

RAPID DEPLOYABLE NEGATIVE-PRESSURE AREA HOSPITALS

TECHNICAL PROPOSAL

Summary of Specifications

Compact, Modular, Robust, Heavy Duty, Low Maintenance Equipment,

Rapid Deployment,

Negative-Pressure (Airborne Infection Isolation Rooms/Areas),

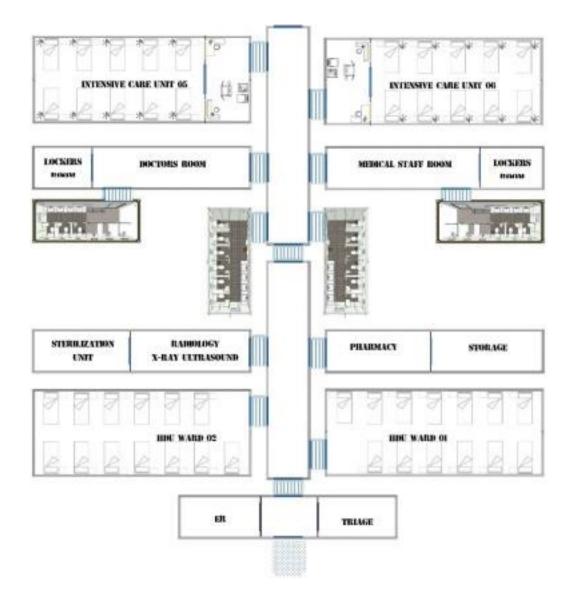
COVID-19 READY Mass Intensive Care Hospital (Triage, Emergency Room, Radiology, Sterilization, Pharmacy, Storage, Intensive Care ICU and High- Dependency HDU), Field Laboratory, Field Poly-Clinics, Field Latrine-Ablution Units State-of-the-art Oxygen Generator Unit (Oxygen Concentrator), Diesel Power Generator Station, Field Kitchen, Field Dinning Hall, Field Water Tank, Field Laundry, Field Dish-Washer, Field Technical Unit, Field ICT Unit,

NATO Role 1 Plus Equivalent. Modular, Can Be Upgraded to NATO Role 2 or NATO Role 3 Surgical Hospital,

Wire/Wireless Communication Systems,

Intranet, Surveillance System, Smart Units & Systems,

Tele-medicine Ready, Capacity Extendable up to %20.



General Overview of the COVID-19 Ready Hospitals

The Sandwich Panel Negative-Pressure Field Hospital is made of three (3) main sections:

Section A – Triage, ER, Inpatient HDU & ICU

Section B – Polyclinics and Administrative Section

Section C – Supply & Technical Support Section

The hospitals contains 60 Intensive Care Unit ICU Beds + 3 Triage Beds + 2 Emergency Room ER Beds + 26 High-dependency unit HDU beds, equaling a total of 91 beds. The hospital is designed as modular extendable with approximately base total size of approximately gross $3,500 \text{ m}^2$, net $1,4567 \text{ m}^2$ including corridors.

Common Key Features of the Field Hospitals;

Dust-Proof, Snow-Proof, Wind-Proof Modular Structure

Modular, Can Be Upgraded to Role 2 or Role 3 Surgical Hospital Air Conditioned, clean and sterile closed environment for patients not affected by sun, rain or dust,

Ramps for stretchers, Eco-decking floor covering + PVC covering, Medical gas system powered with O2 generator, air compressor, copper piping and O2 tubes,

Wireless Communication Systems,

By-pass Electrical connection for existing power network, 3 pin standard Plug System,

Robust, heavy duty, low maintenance equipment, anti-corrosion, Cold storage, water tank and fuel tank (for Generator),

Training will be provided; personnel will be supplied with a 6 hour training,

Spare Part Support Warrantee via Local Partner,

The main Structure is insulated sandwich panel, Polyurethane Density (en1602) $42(\pm 2)$ kg/m3 and thickness 50-80 mm.

Fully Equipped Field Hospital can be transported with semi-trailer

trucks, All non-medical equipment, All furniture, All medical equipment**, 6 Kg. Dry Chemical Fire Extinguishers, RO system Water Treatment, Fully isolated silent type Primary and back-up Generators, Tele-medicine (Optional) REGULAR or/and INFLATABLE TENTS : Fully Inflatable Automatic Pressure Control Tents can be provided upon request. (Optional)

The medical/non-medical equipment/furniture are high quality, well known products and complies to international standards.



