

Urban Cluster

Live Fire Village, Breach Wall



RANGE AND TRAINING LAND PROGRAM – MANDATORY CENTER OF EXPERTISE U.S. ARMY ENGINEERING AND SUPPORT CENTER, HUNTSVILLE HUNTSVILLE, ALABAMA 256-895-1534 <u>EMAIL RTLP</u>

Purpose

The Urban Cluster is a set of roads, buildings, facades, etc. designed to replicate a small urban area. Clusters can also include breach walls to support Stryker MGS training. Urban clusters are standard on mounted maneuver ranges including the (D)MPTR, (D)MPRC, DAGIR, BAX, and AGR. Refer to the individual range sections for details of placement and training requirements.

This RDG section includes general requirements for the Urban Cluster plus details of the live fire buildings and breach wall; refer to the separate sections for detailed requirements for the facades and other items.

General

The intent is for mounted and dismounted troops to maneuver to, engage, and clear a small urban area. Both vehicles and dismounted troop engage targets in the facades, only dismounted troops will engage the buildings. Facades include automated targetry; the buildings or the breach walls do not. The intent of the breach wall is to simulate a Stryker MGS breaching a wall. Dismounted troops then maneuver through the breach to clear a building. The urban cluster can include other automated targets placed in and around the area.

There are two Urban Clusters, a five and seven building layout, refer to the table below.

	Five-Building Cluster	Seven-Building Cluster
Buildings	5	7
Facades	3	5
Breach Walls*	2	2

* The breach wall is only included when Stryker MGS training is required.

Layout

The actual layout depends on many factors. Consider the training requirements of the installation, what type of scenario they are trying to replicate, range layout, environmentally sensitive areas, topography, SDZ, etc. Coordinate closely with installation training staff. Layout the roads and structures so that line of sight is available as needed. Do not place structures, targets, or electrical emplacements in the expected line of fire of other facilities as much as practical. Refer to the standard drawings for typical layouts.

Buildings

The buildings are training structures, not inhabited buildings. They should be relatively inexpensive and easily replaceable. They do not have automated targets and are only intended for live fire clearing using man-marking rounds. However, since live fire is taking place in the area,

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the buildings should be able to withstand limited live fire without causing ricochets. They are generally treated wood construction with rolled roofing. Design building layout based on installation requirements; including sizes, location of openings, and orientation. Match the general size and layout shown on the standard drawings. Add courtyard walls if required by the installation.

Breach Wall

The breach walls are specialty structures used to train Stryker MGS crews in urban wall breaching TTPs. The standard includes plywood panels used as a target by the MGS crew to simulate the wall breach. The standard has a separate concrete wall with an irregular hole formed in it. The dismounted troops use this hole as the simulated breach in the wall. They enter through this hole and clear the structure behind the wall.

The breach wall requires a Stryker firing position 100M to 200M in front of it. Keep the area directly behind the wall clear of buildings and other structures to limit damage by the training round or debris. Provide a positive protection area for troops during the breaching operation and a building behind the wall for clearing.

Facades

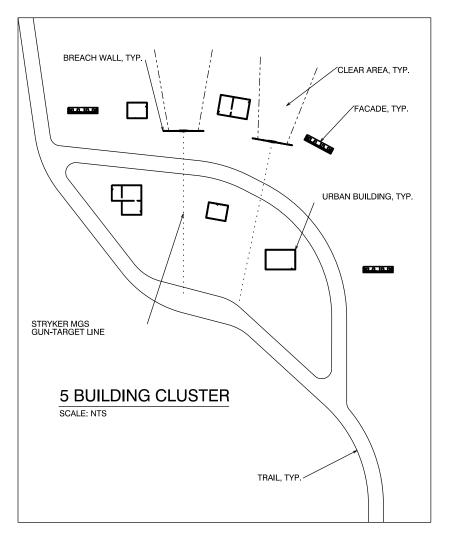
There is a separate Facade section in the RDG. It contains all of the design requirements for the facades.

Electrical

There are no electrical requirements for the buildings or breach wall. The facades do have automated targets.

Urban Cluster- December 2014 RTLP-MCX Range Design Guide

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NOTES TO DESIGNER:

Refer to the RDG Write-Up for additional information and requirements

See Standard Facade and Breach Wall drawings for details of their construction







2 Breach Wall (See Note) (Breach walls are only include at locations where Stryker MGS Vehicle qualification is required)

Stryker MGS Gun-Target line distance is a minimum of 100M based on installation training requirement

Add positive protection area for troops during breaching operation

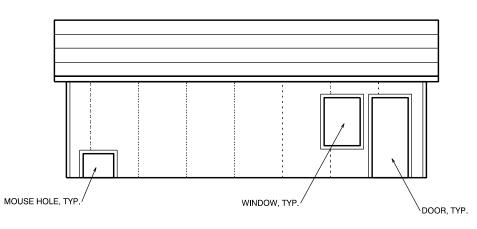
Layouts are typical; based on topography, SDZ, Line of Sight, and Installation requirements

