

## Mobile Surgery Clinic Vehicles

Mobile surgery clinic vehicles consist of 8 separate 3-axles semi-trailers that designed in accordance with traffic regulations and health standards.



Mobile surgery clinic vehicles; are designed to provide health services in areas where health facilities are not available or health facilities temporarily unavailable regions. Each semi-trailer is equipped with the necessary health equipment in accordance with its intended use.

We can group interior equipment of mobile surgical clinical vehicles with the following details.



- ✓ Patient examination bed, doctor examination chairs and stretchers
- ✓ First aid tools, equipment and accessories
- ✓ Disease diagnosis, imaging and analyzers devices
- ✓ X-ray devices and accessories (mobile and ground mounted devices)
- ✓ Surgery equipment and accessories
- ✓ Surgery table and operating lighting equipment

- ✓ Respiratory and sterilization devices and accessories
- ✓ Other necessary health devices, tools and accessories

All legal regulations that relation with health, traffic and work safety were taken into account during the design and production process of the mobile surgery clinic vehicles. A physician expertise support was taken as reference in the selection and placement of the health equipment at the project.

## Technical Design Purposes of 8 Unit Mobile Surgery Clinic Vehicles

### 1. STKK30AG30 - Mobile Surgery Clinic - Emergency Service - (2 Semi-Trailer):

Emergency Response - General Surgery - Surgery Operating and Postoperative



**2. STKK30AG30 - Mobile Surgery Clinic - 4 Room Design - (2 Semi-Trailer);**

X-Ray Room (Roentgen Room) - Laboratory - Pharmacy - Internal Diseases Polyclinic



**3. STKK30AG30 - Mobile Surgery Clinic - 5 Room Design - (4 Semi-Trailer);**

X-Ray Room (Roentgen Room) - Laboratory - Pharmacy – ‘Otorhinolaryngology Polyclinic for Child’ and ‘Gynaecology - Orthopaedics - General Surgery’ Department



## Mobile Surgery Clinic Semi-Trailer and Technical Specifications

### 1. Walls of Semi-Trailer

Mobile surgery clinic semi-trailer is designed as caravan type. External walls are produced from high density composite panel. Composite panel (wall) thickness is 50 mm. Outer and inner plate of panel produced from 'Glass Reinforced Polyester' and interior insulation material is '32 density quality XPS' material. Walls are heat, sound and water proof. Walls that X-Ray device available in room; are produced as radiation proof with inside lead.



### 2. Solar Cells / Panels

Mobile surgery clinic semi-trailer produces its own electricity with the solar panels installed on to the roof that are moving hydraulically towards the sun.

The electricity produced is stored in batteries. It provides independent energy from the electric line coming from the electric generator. Some of the energy to be used in the electrical devices inside semi-trailer supplied from electricity produced by solar panels.



### 3. Hydraulic Floor Foots and Semi-Trailer Landing Leg

In order to absorb the effects of vibration that created by external factors during examination and surgery; the semi-trailer is equipped with hydraulic ground fixing foots.

3 unit right and 3 unit left hydraulically controlled ground fixing foot have been mounted to semi-trailer. In addition; statically 50-ton capacity and 2-speed mechanically controlled standard semi-trailer landing leg set also mounted to semi-trailer.



### 4. Air Conditioning

Mobile surgery clinic semi-trailer can also work in areas with bad weather conditions. The air temperature inside the trailer; it can become an important element during a health diagnosis or surgery. Air temperature must be controlled to avoid the possibility of exposure to any obstacles.

All the rooms are equipped with required capacity (from 9.000 to 18.000 BTU) air conditioner/s to control air temperature at desired temperature.



## 5. Sanitary & Sewage System

Environmental compliance and waste management systems is also taken into account in mobile surgery clinic vehicles design. Therefore, the project is an environmentally friendly. 1,000 liters capacity stainless steel clean and usable water tank and 1,500 liters capacity stainless steel waste water tank is mounted to semi-trailer with their transfer system.



