

RRF Caging and Space Requirements Guide

**Using standards published in the *Guide for the Care and Use of
Laboratory Animals*, 8th edition (2011) and USDA standards.**

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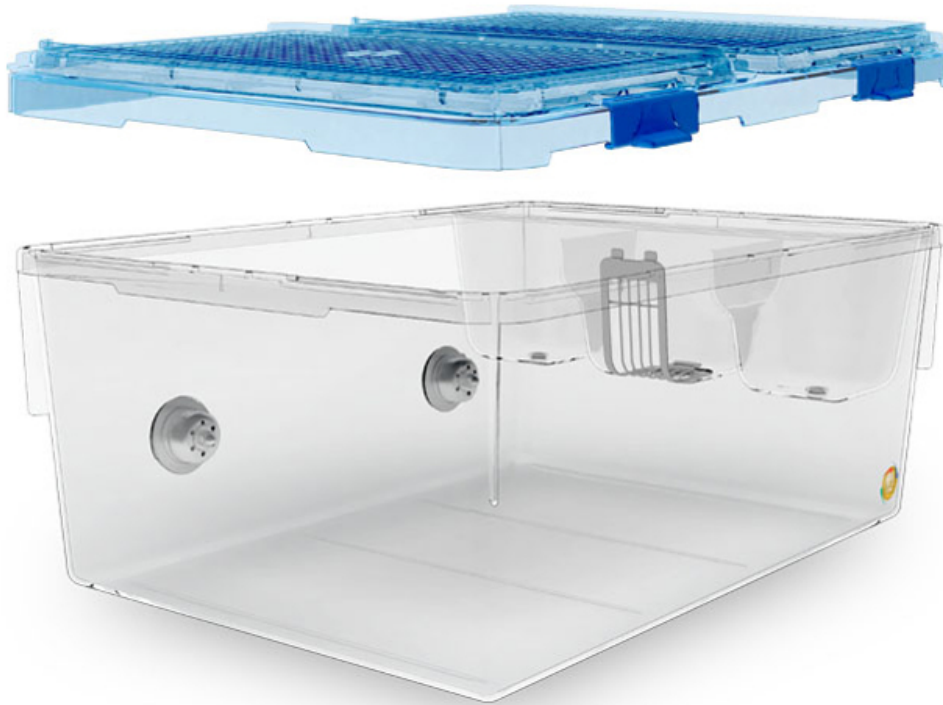
Supermouse 750 Mouse Plastic 6.6”W x 12”L x 5.5”H – 79 IN²



Animal	Weight (gms.)	Number per cage
Mice	<10	13 (mother + litter)
	Up to 15	9
	Up to 25	6
	>25	5

These are the standard units for housing mice. They are used on the Super Mouse 750™ High Density Housing System microisolator racks. They may be used with automatic water or bottles. Use a thin layer of bedding, 1/4” to 3/8”. Water port must line up to the manifold on the rack.

One Cage 2100 Ventilated Cage 17.5”W x 12.25”L x 7.63”H – 214 IN²



Animal	Weight (gms.)	Number per cage
Rats in groups	<100	12
	Up to 200	9
	Up to 300	7
	Up to 400	5
	Up to 500	3
	>500 ^a	3
Single mothers w/ pups	124 IN ² req. for the group	1 mother & pups

a. Larger animals may require more space to meet the performance standards published in the *Guide*.

These cages will normally house 2 adult rats plus 1 litter, 5 rats less than 400 grams, or 3 rats greater than 400 grams.

Conventional Mouse Plastic 6”W X 11”L X 6”H – 66 IN²



Animal	Weight (gms.)	Number per cage
Mice ^a	<10	11 (mother + litter) ^b
	Up to 15	8
	Up to 25	4
	>25	4

- a. Adult male mice may require single housing.
- b. Use a larger cage if possible for large litters.

These cages are rarely used as most rodent housing is in individually ventilated caging (IVCs). Bedding level should be about 1/2". These cages require more frequent cage changes than IVCs. RRF policy specifies no more than four adults in these cages.

Sealsafe Plus (Green Line) & ISOcage (Orange Line) Mouse Plastic
Floor Area – 78 IN²



Animal	Weight (gms.)	Number per cage
Mice	<10	13 (mother + litter)
	Up to 15	9
	Up to 25	6
	>25	5

Techniplast Sealsafe Plus cages are used at VA, and ISOcage cages are used at RBL. These are individually ventilated cages designed for biocontainment. Use a thin layer of bedding, 1/4” to 3/8”.

