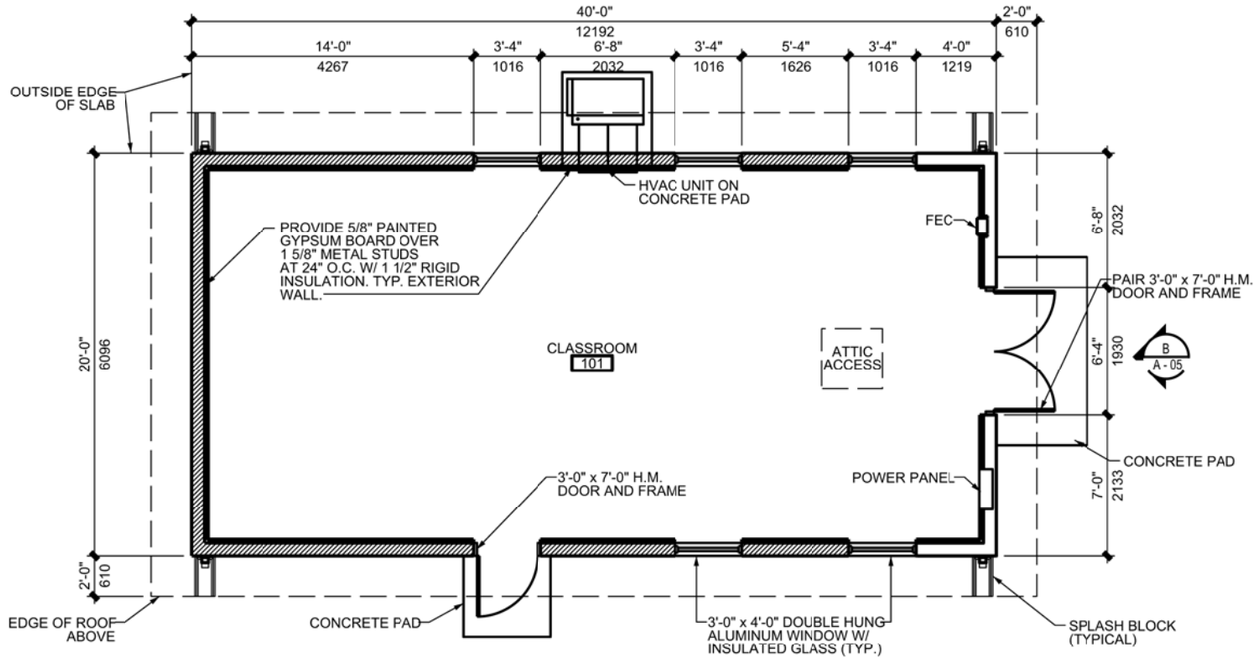
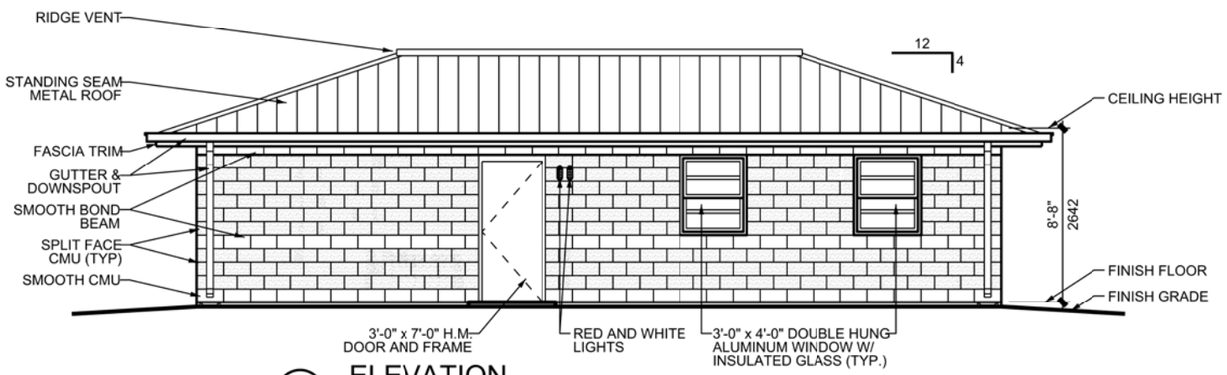


