



health

Department:
Health

REPUBLIC OF SOUTH AFRICA

NATIONAL TREASURY: REPUBLIC OF SOUTH AFRICA

EMERGENCY MEDICAL SERVICES

Ambulance Medical Container

EMS 002/2022

NOTE:

1. All materials used in the construction of the ambulance conversion are to meet SANAS/SABS standards.
2. Conversion is to be approved by the relevant End-User Department after a "prototype" has been inspected and approved.
3. Contractor must be an accredited ISO 9000 manufacturer.
4. All conversion aspects related workmanship must carry at least 36 months warranty.
5. Contractors to submit detailed project plan which should include midway inspection or at any time during production of each vehicle by the end user.
6. Sign off will depend on end user acceptance as per the prototype specification.

List of abbreviations

LHS –	Left Hand Side (passenger side)
RHS –	Right hand side (driver side)
OEM –	Original equipment manufacturer
GMAW –	Gas metal arc welding
GTAW -	Gas tungsten arc welding

CONSTRUCTING OF MEDICAL CONTAINER FOR EMERGENCY MEDICAL SERVICES

The container should be supplied to fit the procured 7 ton vehicle.

1. SPECIFIED

- 1.1 The Medical container is to be manufactured and constructed using the exactly the same type of materials as indicated below:

Main under frame and front upright supports: 150x 80 x 6mm mild steel channel section

Container upper frame: 2mm thick Galvanised steel sheeting

Container floor: 2mm thick Galvanised steel sheeting

Roof: 3mm thick 5 bar Aluminium checker plate

Exterior panelling: 1.2mm Electro galvanised steel sheeting

Interior panelling and doors: 1mm thick Chromoprep sheeting

Roof rails: hot dip galvanised angel and flat bar section

External fittings: hot dip galvanised

External and Internal hand rails: 25 x 2mm 316 grade stainless steel tubing

All internal and external fasteners: Stainless steel 304 grade

- 1.2 Container must be supplied as a hook Lift, compatible in all respects and suitable for fully functioning use with Vehicle Toyota Hino 12-217 (Hook Lift).

2. GENERAL CONFIGURATION

- 2.1 Container overall dimensions 5500 x 2400 x 2150 mm Length x Width x Height.

- 2.2 In general terms the container will be divided into two areas.

- 2.3 Created by a dividing partition running from left to right hand sides of vehicle 1400mm from the forward most point of the container.

- 2.4 This forward section will have dimensions of 1400 x 2400 x 2150 mm Length x Width x Height.

- 2.5 This area will be accessed via two doors, one located on the left hand side of the vehicle and one located in the centre of the dividing partition.

- 2.6 Both doors are fitted with heavy duty hinges, curtained sliding windows and coach type double latching locks.

- 2.7 Within interior door aperture of the left hand side door a galvanized steel checker plate loading ramp is fitted.

- 2.8 The ramp serves for the removing of the Medical Equipment inflatable tent, which is stored in this area during transportation.
- 2.9 A purpose build tent transportation trolley, heavy duty tent storage/handling bag with six sturdy grab handles and suitable (whilst in transit) securing strapping and deck mounted strap location eyes must be provided for this purpose.
- 3. FRONT SECTION**
- 3.1 The front section of the container needs also be equipped with:
- 3.2 Rock wool fire retardant cavity insulation to ceiling and side panels.
- 3.3 Fully washable interior lining panels with LED ceiling Lighting must be fitted.
- 3.4 1 x Cupboard/drawer arrangement fitted with Stainless steel Wash Basin and disposal area. Complete with: Tap, Electric Pump, push button activated water supply, 50L Fresh and 50L Waste Water Tanks. Filling via a Flush Fitting Exterior Port Draining via a Tap fitted under Vehicle. Fit Coat Hooks, Various Brackets and Entrance Hand Rails All cupboards must be manufactured from washable highly durable materials.
- 3.5 Heavy duty marine push locks, hinges and roller bearing drawer runners must be used.
- 3.6 All edges are fitted with radiused high impact edging.
- 3.7 Fit Stepsure Heavy duty Floor Sheeting, Welded Seams.
- 3.8 Sheeting Extended onto Side Walls for Ease of Cleaning.
- 4. REAR COMPARTMENT**
- 4.1 Dimensions 4100 x 2400 x 2150 mm Length x Width x Height.
- 4.2 External rear section layout consists of:**
- 4.2.1 Two access doors are provided one centrally position rear panel and one fitted to the right hand side of the vehicle just to the rear of the dividing partition.
- 4.2.2 Both doors are equipped with curtained sliding window as per L/H side access door.
- 4.2.3 Each door must be provided with a access ramp, which allows easy access into the Medical container for wheelchairs and medical equipment trolleys, etc.
- 8 x Trolleys must be supplied with the container.
- Medical trolley must be manufactured from electro galvanized steel and have external dimensions of 1850 x 790 x 790 mm height x width x depth. (Exact Trolley Design and dimensions to be finalized)

