

FIGURE 1, USING TECHNICAL PAPER-15 FOR UP TO 8,818 lbs NET EXPLOSIVES WEIGHT

Technical Paper-15, Approved Protective Construction for 8,818 lbs

Figure 1 configuration is in accordance with Department of Defense Explosives Safety Board (DDESB) Technical Paper-15, Approved Protective Construction storing up to 8,818 lbs. The intermagazine distance (IMD) shall be **28 feet** with an inhabited building distance (IBD) of **1,250 feet**. This configuration requires a **smaller storage area footprint** than in Figure 2, however the IBD arc will be 104 feet larger.

Figure 1. Critical Dimensions and Permissible Operations at Minimum Safe Separation Distances for 8,818 lbs using Technical Paper (TP)-15	
(1) Ammo Stack (potential explosion site (PES)) to the end of the wing wall (must be from the peak of the barricade that measures 3 feet wide minimum)	3 feet
(2) Barricade Peak (minimum width)	3 feet
(3) Ammo Stack to Barricade (minimum standoff distance)	10 feet
(4) Ammo Stack to Ammo Stack in the adjacent cell or row (minimum intermagazine distance (IMD))	28 feet
Barricaded Intra-line Distance (B)ILD - Security Alert Force - Damage preparation or similar non-AE operations, used only by personnel at the PES - Tactical missile site, where greater distances from the PES cannot be provided for technical or tactical reasons - Successive steps of a single renovation, or maintenance operation - Temporary holding areas for AE transports servicing maintenance facilities - AE-related operations in magazine areas, when performing minor maintenance, preservation, packaging, or surveillance inspection	186 feet
Unbarricaded Intra-line Distance (U)ILD - Surveillance Workshop (Labor-intensive AE operations (e.g., surveillance, maintenance, inspection) closely related to the PES) - Buildings/facilities, for comfort, safety, or convenience (e.g., lunchrooms, motor pools, area offices, auxiliary fire stations, transportation dispatch points, and shipping and receiving buildings) that are used exclusively in support of the PES - Parallel operating lines or pads, whether or not barricaded, provided the AE involved in each operating line or pad present similar hazards. - Operational support buildings (e.g., day rooms, ammo operation offices, and similar functions) that only personnel from the activity operating the PES use or attend - Training functions (e.g., classroom and field training of personnel who may be required to engage in AE work) that only personnel from the activity operating the PES use or attend - Maintenance of military vehicles or equipment that are located outside the United States when the maintenance work must be performed exclusively for the unit	372 feet
(5) Public Traffic Route Distance (PTRD) - Public roadways - On-Installation roadways open to the general public	750 feet
(6) Inhabited Building Distance (IBD) - Billeting - Administrative areas/facilities - MWR Facilities - Dining Facilities - Installation Boundary - Physical fitness areas/sites (e.g. running tracks, sports fields, outdoor exercise equipment, etc.) used by personnel not associated to the AE mission - Off-installation exposures	1250 feet
(7) Improved approach apron recommended for forklift maneuvering (reduced maintenance cost)	10 feet
(8) Nominal length of MILVAN used for ammunition and explosives (each MILVAN 20' long)	20 feet
(9) Minimum recommended roadway width to accommodate forklift maneuvering to/from MILVANS (greater distance recommended, see note 4)	26 feet
(10) Nominal width of 6 MILVANS (each MILVAN 8' wide)	48 feet

* Number of MILVANS may vary based on requirements however, critical dimensions are the same.

** HESCO barricades depicted in this drawing are the recommended configuration. Other configurations are permissible provided the configuration is stable and provides a minimum height of 10'. Although minimum barricade height is 1' above line-of-sight from top of MILVANS in adjacent cells, a 10' to 10.5' barricade height will provide for a slight elevation of the MILVAN pads for drainage and for setting of the HESCO barricades.

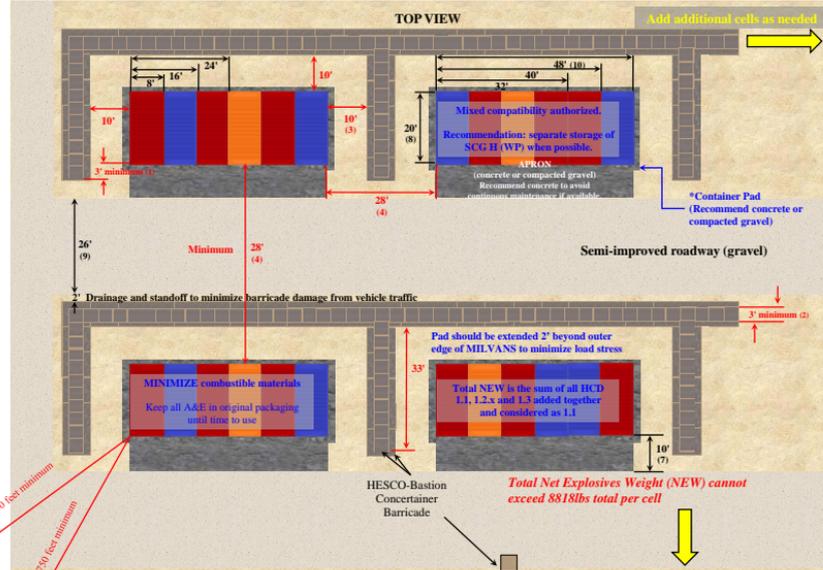
Other HESCO-Bastion sizes available for use:			
HESCO MIL Type:	NSN:	HESCO MIL Types:	NSN:
MIL-1B, (4.5'H x 3.6'W x 32.0'L)	5680-99-835-7866	MIL-8B, (4.5'H x 4.0'W x 2.66'L)	5680-99-335-4902
MIL-1G	5680-99-001-9396	MIL-8G	5680-99-517-3281
MIL-2B, (2.0'H x 2.0'W x 4.0'L)	5680-99-968-1764	MIL-9B, (3.25'H x 2.5'W x 30.0'L)	5680-99-563-5949
MIL-2G	5680-99-001-9397	MIL-9G	5680-99-052-0506
MIL-3B, (3.25'H x 3.25'W x 32.0'L)	5680-99-001-9392	MIL-9B, (3.25'H x 2.5'W x 30.0'L)	5680-99-563-5949
MIL-3G	5680-99-001-9398	MIL-9G	5680-99-052-0506
MIL-5B, (2.0'H x 2.0'W x 10.0'L)	5680-99-001-9394		
MIL-5G	5680-99-001-9400		