## 6. Diesel Electric Generator & Power Unit

In order to supply electrical needs of the electrical equipment in the semi-trailer; a 380/220 Volt & diesel and three-phase electric generator that capable producing 22 kW power is placed in front of the semi-trailer. Diesel generator is preferred in mobile health vehicles in order to prevent flare-ups against any mishap.

Especially during surgery and sensitive examination; in order to avoid from vibration that produced by generator, it is aimed to be lowered to the ground with the help of an electric winch. Required energy for 'electric winch' is supplied from solar cells or electricity stored in batteries without any other additional electrical connection.

The necessary electrical panel and overcurrent protections are available in semi-trailer. All electrical connections are surface mount electrical line therefore easily repairable.



## 7. Walkways (Entry Platforms) & Ladders

Access to mobile surgery clinic semitrailer side door entrances is provided by a hydraulically folding (opening and closing) side walkway. The walkway is fixed to the floor with manual folding support legs, the height of it can be adjusted easily and mechanically. Walkway is surrounded by easy-to-install, removable and portable ladders and stretcher ramp that made of lightweight aluminium and with rigid structure. Stretcher ramp is designed with a low slope to facilitate wheelchair and stretcher patient access. As a requirement of the scope of work safety; ladders and stretcher ramp have a foldable stair railing mechanism. Specially prepared painting has been applied on the stretcher ramp to prevent slippery.



## 8. Lighting

The interior lighting of mobile surgery clinic semi-trailer is provided by wall mounted LED lamps. To provide walkways lighting; 2 exterior lamps is mounted at entrance door side of semi-trailer. Additionally; projector lamps are mounted on the upper and corner sections of the semi-trailer for outside lighting (outside environmental lighting).