- 4.2.4 Each of the eight medical trolleys must be supplied along with:
- 4.2.5 Fold down work surface, oxygen bottle holder, shelves to accommodate storage boxes; storage and supply of a Nato stretcher folding carriage.
- 4.2.6 (The Nato stretchers and oxygen bottles are end user supplied).
- 4.2.7 Securing brackets with securing straps or catches (for each of the eight equipment trolleys) must be provided and fitted onto the internal sides of the container.
- 4.2.8 The interior sides and ceiling of the container must insulated and clad as per the forward section of the container.
- 4.2.9 Rear section interior floor (as forward section) must be fitted with Stepsure heavy duty floor sheeting.
- 4.2.10 The floor sheeting must extend onto the interior side walls of the container, for easy of cleaning and hygiene.
- 4.2.11 Secure mounting points are provided for two examination beds or stretchers. (Examination Beds or Stretchers are end user supplied).
- 4.2.12 A Faro EDI ceiling mounted examination/procedure lamp must be located above examination area. (Lamp technical specifications available)

5 EXTERIOR OF THE CONTAINER

- 5.1 Exterior of Container must be fitted with a recessed left hand rear panel mounted Aluminium roof access ladder.
- 5.2 Container exterior roof panels must be manufactured from Aluminium checker plate and the roof is also equipped with a hot dip galvanized perimeter foot rail.
- 5.3 Exterior of Container finished in White.

6 ELETRICAL SYSTEM

- 6.1 Supply a Generator Set Honda EP 6500 = 6.5Kva with Automatic voltage Regulation and electric start (25 L fuel tank for long running times). Generator fitted onto sliding cradle and it can also be removed from container.
- 6.2 Supply and fit 2 x 1200mm Dual fluorescent lights, ceiling mounted over bed area in rear compartment.
- 6.3 Supply and fit 1 x 1200mm Dual fluorescent light, ceiling mounted in frontal area.
- 6.4 Supply and fiit4 x 220 volt AC power points, located to be finalized.
- 6.5 Supply and fit DB Board with main switch earth leakage and marked circuit breakers.
- 6.6 Suplly all trucking wiring.

6.7 Supply and fit all control switches conveniently located and marked.

6.8 Supply and fit other Electrical Hardware:

1 x Valiant water boiler, mixer, 5L capacity.

(Located above sink in frontal area).

1 x Teklite System. Consisting of:

1 x p3/0 mast 3m Mast

1 x 3 x 500watt Lighting Head 360 Degrees.

1 x Vehicle Mounting Kit.

1 x Pneumatic hand pump

1 x pneumatic coupler kit

1 x Electrical coupler to power point.

(Located at Right Hand forward most corner of vehicle, in a roof mounted recessed housing)

6.9 Supply and fit 1 x Faro EDI Examination/Procedure Lamp.

(Located to over Examination area)

7. **EMERGENCY LIGHTING**

Generation 3 LED lights to be fitted to provide sufficient light in and around the container

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