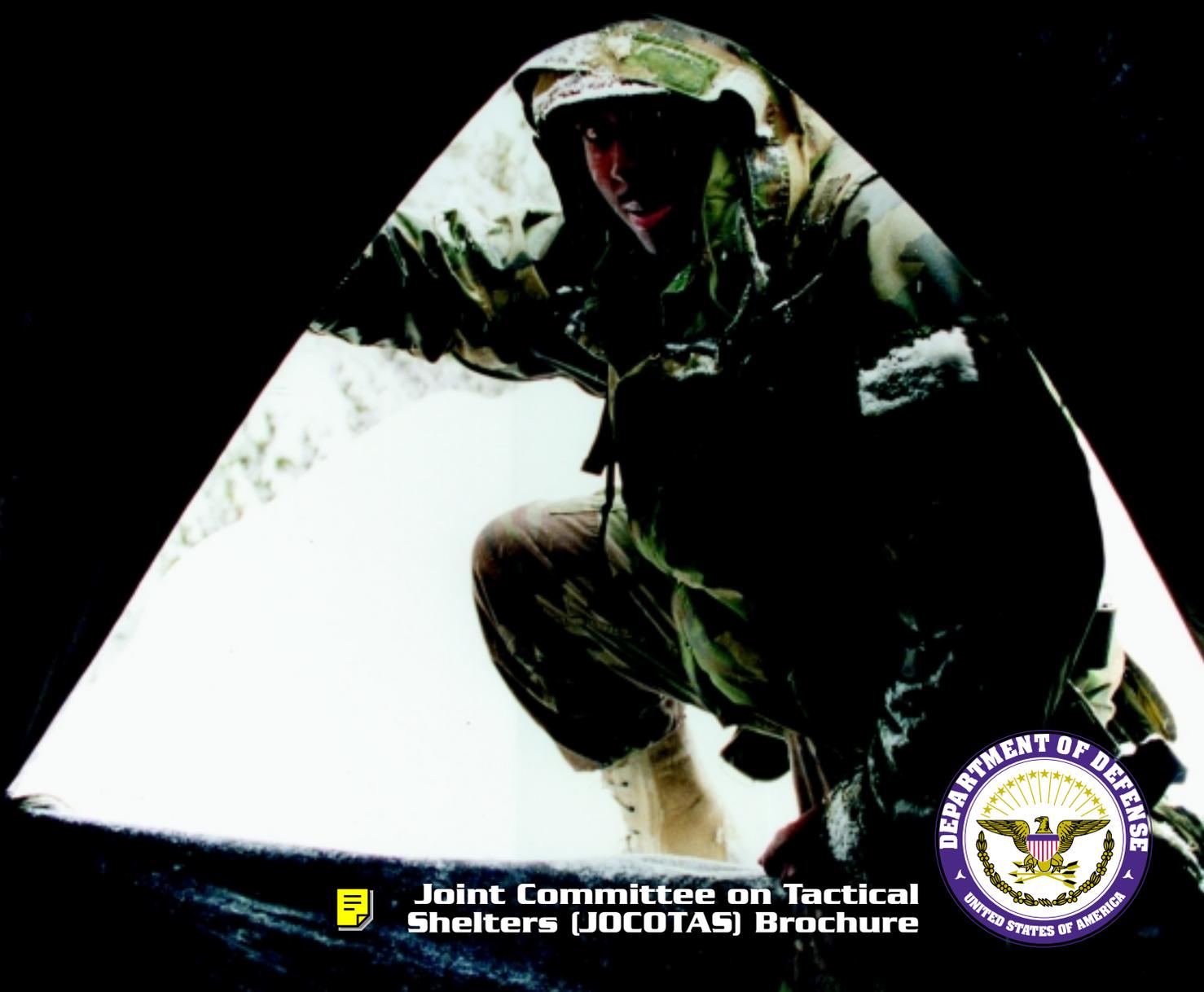


**United States Army
Soldier and Biological
Chemical Command
Natick, Massachusetts**

Department of Defense Standard Family of Tactical Shelters (Rigid/Soft/Hybrid)



**Joint Committee on Tactical
Shelters (JOCOTAS) Brochure**



In accordance with Department of Defense (DoD) policy as stated in AR 70-59, OPNAVINST 3900.27, AFJI 61-106, and MCO 3920.5A, the services through the Joint Committee on Tactical Shelters (JOCOTAS) has approved a Standard Family of Tactical Shelters.

The shelters contained in this brochure are the only shelters authorized for military use.

PREPARED BY:

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November 2001

See updates of this
DoD JOCOTAS Shelter Brochure
at <http://www.sbccom.army.mil/hooah/pubs/jocotas.pdf>

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This brochure contains information on the Department of Defense (DoD) Standard Family of Tactical Shelters. The standard rigid wall, soft wall, and hybrid shelters shown in this brochure have been approved by the Joint Committee on Tactical Shelters (JOCOTAS) for Department of Defense (DoD) use.

JOCOTAS was formed in 1975 under Office of the Secretary of Defense (OSD) direction with the purpose to:

- Prevent the duplication of Tactical Shelter Research and Development.
- Eliminate the proliferation of non-standard tactical shelters in the DoD inventory.
- Maximize the usage of DoD Standard Family of Tactical Shelters.

Prior to the formation of JOCOTAS, 100+ rigid wall tactical shelter types existed among the Four Services which created a huge logistics burden for shelters. JOCOTAS has succeeded in reducing the standard family of rigid wall tactical shelters to 17 shelter types among the Four Services. Soft wall and hybrid shelters were added to JOCOTAS in 1995. JOCOTAS consists of two technical working groups (TWGs), Rigid Wall/Hybrid TWG and Soft Wall TWG, that meet twice per year and principal/voting Service members that meet annually. Office of the Under Secretary of Defense (Acquisition & Technology), OUSD (A&T), has approval authority for JOCOTAS. Additional detailed JOCOTAS information is delineated in the 19 April 2000 OUSD-approved new JOCOTAS Charter that is shown on pages 36-38. JOCOTAS officers and principal voting members are listed on page 39.

Shelters developed by the Army, Air Force, Navy and Marine Corps are usable by more than one Service and make up the JOCOTAS approved DoD Standard Family of Tactical Shelters. The standard shelters contained in this brochure can be used by all Services. New requirements and technology advancements will likely result in additional shelters being added by JOCOTAS to the existing Standard Family of Tactical Shelters Listing.

General Information

Tactical Shelter - A highly mobile, transportable structure designed for a functional requirement that provides a live-in and/or work-in capability. These structures can be:

- a) **Rigid Wall shelters** which are presized structures (non-expandable and expandable shelters) that are transportable by land, sea, or air. These shelters require minimal site preparation and no specialized set-up.
- b) **Soft wall shelters** which include air supported and prefabricated structures, that are transported and then erected or assembled on site.
- c) **Hybrid shelters** which are a combination of rigid and soft wall shelters that are transported and erected or assembled on site.

Structures not considered tactical shelters and outside the scope of the DoD Standard Family of Tactical Shelters are:

- a) Containers used exclusively for cargo transportation (e.g., milvans, conex containers).
- b) Refrigerated structures.
- c) Modular or prefabricated structures designed to be shipped to the operating location and assembled with external unit support.
- d) Vans.

Joint Committee on Tactical Shelters (JOCOTAS) - A committee consisting of representatives from Army, Air Force, Navy, and Marine Corps that:

- Eliminates duplication of research and development by annual submission and DoD approval of a 5-year DoD Tactical Shelter Research and Development program.
- Encourages maximum use of the DOD standard family of shelters.
- Provides a forum for technical interchange via Joint Working Group Meetings.

Tactical Shelter Family Means:

- Maximum Standardization for DoD shelters and continue to meet the needs of the Services.
- Rapid Worldwide Deployment of a tactical force featuring ISO (International Organization for Standardization) handling, structural and dimensional standards, where applicable, for container vessel shipment.
- Lower Long Term Deployment Costs by recovering deployed structures for future uses, eliminating wasted dollars on permanent construction which is later abandoned.
- Rugged Qualified Shelters that stand up to rough use in the field and climates all over the world.

DoD Standard Family of Rigid Wall Tactical Shelters Listing

This list has been approved by the Joint Committee on Tactical Shelters (JOCOTAS). Based on the recommendations of the JOCOTAS group, this list may have future additions or deletions.