Flex-Air Plastic Mouse Cage 8.8" W x 13.8" D x 5.8" H – 76 IN²



Animal	Weight (gms.)	Number per cage
Mice	<10	13 (mother + litter)
	Up to 15	9
	Up to 25	6
	>25	5

These are used in the Inhalation Barrier facility on the 7th floor of the Medical Dental Research building.

Rat Plastic 8.5”W X 17”L X 8”H – 144 IN²



Animal	Weight (gms.)	Number per cage
Rats	<100	8
	Up to 200	6
	Up to 300	4
	Up to 400	3
	Up to 500	2
	>500 ^a	1 or 2
Hamsters ^b	<60	14
	Up to 80	11
	Up to 100	9
	>100 ^a	7

b. Larger animals may require more space to meet the performance standards published in the *Guide*.

c. Use a 6” high cage instead or a deep wire top feeder so that animals can reach the feed.

Note the automatic water port on the cage on the right. Care should be taken that this port is lined up correctly to the corresponding water valve on the shelf rack if bottles are not in use. The automatic water port may need to be blocked for breeding, as pups may escape through the port.

Techniplast Rabbit Cage 29.27 x 28.19 x 18.55– 5.73 FT² each



Animal	Weight (kgs.)	Number per cage
Rabbit	<2	3
	Up to 4	1
	Up to 5.4	1
	>5.4 ^a	1

a. Larger animals may require more space to meet the performance standards published in the *Guide*.

These modular cages are used for rabbits. Female rabbits should be housed in groups, which would require linking 2 or more racks together. Normal bedding for these units is paper, changed twice per week.

Guinea Pig Tubs 25”L X 25”W X 9”H – 625 IN²



Animal	Weight (gms.)	Number per cage
Guinea Pig	<350	10
	≥350	6 ^a

a. Larger animals may require more space to meet the performance standards published in the *Guide*.

Used on Lenderking™ Guinea Pig racks. Automatic water or bottles may be used.

Allentown Ventilated Rabbit/Ferret Rack - 5 FT² each cage



Animal	Weight (kgs.)	Number per cage
Rabbit	<2	3
	Up to 4	1
	Up to 5.4	1
	>5.4 ^a	1
Ferret ^b	Up to .6 (600g)	4
	Up to .8 (800g)	3
	> .8 (800g)	1
	Adult Male ^c	<i>Do Not Use</i>

- a. Larger animals may require more space to meet the performance standards published in the *Guide*.
- b. Per the UK "*Code of Practice*". NIH does not specify minimum cage size for ferrets.
- c. See Table 4.

RRC Large Animal Runs 4'W X 6' L – 24 FT² each section

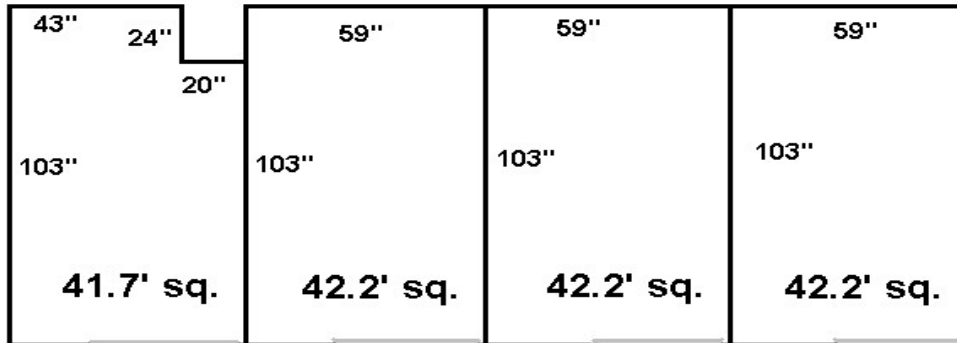


See the *Guide* to insure compliance with the *Animal Welfare Act*. Recommended floor space requirements from the *Guide* are found in Table 2 and Table 3. The space requirements listed in the *AWA* supercede the *Guide* and are based on size, not weight.

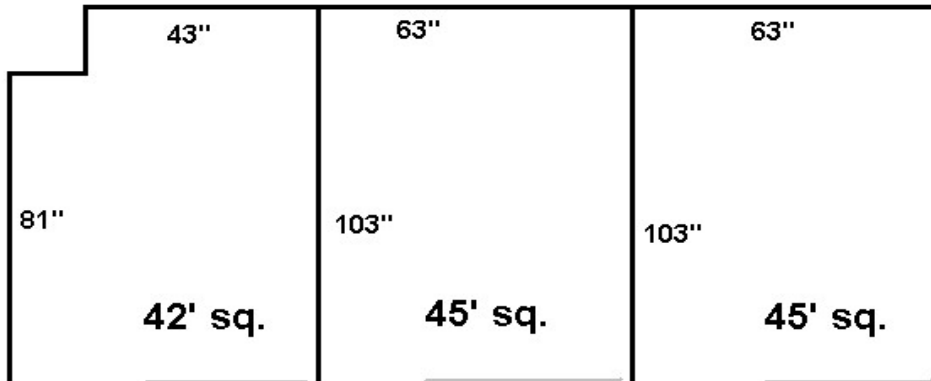
To insure compliance with the law at our facility, Dogs require twice the space recommended by the AWA (length from nose to tip of tail + 6" squared rule) or daily exercise.

