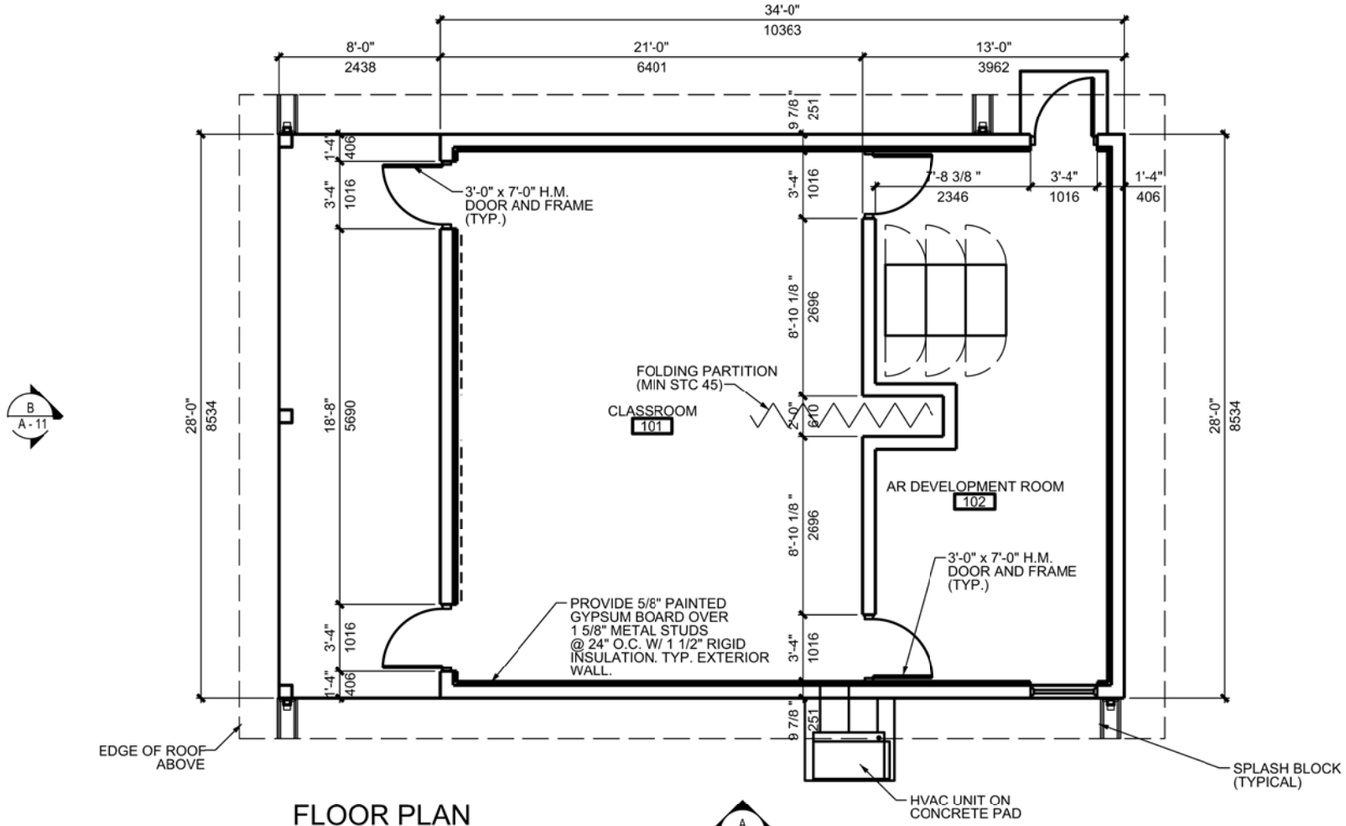
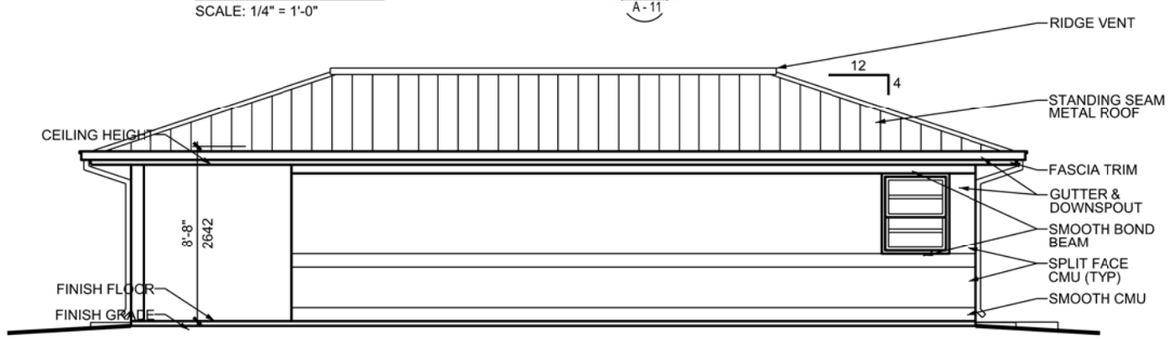