Shelter Name

National Stock Number (NSN)

Air Force

Expandable, S-530 A/G (60 HZ) 5411-01-280-2909EJ

Army

ISO, Shelter, Tactical, Nonexpandable, S-781/G (60 Amp) 5411-01-136-9837
ISO, Shelter, Tactical, Nonexpandable, S-782/G (100 Amp) 5411-01-294-6390
Shelter, Electrical Equipment, S-250/G, Unshielded 5411-00-999-4935
Shelter, Electrical Equipment, S-250/G, EMI Shielded 5411-00-489-6076
Shelter, Electrical Equipment, S-280(C)/G, Unshielded 5411-01-092-0892
Shelter, Electrical Equipment, S-280(C)/G, EMI Shielded 5411-01-304-3069
Shelter, Non-Expandable, Rigid Wall, Integrated, S-832/G 5411-01-436-3326
Shelter, Electrical Equipment, Lightweight, S-788/G Type I 5411-01-357-3582
Shelter, Electrical Equipment, Lightweight, S-788/G Type III 5411-01-357-3583
ISO, Shelter, Tactical, Expandable, One Side, S-783/G (60 Amp) 5411-01-124-1377
ISO, Shelter, Tactical, Expandable, One Side, S-784/G (100 Amp) 5411-01-295-3433
ISO, Shelter, Tactical, Expandable, Two Side, S-785/G (60 Amp) 5411-01-136-9838
ISO, Shelter, Tactical, Expandable, Two Side, S-786/G (100 Amp) 5411-01-294-9866
Modular Extendable Rigid Wall Shelter (MERWS) 5411-01-312-9084

Marine Corps

ISO, 10 Foot, General Purpose 5411-01-287-4341
ISO, 10 Foot, EMI Shielded 5411-01-206-6079
ISO, 20 Foot, General Purpose 5411-01-209-3451
ISO, 20 Foot, EMI Shielded 5411-01-206-6078
ISO, Knockdown 5411-01-206-6077

Navy

ISO, Basic Mobile Facility A 5411-01-355-4322
ISO, Basic Mobile Facility B 5411-01-355-4323
ISO, Side Opening Mobile Facility A 5411-01-355-4320
ISO, Side Opening Mobile Facility B 5411-01-355-4321
ISO, Side Opening Mobile Facility B (Modified 80" Door) 5411-01-355-4319
ISO, Side Opening Mobile Facility C 5411-01-355-6566
ISO, Integration Unit Mobile Facility 5411-01-355-4318

DoD Standard Family of Soft Wall and Hybrid Shelters Listing

This list has been approved by the Joint Committee on Tactical Shelters (JOCOTAS). Based on the recommendations of the JOCOTAS group, this list may have future additions or deletions.

<i>Shelter Name</i>	<i>National Stock Number (NSN)</i>
----------------------------	---

Air Force

Dome Shelter (Bare Base)	5410-01-363-0090
General Purpose Shelter (Bare Base)	5410-00-365-5017
Small Shelter System (Green)	5419-01-465-3024EJ
Small Shelter System (Tan).....	5419-01-465-3025EJ
Medium Shelter System(Green)	4519-01-465-3023EJ
Medium Shelter System(Tan)	4519-01-465-3019EJ

Army

Tent, General Purpose, Small	8340-00-470-2335
Tent, General Purpose, Medium (Camo Green 483)	8340-00-482-3963
Tent, General Purpose, Medium (Desert Tan 459)	8340-01-329-7478
Tent, General Purpose, Large (Camo Green 483)	8340-00-470-2342
Tent, General Purpose, Large (Desert Tan 459)	8340-01-329-7479
Tent, Frame-Type Expandable, 16 Ft × 16 Ft	8340-00-782-3232
Tent, Extendable, Modular, Personnel (TEMPER)	16 Types, 32 NSNs
Modular Command Post System (Camo Green 483)	8340-01-323-2454
Modular Command Post System (Desert Tan 459)	8340-01-334-7529
Soldier Crew Tent, Type I	8340-00-259-0084
Soldier Crew Tent, Type II	8340-00-259-1481
Lightweight Extreme Weather Shelter (LEWS), 3-Man	8340-01-429-5932
Tent, Shelter Half	8340-00-753-6435
Tent, Hexagonal, Lightweight, M-1950	8340-00-269-1372
Tent, Arctic, 10-man	8340-00-262-3685
Tent, Frame-Type, Insulated Sectional, 16 Ft × 16 Ft	8340-00-262-2399
Tent, Frame-Type, Maintenance, Medium, Light Metal	8340-00-951-6419
Large Area Maintenance Shelter	
75'W × 31'H × 190'L.....	5410-01-334-3158
65'W × 31'H × 122'L.....	5410-01-333-9299
Chemically & Biologically Protected Shelter (CBPS)	5410-01-441-8054
Modular General Purpose Tent System (MGPTS) Small	8340-01-456-3633
Medium	8340-01-456-3628
Large	8340-01-456-3674
Lightweight Maintenance Enclosure (LME)	5410-01-456-3637
Ammunition & General Purpose Solar Covers	To Be Determined

Marine Corps

Combat Tent, 2-Man	8340-01-452-5191
Extreme Cold Weather Shelter (ECWS), 4-Man	8340-01-406-9299
Tent, Command Post, M-1945	8340-00-269-1370

Shelter POCs for the Four Services

<i>Service</i>	<i>Phone/Fax</i>	<i>E-Mail</i>	<i>Mailing Address</i>
Air Force Tactical Shelters	(801) 777-2860 DSN 777-2860 FAX (801) 586-2149 FAX DSN 586-2149	terry.holland@hill.af.mil	Shelter Product Group Manager OO-ALC/LHH ATTN: Terry Holland 6021 Gum Lane Building 1228 Hill AFB, UT 84056-5826
Air Force (Bare Base Sustainment & S-530)	(912) 926-6762 DSN 468-6762 FAX (912) 926-9096 FAX DSN 468-9096	ronald.butts@robins.af.mil	WR-ALC/LKJB ATTN: Lt Col Ronald Butts 460 Richard Day Boulevard, Suite 220 Robins AFB, GA 31098-1640
Soft Wall Shelter Development	(850)-882-4686 x331 DSN 872-4686 x331 FAX (850) 882-9381 FAX DSN 872-9381	joan.sanders@eglin.af.mil	PM-Family of Portable Shelters ATTN: AAC/WMO (Joan Sanders) 314 W. Choctawhatchee Ave. Suite 104 Eglin AFB, FL 32542-5717
Army	(508) 233-5637 DSN 256-5637 FAX (508) 233-5554 FAX DSN 256-5554	thomas.waild@natick.army.mil	Product Manager – Soldier Support ATTN: AMSSC-PM-RSS(N) (MAJ Tom Waild) Natick, MA 01760-5057
Rigid Wall	(508) 233-5243 DSN 256-5243 FAX (508) 233-4433 FAX DSN 256-4433	david.mikelson@natick.army.mil	Shelter Customer Team ATTN: AMSSB-RCP-SC(N) (Dave Mikelson) Natick, MA 01760-5018
Soft Wall	(508) 233-5257 DSN 256-5257 FAX (508) 233-5112 FAX DSN 256-5112	frank.kostka@natick.army.mil	21st Century Fabric Structures Group AATN: AMSSB-RCP-C(N) (Frank Kostka) Natick, MA 01760-5018
Marine Corps	(703) 784-5897 x43043 DSN 278-5897 x43043 FAX (703) 784-5899 FAX DSN 278-5899	iddingswr@mcsc.usmc.mil	Marine Corps Systems Command ATTN: Bill Iddings 2033 Barnett Ave., Suite 315 Quantico, VA 22134-5010
Navy	(301) 757-9149 DSN 757-9149 FAX (301) 757-5096 FAX DSN 757-5096	mooreag@navair.navy.mil	NAVAIRSYSCOM (AIR 3.9.4) ATTN: Capt. A.G. Moore Bldg 416, Room 203 47013 Hinkle Circle, Unit 8 Patuxent River, MD 20670-1028

Shelter Transportability

Transportability and deployment are two main advantages of using DoD Standard Family Shelters. DoD Standard Family Shelters can be transported by land, air, or sea and deployed quickly.

Standard shelters are transportable using military/commercial trucks, railcars, container ships, dolly sets/mobilizers, helicopters, and military cargo aircraft.

Standard shelters are rapidly and easily erectable on site with no specialized equipment/tools and minimal, if any, site preparation.



High Mobility Multipurpose Wheeled Vehicle (HMMWV)



Container Ship



Fixed Wing Aircraft



Railcar

Shelter Transportability



M1022A1 ISO Shelter Dolly Set



Palletized Load System (PLS) Truck



5-Ton Truck



Cargo Aircraft



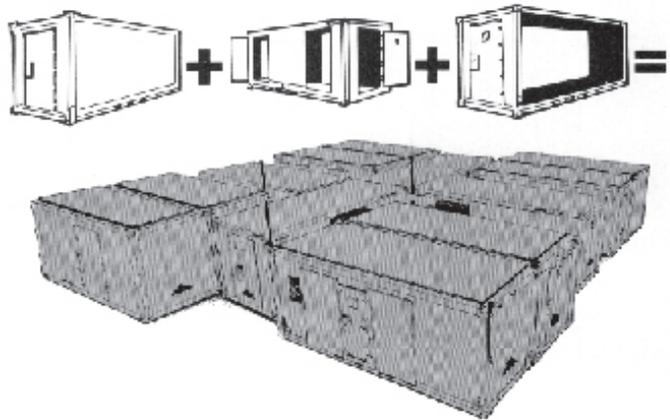
Helicopter



Truck - Flatbed Trailer

Shelter Complexing

A wide variety of complexing arrangements can be made using standard shelters. Joining corridors/passageways/bootwalls are available to connect basic shelter units to other basic shelter units and tents.



