

APPENDIX C

RANGE CONSTRUCTION/MODIFICATION

This appendix provides structural dimensions and safety requirements for the construction and modification of a hand grenade range.

C-1. STRUCTURAL DIMENSIONS

The structural dimensions of live-bay throwing pits are accomplished IAW Chapter 4 with a separation distance of 25 meters between each lane. This places adjacent pits outside the effective casualty-producing radius of 15 meters for the M67 fragmentation grenade. A rear wall (knee wall) is constructed no more than 0.6 meter (2 feet) high and 0.15 meter (6 inches) thick. It extends the width of the throwing pit, connecting both ends of the enclosure. Slope the top of the knee wall inward to allow any grenade dropped on the wall to roll into the throwing pit. Install drain pipes (no more than 2 inches in diameter) in the knee wall to allow throwing pit drainage. Slope the floor of the pits in the direction of the drainage pipes. Do not construct grenade sumps or ditches inside the throwing pits (Figure C-1).

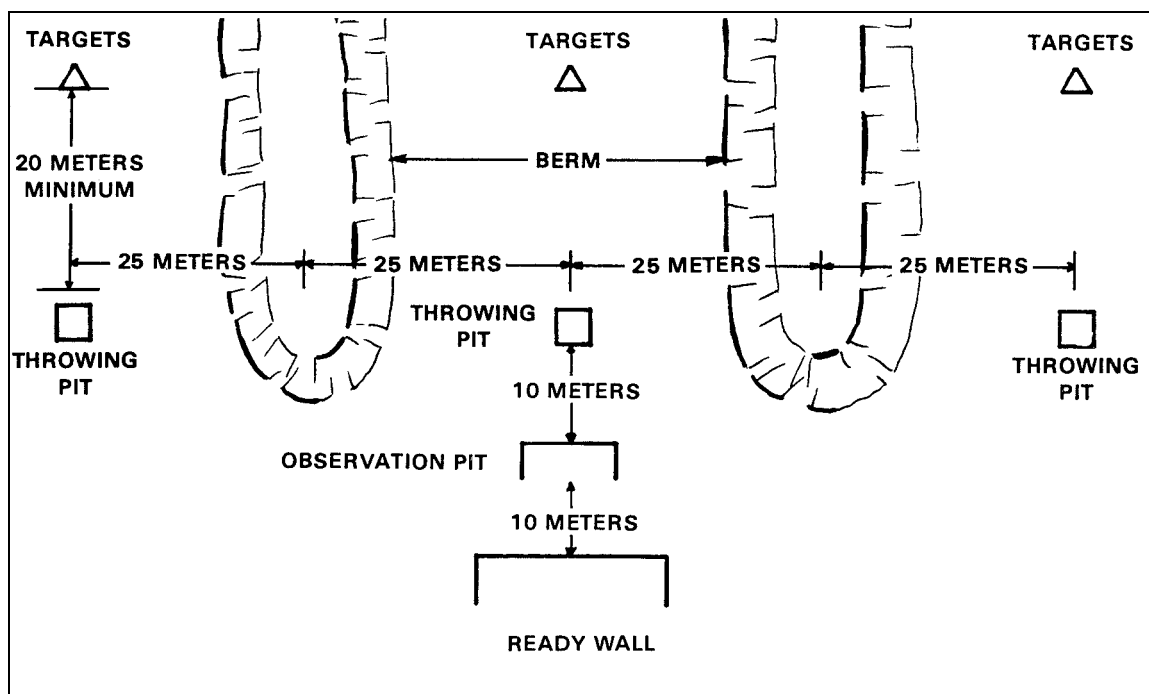


Figure C-1. Range layout.

C-2. SAND/SAWDUST PIT AND THROWING PIT

A sand/sawdust pit is placed outside the knee wall to cushion the fall of personnel diving over the wall in the event a grenade is dropped in the throwing pit (Figure C-2).

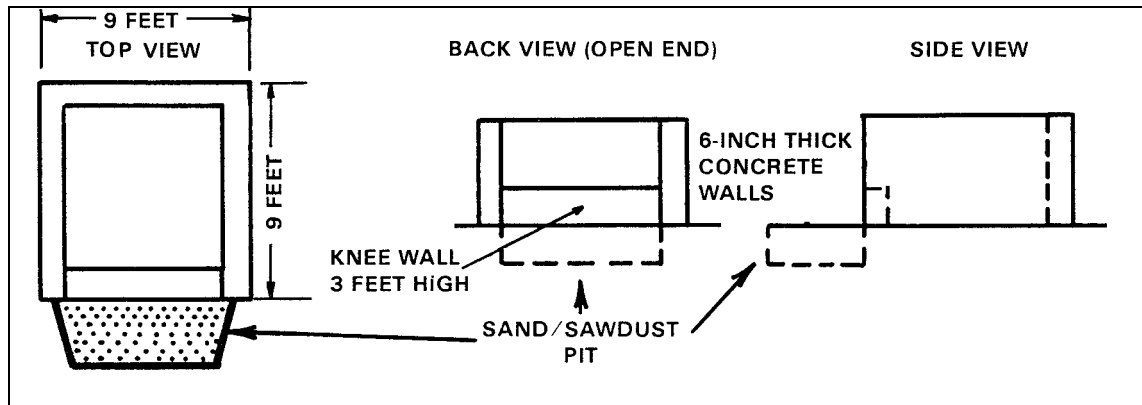


Figure C-2. Sand/sawdust pit and throwing pit.

C-3. PIT SEPARATIONS

Where possible, separate the throwing pits by using steel, concrete, or wooden revetments or earthen berms of a length and height to lessen the effect of high velocity, low angle fragments (for example, 50 meters long and 1.8 meters high). The thickness varies according to the type of construction used. This permits grenade throwing to continue from the adjacent pit when a dud grenade requires closure of a specific pit pending dud disposal.

C-4. OBSERVATION PITS

Observation pits are built of a sufficient height to enable the OIC to observe and control all throwing pits. Laminated windowpanes, constructed as described below, provide the necessary degree of safety for the observation pits.

- 10-mm glass (outside).
- 7-mm polycarbonate resin sheet.
- 6-mm glass.
- 6-mm polycarbonate resin sheet.
- 6-mm glass.

Total: 35 mm (about 1 3/8 inches).