasium	$n = 0.065A$	n : Design population (person) A : Total area (m2)	155	40	15	
2	Residence	i	Residence	$A \leq 130$	$n = 5$	200	40	12	
				$130 < A$	$n = 7$				
				More than 2 kitchens and 2 bath	$n = 10$				
		ii	Apartment	$n = 0.05A$	n : Design population (person) A : Total area (m2) (Note) In case of $n \leq 3.5$, $n = 3.5$ or 2 (a compartment consists of one room) In case of $n \geq 6$, $n = 6$	200	40	12	
iii	Dormitory	$n = 0.07A$	n : Design population (person) A : Total area (m2)	200	28	8			
iv	Home for the aged / camp	$n = P$	n : Design population (person) P : Full number (person)	200	40	8 (Home for the aged :10)			
3	Accommodation	i	Hotel	With banquet room	$n = 0.15A$	n : Design population (person) A : Total area (m2)	200	40	10
				Without banquet room	$n = 0.075A$	n : Design population (person) A : Total area (m2)	400	40	
		ii	Motel	$n = 5R$	n : Design population (person) R : Number of room	200	30		
iii	Hostel	$n = P$	n : Design population (person) P : Full number (person)	200	40	8			
4	Medical facilities	i	Large scale	With kitchen and laundry equipment	B: less than 300 $n = 8B$ B: 300 or more $n = 11.43 (B - 300) + 2,400$	n : Design population (person) B : Number of bed	125	40	12
				Without kitchen and laundry equipment	B: less than 300 $n = 5B$ B: 300 or more $n = 7.14 (B - 300) + 1,500$		113	36	
							200	30	
							182	27	
ii	Small scale	$n = 0.19A$	n : Design population (person) A : Total area (m2)	130	40	8			
5	Shop	i	Shop / market	$n = 0.075A$		200	30	8	
		ii	Department store	$n = 0.15A$		200	30		
		iii	Restaurant	Moderate	$n = 0.72A$	n : Design population (person) A : Total area (m2)	180		40
				Heavily polluted	$n = 2.94A$		90		40
iv	Cafe	$n = 0.55A$		200	40				
6	Amusement facilities	i	Pull hall	$n = 0.80A$		200	30	10	
		ii	Pachinko parlors	$n = 0.075A$		200	30	8	
		iii	Pachinko parlors	$n = 0.11A$	n : Design population (person)	200	30	12	
		iv	Igo / mah-jongg club	$n = 0.15A$	A : Total area (m2)	200	30	8	
		v	Disco	$n = 0.50A$		200	30	6	
		v	Golf driving range	$n = 0.25S$	n : Design population (person) S : Number of range	200	30		
		vi	Bowling stadium	$n = 2.50L$	n : Design population (person) L : Number of lane	200	30	10	
		vii	Batting cage	$n = 0.20S$	n : Design population (person) S : Number of cage	200	30		
viii	Tennis club	With night lighting	$n = 3S$	n : Design population (person) S : Number of court	200	30			
		Without night lighting	$n = 2S$		200	30			

出典：JIS 「建築物の用途別によるし尿浄化槽の処理対象人員算定基準」を JICA 調査団が英訳

表 4-6 日本における浄化槽の算定基準（2）

Estimation of Population for wastewater purifier (JOHKASOU) of buildings

Category	Type of Building			Design Population		Wastewater generation and BOD load per design population (n) (Reference)		Time for discharging (Reference)		
				Formula	Unit	Wastewater per capita (liter per capita day)	BOD load (gram per capita day)			
6	Amusement facilities	ix	Amusement park / bathing beach		$n = 16C$	n : Design population (person) $C^{\text{Note 1}}$: Number of lavatory basin	150	40	7	
		x	Swimming pool / ice skate link		$n = (20C + 120U)/8 \times t$	n : Design population (person) C : Number of lavatory basin $U^{\text{Note 2}}$: Number of urinary t : Daily operating time per lavatory basins and urinary $t = 1.0 \sim 2.0$	-	-	10	
		xi	Camp		$n = 0.56P$	n : Design population (person) P : Full number (person)	125	40	8	
		xii	Golf link		$n = 21H$	n : Design population (person) H : Number of hole	250	26	10	
7	Parking lot	i	Service area	Toilet	Not located in sight seeing area	$n = 3.60P$	n : Design population (person) P : Number of parking space for one car	135	40	12
					Located in sightseeing area	$n = 3.83P$			40	
				Parking area without kiosk		$n = 2.55P$			40	
				Kiosk	Not located in sight seeing area	$n = 2.66P$			40	
		Located in sightseeing area	$n = 2.81P$		40					
		ii	Parking lot		$n = (20C + 120U)/8 \times t$	n : Design population (person) C : Number of lavatory basin $U^{\text{Note 2}}$: Number of urinary t : Daily operating time per lavatory basins and urinary $t = 0.4 \sim 2.0$		-	-	
iii	Gas station		$n = 20$	n : Design population (person)	-	-	8			
8	School	i	Kindergarten / elementary school / junior high school		$n = 0.20P$	n : Design population (person)	200	36	8	
		ii	Senior high school / college / university		$n = 0.25P$	P : Full number (person)	200	36	8	
		iii	Library		$n = 0.08A$	n : Design population (person) A : Total area (m ²)	200	30	5	
9	Office	i	Office	With kitchen	$n = 0.075A$	n : Design population (person)	200	40	8	
				Without kitchen	$n = 0.06A$	A : Total area (m ²)	270	40		
10	Workshop	i	Factory/ research institute / workshop / laboratory	With kitchen	$n = 0.75P$	n : Design population (person) P : Full number (person)	133	40	Factory/workshop (no shiftwork): 8 Factory/workshop (shiftwork): 12 to 24 Research institute/laboratory: 8	
				Without kitchen	$n = 0.30P$		200	30		
11	Others	i	Market		$n = 0.02A$	n : Design population (person)	200	40	10	
		ii	Public bath		$n = 0.17A$	A : Total area (m ²)	200	10	12	
		iii	Public toilet		$n = 16C$	n : Design population (person) $C^{\text{Note 1}}$: Number of lavatory basin	-	-	8	
		iv	Railway station/ bus terminal	$P < 100,000$	$n = 0.008P$	n : Design population (person) P : Number of passenger	-	-	-	First to last train
$100,000 \leq P < 200,000$	$n = 0.010P$									
$200,000 \leq P$	$n = 0.013P$									

Note 1: Total number of lavatory basin and urinary

Note 2: For women's toilet, about 1/2 of number of lavatory basin is regarded as urinary

出典：JIS 「建築物の用途別によるし尿浄化槽の処理対象人員算定基準」を JICA 調査団が英訳