Navy Mobile Facility Complexing



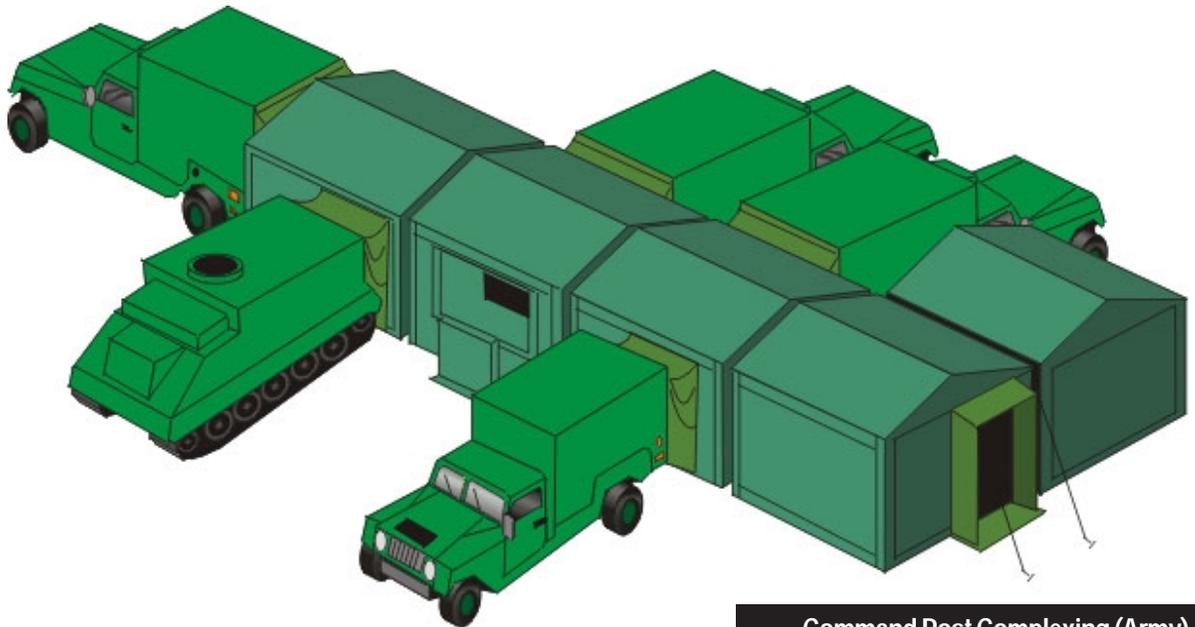
ISO to ISO Passageway (Army)



ISO to TEMPER Passageway (Army)



Deployable Medical Systems Field Hospital



Command Post Complexing (Army)



Bootwall Connecting Standardized Integrated Command Post System (SICPS) Rigid Wall Shelter to Modular Command Post System (MCPS) Tent (Army)

Shelter System Configurations

Some of the system configurations that are possible using standard shelters include command posts, field hospitals, dental facilities, supply depots, maintenance support facilities, food services field feeding systems, administrative/billeting quarters, and logistic support. Shelters can also double as shipping containers for equipment and/or systems used within. Below are some typical system configurations using standard shelters:



Field Kitchen



Maintenance Shop Set



Modular Print System



Battalion Aid Station



Corps Command Post



Hospital Operating Room

Non-Expandable Rigid Wall Shelters

ARMY

S-250/G, Shelter, Electrical Equipment

- **Description:** Mobile tactical shelter designed for housing communications and electronics equipment.
- **NSNs:** Unshielded NSN 5411-00-999-4935, EMI Shielded NSN 5411-01-489-6076.
- **Dimensions:** Exterior 7'-3"L × 6'-7"W × 5'-10"H, Interior 6'-8"L x 6'-3"W x 5'-4"H
- **Weight:** 770 lbs.
- **Payload:** 2530 lbs.
- **Construction:** Foam & Beam
- **Prime Mover:** HMMWV, M1028 CUCV
- **EMI Modification Kit:** NSN 9999-00-880-2188
- **EMI Protection:** 60 dB
- **HMMWV Mounting Kit:** NSN 5340-01-455-8700
- Includes Cable Lift & Tie Down Assembly
- **LIN:** S01427



S-250/G (Army)

S-280C/G, Shelter, Electrical Equipment

- **Description:** Mobile tactical shelter designed for housing communications & electronics equipment.
- **NSNs:** Unshielded NSN 5411-01-092-0892, EMI Shielded NSN 5411-01-304-3069.
- **Dimensions:** Interior 11'-6"L × 6'-10"W × 6'-5"H, Exterior (Envelope) 12'-3"L × 7'-3"W × 7'-3"H, Exterior (Skin to Skin) 11'-10"L × 7'-3"W × 6'-10"H
- **Weight:** 1400 lbs.
- **Payload:** 7100 lbs.
- **Construction:** Foam & Beam
- **Prime Mover:** 5 Ton Truck
- **EMI Modification Kit:** NSN 5410-00-937-5248
- **EMI Protection:** 60 dB
- Includes Cable Lift & Tie Down Assembly
- **LIN:** S01495



S-280(C)/G (Army)



S-280(C)/G Mounted
on 5-Ton Truck

Non-Expandable Rigid Wall Shelters

ARMY

S-788/G, Shelter, Electrical Equipment, Lightweight



S-788/G Mounted on HMMWV (Army)

- **Description:** Replacement for S-250/G shelter designed for housing C4I battlefield systems.
- **Dimensions:** Interior 8'-3.5"L × 6'-9.5"W × 5'-4.5"H, Exterior 8'-6"L × 7"W × 5'-7"H
- **S-788/G Versions:**
 - Type I - Basic Shelter, Empty: NSN 5411-01-357-3582
 - Type III - Basic Shelter w/Tunnel Only: NSN 5411-01-357-3583
- **Weight:** Type I - 608 lbs., Type III - 643 lbs.
- **Payload:** 3300 lbs.
- **Construction:** Honeycomb Core
- **Prime Mover:** M1097/M1113 HMMWVs
- **EMI Protection:** 60 dB
- **LIN:** S01563

S-832/G, Shelter, Non-Expandable, Rigid Wall, Integrated



S-832/G (Army) SICPS Rigid Wall Shelter

- **Description:** Standardized Integrated Command Post System Rigid Wall Shelter (SICPS RWS) is a transportable HMMWV mounted shelter integrated with on-board power, environmental control unit (ECU), EMI and CB protection, equipment racks, and power/signal wiring.
- **NSN:** 5411-01-436-3326.
- **Dimensions:** Interior 8'-3.5"L × 6'-9.5"W × 5'-4.5"H, Exterior 8'-6"L × 7"W × 5'-7"H
- Consists of 10 kW Power Unit, 18K BTUH ECU
- **Construction:** Honeycomb Core
- **Prime Mover:** M1097/M1113 HMMWVs
- **EMI Protection:** 60 dB
- **LIN:** Z77196

ISO Shelter, Tactical, Nonexpandable



S-781/G, S-782/G (Army)
Non-Expandable Tactical ISO Shelter

- **Description:** Non-Expandable 20 Ft ISO Shelter.
- **Dimensions:** Interior 19'-1"L x 7'-7"W x 7'-1"H, Exterior 19'-11"L x 8'W x 8'H
- **Non-Expandable ISO Versions:**
 - 1) S-781/G - 60 Amp Service: NSN 5411-01-136-9837
 - 2) S-782/G - 100 Amp Service: NSN 5411-01-294-6390
- **Weight:** 3900 lbs.
- **Payload:** 11,100 lbs.
- **Gross Weight:** 15,000 lbs.
- **Construction:** Honeycomb Core
- **LIN:** S00860
- Includes Lights, Power Entrance Panel, Circuit Breaker Panel, Duplex Receptacles, Leveling Jacks
- Single Personnel Door on One End

Non-Expandable Rigid Wall Shelters

MARINE CORPS

ISO, 10 Foot

- **Description:** Non-Expandable 10 Ft. ISO Shelter
- **NSNs:** General Purpose - 5411-01-287-4341, EMI Shielded - 5411-01-206-6079
- **Dimensions:** Interior 9'L × 7'-6"W × 7'-2"H, Exterior 9'-11"L × 8'W × 8'H
- **Weight:** General Purpose - 2670 lbs., EMI Shielded - 2705 lbs.
- **Payload:** 3500 lbs.
- **Gross Weight:** General Purpose - 6170 lbs., EMI Shielded - 6205 lbs.
- **Construction:** Honeycomb Core
- **EMI Protection:** 60 dB
- Removable Side and End Walls for GP ISO Only



