

Ramim Engineering Works LTD

Military Portable Shelters

With over 40 years of experience as a leader in tactical shelter design and manufacture, Ramim is recognized world wide for it's efficient production of lightweight units. Today these rugged transportable shelters are used by every army around a world. Ramim Engineering Works Ltd. is a subsidiary of Koor Metals Group. Ramim is a division of Koor Metals and receives direct technical, financial and logistical support from this organization. The company utilizes U.S. and Israeli know-how to manufacture a specialized line of transportable prefabricated Communications Shelters, Mobile Tactical Shelters, Telecommunications Shelters, Mobile Laboratories, Collapsible Cabins, Refrigerated Container Trucks. The company manufactures Communication Shelters in accordance with various American Military Specifications.

NATO/ACE SHELTER

Electronic Equipment



Subject to technical modifications. E&OE.



Brochure No-2014-04



Modification & Integration:

Ramim Engineering Works Ltd. can meet any Modification or Integration requirement from simple Entry Panel through Power Distribution, Lighting, Air Conditioning, Equipment Racks, Power and Signal Cabeling Racks and Onboard Power Generators. Ramims Communications Shelters and products incorporate any EMI, RFI protection and EMC compatibility requirements.

The following are Ramim's Shelters as per NATO standards: NATO-I, NATO-II, NATO-III, ACE-I, ACE-II, ACE-III

The following are Ramim's Shelters as per US Specifications: S-250/G, S-280C/G, S-1497, S-788, 20' ISO Shelters, 20' One-Sided or Two-Sided Expandable Shelters Various types of Shelters can be manufactured to order up to 50' long.

Areas of Deployment:

- Transmitting and Receiving Stations
- Air Defence Command Control Centers
- Mobile Military Command Centers
- Mobile Laboratories
- Mobile Workshops
- Radio and TV Link Stations
- Mobile Medical Units
- Air Traffic Control, ATC Centers
- Disaster Relief Coordination Centers
- Various mobile Housings and Enclosures for UAV & Missiles

Ramim's key Advantages:

- In house Design and Production
- Modularity
- Survivability
- Low life cycle cost
- Maximum space and maximum payload without sacrificing mobility
- Increased RFI integrity throughout the lifecycle of the Shelter
- Full Qualification to US Military Standards & NATO Standards

NATO

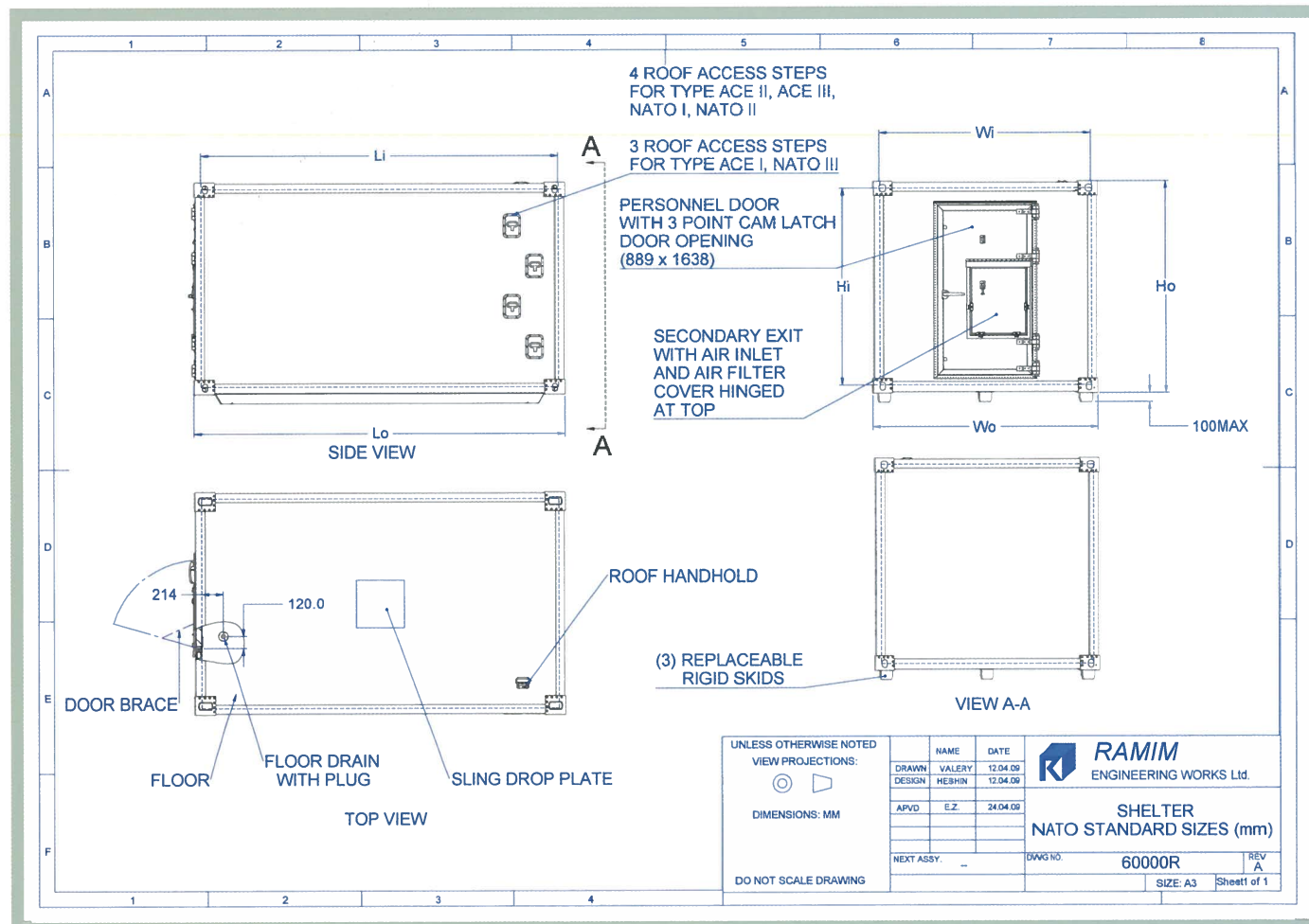
Standard, proven and ruggedized for your transportable shelter needs.