FLOOR PLAN

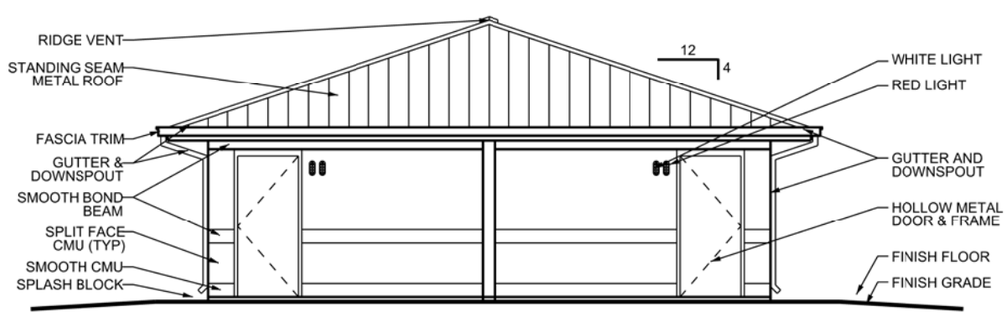
SCALE: 1/4" = 1'-0"



A
A - 11

ELEVATION

SCALE: 1/4" = 1'-0"



B
A - 11

ELEVATION

SCALE: 1/4" = 1'-0"

General

The After Action Review (AAR-SMALL) facility provides space for personnel to review training exercises. The facility is 1,064 square feet (98.85 square meters) in area. Space is also provided for the installation of required electronics and communications equipment to prepare the review presentations and control rooms to monitor the presentations. When this standard is used for a Live Fire Exercise Shoothouse it is also used as a ROC. The occupant load factor is 100 net square feet (9.3 net sq. meters) (per person) for the control room and 32 occupants for the classroom based on a business use. See NFPA 101 table 7.3.1.2. All dimensions not labeled are in feet and inches.

Site Adaptation

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

Reference Criteria

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

Functional Requirements

A folding partition is provided in the classroom to provide the option for two smaller classrooms. The partition may be deleted based on installation requirements when the standard is used on a shoothouse. Two Offices are provided off of the Classroom. Windows in the office are double hung to meet functional requirements providing natural lighting and ventilations. Windows have forced entry resistant metal framed and are provided with insect screens. Provide polycarbonate security glazing in windows and doors. One way glazing is provided between the control rooms and the classrooms. Floors should be sealed concrete or vinyl tile for ease of cleaning. Ceilings should be finished gypsum board. Gutters, downspouts, and splash blocks should be provided where required by climatic conditions. Covered entries and ice guards may be necessary in northern climates.
The After Action Review (AAR) is accessed only by able-bodied personnel and does not require ADA compliance unless dictated by local criteria.

Mechanical

The Mechanical Equipment shall be selected and sized based on site requirements, local weather design criteria, and available energy sources and building construction materials. U-factor requirements are based on the local climatic conditions in accordance with TI 800-1. The mechanical system must be sized to maintain the Data Termination Rack at an operating temperature of 72 F +/- 2 F. Obtain communication equipment heat release from targetry supplier for HVAC load calculations and equipment sizing. HVAC design for personnel comfort shall be in accordance with UFC 3-410-FA. Route ductwork to provide an even distribution of conditioned air throughout the building to meet occupant comfort and outdoor air requirements. Provide diffusers and dampers to allow for annual balancing.

