



**GENERAL NOTES:**

1. WALLS AND ROOF SHALL BE CONSTRUCTED OF TREATED TIMBERS, FILTER FABRIC SHALL BE INSTALLED ABOVE ROOF AND BEHIND ALL WOOD WALLS BELOW GRADE.
2. AREAS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE REVEGETATED OR RESURFACED CONSISTENT WITH THE NATURAL SURROUNDINGS. GROUND COVER SHALL NOT REDUCE TARGET VISIBILITY.
3. ALL DIMENSIONS ARE INDICATED AS FOLLOWS: METRIC (ENGLISH) UNITS FOR INSTANCE, 1372MM [4'-6"]
4. CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 21 MPa [3000PSI] IN 28 DAYS.
5. BUNKER ORIENTATION SHALL BE COORDINATED WITH USERS AND TRAINERS DURING DESIGN TO ENSURE THE "WINDOW" IS FACING THE DIRECTION OF ASSAULT.

**NOTES TO DESIGNER:**

1. PROVIDE A SUBDRAIN SYSTEM TO ENSURE ADEQUATE DRAINAGE OF BUNKER.
2. THE NEED FOR FILTER FABRIC BEHIND THE BUNKER WALLS SHOULD BE EVALUATED AS PART OF THE SITE ADAPTION PROCESS. A FILTER FABRIC MAY OR MAY NOT BE REQUIRED DEPENDING UPON THE SOIL TYPE AT A PARTICULAR SITE.
3. THIS GENERIC DESIGN FOR THE BUNKER MUST BE SITE ADAPTED TO SPECIFIC SITE CONDITIONS DETERMINED BY A SUBSURFACE INVESTIGATION AND A TOPOGRAPHIC SURVEY.
4. SANDBAGS SHOULD BE MADE OF A MILDEW AND UV RESISTANT MATERIAL.
5. DEPTH OF FOOTINGS WILL VARY DEPENDING UPON SUBSURFACE INVESTIGATION AND COMPACTION REQUIREMENTS DURING CONSTRUCTION.
6. DESIGNER MUST VERIFY STRUCTURAL DESIGN BASED ON LOCAL CONDITIONS.

 <b>US Army Corps of Engineers</b>	
DESIGNED BY:	ISSUE DATE:
DRAWN BY:	SUBMITTAL NO.:
CHECKED BY:	CONTRACT NO.:
DATE:	PROJECT NUMBER:
SIZE:	SCALE:
U.S. ARMY CORPS OF ENGINEERS ENGINEERING & SUPPORT CENTER HANSHALE, ALABAMA AUGUST 2017	
RANGE AND TRAINING LAND PROGRAM STANDARD DESIGN MANUAL MACHINE GUN / OBSERVATION BUNKER	
SHEET ID <b>MGB</b>	