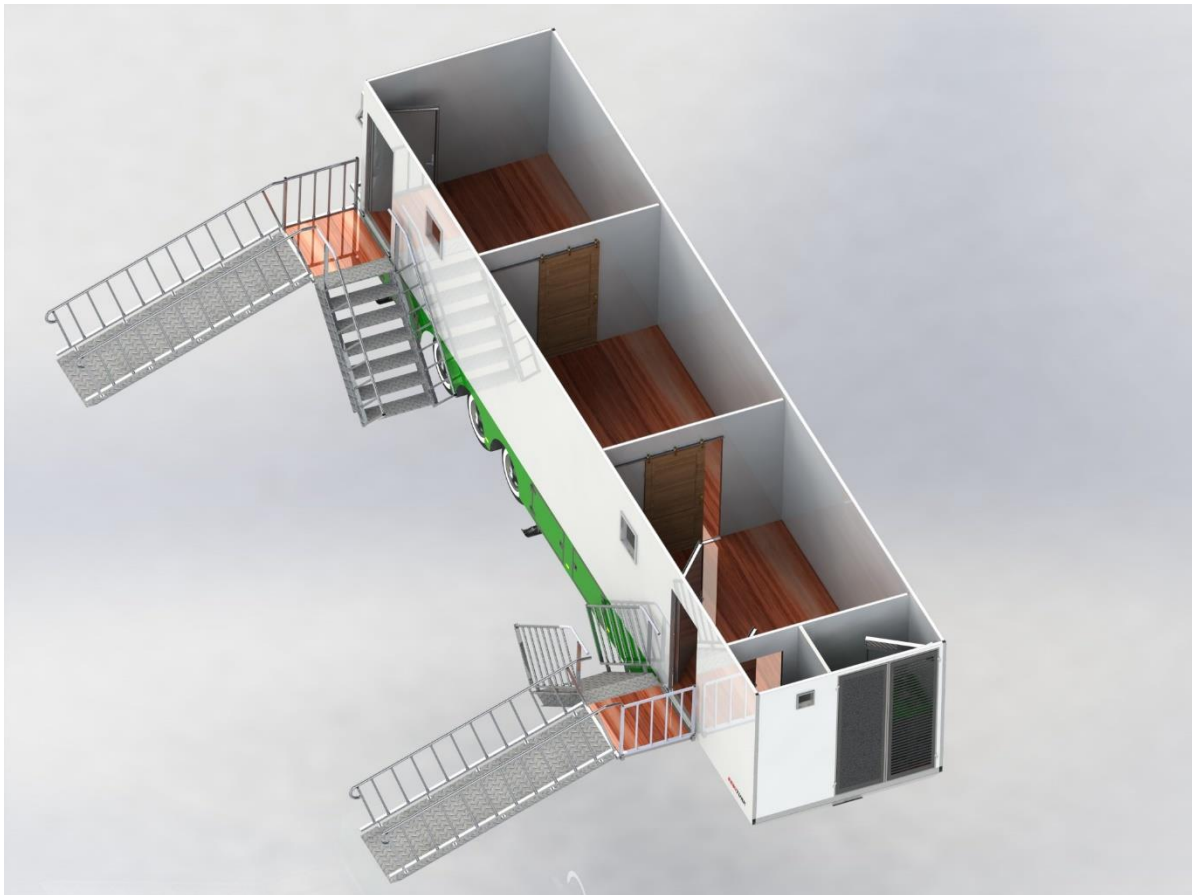
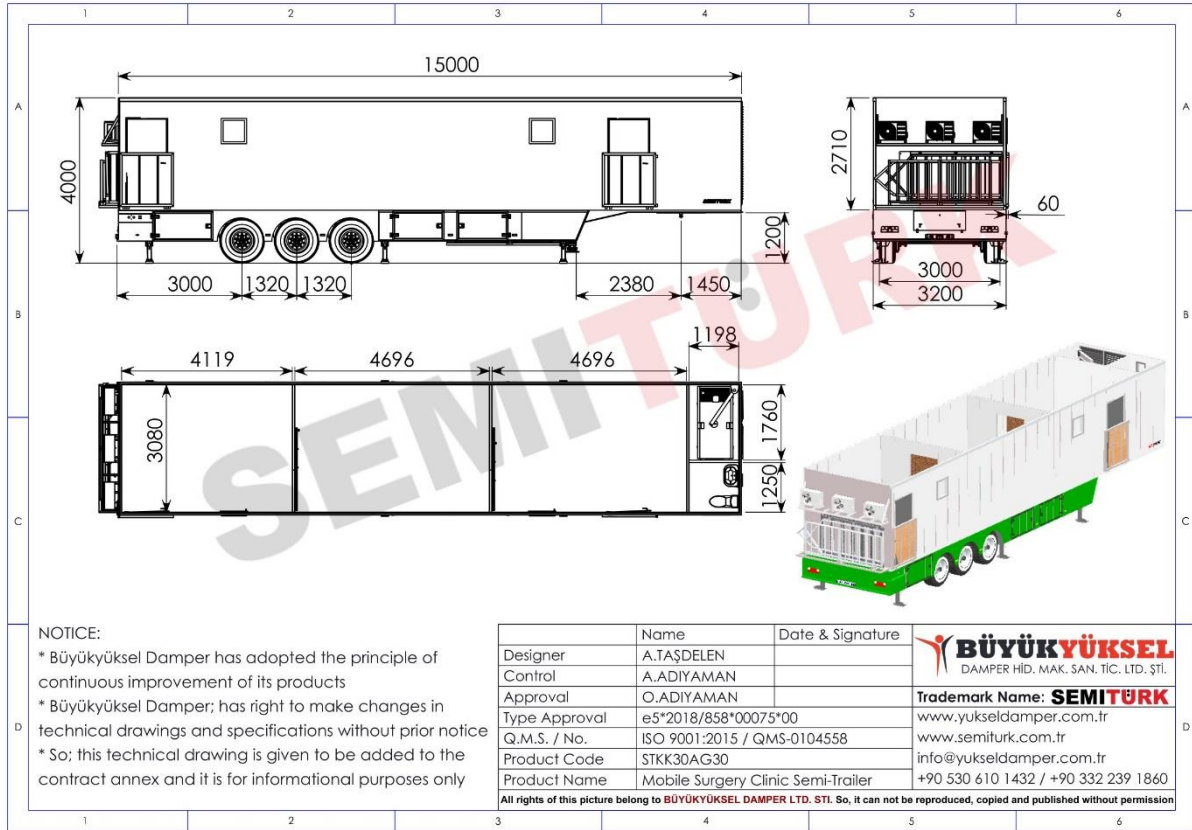