ISO, 10 Foot (Marine Corps)

ISO, 20 Foot

- **Description:** Non-Expandable 20 Ft. ISO Shelter
- **NSNs:** General Purpose - 5411-01-209-3451, EMI Shielded - 5411-01-206-6078
- **Dimensions:** Interior 19'L × 7'-6"W × 7'-2"H, Exterior 19'-11"L × 8'W × 8'H
- **Weight:** General Purpose - 3750 lbs., EMI Shielded - 4650 lbs.
- **Payload:** General Purpose - 11,250 lbs., EMI Shielded - 10,350 lbs.
- **Gross Weight:** General Purpose - 15,000 lbs., EMI Shielded - 15,000 lbs.
- **Construction:** Honeycomb Core
- **EMI Protection:** 60 dB
- Removable Side and End Walls for GP ISO Only



ISO, 20 Foot (Marine Corps)

Non-Expandable Rigid Wall Shelters

NAVY

Family of NAVAIR Mobile Facility (MF) ISO Shelters



Basic Mobile Facility (BMF)
A (Navy)

- **Description:** Non-Expandable 20 Ft ISO Shelter
- **Dimensions:** Interior 19'-1/4"L × 7'-6"W × 7'-1/2"H, Exterior 19'-11"L × 8'W × 8'H
- **Weight:** 5235 lbs
- **Payload:** 14765 lbs.
- **Gross Weight:** 20,000 lbs.
- **Service Life:** 20 Years
- **Construction:** Foam & Beam
- **Exterior Color:** Glossy White Polyurethane
- Can Easily Be Integrated with Environmental Control Units and Mission Equipment

Basic Mobile Facility Type A

- **NSN:** 5411-01-355-4322
- Can Be Complexed from Both Ends.
- **Doors:** 4'W × 6'-4"H (Both Ends of MF)
- Wired for 60HZ, 100 Amp Power. Power Can Be Transferred to Another MF.
- Capable of Transferring 400 HZ Power.
- Heating/Cooling Provided by 36,000 BTUH ECU Integrally Mounted Through Side of MF.
- Emergency Lighting Capability.

Basic Mobile Facility Type B

- **NSN:** 5411-01-355-4323
- Similar to Basic MF Type A Except Wired for Both 60HZ and 400 HZ Power.

Non-Expandable Rigid Wall Shelters

NAVY

Side Opening MF Type A

- **NSN:** 5411-01-355-4320
- Similar to Basic MF Type B with Following Exceptions:
 - Provisions for Installation of Two 36K BTUH or 60K BTUH ECUs on One Side.
 - Other Side Removable to Allow Complexing With Side Opening MF Type B, Side Opening MF Type C, or Side Opening MF Type B (Modified).
 - Can be Complexed at End Doors.



Side Opening MF Unit A (Navy)

Side Opening MF Type B

- **NSN:** 5411-01-355-4321
- Similar to Side Opening MF Type A with Following Exceptions:
 - No End Doors
 - Can Only Be Complexed With Another Side Opening MF
 - Access Before Complexing Provided Through a Non-Standard Personnel Door (32"W × 66"H)
 - Designed to House Automatic Test Equipment
 - Provisions for 200 Amp Input Capability



Side Opening MF Unit B (Navy)

Side Opening MF Type B (Modified)

- **NSN:** 5411-01-355-4319
- Similar to Side Opening MF Type B Except It Has 80-Inch Wide Double Doors at One End to Allow Induction of Large Items for Repair.



Side Opening MF Unit B (Navy)
with Modified 80" Door

Non-Expandable Rigid Wall Shelters

NAVY

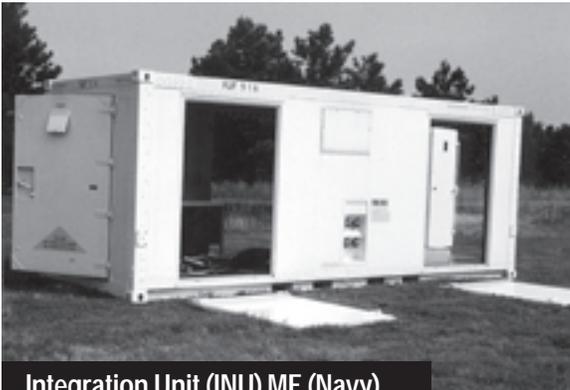
Side Opening MF Type C



Side Opening MF Unit B (Navy)

- **NSN:** 5411-01-355-6566
- Both Sides Removable; Can Be Complexed with Side Opening MFs. Increase Workspace.
- No Installed Equipment or ECU Provisions.
- Access Before Complexing Provided by a Normal Sized End Door

Integration Unit (INU) MF



Integration Unit (INU) MF (Navy)

- **NSN:** 5411-01-355-4318
- Used as a Junction for Up To Six Additional MFs; Two on One Side and Four on Other Side
- End Doors Complexible to Other INUs
- Receives 200 Amp, 60 HZ and 100 Amp, 400 HZ Power for Distribution to Attached MFs
- Heating/Cooling Provided By 10K BTUH Window Type Heat Pump Mounted to Side Wall

Expandable Rigid Wall Shelters

AIR FORCE

Expandable, S-530 A/G

- **Description:** Expandable Shelter (Two Shelters Expands to Volume of Three Shelters - 3:2)
- **NSN:** 5411-01-280-2909EJ
- **Dimensions:**
Interior (Non-Expanded) 11'-5"L × 6'-7"W × 6'-9"H,
Interior (Expanded) 11'-5"L × 20'-4"W × 6'-9"H, Exterior
12'-2"L × 7'-3"W × 7'-6"H
- **Weight:** 2000 lbs.
- **Payload:** 4500 lbs.
- **Gross Weight:** 6500 lbs.
- **Construction:** Nomex Honeycomb Core
- Two Shelters are Joined for Expanded Mode
- **Erection:** Six Soldiers - 45 Minutes
- **EMI Protection:** 60 dB



**S-530 A/G Non-Expanded
(Air Force)**

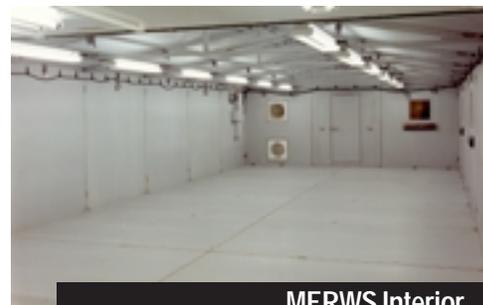
ARMY - AIR FORCE

Modular Extendable Rigid Wall Shelter (MERWS)

- **Description:** Expansion Kit for Army Standard Expandable ISO Shelter.
- **NSN:** 5411-01-312-9084
- Entire MERWS Kit Packs Within ISO Shelter for Transport and Storage
- **Weight:** MERWS Kit Only - 7500 lbs.,
Attached to 1-Side Exp ISO - 13,200 lbs.,
Attached to 2-Side Exp ISO - 14,700 lbs.
- **Unobstructed Floor Space:**
Attached to 1-Side Exp ISO - 1000 sq. ft.,
Attached to 2-Side Exp ISO - 1150 sq. ft.
- **Dimensions:**
Attached to 1-Side Exp ISO - 53'L × 20'W × 8'H,
Attached to 2-Side Exp ISO - 60'L × 20'W × 8'H
- **Erection:** Four Soldiers - Four Hours Using Repetitive Sequence (Includes Unpacking from ISO Shelter)
- **Construction:** Honeycomb Core with Aluminum Skins
- Includes Lights, Breaker Panel, Personnel Door, ECU Interface, Leveling Jacks
- Removable Panels Allow Attachment of ECU Ducting and Complexing Passageways



**Modular Extendable Rigid Wall
Shelter (MERWS) Kit**



MERWS Interior



MERWS Packed Within ISO Shelter

Expandable Rigid Wall Shelters

ARMY

Shelter, Tactical, Expandable, One Side



S-783/G, S-784/G (Army)

- **Description:** One Side Expandable ISO Shelter
- **Dimensions:** Exterior 19'-11"L × 8"W × 8"H, Interior (Transport Mode) 19'-1"L × 7"W × 7'-1"H, Interior (Expanded) 18'-4"L × 14'-6"W × 7'-1"H
- **One Side Expandable ISO Versions:**
 - 1) S-783/G - 60 Amp Service: NSN 5411-01-124-1377
 - 2) S-784/G - 100 Amp Service: NSN 5411-01-295-3433
- **Weight:** 5400 lbs.
- **Payload:** 9600 lbs.
- **Gross Weight:** 15,000 lbs.
- **Construction:** Honeycomb Core
- **Erection:** Four Soldiers - 20 Minutes
- Removable Panels Allow Attachment of ECU Ducting and Complexing Passageways
- Includes Lights, Breaker Panel, Power Entrance Panel, Duplex Receptacles, Leveling Jacks
- **LIN:** S01291