** All medical equipment

Common Unit Specifications

Anti-bacterial-Static PVC Floor All Electrical Fit outs including LED lights Air Conditioning Walls 40-50 mm Sandwich Panel 6 kg Dry Chemical Fire Extinguisher

Scanning Unit Digital X-Ray

Digital X Ray

Mobile-Digital X-Ray

Mobile-Ultrasound

Utility trolley Lead apron with rack Protective equipment

Stretcher for x-ray

Folding screen

Laboratory Unit

Microbiology, Biochemistry & Hematology Laboratory Equipment









Section A – Triage, ER, Inpatient HDU & ICU

86+ BED

FIELD CLINIC / UNIT DESCRIPTION QTY	AREA
TRIAGE UNIT 1	
ER CLINIC UNIT 1	
ICU INTENSIVE CARE CLINIC UNIT 6	
 HDU HIGH-DEPENDENCY WARD UNIT 2	
DOCTOR'S ROOM UNIT 1	
MEDICAL STAFF ROOM UNIT 1	
X RAY ROOM 1	
STERILIZATION ROOM 1	
PHARMACY UNIT 1	
STORAGE ROOM 1	
FIELD LATRINE - ABLUTION 4	

Section B – Polyclinics and Administrative Section

FIELD CLINIC / UNIT DESCRIPTION QTY	AREA
POLYCLINICS (MEDICINE, GYNECOLOGY, DERMATOLOGY, ENT, 1 OPHTHALMOLOGY, ORTHOPEDY & NEUROLOGY CLINICS)	. 2
LABROTARY UNIT 1	
DOCTOR'S ROOM UNIT 1	
MEDICAL STAFF ROOM UNIT 1	
FIELD LATRINE - ABLUTION 2	
MOURTARY UNIT 1	

UNIT DESCRIPTION QTY	AREA
FIELD KITCHEN UNIT 1	
 FIELD DINING HALL UNIT 1	
 FIELD GENERATOR UNIT 1	
FIELD LAUNDRY UNIT 1	
FIELD DISHWASHING UNIT 1	
TECHNICAL SUPPORT UNIT 1	
ICT UNIT 1	
FIELD OXYGEN FILLING STATION UNIT 1	
FIELD WATER TANK UNIT 1	

Some of the Hospital Units Content Breakdown "ICU"

 S/N	DESCRIPTION	Quant ity	Units	TOTAL
1	Air Conditioning Unit	1	6	6
 2 	Medical Gas	1	6	6
3	Lamps	1	6	6
 4	ICU Bed	10	6	60
 5	Emergency Warning system	1	6	6
 6 	Anteroom furnished & Equipped	1	6	6
7.	Others	1	6	6
8.	Fire Distinguisher	2	6	6

Complete Breakdown of the Medical, non-medical equipment, Furniture and technical equipment will be provided after signing NDA.

