

ROBUS Ballistic Safe Haven

STANDARD SPECIFICATIONS v3.0.



CONTAINER SPECIFICATIONS

Custom built steel container either 20Ft (Length- 6055mm Width- 2435mm Height- 2935mm) or 40Ft version (Length- 12,110mm Width- 2435mm Height- 2935mm) non-ISO certified. Container constructed with Cor-ten steel and 12mm THK internal MDF and 100mm Rockwool 55kg/m² insulation. Container looks like an ordinary shipping container from the outside but has a ballistic reinforced steel structure within it. Ballistic plate fully encloses the structure including the floor.

The unit offers protection to B6 + Grade. Using high quality hardened, 8mm Ballistic Steel from SSAB Inc., the unit will withstand 7,62 x 51 NATO BALL/FMJ/PB/SCP (e.g., AK47) and blast resistance.

The unit has been independently tested by a UK Ministry Of Defence accredited testing facility and is full certified. Copies of the test reports are available after signing an NDA.

Our Fabrication Partners are pre-qualified by all Major Oil & Gas and Military Organisations and confirms to the majority of Internationally recognised standards. The units are fabricated in the UAE or South Africa.

The conventional container doors are replaced with a single pedestrian access door, built to the same specifications and independently ballistically rated. The door has a single barrel lock on the outside elevation and a 4-way slimline locking mechanism, lockable from the inside.

The units are fitted with high-performance locking systems, all of which are rated and manufactured by Surelock McGill.

The locks have been successfully tested on a wide range of LPS 1175 Security Ratings, blast tested on doors in accordance with the methodology set out within ISO 16933 EXV15 & EXV25 and successfully ballistically tested on door sets to BS EN 1522:1999 FB1-FB7.

Reinforced engineered steel structure clad with THK internal MDF and 100mm Rockwool 55kg/m² insulation 12mm enclosed 8mm armor plating. Cavity insulated with 100mm ProRox SL 930 (Rockwool). Internal wall clad with 12mm shutter board finished off with 0.58mm Chromadek sheeting which is designed to provide superior corrosion resistance.

Floor complete with 18mm shutter board on external face of reinforced steel structure, with 100mm ProRox SL 930 (Rockwool) insulation in cavity. Internal floor complete with 16mm Superboard™ – non-combustible floorboard complete with a 2mm non-slip heavy duty vinyl. The units can also be insulated with fire resistant material that provides a 90-minute fire rating.

A rear escape hatch door can be provided upon request complete with a 4-way Slimline locking mechanism on the inside.

Toilet compartment comes complete with flush system Porta Potti, toilet door and cabinet for supplies.

Cushioned benches for 20-25 / 40-50 persons, storage underneath for supplies.

Wall mounted 4.5Kg / 9Kg DCP fire extinguisher

Entrance into emergency container is finished off with tread bright aluminum checker plate



Container Size

- 20ft container (20 pax)
- 40ft container (40 pax)
- Manoeuvrable to mitigate the threat
- Hidden in plain sight

Ballistic and Blast Resistant

- Hardened ballistic and blast-resistant steel
- UK certified (Radnor Testing Range)
- BS EN1522 up to Level FB6
- UL752 Level 8 up to 900 m/s
- NIJ 0108.01 up to Level 3
- Surelock McGill ballistic locking system

CCTV Monitoring

- Pinhole security cameras viewing 360 degrees
- Remote monitoring via IP link up to crisis management centre

* B7 Ballistic Armour Available

ELECTRICS

8 Way DB

LED recessed fluorescent lights or downlighters

Multiple international socket outlets

18 000 BTU Inverter split A/C unit with ventilation fan. AC exhaust vents to the rear of the units and the exhaust fans are protected by ballistic rated louvers.

The energy storage system is a lithium Iron Phosphate based system with a 5 kVA MultiPlus Victron Inverter, colour control monitor and a BMV battery monitor. This system can be monitored remotely via the VRM online portal. The estimated running time of this system (30kWh) is ± 24 hrs assuming all electrical items are in use, including the A/C unit and ventilation system. The energy storage system will only be required if the main supply is cut off, if this is the case there would be a seamless transfer from the main power source to the energy storage system. The system can remotely start and control an external generator from inside the unit if required. The batteries are upgradeable depending on the clients' requirements.