Shelter, Tactical, Expandable, Two Side



S-785/G, S-786/G (Army)

- **Description:** Two Side Expandable ISO Shelter
- **Dimensions:** Exterior 19'-11"L × 8"W × 8"H, Interior (Transport) 19'-1"L × 6'-5"W × 7'-1"H, Interior (Expanded) 18'-4"L × 21'-6"W × 7'-1"H
- **Two Side Expandable ISO Versions:**
 - 1) S-785/G - 60 Amp Service: NSN 5411-01-136-9838
 - 2) S-786/G - 100 Amp Service: NSN 5411-01-294-9866
- **Weight:** 6900 lbs.
- **Payload:** 8100 lbs.
- **Gross Weight:** 15,000 lbs.
- **Construction:** Honeycomb Core
- Removable Panels Allow Attachment of ECU Ducting and Complexing Passageways
- **Erection:** Four Soldiers - 30 Minutes
- Includes Lights, Breaker Panel, Power Entrance Panel, Duplex Receptacles, Leveling Jacks
- **LIN:** S01359

Expandable Rigid Wall Shelters

MARINE CORPS ISO, Knockdown

- **NSN:** 5411-01-206-6077
- **Stored/Stacked Dimensions:**
19'-11"L × 8'W × 1'-9"H
- Four Knocked Down Shelters Can be Stacked and Shipped in Transport Mode (8' × 8' × 19'-11"L)
- **Erection:** 20 Soldiers - 20 Minutes
- Conforms to ISO Container Standards
- **Erected Dimensions:**
Interior 19'-11"L × 7'-5"W × 7'-1"H, Floor to Beam 6'-2"H
- **Weight:** 3650 lbs.
- **Floor Load:** 45 lbs./sq. ft.



Knockdown ISO, Stacked (USMC)



Knockdown ISO, Partially Erected

Soft Wall Shelters

AIR FORCE

Rapid Deployment Bare Base Shelter System (Dome Shelter)



Bare Base System - Dome Shelter
(Air Force)



Dome Shelter -
Interior View Aircraft Hangar

- **Type of Shelter:** Frame Supported
- **NSN:** 5410-01-363-0090
- **Purpose/Use:** Primary - Warehouses/Storage, Secondary - Aircraft Hangars, Maintenance
- **Environment:** Desert, Temperate, Tropical, and Arctic Conditions
- **Dimensions:** 120'L × 65'W × 10'H to 24'H (Eave to Peak) - Basic 4000 sq. ft.
- **Floor Area:** 4000 to 8000 sq. ft. (Length Can Be Extended Using 14 Ft Modules)
- **Weight:** Shelter Only (4000 sq. ft.) - 28,660 lbs., Shelter w/ Container - 33,070 lbs.
- **Cube:** 1500 cu. ft. (4000 sq. ft.)
- **Erection:** Eight People - 32 Hours (No Special Tools)
- **Dismantle/Repack:** Eight Soldiers - 26 Hours
- **Fabric:** PVC Coated Fabric Membrane
- **Color:** Desert Tan, Olive Drab, Camouflage
- Transported Within Three Bare Base Shipping/Storage Containers
- Includes Electrical and Lighting

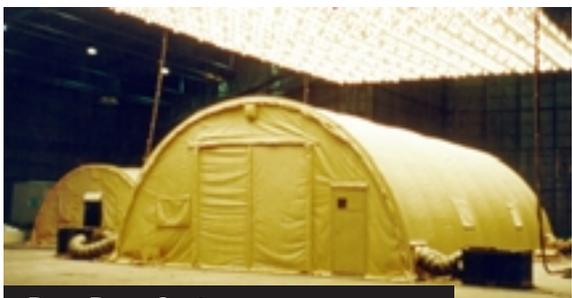
Small Shelter System



Bare Base System -
Small Shelter System (Air Force)

- **Type of Shelter:** Frame supported
- **NSNs:** Green 5419-01-465-3024EJ, Tan 5419-01-465-3025EJ
- **Purpose/Use:** Billeting, general purpose
- **Environment:** Worldwide
- **Dimensions:** 20 × 32.5 ft.
- **Floor Area:** 650 sq. ft.
- **Weight:** 1250 lbs. basic shelter system (includes shelter, membrane floor, liner, electrical, container)
- **Cube:** 119 cu. ft. for container (includes basic shelter system plus Mobility Readiness Spare Package)
- **Erection:** Four men less than one hour
- **Dismantle/repack:** Four men less than 45 minutes
- **Fabric:** 13.5 oz. PVC coated polyester
- **Color:** Camouflage Green or Desert Tan
- Transported in individual composite container, 4 to a 463L pallet
- Includes 3.5-ton Environmental Control Unit, 611 lbs., 42 cu. ft. (airlifted separately, 12 to a 463L pallet)

Medium Shelter System



Bare Base System -
Medium Shelter System (Air Force)

- **Type of Shelter:** Frame Supported
- **NSNs:** Tan 4519-01-465-3019EJ, Green 4519-01-465-3023EJ
- **Purpose/Use:** General Purpose, (Communication, Supply, Flight line and Vehicle Maintenance)
- **Environment:** Worldwide (-60° to 125°)
- **Dimensions:** 52 × 29.5 ft
- **Floor Area:** 1500 sq. ft.
- **Weight:** 3,940 lbs
- **Cube:** 224 cu. ft. packed container
- **Erection:** 6 people 4 hrs
- **Fabric:** 13.5 oz. PVC coated polyester
- **Color:** Desert tan or camouflage green

ARMY

Tent, General Purpose, Small

- **NSN:** 8340-00-470-2335
- **Type of Shelter:** Pole Supported
- **Purpose/Use:** Command Post, Battalion Aid Station, Fire Direction Center, or General Purpose
- **Dimensions:** 8'-9"L × 17'-6"W × 5' to 10'-6"H (Eave to Peak)
- **Floor Area:** 200 sq. ft.
- **Weight:** 186 lbs.
- **Cube:** 8 cu. ft.
- **Erection:** Four Soldiers - 30 Minutes
- **Fabric:** 13.5 oz. (Max) Polyester Duck
- **Color:** Desert Tan 459, Camo Green 483
- **LIN:** V49126



General Purpose (GP)
Small (Army)

Tent, General Purpose, Medium

- **NSNs:** Green 8340-00-482-3963, Tan 8340-01-329-7478
- **Type of Shelter:** Pole Supported
- **Purpose/Use:** Personnel Housing, Command Post, Fire Direction Center, Mess Tents
- **Dimensions:** 32'L × 16'W × 5'-6" to 10'H (Eave to Peak)
- **Floor Area:** 512 sq. ft.
- **Weight:** 530 lbs.
- **Cube:** 33 cu. ft.
- **Erection:** Four Soldiers - 40 Minutes
- **Fabric:** 13.5 oz. (Max) Polyester Duck
- **Color:** Camo Green 483, Desert Tan 459
- **LIN:** V48989



General Purpose (GP)
Medium (Army)

Tent, General Purpose, Large

- **NSNs:** Green 8340-00-470-2342, Tan 8340-01-329-7479
- **Type of Shelter:** Pole Supported
- **Purpose/Use:** Hospital Ward, Billeting, Storage
- **Dimensions:** 52'L × 18'W × 5'-6" to 12'H (Eave to Peak)
- **Floor Area:** 936 sq. ft.
- **Weight:** 666 lbs.
- **Cube:** 69 cu. ft.
- **Erection:** Six Soldiers - 75 Minutes
- **Fabric:** 13.5 oz. (Max) Polyester Duck
- **Color:** Camo Green 483, Desert Tan 459
- **LIN:** V48578



General Purpose (GP)
Large (Army)

ARMY

Modular General Purpose Tent System (MGPTS)



Modular General Purpose Tent System (MGPTS) (Army)

- **Type of Shelter:** Currently Pole Supported
- **NSNs:**
 - 1) NSN 8340-01-456-3633 Small
 - 2) NSN 8340-01-456-3628 Medium
 - 3) NSN 8340-01-456-3674 Large
- **Purpose/Use:** Billeting and Field Services
- More Versatile and Habitable Replacement to GP Small, Medium, and Large Tents
- **Dimensions:** 18'L × 18'W × 7'H to 11'3"H (Eave to Peak)
- Length Can Be Extended in 18 ft. Increments by Adding Intermediate Modules
- **Floor Area:** 648 sq. ft. (MGPTS Equivalent to GP Medium)
- **Fabric:** 13.5 oz. (Max) Polyester Duck (Tensioned System)
- **Color:** Desert Tan 459, Camo Green 483
- P3I for Dual Support (Frame) System

Lightweight Extreme Weather Shelter (LEWS), 3-Man



3-Man Lightweight Extreme Weather Shelter (LEWS) (Army)