FLOOR PLAN

SCALE: ¼" = 1'-0"

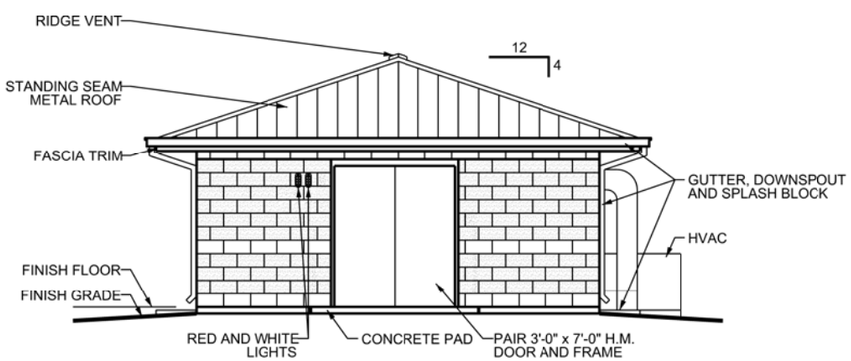
A
A - 05



A
A - 05

ELEVATION

SCALE: ¼" = 1'-0"



B
A - 05

ELEVATION

SCALE: ¼" = 1'-0"

General

The Classroom Building is used for troop instruction before and after training exercises. The facility is 800 square feet (74.32 square meters) in area. The building will provide space for 40 desks and approximately 12.7 square feet (1.2 square meters) per person for circulation. The occupant load factor is 15 net sq. feet (1.4 net sq. meters) per person based on an assemble use, less concentrated, without fixed seating. See NFPA 101 table 7.3.1.2.

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

All dimensions not labeled are in feet and inches. Windows 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. Gutters, downspouts, and splash blocks should be provided where required by climatic conditions. Covered entries and ice guards may be necessary in northern climates. Floors should be vinyl tile or sealed concrete for ease of cleaning and ceilings should be finished. The Classroom Building is accessed only by able-bodied personnel and does not require ADA compliance unless dictated by local criteria.

Mechanical

The mechanical equipment shall be sized in accordance with site requirements, local weather, design criteria, and the material of building construction. HVAC design for personnel comfort shall be in accordance with UFC 3-4-10-01FA. Provide concrete pod below HVAC unit. Pod shall extend 6"beyond edge of unit on 3 sides.

Electrical

The Classroom 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. In addition to normal receptacles, provide a 120V duplex receptacle mounted flush in the ceiling for an overhead projector and a 120V duplex receptacle for a presentation computer in the front of the classroom. Provide recessed 4"X 4"junction boxes with removable faceplates adjacent to the additional receptacles. Connect the junction boxes with a 1" conduit with pull wire. For locations where training will occur at night, provide separately switched red lighting on the building exterior and in all interior rooms that have windows or doors opening to training areas. Ensure all white lighting can be turned off when the red lights are used.

