



# **EXPANDABLE 20 'ISO 1C SHELTERS**

## **FOR CLASSIFIED APPLICATIONS**

### **Description**

The shelter complies with the ISO 668 standard, and is expandable by extracting a single mobile drawer.

The ISO 1C shelter expandable on one or two sides is equipped with n. 3 operating stations in compact configuration and with n. 5 operating stations in expanded configuration, without prejudice to the possibility of hosting up to 10 people.

All the moving parts of the structure, such as the expandable drawer, doors and safety hatches are finished by means of conductive gaskets and conductive silicones so as to guarantee galvanic continuity with the entire structure and thus maintain the shielding characteristics of the same, or a level of attenuation min. equal to 60 dB in the frequency range 150 kHz - 1GHz.

In any case, the shelter is also operative in a closed configuration, ie with an unexpanded shelter.

The structure consists of sandwich-type aluminum panels joined to the supporting beams by means of continuous wire welding in accordance with ASTM 1925.99.

The expansion of the cell can be performed by n. 2 people in the maximum time of 30 minutes.

The structure is already prepared for boarding and air transport on C130J according to MIL-STD 1791 and ICAO IT standards.

The shelter is operational both on the ground, raised and leveled, and on a stationary vehicle.

# SHELTER 20' ISO 1C ESPANDIBILI

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## Per Applicazioni Classificate

### Normative requirements

1. STET 1306 COTES del 94;
2. MIL-STD 461E
3. MIL-STD 285
4. IEE-299
5. SDIP-27
6. UNI-7012
7. MIL-STD 810F
8. 98/37/CEE
9. 73/23/CEE
10. MIL-C-5015
11. ASTM 1925-99
12. MIL-STD 1472F
13. SHAPE/NATO 6516/88 ACE
14. Normativa CSC D.P.R. 04/06/1997 n. 448;
15. UNI/ISO 668
16. NATO SDIP-29/1;
17. NATO SDIP-27/1
18. MIL-STD 1791
19. ISO 1161-1984
20. UNI 9795-91
21. Direttive CE 89/392, 91/368, 93/44, 93/68;
22. STANAG 4370 ed. 3;
23. STANAG 4632 Ed. 1;
24. MIL-STD 220A
25. IEC 950
26. CEI 70-1
27. CEI 64-8
28. CEI 81-1
29. CEI 14-6
30. CEI 17-13"
31. CEI 20-22
32. CEI 20-35
33. CEI 20-37
34. CEI 20-38
35. Manuale del velivolo C130J;

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### The fully equipped shelter is:

- capable of operating in accordance with the provisions of STANAG 4632 and ensuring rapid handling, deployment and set-up in operating conditions;
- shielded with attenuation of at least 60 dB from 150 khz to 1 GHz, measured according to MIL-STD 285. All power and signal lines, which are not already filtered, are equipped with filters according to law
- capable of operating even in extreme environmental and meteorological conditions, compliant with the MIL-STD 810E standard, external temperature from -30 ° C to + 55 ° C as per STANAG 4370 Ed. 3 (thermal shock), and in any case to ensure internal temperature of about 20 ° C;
- certified according to CSC regulations
- equipped with a suitable system for NBC / Rota protection, which allows pressurization by introducing purified air from any chemical, biological and radiological contaminants through a series of suitable slits capable of ensuring uniform air distribution.
- suitable for transport on:
  - ◇ C130J aircraft according to MIL-STD 1791
  - ◇ military vehicle. 8x8 APS 95 Container container shelves, in accordance with the ISO 668 standard;
  - ◇ ETNA ship and Landing Naval Units (San Giorgio / San Giusto type):
  - ◇ merchant ships used for the commercial transport of Ro / Ro type containers and ferries;
- suitable for lifting with ropes
- suitable for loading using the CHU device supplied with the APS 8x8.
- with a full load mass not exceeding 8000 kg

### **External set up**

- installation of the two entrance / exit doors, the emergency hatch and the two Z-panels. These openings, including the two Z-panels, are made in such a way as not to compromise the shielding degree of the shelter;
- installation of connectors on the two Z-panels provided for connection to:
  - ◇ system antennas,
  - ◇ telephone lines and data on optical fiber;
  - ◇ energy supply lines;
  - ◇ connection system of the CCTV system
- construction and installation of a reinforcement platform which applied to the center of the roof of the shelter;

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- supply and installation on the roof of the shelter of a perimeter anti-slip path
- No. 4 self-lifting and self-leveling devices with a capacity of 4,000 kg each positioned at the four corners of the retractable shelter and independent of each other
- External electronic control unit for the command and control of the lifting system
- External lighting system
- Mechanical arrangements for aviation on C130J

## Interior construction

- No. 1 shielded module (minimum level 60 dB) of 6U height.
- Energy rack containing the electrical distribution panel and all the necessary shielding and separation devices such as filters and isolation transformer;
- Creation of the necessary support elements, folding upwards, for the use of the monitor, mouse and keyboard devices for the foreseen operating stations;
- Fire system
- Video surveillance system
- White / blue led lighting system
- Emergency lighting system
- EMI filtering and sealing devices
- Installation of an access control system positioned at the two access doors;
- Air treatment and conditioning devices (NBC and ACU), proportionate for 10 people and in relation to the expected environmental limits.
- N. 4 racks with a height of 36 U characterized by a cushioned internal frame and an external containment structure rigidly fixed to the shelter
- 1 folding aluminum meeting table with 5 folding chairs
- 5 folding aluminum tables for operator stations with respective ergonomic chair
- 1 electric roller screen

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- 1 video projection system with RGB liquid crystal shutter
- 1 high-performance shredder
- 1 triple combination safe
- 1 whiteboard with dimensions 180x100 cm.