Power

- 24 hours of DC power from new technology batteries (Lithium-Ion Phosphate)
- Victron Energy Power Management system (UPS)
- Remote diagnostic testing
- Upgrade in battery capacity (up to 4 days continuous power)
- Solar power option available for locations with no mains

Communications

- Triple level communications package
- 1. Crisis Management platform for real time assistance
- 2. Satellite phone in docking station with coaxial connection
- 3. SIM card functionality via coaxial connection

Air Circulation

- Container configured with air ducts
- Full circulation and management of CO2
- Ventilation fan constructed from stainless steel with self-close louvre shutters

BATTERIES

Amulus uses Lithium-Iron Phosphate batteries as standard in our units.

Lithium iron phosphate batteries (LiFePO₄ or LFP) offer lots of benefits compared to lead-acid batteries and other lithium batteries. Longer life span, no maintenance, extremely safe, lightweight, improved discharge, and charge efficiency, just to name a few. LiFePO₄ batteries are expensive, but due to a long-life span and zero maintenance they are our preferred choice.

- Scalable from 5kWh to 983 kWh
- Compatible with 1 and 3 Phase Inverters
- Cobalt Free Lithium Iron Phosphate (LFP) Battery: Maximum Safety, Life Cycle, and Power
- Capable of High-Powered Back-up and Off-Grid Function
- The batteries show no memory effects and due to low self-discharge (<3% per month), they can be stored for a longer period of time

SECURITY MONITORING SYSTEM

CCTV system consists of an IP Based camera system with a covert camera with outside view on each side of container and one on the roof to monitor activities outside your panic room. The Cameras are High-Definition Full Colour IP units with Wide Angle lenses and 2-megapixel resolution to ensure high quality viewing and recording of outside environment. Unit also comes standard with a 2-megapixel IP dome camera to monitor the inside of the unit.

The Standard option includes an 8 Channel IP based recorder with offsite monitoring capabilities, offsite alarm notification, incident viewing and recording, unit also record locally on an internal HDD and can be viewed locally on 24" monitor.

An additional two cameras can be added to customize the views even further to suite specific client's requirements/environment.

Optionally, should client want more than 8 cameras, bigger systems can be installed tailor made to their specific requirements/environment.

Monitoring of air quality and smoke inside units are standard and can be viewed inside unit by client. Optional a unit with offsite monitoring can also be supplied.

ACCESS CONTROL

In case of emergency, the door will be locked manually with a multipoint bolt system that securely locks into the floor and roof of unit from the inside. Emergency escape hatch can be provided at the rear of the unit having the same locking system.

PANIC ALERT FUNCTIONS

Panic alert functionality can be facilitated via the existing Alarm systems onsite and alternatively through alarm exceptions on the CCTV system. Wall mounted GSM/LTE tablet is provided preloaded with the NGS "Aurora App" for crisis response management.

Optionally as an alternative a standalone SMS SOS unit can be installed to notify local emergency contacts.

NETWORKING AND COMMUNICATIONS

All units will come standard with three options of communications.

- Internet connection via LAN cable and switch connected onsite directly to client's network and/or
 - An ADSL router connecting to client's telephone line onsite with a failover to 3/4G should telephone lines be severed.
 - Optional network points in walling can be requested should clients have the need to use network devices in an emergency.
 - Additional communication options include the following: VHF, HF, UHF, SATELLITE
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Monitoring of air quality and smoke inside units are standard and can be viewed inside the client. Optionally, a unit with offsite monitoring capabilities can also be supplied.

BALLISTIC STEEL SPECIFICATIONS

The unit is fully encased using ballistic steel that is rated by SSAB Inc to BS EN1522 up to

Level FB6 – 5.56 x 45 SS109 and 7.62 x 51 Nato Ball (as per below) ballistic resistance rating.

Test Standard	Projectile Description and Criteria
BS EN1522 up to Level FB6	5,56 x 45 SS109 FMJ/PB/SCP 7,62 x 51 NATO BALL/FMJ/PB/SCP, Steel Core: 9.5 grams at 830m/s (Kalashnikov)
UL752 Level 8 up to 900 m/s	7.62 x 51 – 149 grain M80 FMJ/PB/SC - 5 shots
NIJ 0108.01 up to Level 3	7.62 x 51 – 150 grain FMJ – 5 shots