Ramim's NATO/ACE shelters provide optimum performance under the most demanding field conditions. Lightweight, high strength, insulated and all weather, this shelter satisfies general purpose applications for housing communications and other transportable electronic equipment. Rugged inside and outside, the NATO/ACE shelters are equipped to withstand adverse weather and terrain, in addition to a high level of interior traffic.

Ramim's NATO/ACE shelters are constructed of foam and beam sandwich panels which consist of a polyurethane foam core, aluminum skins and a framework of high strength aluminum alloy extrusion. Structural strength is assured by orientation of the floor and roof beams in transverse direction. This "barrel hoop" construction provides the ability to withstand drop tests and high roof loads. Foam and beam panel construction provides high strength to weight ratios and facilitates ease of modification, repair and maintenance. Thick inner and outer floor skins lend added strength to withstand increased personnel or equipment traffic. Shelter ISO corners are reinforced to accept leveling jacks and to withstand side load imposed by high wind velocities.

Ramim's NATO/ACE shelters have been designed and tested to Allied Command Europe's Standard Shelter Technical Specification 6516/SHCPR/88. As a result, these shelters are immediately available to all NATO countries. These shelters can be readily customized to accept your specific system by Ramim extensive, experienced Engineering Design Staff.

Ramim's NATO/ACE Shelters provide protection for your equipment/system, while being exposed to the most demanding man-made or natural environment, including transportation by land, sea or air.



NATO/ACE SHELTER Electronic Equipment

Model No	Description	Specification	Exterior dimensions [mm]			Interior dimensions [mm]			Shelter weights [kg]	Payload [lbs]	Outline drawing
			Ho	Wo	Lo	Hi	Wi	Li			
ACE I	standard	6516/SHCPR/88	1825	2050	2900	1635	1885	2735	700	1300	60530
ACE II	standard	6516/SHCPR/88	2075	2200	4250	1884	2034	4084	900	3600	60540
ACE III	standard	6516/SHCPR/88	2075	2200	5000	1884	2034	4835	1200	4300	60550
NATO I	standard	6516/SHCPR/88	2110	2080	3810	1907	1933	3573	590	2270	5082-0000
NATO II	standard	6516/SHCPR/88	2110	2080	3810	1882	1933	3573	620	3915	5124-700
NATO III(1)	standard	6516/SHCPR/88	1780	2000	2160	1577	1853	1923	360	995	60500
NATO III(2)	standard	6516/SHCPR/88	1886	1747	2340	1683	1600	2103	370	995	60500-2

Roof load	Snow and ice 3660 N/m ² . The roof shall be capable of withstanding a concentrated load of 3.5kN distributed on a 0.25m ² area (0.5m x 0.5m) anywhere on the roof
Floor Load	The floor shall be capable of carrying a distributed load of 5kN. The floor shall be capable of carrying a concentrated load of 10kN distributed on a 0.25m ² area (0.5m x 0.5m) anywhere on the floor
Temperature extremes	<ul style="list-style-type: none"> Operating: -40°C to 55 °C plus solar load. Non-operating mode: -45°C to 70 °C
Heat transfer coefficient	U-factor = 0.28 $\frac{Btu}{hr \cdot ft^2 \cdot ^\circ F}$ Designed to meet requirements of NATO STANDARD #6516/SHCPR/88
RFI/EMI	The shielding shall provide at least 80 dB attenuation to electric and magnetic fields and plane waves in the frequency range from 150 kHz to 10 GHz when the shelter is tested in accordance with MIL STD 285.
Watertightness	The shelter shall be capable of being immersed in water to a depth of 500 mm, measured from the bottom of the skids, without ingress of water inside the shelter
C-Rails	Each shelter shall be equipped with C rails for the fixing of internal equipment. Quantity: <ol style="list-style-type: none"> ACE I Shelter <ul style="list-style-type: none"> Side and front walls: 3 rails Floor and ceiling: 6 rails ACE II or ACE III Shelter <ul style="list-style-type: none"> Side and front walls: 4 rails Floor and ceiling: 6 rails
Standard features	<ul style="list-style-type: none"> Skids: 3 full length replaceable type Roof Access steps: 4 folding steps in sidewall and one roof handhold
Transportability	Transport by Truck: The shelters with payload shall be capable of being transported over cross-country terrain by military vehicles without sustaining any damage.
Corner fitting	The shelter shall be equipped at its top and bottom corner fittings that comply with recommendations ISO 1161-1976 (Series I freight containers – corner fitting specifications). These fittings shall, by making use of suitable slings, provide a means for lifting, towing and tying the shelter.