

by Croney Research Group

Environmental Sources of Stress for Kenneled Dogs: Space and Flooring

Dog welfare is more than just food, water, and good physical health. Several aspects of the environment can impact a dog's welfare. Dogs have a very different sensory experience from humans.

Make sure your kennel is tailored to meet your dog's needs.

Space Needs of Kenneled Dogs

Dogs need enough space to be able to sit, stand, lie, and move comfortably. Dogs also need space to exercise, and to have separate eating/sleeping and elimination areas. Give dogs space to have the choice to interact with or move away from other dogs.

Federal and state mandatory minimum space requirements exist. However, there is little research to support these minimum requirements. More research is needed in order to make evidence-based recommendations for space needs of kenneled dogs.

We recommend providing as much space as possible based on the needs stated above and the considerations below:

Restriction of movements is stressful to animals.



Enrichment and group housing can improve the quality of a living space.





Barren areas increase stress. The complexity of the space is important.



Dogs should have areas to hide or retreat. Provide solid barriers or furnishings that give dogs choices to hide or avoid stimuli.

Flooring Substrates

- Flooring should be easy to clean and disinfect, and be non-slip to avoid injury.
- Slippery floors can be difficult for dogs to walk on. They increase the risk of injuries and joint/orthopedic problems.
- Flooring must provide support for dogs to walk on it easily.
- Use non-porous flooring materials. These surfaces are easier to disinfect and will prevent saturation with urine or feces.



- Design kennels with gently sloping floors to ensure good drainage.
- Clean waste from flooring regularly. Walking through urine can irritate paws.
- Flooring should be easy to dry damp flooring can cause paw inflammation (pododermatitis).
- Smooth flooring can reflect sounds and make environments noisier.
- Dogs should have areas that are comfortable for resting or laying on. Provide bedding and non-slip mats. Remove and replace soiled bedding as soon as it is detected.



Access to multiple substrates gives dogs choices and may be better for physical health.

