

Additional Reference Tables for Policy 110 Housing Density

Rodents				
Animals	Housing Arrangement	Weight (g)	Floor Area/ Animal (in ²)	Height (in)
Mice	Group Housing of Compatible Animals	<10	6	5
		10-15	8	5
		15-25	12	5
		25-35	15	5
		35-45*	19	5
		>45*	23	5
	Female + litter		51	5
Rats	Group Housing of Compatible Animals	<100	17	7
		100-200	23	7
		200-300	29	7
		300-400	40	7
		400-500	60	7
		500-650	70	7
		650-800*	80	7
	>800*	90	7	
Female + litter		124	7	
Hamsters		<60	10	6
		60-80	13	6
		80-100	16	6
		>100	≥19	6
Guinea Pigs	Group Housing of Compatible Animals	<350	60	7
		350-700	101	7
		>700*	155	7

* These space requirements were determined by projecting the recommendations for lower weight ranges and are intended to serve as a guideline on space requirements to meet the performance standards as specified in the *ILAR Guide*.

Rabbits, Cats, and Dogs				
Animals	Housing Arrangement	Weight (kg)	Floor Area/ Animal (ft ²)	Height (in)
Rabbits	Individual Housing	<2	1.5	16
		2-4	3	16
		4-5.4	4	16
		>5.4	≥5.0	16
Cats	Individual or Pair Housing	≤4	3	24
		>4	≥4.0	24
Dogs*	Individual or Pair Housing	<15	8	-
		15-30	12	-
		>30	≥24	-

* The requirements of the Animal Welfare Regulations (9CFR §3.6-3.8) are dependent upon the dog's length and differ considerably from the space recommendations in the *ILAR Guide*. Adherence to the requirements of the Animal Welfare Regulations (9CFR §3.6-3.8) is mandatory.

Nonhuman Primates				
Animals	Housing Arrangement	Weight (kg)	Floor Area/ Animal (ft ²)	Height (in)
Macaques	Individual, Pairs, or Groups	≤10	4.3	30
		10-15	6	32

Avian Species in Biomedical Research				
Animals	Housing Arrangement	Weight (kg)	Floor Area/ Animal (ft ²)	Height (in)
Pigeons	Individual, Pairs, or Groups		0.8	-
Quail	Individual, Pairs, or Groups		0.25	-
Chickens	Individual, Pairs, or Groups	<0.25	0.25	-
		0.25-0.5	0.5	-
		0.5-1.5	1	-
		1.5-3.0	2	-
		>3.0	≥3.0	-

Agricultural Species in Biomedical Research				
Animals	Housing Arrangement	Weight (kg)	Floor Area/ Animal (ft²)	Height (in)
Horses		-	144	-
Ponies	1-4/enclosure	-	72	-
	>4/enclosure	≤200	60	-
		>200	≥72	-
Sheep & Goats	Individual	<25	10	-
		25-50	15	-
		>50	≥20	-
	2-5/enclosure	<25	8.5	-
		25-50	12.5	-
		>50	≥17	-
	>5/enclosure	<25	7.5	-
		25-50	11.3	-
		>50	≥15	-
Swine	Individual	<15	8	-
		15-25	12	-
		25-50	15	-
		50-100	24	-
		100-200	48	-
		>200	≥60	-
	2-5/enclosure	<25	6	-
		25-50	10	-
		50-100	20	-
		100-200	40	-
		>200	52	-
	>5/enclosure	<25	6	-
		25-50	9	-
		50-100	18	-
		100-200	36	-
>200		48	-	

Agricultural Species in Biomedical Research				
Animals	Housing Arrangement	Weight (kg)	Floor Area/ Animal (ft ²)	Height (in)
Cattle	Individual	<75	24	-
		75-200	48	-
		200-350	72	-
		350-500	96	-
		500-650	124	-
		>650	≥144	-
	2-5/enclosure	<75	20	-
		75-200	40	-
		200-350	60	-
		350-500	80	-
		500-650	105	-
		>650	≥120	-
	>5/enclosure	<75	18	-
		75-200	36	-
		200-350	54	-
		350-500	72	-
		500-650	93	-
		>650	≥108	-