Facades are intended for live-fire, buildings are not

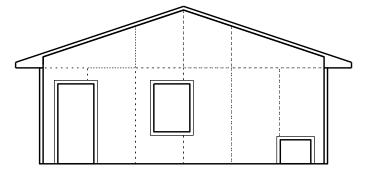
Courtyard walls may be required to meet installation training mission

V-Shaped facade counts as two facades

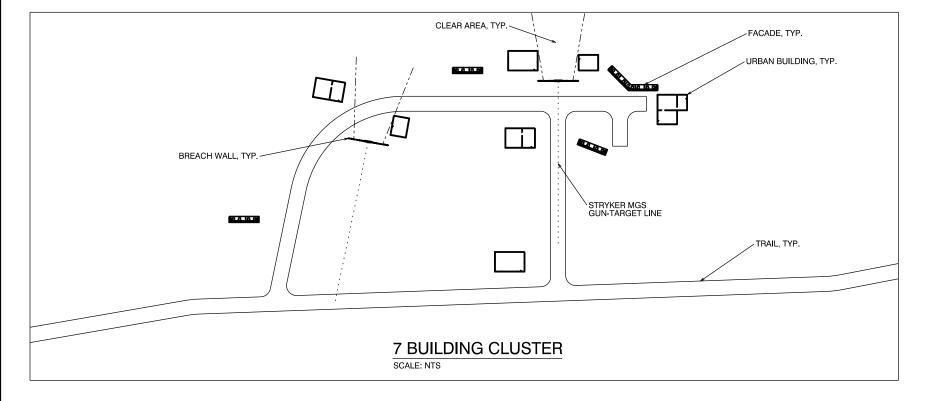
Ensure positive drainage away from structures



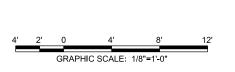


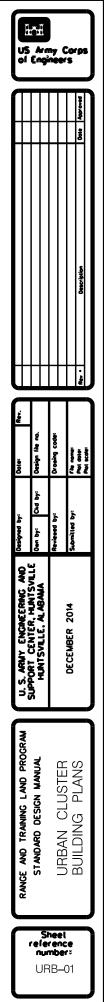


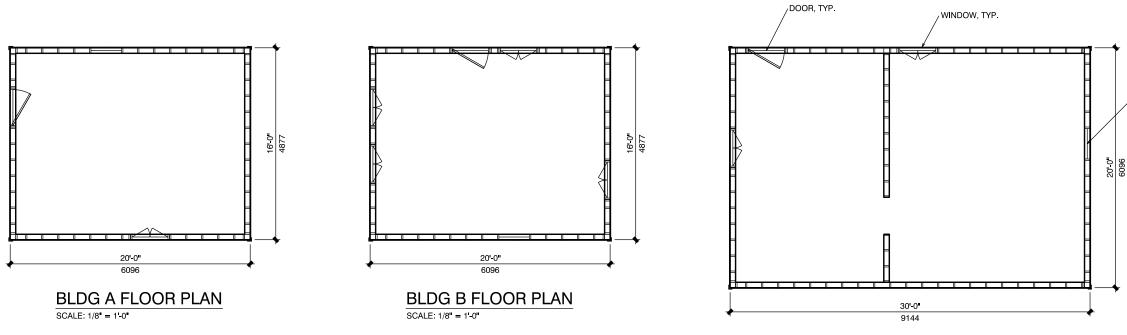






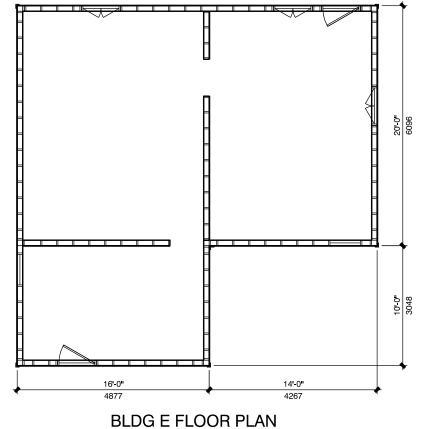




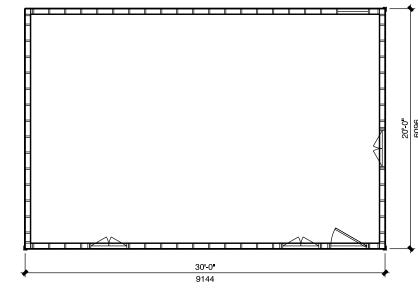




SCALE: 1/8" = 1'-0"



SCALE: 1/8" = 1-0"



BLDG D FLOOR PLAN



NOTES TO DESIGNER:

Refer to the RDG Write-Up for additional information and requirements

Door opening sizes, types and locations are based on installation requirements. Door and shutters, if required by the installation are wood. Typically, doors are 3'-0"by 6'-8", windows are 3'-0"by 4'-0", and mouse holes are 3'-0"by 2'-0".

Wall construction is 2xX framing with plywood sheathing

Use treated lumber

Use plywood roof on wood trusses or framing

Use wood or gravel floors

Ensure positive drainage away from structures

/MOUSE HOLE, TYP.