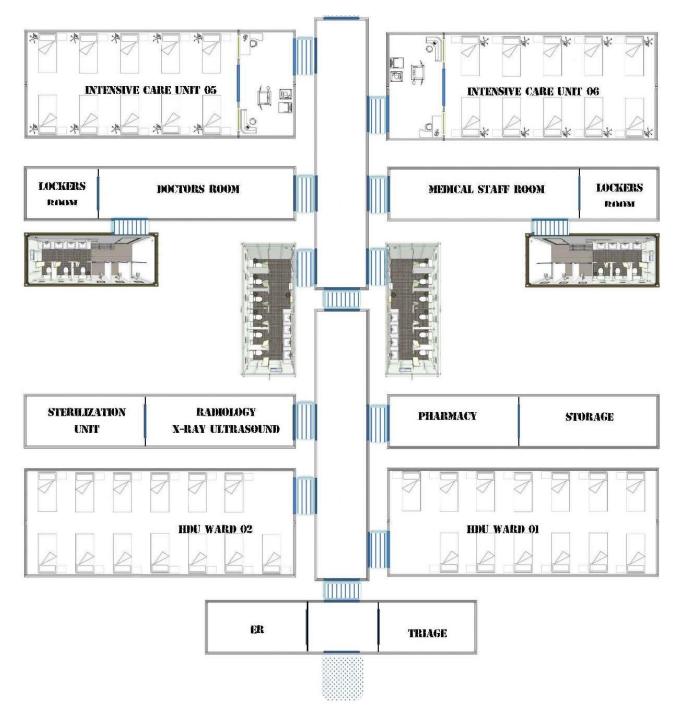








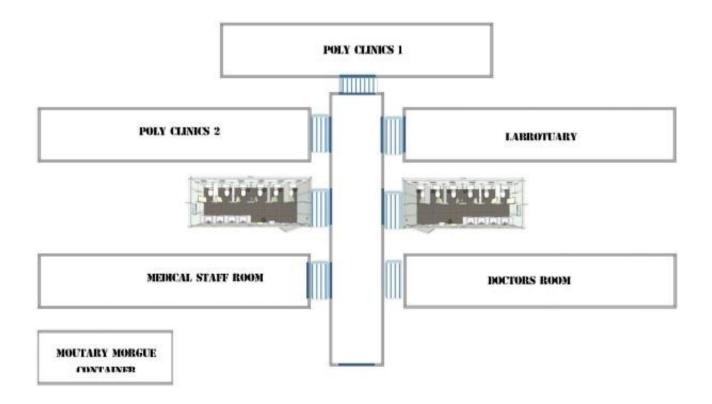
Section A – Triage, ER, Inpatient HDU & ICU