- **Type of Shelter:** Frame Supported
- **NSN:** 8340-02-429-5932
- **Purpose/Use:** Back Packable Tent Satisfies Special Operations Forces (SOF) Requirement for Use in Extreme Weather Conditions
- **Environment:** Arctic, Desert, Mountain Regions
- **Dimensions:** 45"H
- **Floor Area:** 45 sq. ft. min (10 sq. ft. min Vestibule)
- **Weight:** 12 lbs.
- **Cube:** 1.1 cu. ft.
- **Erection:** Two Soldiers - Five Minutes
- **Color:** Desert Tan, Arctic White, Woodland Green
- Camouflage Capability

Tent, Extendable, Modular, Personnel (TEMPER)

- **Type of Shelter:** Frame Supported
- **NSNs:** 32 NSNs; 16 TEMPER Types (I thru XVI) in either Color (ex. Type IV, Personnel, Green NSN 8340-01-196-6272, Type IV, Tan NSN 8340-01-185-2628).
- **Purpose/Use:** Field Feeding, Medical Facilities, Billeting
- **Environment:** All Climates
- **Dimensions:** 8'L × 20'-6"W × 6'-9"H to 10'H (One Section) (Eave to Peak)
- Length Can Be Extended in 8 ft. Increments.
- **Floor Area:** 640 sq. ft. (Type IV, Personnel) (Four Sections)
- **Weight:** 1328 lbs. (Type IV)
- **Cube:** 123 cu. ft. (Type IV)
- **Erection:** Five Soldiers - 40 Minutes (Type IV)
- **Fabric:** 13.5 oz. (Max) Polyester Duck
- **Color:** Camo Green 483, Desert Tan 459
- **Features:** Tent Fly to Reduce Solar Loading, Fluorescent Lights, Electrical Power Distribution, Air Distribution Plenums for Heating/Cooling, Entrance Vestibule, Insulated Floor Capability Available



32-Foot Long TEMPER Type IV (Army)

Tent, Frame-Type, Expandable, 16 Ft × 16 Ft

- **Type of Shelter:** Frame Supported
- **NSN:** 8340-00-782-3232
- **Purpose/Use:** Division Tactical Operations Center, Briefings
- **Dimensions:** 16'L × 16'W × 6'H to 8'-6"H (Eave to Peak)
- **Floor Area:** 256 sq. ft.
- **Weight:** 400 lbs.
- **Cube:** 60 cu. ft.
- **Erection:** Four Soldiers - 45 Minutes
- **Fabric:** 13.5 oz. (Max) Polyester Duck
- **Color:** Desert Tan 459, Camo Green 483



16 Ft × 16 Ft Frame Type Expandable Tent (Army)

Modular Command Post System (MCPS)

- **Type of Shelter:** Frame Supported
- **NSNs:** Green NSN 8340-01-323-2454, Tan 8340-01-334-7529
- **Purpose/Use:** Command Posts in All Climates
- **Dimensions:** 11'L × 11'W × 7'H to 9'H (Eave to Peak)
- **Floor Area:** 121 sq. ft.
- **Weight:** 482 lbs. (Complete Tent System)
- **Cube:** 30 cu. ft.
- **Erection:** Two Soldiers - 20 Minutes
- **Fabric:** 13.5 oz. Polyester Duck
- **Color:** Camo Green 483, Desert Tan 459
- Includes Two Field Tables, Four Mapboards, Two Fluorescent Lights, Removable Walls for Complexing to Other MCPS, Rain Gutters.



Modular Command Post System (Army)

Soft Wall Shelters

ARMY

Tent, Arctic, 10-Man



10-Man Arctic Tent (Army)

- **Type of Shelter:** Pole Supported
- **NSN:** 8340-00-262-3685
- **Purpose/Use:** Provide Shelter for Ten Soldiers and Their Equipment in Arctic Weather Conditions
- **Dimensions:** 8'-9"L × 3'H to 8'-6"H (Eave to Peak)
- **Floor Area:** 200 sq. ft.
- **Weight:** 76 lbs.
- **Cube:** 7.3 cu. ft.
- **Erection:** Six Soldiers - 27 Minutes
- **Fabric:** Cotton
- **Color:** Olive Drab
- **LIN:** V51729

Tent, Hexagonal, Lightweight, M-1950 (5-Man Arctic)



M-1950 Lightweight Hexagonal (5-Man Arctic) Tent (Army)

- **Type of Shelter:** Pole Supported
- **NSN:** 8340-00-269-1372
- **Purpose/Use:** Provide Shelter for Five Men and Their Equipment in Extremely Cold, or Cold-Wet Conditions
- **Dimensions:** 6'-7"L × 2'H to 8'-6"H (Eave to Peak)
- **Floor Area:** 113.2 sq. ft.
- **Weight:** 56 lbs.
- **Cube:** 3.8 cu. ft.
- **Erection:** Five Soldiers - 15 Minutes
- **Fabric:** Cotton
- **Color:** Olive Drab
- **LIN:** V49674

Tent, Frame-Type, Insulated, Sectional, 16 Ft × 16 Ft



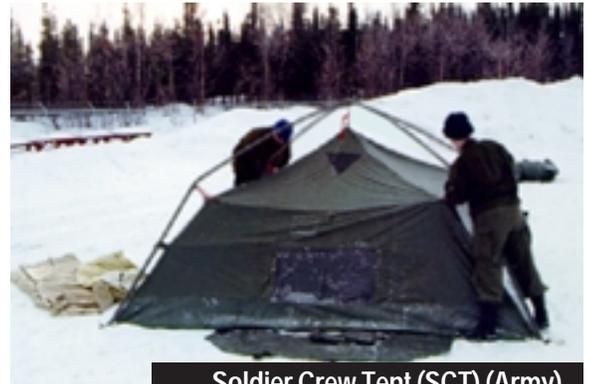
16 Ft × 16 Ft Frame Type Insulated Sectional Tent (Army)

- **Type of Shelter:** Frame Supported
- **NSN:** 8340-00-262-2399
- **Purpose/Use:** General Purpose Use in Extreme Cold Climates
- **Dimensions:** 16'L × 16'W × 6'H to 8'H (Eave to Peak)
- **Floor Area:** 256 sq. ft.
- **Weight:** 2252 lbs.
- **Cube:** 250 cu. ft.
- **Erection:** Six Soldiers - 45 Minutes
- **Fabric:** Vinyl Coated Cotton Duck (1" Thick Fiberglass Batting)

ARMY

Soldier Crew Tent

- **Type of Shelter:** Frame Supported
- **NSNs:** Type I NSN 8340-01-359-0084, Type II NSN 8340-01-359-1481
- **Purpose/Use:** Quickly Erectable Tent for Combat Vehicle Crews
- **Dimensions:** 10'-10"L × 10'-10"W × 59"H
- **Floor Area:** 120 sq. ft.
- **Weight:** 75 lbs.
- **Cube:** 6 cu. ft.
- **Erection:** Two Soldiers - Five Minutes
- Reversible Overcovers
- Cold Weather Cotton Liner Available
- **SCT Types:** Type I (Green/Tan), Type II (Green/White)



Soldier Crew Tent (SCT) (Army)

Tent, Shelter Half

- **Type of Shelter:** Pole Supported
- **NSN:** 8340-00-753-6435
- **Purpose/Use:** Provide One Soldier Shade, Shelter Joined Together with Another Shelter Half for Two Soldiers
- **Dimensions:** 7'L × 5'-4"W × 3'-7"H (Two Halves)
- **Floor Area:** 30 sq. ft. (Two Shelter Halves)
- **Weight:** 5 lbs.
- **Cube:** 0.4cu. ft.
- **Erection:** Two Soldiers - Five Minutes
- **Fabric:** 8.25 oz. Cotton Duck
- Six Halves Can Be Joined to Shelter Six Soldiers
- **LIN:** T00150



Shelter Half Tent (Army)

Soft Wall Shelters

MARINE CORPS

Tent, Command Post, M-1945



M-1945 Command Post Tent
(Marine Corps)

- **Type of Shelter:** Pole Supported
- **NSN:** 8340-00-269-1370
- **Purpose/Use:** Battalion Command Post, Battalion Aid Station
- **Dimensions:** 20'-7"L × 10'W × 6'H to 9'H (Eave to Peak)
- **Floor Area:** 172 sq. ft. (48 sq. ft. Vestibule Space)
- **Weight:** 235 lbs.
- **Cube:** 9.9 cu. ft.
- **Erection:** Five Soldiers - 20 Minutes
- **Fabric:** 13.5 oz. (Max) Polyester Duck
- **Color:** Desert Tan 459, Camo Green 483
- **LIN:** V49143

Extreme Cold Weather Shelter (ECWS), 4-Man



4-Man Extreme Cold Weather Shelter (ECWS) (Marine Corps)

