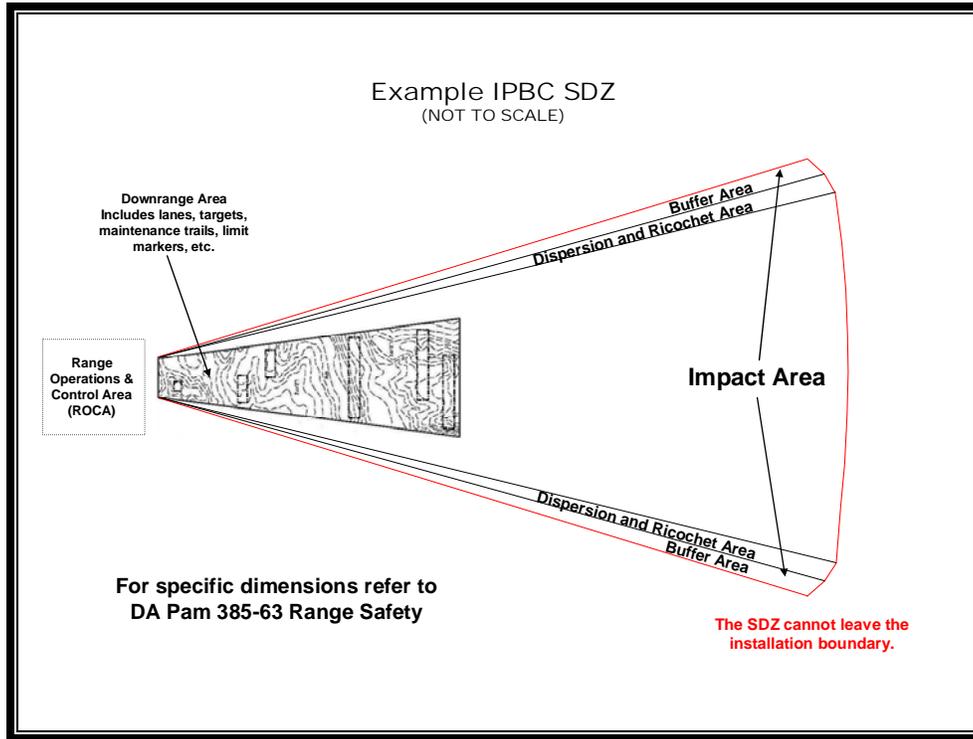


# INFANTRY PLATOON BATTLE COURSE (IPBC) SURFACE DANGER ZONES (SDZ)



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 impact upon return to earth, either by direct fire or 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 for the expected caliber of the weapon(s) being fired so that all projectile fragments will be contained in this area. These dimensions are found in DA PAM 385-63 - Range Safety.

While this area is not considered part of the range design, it is one of the deciding factors in the determination of the location upon which the range facility can be built and the orientation of the lanes and targets. Typically, a composite SDZ is generated to encompass all firing points and 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 from different ranges may overlap, but no SDZ will fall on a part of another range where soldiers are training.

General: The IPBC has 6 objective areas for an Infantry platoon to conduct fire and maneuver training. The placement of these objectives is dependant on the terrain and the

installations training objectives. The SDZ for the IPBC will be based on where the targets are located, where the soldiers will be allowed to fire from as they maneuver through the course and administrative fire control measures, e.g. a range limit marker.

The length and width of the SDZ will be determined by the SDZs of the weapons fired from all the individual firing points throughout the maneuver corridor and then building a composite SDZ based on the individual SDZs.

A key item in the calculation of the SDZ is the terrain that the IPBC will be constructed on. Although terrain does not reduce the numbers used in the calculations, it will determine where projectiles will impact the earth. Installations can use the terrain to reduce the size of the SDZ through the "Deviation to SDZ" procedure.

In the example the SDZ is constructed for training to start at the baseline of the range. Installations may allow units to attack the range from various directions to allow for various training perspectives. New SDZs will be generated prior to this training.

The authorized ammunitions for this range are .50cal ball/tracers, 7.62mm ball/tracers, 5.56mm ball/tracers, 9mm ball/tracer, and 40mm training practice grenades.

Note: The SDZ depicted is an example only. The facility diagram is a generic layout from TC 25-8. The SDZ will differ from an actual SDZ based on a constructed facility.

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

Deviations: In some circumstances, installations may pursue a deviation for some SDZ criteria and use an adjusted SDZ. This is solely an installation decision and is based on having mitigating factors, such as a mountain to block projectile travel.