Agricultural Species in Agricultural Research			
Animals	Housing Arrangement	Animal Description	Floor Area Dimensions (ft)
Horses & Ponies	Indoor Facilities		
	Box Stall	Individual Housing - 20 ft ² /100 kg	12 x 12
	Straight or Tie Stall	Individual Housing - 9 ft ² / 100 kg	5 x 12
	Outdoor Facilities		
	Run-in Shed	per 1000 lb horse; up to 2 horses	11 x 11
	Outdoor Pen	for single horse	12 x 12

Agricultural Species in Agricultural Research				
Animals	Housing Arrangement	Animal Description	Weight (kg)	Floor Area/ Animal (ft ²)
Sheep & Goats	Solid Floor	Rams	65-90	20-30
		Dry Ewes	65-90	12-16
		Feeder Lambs	14-50	8-10
		Lamb Creep Area	2-14	1.5-2.0
		Ewes & Lambs	-	15-20
	Slotted Floor	Rams	65-90	14-20
		Dry Ewes	65-90	8-10
		Feeder Lambs	14-50	4-5
		Lamb Creep Area	2-14	1.5-2.0
		Ewes & Lambs	-	10-12
	Dirt Lot	Rams	65-90	25-40
		Dry Ewes	65-90	25-40
		Feeder Lambs	14-50	20-30
		Lamb Creep Area	2-14	-
		Ewes & Lambs	-	30-50
Paved Lot	Rams	65-90	16	
	Dry Ewes	65-90	16	
	Feeder Lambs	14-50	10	
	Lamb Creep Area	2-14	-	
	Ewes & Lambs	-	20	
Animals	Housing Arrangement	Animal Description	Weight (kg)	Floor Area/ Animal (ft ²)
Swine	Individual	Nursery	3-27	6
		Growing	27-57	10
		Finishing	57-104	14
		Late Finishing	105-125	14
		Mature Adults	>125	14
	5-20/enclosure	Nursery	3-27	1.7-4
		Growing	27-57	4-6
		Finishing	57-104	6-8
		Late Finishing	105-125	8-9
		Mature Adults	>125	16
	Pen	Litter and Lactating Sow	-	35
Crate (Sow Portion)	Litter and Lactating Sow	-	14	

Agricultural Species in Agricultural Research					
Animals	Housing Arrangement	Animal Description	Weight (kg)	Floor Area Dimensions (in)	
Dairy Cattle	Free Stall	Dairy Cow 4-6 months	118-182	24 x 48	
		Dairy Cow 6-8 months	182-236	27 x 48	
		Dairy Cow 8-12 months	236-327	30 x 54-60	
		Dairy Cow 12-16 months	327-377	34-36 x 60-66	
		Dairy Cow 16-20 months	377-454	36-42 x 66-78	
		Dairy Cow 20-24 months	454-500	39 x 72	
		Dairy Cow 24-26 months	500-545	42 x 78-84	
		Dairy Cow 26-48 months	545-636	45 x 82-84	
		Dairy Cow 48-60 months	636-727	48 x 84-86	
		Dairy Cow >60 months	>727	48 x 90	
	Tie Stall	Dairy Cow 20-24 months	454-500	48 x 60-69	
		Dairy Cow 24-26 months	500-545	48 x 63-69	
		Dairy Cow 26-48 months	545-636	48 x 66-69	
		Dairy Cow 48-60 months	636-727	54 x 72	
		Dairy Cow >60 months	>727	60 x 72-78	
		Individual Mature Bulls		54-72 x 97-108	
		Animal Description	Housing Arrangement	Floor Area/ Animal (ft²)	
		Individual Calves	Hutches and yard or tether	6-12	
		Calves < 2 mos (<91 kg)	Bedded Pen	24-32	
		Calves 2-7 mos (< 182 kg, 3-12/group)	Stall	10-15	
	Moveable Shed plus Yard		21		
	Inside Pen		25-30		
	Individual Mature Bulls	Pens	140-240		
	Milking Cows	Paved Lot	100		
		Unpaved corrals	500		
	Dry Cows & Heifers (>454 kg)	Bedded pack and paved alley	40-96		