CII Large Animal Runs

CII Room 6 - 168.3 sq. ft. all pens opened together



CII Room 8 – 132 sq. ft. all pens opened together



Species	Req. Space	Req. Space (group housed)	# per pen (single housed)	# per pen (group housed 2-5)
Sheep <25kg	10 ft2	8.5 ft2 ea.	4	4-5
Sheep 25 to 50kg	15 ft2	12.5 ft2 ea.	2-3	3
Sheep >50kg	20 ft2	17 ft2 ea.	2	2
Swine <15kg	8 ft2	NA	5	NA
Swine 15 to 25kg	12 ft2	6 ft2 ea.	3	6-7
Swine >25 to 50kg	15 ft2	10 ft2 ea.	2	4
Swine >50 to 100kg	24 ft2	20 ft2 ea.	1	2
Swine >100 to 200kg	48 ft2	40 ft2 ea.	2 pens	1
Cattle <75kg	24 ft2	20 ft2 ea.	1	2
Cattle 75 to 200kg	48 ft2	40 ft2 ea.	2 pens	1

Table 1**Recommended Space for Commonly Used Group-Housed Laboratory Rodents**(From the *Guide for the Care and Use of Laboratory Animals*, 2011 edition)

Animals	Weight (gms.)	Floor Area/Animal (in. ²)	Height (in.)
Mice	<10	6	5
	Up to 15	8	5
	Up to 25	12	5
	>25	At least 15 ^a	5
	Mother + litter	At least 51	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	At least 70 ^a	7
	Mother + litter	At least 124	7
Hamsters	<60	10	6
	Up to 80	13	6
	Up to 100	16	6
	>100	At least 19 ^a	6
	Guinea Pigs	<350	60
>350		At least 101 ^a	7

a. Larger animals may require more space to meet the performance standards published in the *Guide*.

Table 2**Recommended Space for Rabbits, Cats, and Dogs**(From the *Guide for the Care and Use of Laboratory Animals*, 2011 edition)

Animal	Weight (kg.)	Floor Area/Animal (ft. ²)	Height (in.)
Rabbits	<2	1.5	16
	Up to 4	3	16
	Up to 5.4	4	16
	>5.4	At least 5 ^a	16
	Cats	Up to 4	3
>4		At least 4 ^a	24
Dogs ^b	<15	8	-
	Up to 30	12	-
	>30	At least 24 ^a	-

a. Larger animals may require more space to meet the performance standards published in the *Guide*.

b. See the *Guide* to insure compliance with the Animal Welfare Act, and the “length + 6 inches squared” rule. Height must be sufficient for the animal to comfortably stand erect with feet on the floor.

Table 3**Recommended Floor Space for Commonly Used Farm Animals**(From the *Guide for the Care and Use of Laboratory Animals*, 2011 edition)

Animal	Weight (kg.)	Floor Area/Animal (ft. ²) ^b
Sheep & Goats	<25	10
	Up to 50	15
	>50 ^a	20
Swine	<15	8
	Up to 25	12
	Up to 50	15
	Up to 100	24
	Up to 200	48
	>200 ^a	At least 60
Cattle	<75	24
	Up to 200	48
	Up to 350	72
Ponies	-	72

a. Larger animals may require more space to meet the performance standards published in the *Guide*.

b. Group housed animals require less space per animal than listed here. See the *Guide* for details.

Table 4**Minimum Requirements For Housing Ferrets In Breeding And Post Weaned Stock**(From the *Code of Practice for the Housing and Care of Animals*, UK)

	Minimum Floor Area (cm ²)	Minimum Height (cm)
Breeders		
Jill + Litter	5400	50
Group Housing		
up to 600g	1000	50
up to 800g	1500	50
over 800g	3000	50
Single Housed (Stock)		
up to 600g	2000	50
up to 800g	2250	50
over 800g	4500	50
Adult male	5400	50

(Note - the minimum floor area for animals housed in groups must not be less than that specified for an animal housed singly.)