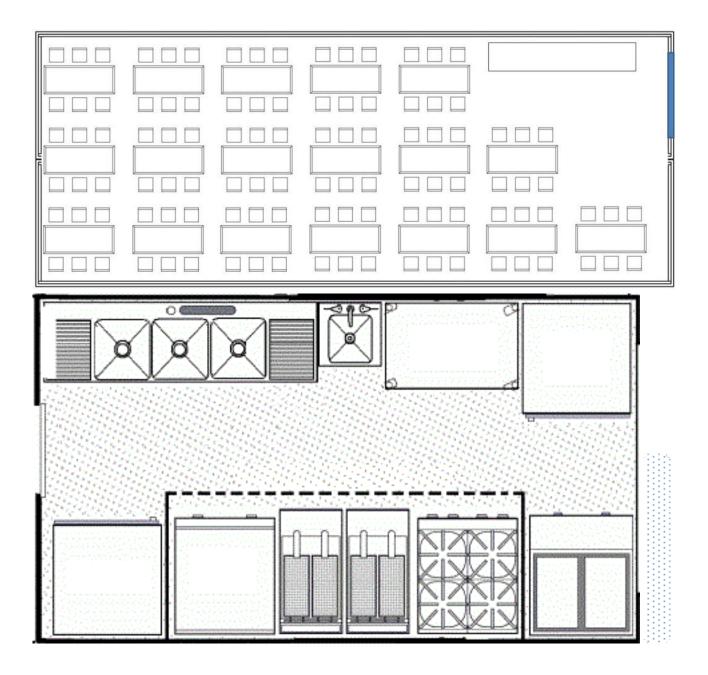


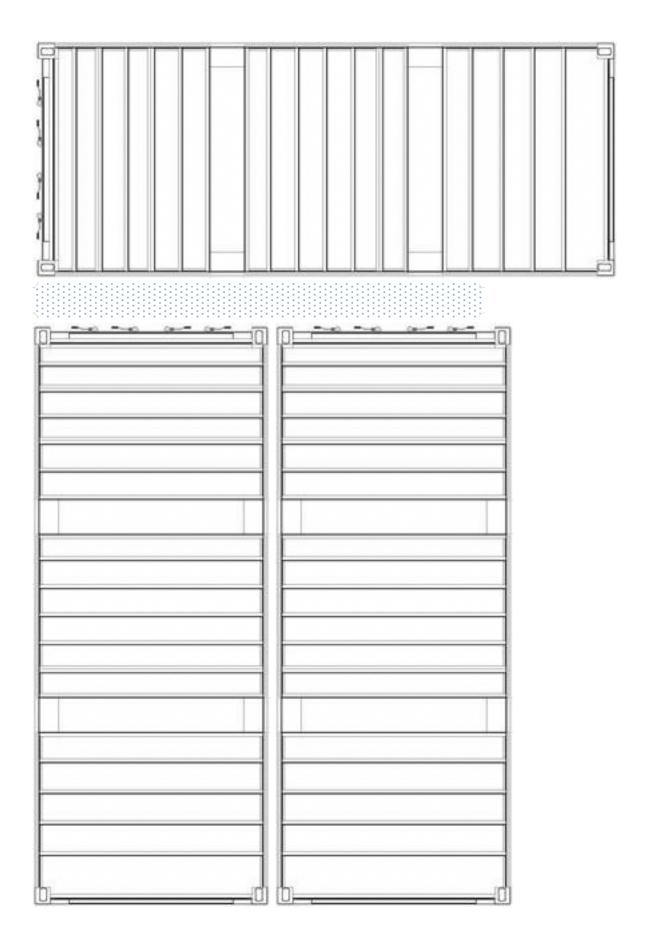
Section B - Administrative Section

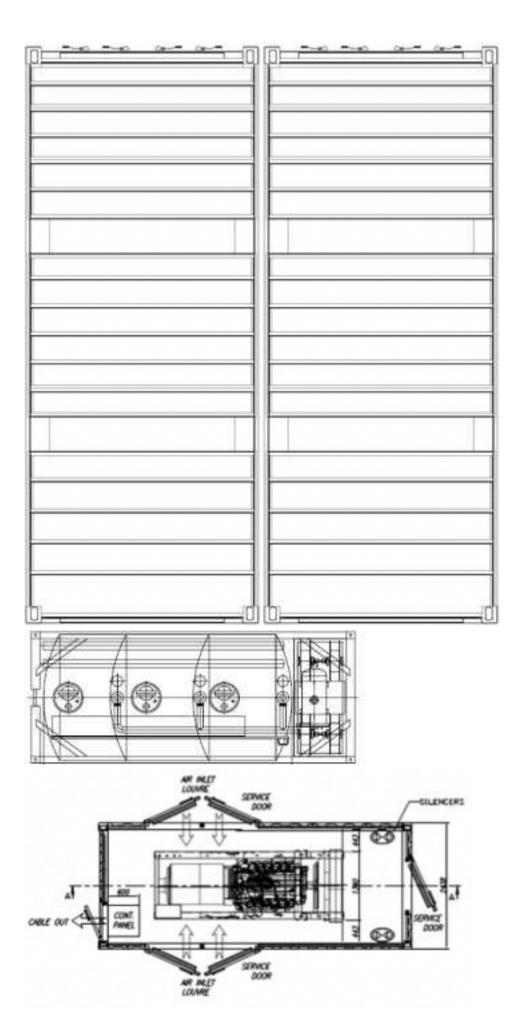




Section C – Supply & Technical Support Section







Section A – Triage, ER, Inpatient HDU & ICU

The Triage, ER, Inpatient HDU & ICU sections are around 1530 sqm, which is approximately 62% of the hospital area, and will contain two main zones; emergency and in-patient.

There are two separate entrances to these sections:

First is the main corridor which is the hospital's main entrance and emergency entrance which also serves as the ambulance platform for the triage

The in-patient entrance, which is the main entrance of hospital, will ease functioning of hospital.

The connection door to the corridor and from there in to the patients' wards. In the emergency zone there will be 5 beds, 3 beds for triage and another 2 beds for trauma.

In the in-patient zone there will be more than 5 medical doctors and nursing examination, treatment, consultation and medical follow-up rooms, in addition another 1 ultra-sound room, and 1 x–ray and 1 pharmacy, will serve both the inpatient department at the hospital.





Section B – Polyclinics, Administrative Section

The Polyclinics, Administrative Section will be 558 sqm, which is approximately 22 % of the Hospital area, and will contain two main zones; Polyclinics, the diagnostics facilities such as laboratory, the morgue unit and other necessary support units.

There are three entrances to the section :

The staff entrance to the changing area

The patient entrance via the nurse control to the operating hall The connection door to the corridor to the patient's wards There will be more than 4 clinics.





Section C – Administrative Supply & Technical Support

Section C will contain the administrative offices, kitchen, laundry, power generators, water tanks, and dish-washers.

Administrative offices Kitchen Industrial kitchen Refrigerator

Laundry Washing machines Dryer machines Iron cylinder type Basket trolley Iron desk Power plant More than 200 kVA primary and backup generators will be used in order to provide sufficient power for the hospital in case of remote operation or power failure.