Agricultural Species in Agricultural Research				
Animals	Housing Arrangement	Animal Description	Weight (kg)	Floor Area/ Animal (ft ²)
Beef Cattle	Open unpaved lot with mound	Calves	180-380	150
		Finishing Cattle	360-545	250
		Bred Heifers	360-455	250
		Cows	455-590	200
		Large Cows	>590	300
		Bulls	≥680	500
	Unpaved lot	Calves	180-380	300
		Finishing Cattle	360-545	400
		Bred Heifers	360-455	400
		Cows	455-590	350
		Large Cows	>590	350
		Bulls	≥680	800
	Paved lot	Calves	180-380	40
		Finishing Cattle	360-545	50
		Bred Heifers	360-455	50
		Cows	455-590	60
		Large Cows	>590	60
		Bulls	≥680	100
	Barn, Open front-Dirt floor	Calves	180-380	15
		Finishing Cattle	360-545	20
		Bred Heifers	360-455	20
		Cows	455-590	20
		Large Cows	>590	25
		Bulls	≥680	40
Barn, Enclosed- Bedded pack	Calves	180-380	20	
	Finishing Cattle	360-545	30	
	Bred Heifers	360-455	30	
	Cows	455-590	35	
	Large Cows	>590	40	
	Bulls	≥680	45	
Barn, Enclosed-Slotted floor	Calves	180-380	12	
	Finishing Cattle	360-545	18	
	Bred Heifers	360-455	18	
	Cows	455-590	20	
	Large Cows	>590	22	
	Bulls	≥680	30	

Agricultural Species in Agricultural Research				
Animals	Animal Description	Housing Arrangement	Age (weeks)	Floor Area Dimensions (in ²)
Chickens, Egg-laying Strains	Females	Pens with litter	0 to 6	72
			6 to 18	144
			>18	252
		Cage	0-3	15
			3-6	24
			6-12	36
			12-18	48
			18-22	60
	>22		72	
	Males		Pens with litter	0 to 6
		4 to 18		187
		>18		328
		Cage	0-3	20
			3-6	31
			6-12	47
			12-18	62
18-22			78	
>22	94			
Animals	Animal Description	Housing Arrangement	Age (days)	Floor Area Dimensions (in ²)
Chickens, Meat-type	Males and/or Females	Pens with litter or multi-bird cages	0 to 13	38
			14 to 18	53
			19 to 24	67
			25 to 27	80
			28 to 31	94
			32 to 35	109
			36 to 39	121
			40 to 43	135
			44 to 48	147
			49 to 57	158
			>58	170

Agricultural Species in Agricultural Research				
Animals	Animal Description	Housing Arrangement	Age (days)	Floor Area Dimensions (in ²)
Chickens, Meat-type	Breeder Females or ratio of 1 male to 10 female	Pens with litter	0 to 21	50
			22 to 42	107
			43 to 63	135
			64 to 84	164
			85 to 105	192
			106 to 126	221
			127 to 140	250
			141 to 150	270
	151 to 160	288		
Chickens, Meat-type	Individually caged adult breeder female	Cage	>151	180
Chickens, Meat-type	Breeder males	Pens with litter	0 to 14	50
			15 to 28	107
			29 to 43	135
			44 to 61	164
			62 to 77	192
			78 to 92	221
			93 to 104	250
			105 to 120	270
			121 to 138	288
			139 to 149	306
			150 to 161	324
	>162	340		
Chickens, Meat-type	Individually caged adult breeder male	Cage	>162	216