



GENERAL NOTES:

- THIS MAGAZINE SHALL BE CONSTRUCTED USING THE BLAST AND FRAGMENT RESISTANT (BFR) WALL SYSTEM, ALSO KNOWN AS THE AGAN STEEL PANEL (ASP) WALL SYSTEM. THIS SYSTEM IS PROTECTED BY U.S. PATENT NUMBER 4,433,522.
- BFR WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PATENT HOLDER AND THE SPECIFICATIONS.
- ALL BFR STEEL FACE PANELS AND LACING PANELS SHALL CONFORM TO ASTM A446, GRADE B, GALVANIZED, WITH MINIMUM YIELD STRENGTH OF 36,000 PSI. STEEL THICKNESSES SHALL BE AS SHOWN. DIMENSIONS AND CORRUGATION PATTERN SHALL BE AS SHOWN OR SHALL PROVIDE STEEL AREA AND SECTION PROPERTIES EQUAL TO OR GREATER THAN THOSE SHOWN.
- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS.
- ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60.
- ALL STRUCTURAL STEEL SHAPES AND PLATES SHALL CONFORM TO ASTM A36, UNLESS OTHERWISE NOTED.
- ALL WELDING FOR STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH AWS D 1.1.
- NO WELDING OF REINFORCING BARS SHALL BE PERMITTED.
- UNLESS SHOWN OTHERWISE, ALL REINFORCING BAR HOOKS AND CONCRETE COVER OVER REINFORCEMENT SHALL BE IN ACCORDANCE WITH ACI 318-89.
- THE MAGAZINE IS NORMALLY CONSTRUCTED IN LENGTHS OF 60'-0" OR 80'-0", ALTHOUGH OTHER LENGTHS CAN BE CONSTRUCTED. MAXIMUM LENGTH OF THE MAGAZINE WITH THE FLOOR SLOPE SHOWN IS 90'-0".
- ALL METAL PARTS, TO INCLUDE REINFORCEMENT, LOUVERS, VENTILATOR, DOOR, DOOR FRAME, ETC., SHALL BE MADE ELECTRICALLY CONTINUOUS BY CLIPPING, BRAZING OR WELDING. ELECTRICAL CONTINUITY SHALL BE PROVIDED CROSS FLOOR CONSTRUCTION JOINTS AND ACROSS FLOOR ISOLATION JOINTS TO ARCH REINFORCEMENT AT 5 LINEAR FEET INTERVALS. ACCEPTABLE ELECTRICAL CONTINUITY METHODS ARE REINFORCEMENT BARS, COPPER STRAPS, ETC.
- OVERALL PLAN DIMENSIONS OF THE MAGAZINE ARE NOMINAL AS SHOWN. AT THE CONTRACTOR'S OPTION, THE LENGTH AND WIDTH OF THE MAGAZINE AND THE LENGTH OF THE WINGWALLS CAN BE INCREASED TO THE LENGTH NECESSARY TO USE THE NEXT HIGHEST INTEGRAL NUMBER OF BFR MODULAR UNITS. HEIGHT OF THE MAGAZINE SHALL BE AS SHOWN.
- THE DOOR OPENING SHALL BE SIZED FOR EITHER THE 10'-0" OR 8'-0" DOOR AS DESIRED.
- THE DRAINAGE SYSTEM SHALL BE EITHER THE DRAINAGE COMPOSITE FILTER SYSTEM OR THE ALTERNATE SAND AND GRAVEL SYSTEM, AT THE CONTRACTOR'S OPTION. DRAINS SHALL BE SITE ADAPTED TO DRAIN TO EITHER THE FRONT OR REAR OF THE MAGAZINE.
- ALL BURIED BFR STEEL SURFACES AND THE MAGAZINE ROOF SHALL BE WATERPROOFED. FOR THE SAND AND GRAVEL FILTER DRAINAGE SYSTEM, FLUID-APPLIED WATERPROOFING MEMBRANE SHALL BE USED. FOR THE DRAINAGE COMPOSITE SYSTEM, ELASTOMERIC MEMBRANE WATERPROOFING SHALL BE USED.

Symbol	Description	Date	Approved
△	GENERAL REVISION FOR LIGHTNING PROTECTION	11JUN98	WAW

U.S. ARMY ENGINEER DIVISION, HUNTSVILLE CORPS OF ENGINEERS HUNTSVILLE, ALABAMA		MAGAZINE, STEEL AND CONCRETE BOX, EARTH COVERED	
Site adapt A/E :		CORPS OF ENGINEERS	
Dwn. by: RP	Ckd. by: JMS	FLOOR PLAN AND SECTIONS	
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