Electrical

The AAR shall be served by 120/240V, 1 phase, 3-wire secondary power. Provide Surge Protective Device (SPD) for incoming service. Rigid Steel conduit shall extend a minimum of 5' (1524 mm) outside the building for power and communication circuits entering and leaving the building. All panel boards shall be recessed if installed in finished areas. Provide a lightning protection system in accordance with NFPA 780. Provide power to both workstations installed in the AAR Development Room 102 by dedicated 120V, 20 amp circuits serving quad outlets mounted 18" AFF. Provide 120V duplex receptacles mounted flush in the ceiling for the overhead projector in each classroom. Provide 120V duplex receptacles for each presentation podium located in the front of each classroom. Coordinate the requirements for the projector screen at the front of each classroom and provide power for screen as required. Provide an L5-30R outlet on a dedicated 120V, 30 amp circuit mounted flush in the ceiling above each Data Termination Rack. Provide a complete 24" ladder type cable tray and conduit system for OPA installed cables interconnecting OPA installed equipment. The 24" cable tray shall extend from the DTR's to each workstation and conduits shall extend from the cable tray to the overhead projectors and presentation podiums in each classroom. Provide vertical cable tray elbows above each DTR. Provide 12" X 4" vertical cable tray sections recessed inside the walls at each workstation location with a removable wall plate 18" AFF for access cable tray access at the workstations. Provide a 4" X 4" junction box recessed in the wall with removable face plate for each presentation podium with a 1" conduit extending back to the cable tray system. Provide a 4" X 4" junction box recessed in the ceiling with removable face plate for each overhead projector with a 1" conduit extending back to the cable tray system. For locations where training will occur at night provide separately switched exterior red lighting and ensure all white lighting is provided with the capability of being turned off when the red lights are used. Provide separately switched red lights in all interior rooms that have windows or doors opening to training areas.

Telephone

Telephone service is not a requirement for range operations. However, service should be provided to the AAR if it is available in the area.

Targetry System Interface:

The targetry system requires a fiber optic connection between the ROC and the AAR. Most ranges will only require one Data Termination Rack, except the Shoothouse range which will require three racks (one MCA provided and two OPA provided).

Fire Protection

Fire protection is not required per fire codes for this building. The fire alarm shall be a local audible alarm. Fire extinguisher's and cabinets are required per NFPA. Consult local Fire Marshall for compliance with local requirements. Provide a Mass Notification system per UFC.

4' 2' 0 4' 8' 12'

GRAPHIC SCALE: ¼"=1'-0"

US Army Corps of Engineers

Rev. #	Description	Date	Approved

Designed by: | Date: | Rev.
Dwn by: | Ckd by: | Design file no.
Reviewed by: | Drawing code:
Submitted by: | File name / Plot scale / Plot scale:

