Recommended Space for Experimental Animals

A. Commonly Used Group Laboratory Rodents

Animals	Weight, g	Floor Area/ Animal, in^{2a}	Height, ^{d} in^{e}
Mice	<10	6	5
	Up to 15	8	5
	Up to 25	12	5
	>25^{f}	>15	5
Rats	<100	17	7
	Up to 200	23	7
	Up to 300	29	7
	Up to 400	40	7
	Up to 500	60	7
	>500^{f}	>70	7
Hamsters	<60	10	6
	Up to 80	13	6
	Up to 100	16	6
	>100	>19	6
Guinea pigs	<350	60	7
	>350	>101	7

B. Rabbits, Cats, Dogs, Nonhuman Primates, and Birds

Animals	Weight, kg^{b}	Floor Area/ Animal, ft^{2c}	Height, ^{d} in^{e}
Rabbits	<2	1.5	14
	Up to 4	3.0	14
	Up to 5.4	4.0	14
	>5.4^{f}	5.0	14
Cats	<4	3.0	24
	>4^{f}	>4.0	24
Dogs	<15	8.0	-
	Up to 30	12.0	-
	>30	>24.0	-
Monkeys^{h,i} (including baboons)			
Group 1	Up to 1	1.6	20
Group 2	Up to 3	3.0	30
Group 3	Up to 10	4.3	30
Group 4	Up to 15	6.0	32
Group 5	Up to 25	8.0	36
Group 6	Up to 30	10.0	46
Group 7	>30^{f}	15.0	46
Apes (Pongidae)^{i}			
Group 1	Up to 20	10.0	55
Group 2	Up to 35	15.0	60
Group 3	>35^{j}	25.0	84
Pigeons^{k}	-	0.8	-

Quail[k]	-	0.25	-
Chickens[k]	<0.25	0.25	-
	Up to 0.5	0.50	-
	Up to 1.5	1.00	-
	Up to 3.0	2.00	-
	>3.0[f]	>3.00	-

[a] To convert square inches to square centimeters, multiply by 6.45.

[b] To convert kilograms to pounds, multiply by 2.2.

[c] To convert square feet to square meters, multiply by 0.09.

[d] From cage floor to cage top.

[e] To convert inches to centimeters, multiply by 2.54.

[f] Larger animals might require more space to meet performance standards (see text of the *Guide for the Care and Use of Laboratory Animals*, 1996 edition)

[g] These recommendations might require modification according to the body conformation of individual animals and breeds. Some dogs, especially those toward upper limit of each weight range, might require additional space to ensure compliance with the regulations of the Animal Welfare Act. These regulations (CFR 1985) mandate that the height of each cage be sufficient to allow occupant to stand in "comfortable position" and that the minimal square feet of floor space be equal to "mathematical square of the sum of the length of the dog in inches (measured from the tip of its nose to the base of its tail) plus 6 inches; then divide the product by 144.

[h] *Callitricidae, Cebidae, Cercopithecidae*, and *Papio*. Baboons might require more height than other monkeys.

[l] For some species (e.g., *Brachyteles, Hylobates, Symphalagus, Pongo* and *Pan*), cage height should be such that an animal can, when fully extend, swing from the cage ceiling without having its feet touch the floor. Cage-ceiling design should enhance brachiating movement.

[j] Apes weighing over 50 kg are more effectively housed in permanent housing of masonry, concrete, and wire-panel structure than in conventional caging.

[k] Cage height should be sufficient for the animals to stand erect with their feet on the floor.

From *Guide for the Care and Use of Laboratory Animals*.

C. Commonly Used Farm Animals

Animals/ Enclosure	Weight, kg[a]	Floor Area/ Animal, ft^{2}[b]
Sheep and Goats		
1	< 25	10.0
	Up to 50	15.0
	> 50[c]	20.0
2.5	<25	8.5
	Up to 50	12.5
	> 50 [c]	17.0
>5	25	7.5
	Up to 50	11.3
>50	15.0	
Swine		
1	<15	8.0
	Up to 25	12.0
	Up to 50	15.0
	Up to 100	24.0
	Up to 200	48.0
	>200 [c]	>60.0
2-5	<25	6.0
	Up to 50	10.0
	Up to 100	20.0
	Up to 200	40.0
	>200 [c]	>52.0
	<25	6.0
>5	Up to 50	9.0
	Up to 100	18.0
	Up to 200	36.0
	>200 [c]	>48.0
Cattle		
1	<75	24.0
	Up to 200	48.0
	Up to 350	72.0
	Up to 500	96.0
	Up to 650	124.0
	>650 [c]	>144.0
2-5	<75	20.0
	Up to 200	40.0
	Up to 350	60.0
	Up to 500	80.0
	Up to 650	105.0
	>650 [c]	>120.0
>5	<75	18.0
	Up to 200	36.0
	Up to 350	54.0

	Up to 500	72.0
	Up to 650	93.0
	>650 [c]	>108.0
Horses	-	144.0
Ponies		
1-4	-	72.0
>4/Pen	<200	60.0
	>200 [c]	>72.0

a To convert kilograms to pounds, multiply by 2.2.

[b] To convert square feet to square meters, multiply by 0.09.

[c] Larger animals might require more space to meet performance standards

From Guide *for the Care and Use of Laboratory Animals*.