Inhabited Buildings (Exposed Sites)



Public Traffic Routes



HESCO-Bastion sizes commonly used, but not limited too:

Bottom: MIL-7B, NSN 5680-99-169-0183 (7.25'H x 7.0'W x 90.0'L) or MIL-7G, NSN 5680-99-126-3716

Top: MIL-4B, NSN 5680-99-001-9393 (3.25'H x 5.0'W x 32.0'L) or MIL-4G, NSN 5680-99-001-9399

FIGURE 2, BLAHA/AHA CRITERIA USING DODM 6055.09-M FOR UP TO 5,500 LBS NET EXPLOSIVES WEIGHT

DoDM 6055.09-M, QD for BLAHA/AHAs for 5,500 lbs

Figure 2 configuration is in accordance with DODM 6055.09-M, QD for BLAHA/AHAs storing up to 5,500lbs. The intermagazine distance (IMD) shall be **35 feet** with an inhabited building distance (IBD) of **886 feet**. This configuration requires a **larger storage area footprint** than in Figure 1, however the IBD arc **will be much smaller**.

Figure 3. Critical Dimensions and Permissible Operations at Minimum Safe Separation Distances for 5,500 lbs using DODM 6055.09-M, QD for BLAHA/AHA

(1) Ammo Stack (potential explosion site (PES)) to the end of the wing wall (must be from the peak of the barricade that measures 3 feet wide minimum)	3 feet
(2) Barricade Peak (minimum width)	3 feet
(3) Ammo Stack to Barricade (minimum standoff distance)	14 feet
(4) Ammo Stack to Ammo Stack in the adjacent cell or row (minimum intermagazine distance (IMD))	35 feet
Barricaded Intraline Distance (B/ILD) - Security Alert Force - Damage preparation or similar non-AE operations, used only by personnel at the PES - Tactical missile site, where greater distances from the PES cannot be provided for technical or tactical reasons - Successive steps of a single renovation, or maintenance operation - Temporary holding areas for AE transports servicing maintenance facilities - AE-related operations in magazine areas, when performing minor maintenance, preservation, packaging, or surveillance inspection	159 feet
Unbarricaded Intraline Distance (U/ILD) - Surveillance Workshop (Labor-intensive AE operations (e.g., surveillance, maintenance, inspection) closely related to the PES) - Buildings/facilities, for comfort, safety, or convenience (e.g., lunchrooms, motor pools, area offices, auxiliary fire stations, transportation dispatch points, and shipping and receiving buildings) that are used exclusively in support of the PES - Parallel operating lines or pads, whether or not barricaded, provided the AE involved in each operating line or pad present similar hazards. - Operational support buildings (e.g., day rooms, ammo operation offices, and similar functions) that only personnel from the activity operating the PES use or attend - Training functions (e.g., classroom and field training of personnel who may be required to engage in AE work) that only personnel from the activity operating the PES use or attend - Maintenance of military vehicles or equipment that are located outside the United States when the maintenance work must be performed exclusively for the unit	318 feet
(5) Public Traffic Route Distance (PTRD) - Public roadways - On-Installation roadways open to the general public	532 feet
(6) Inhabited Building Distance (IBD) - Billeting - Administrative areas/facilities - MWR Facilities - Dining Facilities - Installation Boundary - Physical fitness areas/sites (e.g. running tracks, sports fields, outdoor exercise equipment, etc.) used by personnel not associated to the AE mission - Off-installation exposures	886 feet
(7) Improved approach apron recommended for forklift maneuvering (reduced maintenance cost)	10 feet
(8) Nominal length of MILVAN used for ammunition and explosives (each MILVAN)	20 feet
(9) Minimum recommended roadway width to accommodate forklift maneuvering to/from MILVANS (greater distance recommended, see note 4)	28 feet
(10) Nominal width of 6 MILVANS (each MILVAN 8' wide)	48 feet

* Number of MILVANS may vary based on requirements however, critical dimensions are the same.
 ** HESCO barricades depicted in this drawing are the recommended configuration. Other configurations are permissible provided the configuration is stable and provides a minimum height of 10'. Although minimum barricade height is 1' above line-of-sight from top of MILVANS in adjacent cells, a 10' to 10.5' barricade height will provide for a slight elevation of the MILVAN pads for drainage and for setting of the HESCO barricades.

Other HESCO-Bastion sizes available for use:

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