- **Type of Shelter:** Frame Supported
- **NSN:** 8340-01-406-9299
- **Purpose/Use:** Back Packable Tent Satisfies Marine Corps Requirement for Use in Arctic and Temperate Weather Conditions
- **Environment:** Arctic and Temperate Regions
- **Dimensions:** 60"H
- **Floor Area:** 60 sq. ft. min (60 sq ft min Vestibule)
- **Weight:** 18 lbs.
- **Cube:** 1.6 cu. ft.
- **Erection:** Two Soldiers - Five Minutes
- **Color:** Arctic White, Woodland Camo Green

2-Man Combat Tent



2-Man Combat Tent
(Marine Corps)

- **Type of Shelter:** Frame Supported
- **NSN:** 8340-01-452-5191
- **Purpose/Use:** Back Packable Tent Satisfies Marine Corps Requirement for Use in Desert and Temperate Conditions
- **Dimensions:** 34"H
- **Floor Area:** 39 sq. ft. min (10 sq. ft. Vestibule)
- **Weight:** 7 lbs.
- **Cube:** 0.5 cu. ft.
- **Erection:** Two Soldiers - Five Minutes
- **Color:** Desert Tan, Camouflage Green
- Replacement to Shelter Half Tent

ARMY

Ammunition Solar Cover, General Purpose, Type I

- **Type of Shelter:** Pole Supported
- **Purpose/Use:** Provide General Purpose Solar Protection for Food Stocks, Supplies, Munitions, Vehicles and Equipment
- **Environment:** Hot Climates
- **Dimensions:** 35'L × 35'W × 7' to 10'H
- **Floor Area:** 1225 sq. ft.
- **Erection:** Two Soldiers - 30 Minutes
- Constructed of Lightweight, Open Weave Mesh Material
- Reduces Solar Effects by 50-60%
- HMMWV Drive Through Capability
- **Color:** Woodland Green, Desert Tan



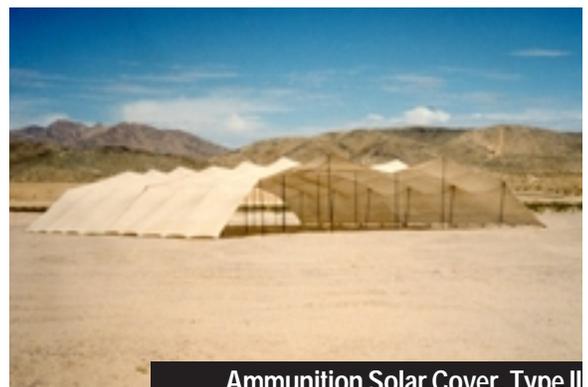
General Purpose Ammunition Solar Cover, Type I (Army)

Ammunition Solar Cover, Type II

- **Type of Shelter:** Pole Supported
- **Purpose/Use:** Provide Solar Protection for Munitions, Vehicles and Equipment
- **Environment:** Hot Climates
- **Dimensions:** 50'L × 50'W × 10' to 14'H
- **Floor Area:** 2500 sq. ft. (Per Module)
- **Erection:** Two Soldiers - One Hour (Per 2500 sq. ft. Module)
- **Fabric:** Lightweight, Open Weave Material
- Complexible
- Modular Design for Varying Ground Cover
- Reduces Solar Effects by 50-60%, Improves Reliability of Munitions
- Vehicle Drive Through Capability
- **Color:** Woodland Green, Desert Tan



Ammunition Solar Cover, Type II (Army) (Single Unit - 2,500 Sq. Ft.)



Ammunition Solar Cover, Type II (Four Units - 10,000 Sq. Ft.)

Special Purpose Shelters

ARMY

Two Soldier, Small Unit Solar Shade (SUSS) — Experimental



2 Soldier, Small Unit Solar Shade (SUSS) (Army)



2 Soldier SUSS in Woodland Camouflage (Army)

- **Type of Shelter:** Supported by adjustable poles
- **Purpose/Use:** Reconnaissance Team /SOF, used for Hide Sites, protects exposed soldiers from high solar loading and reduces visual, thermal and infrared signatures
- **Environment:** Hot Desert/Woodland
- Breaks down into two bundles approximately 7 lbs. each
- **System:** Cover, poles, stakes, hammer and transport bags
- **Set Up:** Five minutes by one soldier
- **Size:** 7' W × 14' L × 20"H
- Composite open mesh solar shade fabric with Lightweight camouflage cover
- Tested and endorsed by 3rd Special Forces Group

COLT Team Small Unit Solar Shade (SUSS) - Four Soldiers — Experimental



COLT Team Small Unit Solar Shade (SUSS) - Four Soldier (Army)

- **Type of Shelter:** Supported by adjustable poles
- **Purpose/Use:** Reconnaissance and Combat Observation Lazing Teams (COLTs), used for forward observer and targeting sites, protects exposed soldiers from high solar loading and reduces visual, thermal and infrared signatures
- **Environment:** Hot Desert/Woodland
- Breaks down into three bundles approximately 12 lbs. each
- **System:** Two interlocking covers, poles, stakes, hammer and transport bags
- **Set Up:** Five minutes by three soldiers
- **Size:** 13'W × 12'L × 30"-50"H
- Composite open mesh solar shade fabric with Lightweight camouflage cover
- Tested and endorsed by COLT teams from the 1st ID and 1st AD (Fort Riley)

ARMY

Tent, Frame-Type, Maintenance Medium, Light Metal (Fritsche)

- **Type of Shelter:** Frame Supported
- **NSN:** 8340-00-951-6419
- **Purpose/Use:** Medium Sized Maintenance Shelter for Repair of Tracked and Wheeled Vehicles
- **Dimensions:** 32'L × 20'W × 14'H
- **Floor Area:** 640 sq. ft.
- **Weight:** 3371 lbs.
- **Cube:** 289.6 cu. ft.
- **Erection:** Four Soldiers - Five Hours
- **Fabric:** 9.85 oz. Cotton Duck (Olive Drab)
- Cold Weather Insulated Liner Available (Cotton Sateen/Fiberglass Batting)
- **LIN:** V48441



Standard Maintenance Tent (Army)

Lightweight Maintenance Enclosure (LME)

- **Type of Shelter:** Frame Supported
- **NSN:** 5410-01-456-3637
- **Purpose/Use:** Lightweight, Mobile Repair Shelter for Tracked & Wheeled Vehicles Across the Battlefield Under All Climatic Conditions
- **Dimensions:** 32'L × 25'W × 13.75'H to 16.5'H (Eave to Peak)
- **Floor Area:** 800 sq. ft.
- **Weight:** 1332 lbs. (1659 lbs Packed)
- **Cube:** 109 cu. ft.
- **Erection:** Six Man-Hours
- Replacement to Standard Maintenance Tent
- Provides Blackout Capability



Lightweight Maintenance Enclosure (LME) (Army)



LME with Vehicle Doors Closed (Army)

Maintenance Shelters

Large Area Maintenance Shelter



Large Area Maintenance Shelter
(Clamshell) (Army/Navy)



Large Area Maintenance Shelter
(Canvas Specialties) (Army)

- **Type of Shelter:** Frame Supported
- **NSNs:**
Clamshell Buildings Inc. - NSN 5410-01-334-3158
Canvas Specialties Inc. - NSN 5410-01-333-9299
- **Purpose/Use:** Large Area Maintenance/Repair Shelter for Helicopters, Tanks, and Wheeled Vehicles
- **Dimensions:**
Clamshell Buildings Inc. - 190'L × 75'W × 31'H
(Length is Modular in 12.5-ft. Increments),
Canvas Specialties Inc. - 122'L × 65'W × 31'H
(Length is Modular in 15-ft. Increments)
- **Floor Area:** Clamshell - 12,500 sq. ft.,
Canvas Specialties - 6700 sq. ft.
- **Shelter Weight:** Clamshell - 26,700 lbs.,
Canvas Specialties - 19,000 lbs.
- **Shipping Weight:** Clamshell - 30,000 lbs.,
Canvas Specialties - 25,400 lbs.
- **Cube:** Clamshell - 797 cu. ft.,
Canvas Specialties - 750 cu. ft.
- **Erection:** Clamshell - 12 People, 36 Hours,
Canvas Specialties - Eight People, 36 Hours
- Procured During Operation Desert Shield/Storm

AIR FORCE

General Purpose Shelter (Bare Base)

- **Type of Shelter:** Hybrid (Rigid and Soft)
- **NSN:** 5410-00-365-5017
- **Dimensions:** Deployed - 46'L × 30'W × 12'H, Transport Mode - 9'-9.75"L × 8'W × 8'H
- **Floor Area:** 1400 sq. ft.
- **Weight:** 10,897 lbs.
- **Erection:** 120 Man-hours (No Special Equipment Required)
- **Construction:** Rigid Honeycomb Wall Panels Connected to I-Beams to Form Arches
- Includes Electrical and Lighting
- Transportable by Truck, Forklift, 463L Cargo Handling System, or Towed Trailer



General Purpose Shelter
(Air Force)

ARMY

Chemically and Biologically Protected Shelter (CBPS)