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

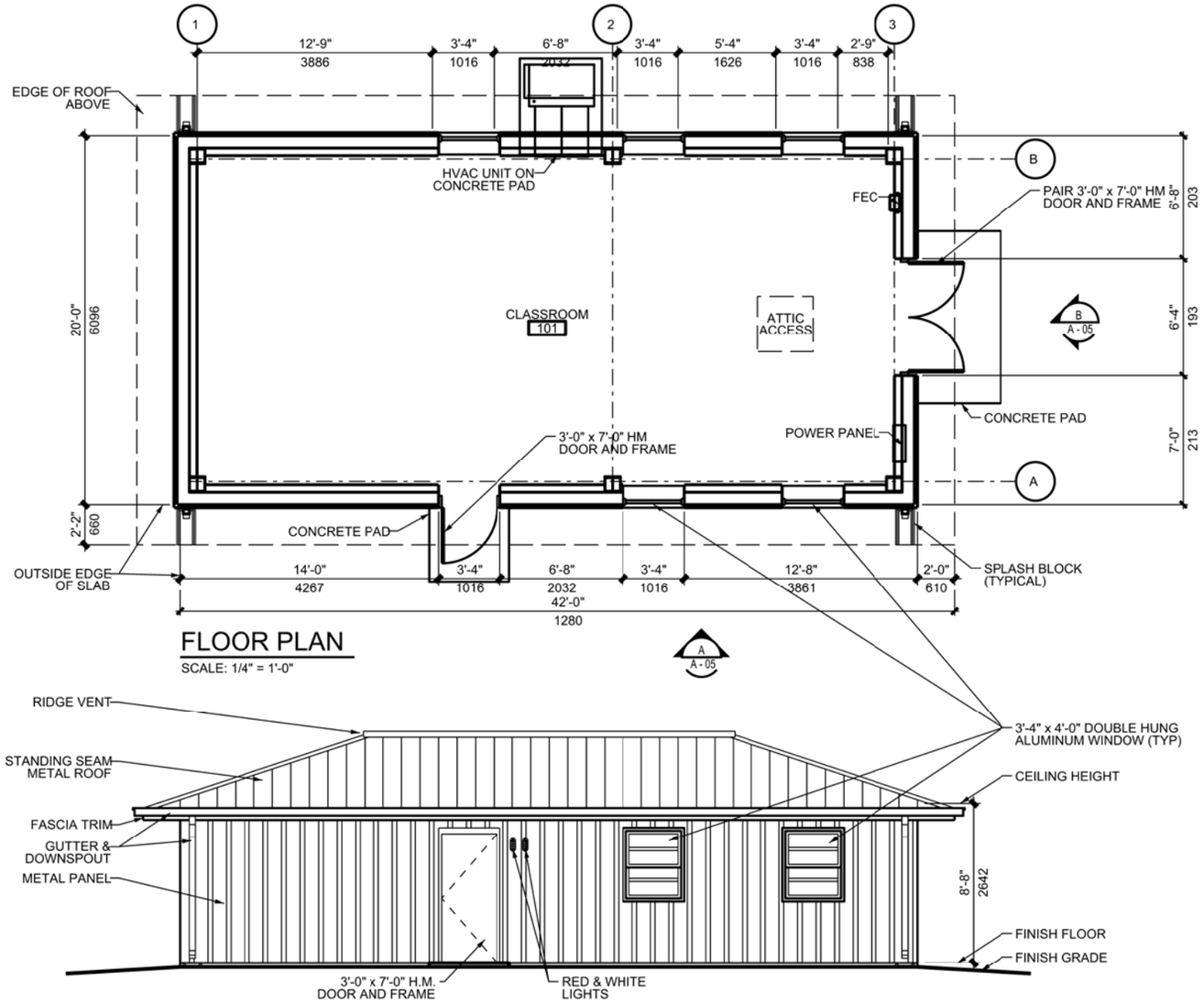
FEBRUARY 2011

RANGE AND TRAINING LAND PROGRAM
STANDARD DESIGN MANUAL

CLASSROOM BUILDING

Sheet reference number:

A–11



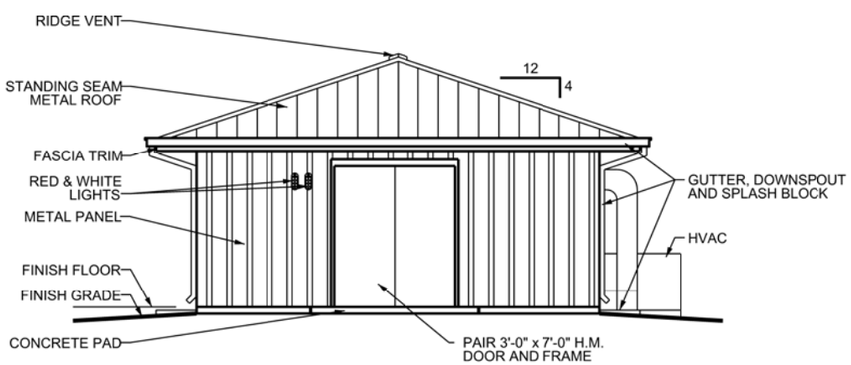
FLOOR PLAN

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

ELEVATION

A
A-05

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



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A
A-05

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