U. S. ARMY ENGINEERING AND SUPPORT CENTER, HUNTSVILLE
HUNTSVILLE, ALABAMA

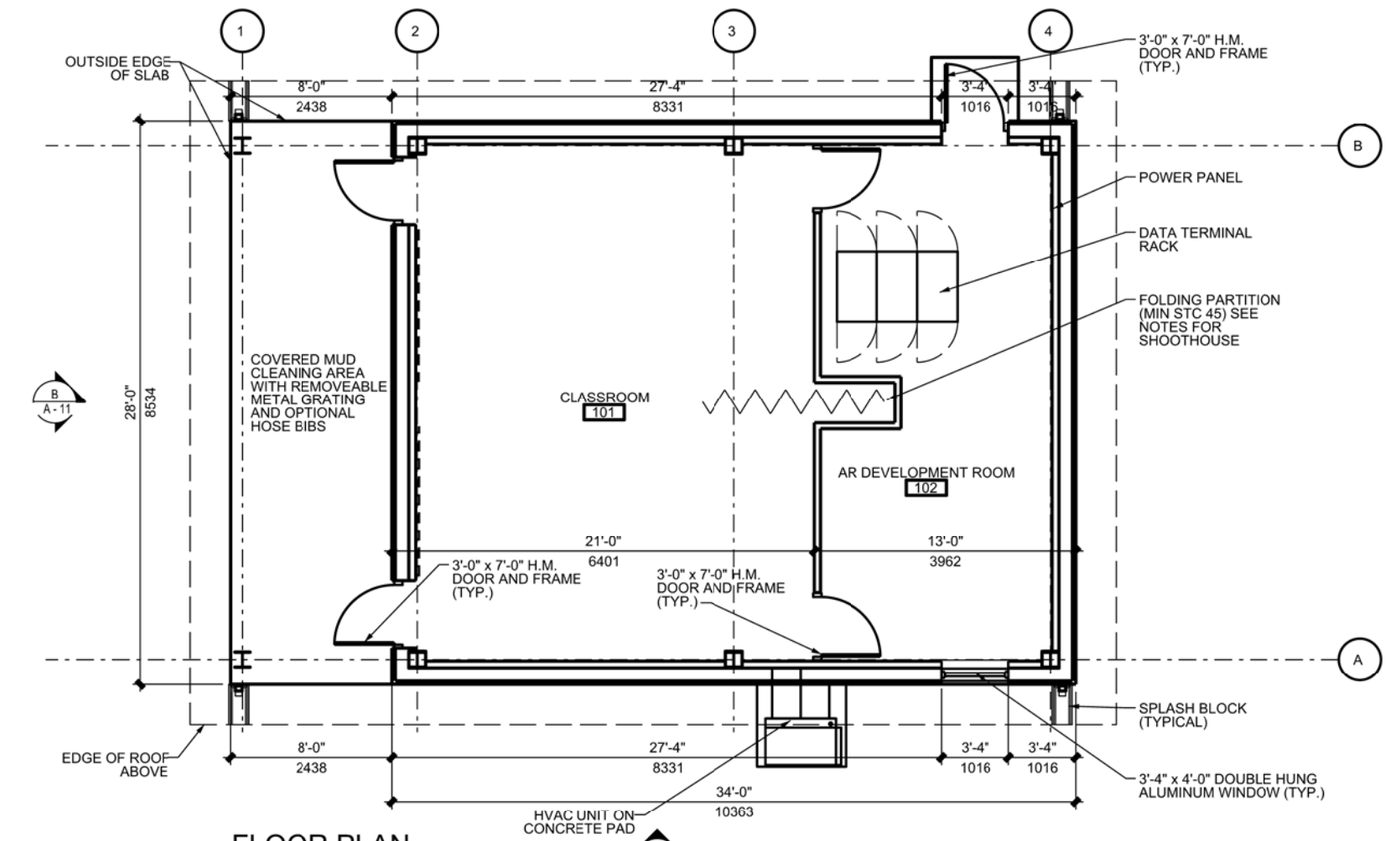
JUNE2011

RANGE AND TRAINING LAND PROGRAM
STANDARD DESIGN MANUAL

AFTER ACTION REVIEW (AAR) SMALL

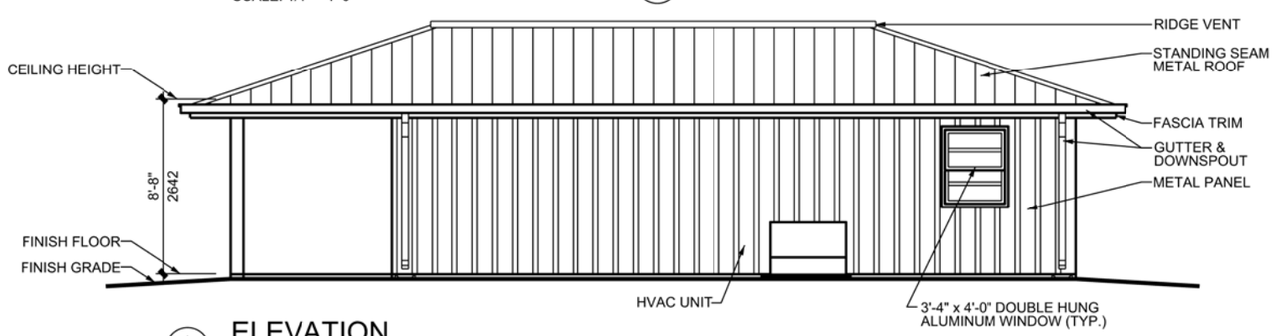
Sheet reference number:

A–12



FLOOR PLAN

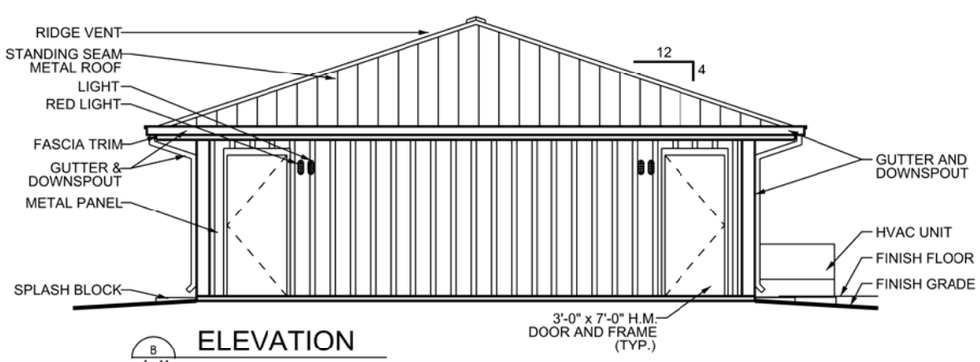
SCALE: 1/4" = 1'-0"



A
A - 11

ELEVATION

SCALE: 1/4" = 1'-0"



B
A - 11

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US Army Corps of Engineers

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Designed by: | Date: | Rev.
Dwn by: | Ckd by: | Design file no.
Reviewed by: | Drawing code:
Submitted by: | File name / Plot scale / Plot scale:

U. S. ARMY ENGINEERING AND SUPPORT CENTER, HUNTSVILLE
HUNTSVILLE, ALABAMA

JUNE 2011

RANGE AND TRAINING LAND PROGRAM
STANDARD DESIGN MANUAL

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