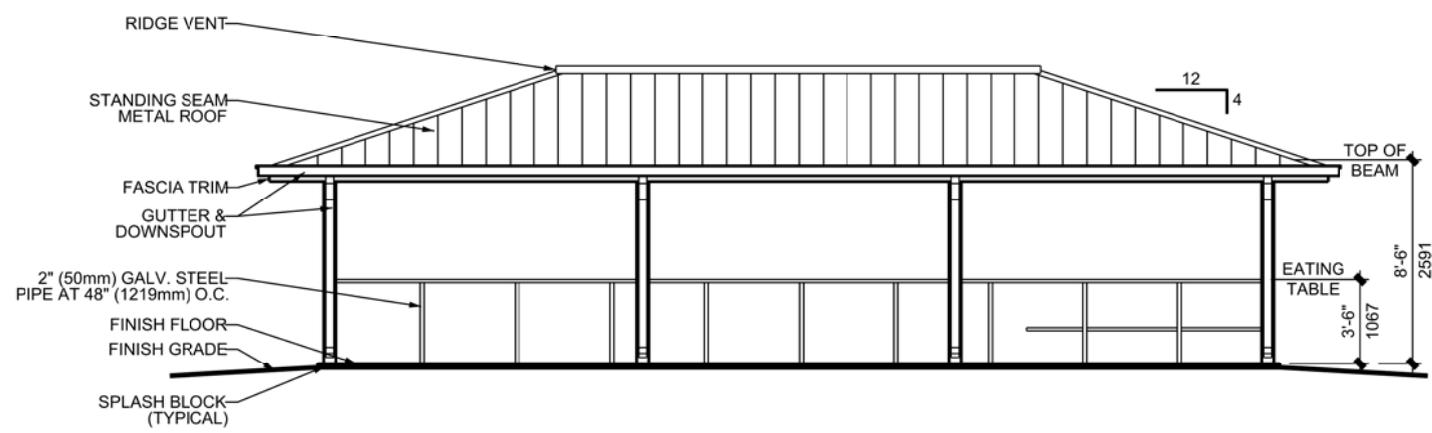
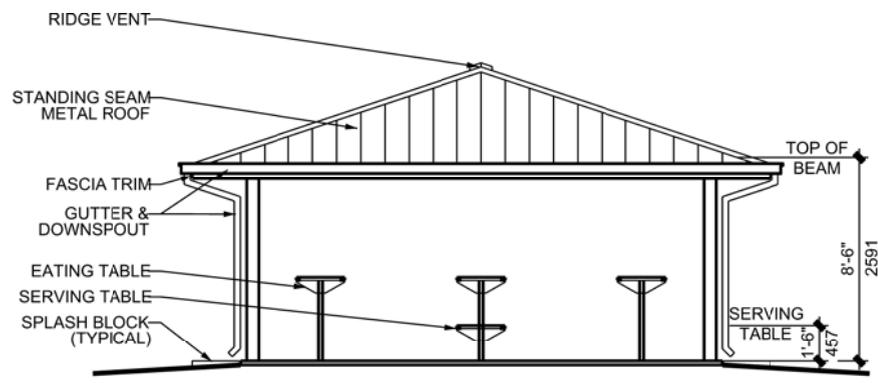


**FLOOR PLAN**  
SCALE: 1/4" = 1'-0"



**ELEVATION A**  
SCALE: 1/4" = 1'-0"



**ELEVATION B**  
SCALE: 1/4" = 1'-0"

**General**

The Covered Mess provides an area for troop messing during training. The facility is also used as an area for weapon cleaning. The covered facility has a concrete floor and has a standing seam metal roof supported on columns and a steel framing system. The sides are left open. Stand-up eating tables and serving tables are provided. The Covered area is 800 square feet (74.3 square meters). But, for 1391 purposes the facility is 400 square feet (37.2 square meters) because the facility is calculated as half square footage. When needed the size can be increased to meet the TRADOC standard of 1413 square feet (131.27 square meters).

**Site Adaptation**

This standard definitive design should be adapted to local conditions such as climate, available construction materials and techniques, topography, seismic zone and the existing character of surrounding buildings. These factors may affect plans, elevations, and building systems. The building foundation must be designed based on the results of a geotechnical investigation. This building shall be sited a minimum of 100 feet from any latrine.

**Reference Criteria**

The design and construction must comply with applicable codes and standards including: technical instruction TI 800-01, "Design Criteria" Departments of the Army regulations, technical manuals, handbooks, standards, and specifications.

**Functional Requirements**

All dimensions not labeled are in feet and inches. Gutters, downspouts and splash blocks should be provided where required by climatic conditions. Ice guards may be necessary in northern climates. The serving and eating tables should be constructed with galvanized or stainless steel shelves as required by the installation. The shelves are supported with galvanized steel pipes and galvanized structural shapes. The floor of the mess is sloped from the center to the perimeter to provide drainage. The Covered Mess is accessed only by able-bodied personnel and does not require ADA compliance unless by local criteria.

**Mechanical**

No mechanical systems are required for the Covered Mess.

**Electrical**

The Covered Mess shall be served by 120/240V, 1 phase, 3-wire secondary power. Rigid Steel conduit shall extend a minimum of 5'(1524mm) outside the building for power and communication circuits entering and leaving the building. Voltage drop shall comply with NEC standards and Army technical manuals. Grounding will be installed in accordance with NFPA 70, the NEC, and other applicable standards. The panelboard shall be 120/240V single phase, mounted on a column in a way as to not block access to the aisles. Receptacles shall be GFCI with weatherproof-while in-use cover, 120V, 20A Duplex mounted 18"(450mm) above the finish floor. Illumination levels will be designed in accordance with IES. Provide additional fixtures with red lamps for ranges where training will occur at night. Red lights shall be switched separate from white lights with provisions to prevent accidental illumination of white lights while red lights are in use.

Lightning protection in accordance with NFPA 780 is required for this building in the form of pole mount protection or air terminals on the building.

**Fire Protection**

Fire protection is not required per fire codes for this building. Consult local Fire Marshall for compliance with local requirements. Provide a Mass Notification system per UFC.

Rev.	Description	Date	Approved

Date	Rev.	Design file no.	Drawing code	File name	Plot name	Plot scale

Designed by:	U.S. Army Engineering and Support Center, Huntsville Huntsville, Alabama
Drawn by:	
Reviewed by:	
Submitted by:	
Date:	MARCH 2011

RANGE AND TRAINING LAND PROGRAM  
STANDARD DESIGN MANUAL  
COVERED MESS

