

Review of Veterinary Radiation Shielding Designs for X-Ray



Critical Values

There are three critical values required to start a radiation shielding design:

1. Maximum operating Kv (max kVp)
2. Clinical average mAs
3. Average number of x-ray patients per week



Formula

We can then use the following formula to create a shielding design:

$$\frac{WUT}{PD^2}$$

W = Workload

U = Use Factor

T = Occupancy Factor

P = Design Goal

D = Distance From X-Ray

Source to Barrier



Regulations

Radiation shielding designs for veterinarian medicine are regulated by the Nuclear Regulatory Commission (NCR). All requirements are provided in a guidance document called NCRP, Report Number 148, which is Radiation Protection in Veterinary Medicine.



For more information:

To learn more about shield design services, click [here!](#)