- **Type of Shelter:** Hybrid - Rigid Wall and Pressurized Airbeam Supported
- **NSN:** 5410-01-441-8054
- **Purpose/Use:** Provide Contamination Free, Environmentally Controlled Work Area for a Battalion Aid Station (BAS) and Division Clearing Station (DCS)
- **Dimensions (Tent):** 18'-10"L × 18'-8"W × 10'H
- **Floor Area (Air Supported Tent):** 300 sq. ft.
- **Erection:** Four Soldiers - 20 Minutes
- Includes Insulating Liner
- 44,000 BTU/hr Cooling, 60,000 BTU/hr Heating
- **Consists:** LMS Mounted on Heavy HMMWV, Airbeam Supported Soft Shelter, and High Mobility Trailer with 10kW Tactical Quiet Generator.
- Transports Four-Person Medical Crew with Gear and All Medical Equipment
- Direct Replacement for M51 Chemically Protected Shelter



Chemically and Biologically
Protected Shelter (CBPS) (Army)



CBPS Rear View



CBPS Inside View of
Air-Supported Shelter

JOINT COMMITTEE ON TACTICAL SHELTERS (JOCOTAS)

CHARTER

19 April 2000

1. Purpose

JOCOTAS is a DOD wide committee that brings together many organizations and individuals involved in soft wall, rigid wall and hybrid military tactical shelters. The purpose is to:

- a. Advance the state of the art in shelter design and shelter ancillary equipment
- b. Search for common solutions to identified user needs
- c. Eliminate duplication of shelter RDT&E
- d. Create a standard shelter family and maximize its use within DOD
- e. Share information and expertise to solve shelter problems
- f. Work to promote evolutionary change in processes used for shelter development
- g. Assist the services in procuring shelters in the most streamlined and cost effective way
- h. Assure shelters are compatible with commercial & military transportation equipment for worldwide deployment
- i. Provide forum for interaction between JOCOTAS and industry.

2. Background

Under the joint regulation AR 70-59/AFJI 61-106/OPNAVINST 3900.27/MCO 3920.5A, entitled "Department of Defense Tactical Shelter Program", JOCOTAS was formed in 1975 for the purpose of eliminating duplication of RDT&E among services, and to establish and maximize usage of a standard family of tactical rigid wall shelters. Since its inception, JOCOTAS has reduced the number of rigid wall shelter types from approximately 250 to 17. Soft shelters were added to JOCOTAS in 1994. This Charter augments the Joint Regulation.

3. Exclusions

Structures that are not considered tactical shelters and are thus not covered by this charter are as follows:

- a. Containers used exclusively for cargo transportation.
- b. Refrigerated structures.
- c. Modular or prefabricated permanent structures designed to be shipped to the operating location, and assembled with external unit support.
- d. Truck and Trailer Vans.

4. Membership

- a. Chairman – JOCOTAS Chairperson (referred to as Chair) shall be from OUSD (AT&L).
- b. Executive Secretary – The Chair shall name an executive secretary that will arrange for the annual meeting, prepare the agenda, and complete and distribute the minutes.
- c. Technical Working Group (TWG) Chairs – There will be two TWGs; Soft Wall Shelters, and Rigid Wall Shelters. The Executive Secretary shall name a TWG Chair for each TWG. The TWG Chairs will arrange the TWG meetings, prepare the agendas, and complete and distribute the minutes.
- d. Service/Agency Representatives – Each service or agency, to include Army, Air Force, Marines, Navy, and DLA Headquarters, shall select a single person that has the authority to vote for that service/agency.

- e. **General Participation** – JOCOTAS invites any Government personnel involved with, or interested in, shelters to attend meetings, to include:
 - Shelter technology and engineering developers
 - Shelter integrators and engineering support activities
 - Shelter procurement agencies
 - Combat developers and requirements agenciesOccasionally, Non-Government personnel may be invited to participate in these meetings.

5. Meetings

- a. **Joint Technical Working Groups (TWGs)** – Generally two joint Rigid/Soft Wall TWGs will be held annually to share information, develop program and standardization strategies, and resolve disputes. Usually held in October and April.
- b. **JOCOTAS Annual Meeting** – Usually held in April with the Chair to review results of the TWGs, highlights of shelter activities over the preceding year, and the Executive Secretary to review each service/agency's 5-year RDT&E and production program.

6. JOCOTAS Responsibilities/Objectives

Since 1975 JOCOTAS has saved millions of dollars through the elimination of duplication in R&D, multi-service buys of shelters, and in reduced logistics supportability costs. Specific responsibilities/objectives under this charter are:

- a. Coordinate multi-service plans for shelter RDT&E, modernization and production programs.
- b. Maximize opportunities for joint requirements, joint development programs, and joint funding.
- c. Promote cost effective, streamlined shelter acquisition and procurement.
- d. Maximize opportunities for joint procurement and central logistics support.
- e. Maintain the DOD standard family of soft wall, rigid wall, and hybrid shelters, and add to the family to meet multi-service requirements.
- f. Maximize the use of standard shelters within DOD; require a waiver to buy non-standard shelters
- g. Prepare and update annually a 5-year multi-service RDTE and production plan.
- h. Sponsor/assist the Defense Ammunition Center & School in the extensive review and revision of MIL-HDBK-138 to include re-inspection criteria for ISO Shelters and changes to the Convention for Safe Containers(CSC) Training Course on Re-Inspection of ISO Shipping Containers to include ISO Shelters.
- i. Publish periodic updates to the JOCOTAS Standard Family of Tactical Shelters Brochure; as changes occur, immediately update the website that contains the Brochure.
- j. Promote development and use of engineering standards and design criteria for multi-service shelters, both rigid and soft wall. An example is ASTM E-1925 "Engineering and Design Criteria for Rigid Wall Relocatable Structures".

7. Committee Procedures

- a. **Service/agency position** – Each service & DLA Headquarters representative to JOCOTAS is responsible for obtaining consensus within their service/agency on any issue.
- b. **Resolving issues** - Each service & DLA Headquarters shall have one voting member. A majority vote shall be sufficient to resolve most issues, unless a majority of the voting members determines that the issue is of such significance that it needs to be brought to the attention of the Chair. When a consensus (majority) cannot be obtained, or the issue is of major significance, then a special meeting shall be held with the Chair. The Executive Secretary will prepare a white paper prior to the meeting describing the issues with a brief synopsis describing the positions of each of the voting groups. Each side

shall then have the opportunity to present their position to the Chair. The Chair will make the decision.

8. Waiver Procedures

a. A waiver is required from OUSD (AT&L) to procure, in production, a soft or rigid wall shelter other than one that is listed in the JOCOTAS Standard Family of Tactical Shelters Brochure.

Note: With respect to waiver requests for soft wall shelters only, this procedure applies if the unit cost of the shelter exceeds \$25,000.

b. Prior to submitting a waiver request, requester must contact their service JOCOTAS member to discuss their situation and verify the need to submit a waiver request. Requester then should prepare the waiver request and submit to the aforementioned JOCOTAS member.

c. JOCOTAS member will coordinate waiver request with other service JOCOTAS members and obtain a written position from each.

d. If the majority of members agree, the waiver request will be forwarded, by the Executive Secretary, to the JOCOTAS Chair. The Chair will issue a memorandum granting or denying the waiver request.

e. When a consensus (majority) cannot be obtained, or the waiver is of major significance, the JOCOTAS Chair will call a meeting to resolve. If a consensus (majority) position cannot be reached at this meeting, the JOCOTAS Chair will make the final decision, and issue a memorandum stating the waiver decision.

f. Non-standard shelter waiver request format:

- 1) Name of using system, development agency, address, responsible individual and phone number.
- 2) Quantity of non-standard shelters and delivery schedule.
- 3) State reasons why a standard shelter cannot be used by addressing the following:
 - (a) What is the rationale? Be specific.
 - (b) What capabilities are not provided by a standard shelter?
 - (c) Why a standard shelter cannot be modified or upgraded?
 - (d) What requirements prevent the use of standard shelters, what is the basis and rationale of these requirements, and what, if any, effort has been made to change/modify these requirements to allow use of standard shelters?
 - (e) Why integrating components or layout cannot be changed so a standard shelter can be used?



Andrus Villu, Deputy Director, Land Warfare
Office of the Under Secretary of Defense
(Acquisition, Technology and Logistics)

JOCOTAS Officers & Principal Voting Members

Chairman:

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Chuck Sieber, Office of the Under Secretary of Defense (Acquisition, Technology and Logistics), Tel: 703-697-7645; DSN 227-7645; Fax: 703-693-7029

Executive Secretary:

Jack M. Siegel, Director, Collective Protection Directorate, U. S. Army Soldier Systems Center - Natick, Tel: 508-233-4209; DSN 256-4209; Fax: 508-233-4433

JOCOTAS Rigid Wall Shelter Technical Working Group (TWG) Chairman:

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JOCOTAS Soft Wall Shelter Technical Working Group (TWG) Chairman:

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