



# Surface Danger Zone



(SDZ)

## Definition

Per DA PAM 385-63: The ground and airspace designated within the training complex (to include associated safety areas) for vertical and lateral containment of projectiles, fragments, debris, and components resulting from the firing, launching, or detonation of weapon systems to include explosives and demolitions.

The Surface Danger Zone (SDZ) is a depiction of the mathematically predicted area a projectile will return to earth either by direct fire or by ricochet. The SDZ is the area extending from a firing point to a distance downrange based on the projectiles fired. This area has specific dimensions that provide a contained area for all fragments resulting from the caliber of weapons fired. These dimensions are found in DA PAM 385-63.

While this area is not considered part of the range design, it is one of the deciding factors considered when determining the location of the range facility and the orientation of its lanes and targets. Typically, a composite SDZ is generated to encompass all firing points resulting from the firing of several different caliber weapons. It encompasses all weapons within the largest SDZ footprint. No part of the SDZ may leave the installation property. SDZs of different ranges may overlap, but no SDZ can be located on a part of another range where soldiers are training, unless an adjusted SDZ is authorized by the installation. See the Deviation Authorization paragraph.

## Deviation Authorization

In some circumstances, installations may wish to pursue a deviation to particular SDZ criteria. In these cases, an installation will use an adjusted SDZ. *Deviation Authorization* is solely an installation decision based on having a certain mitigating factor, such as a mountain or baffle system to block projectile travel and/or contain ricochets.

## Explosive Safety

For proper handling, transportation, and storage of ammunitions and explosives please refer to DA Pam 385-64 Ammunition and Explosives Safety Standards.