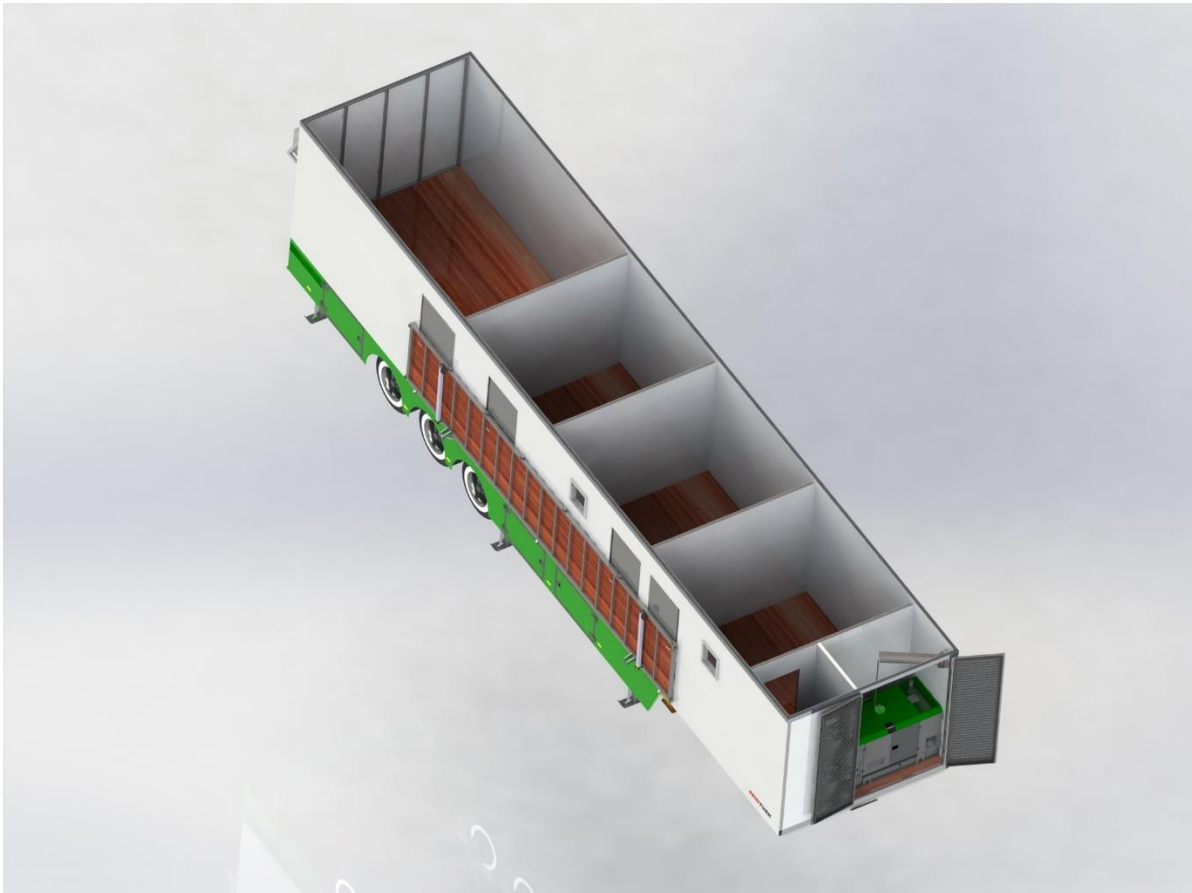
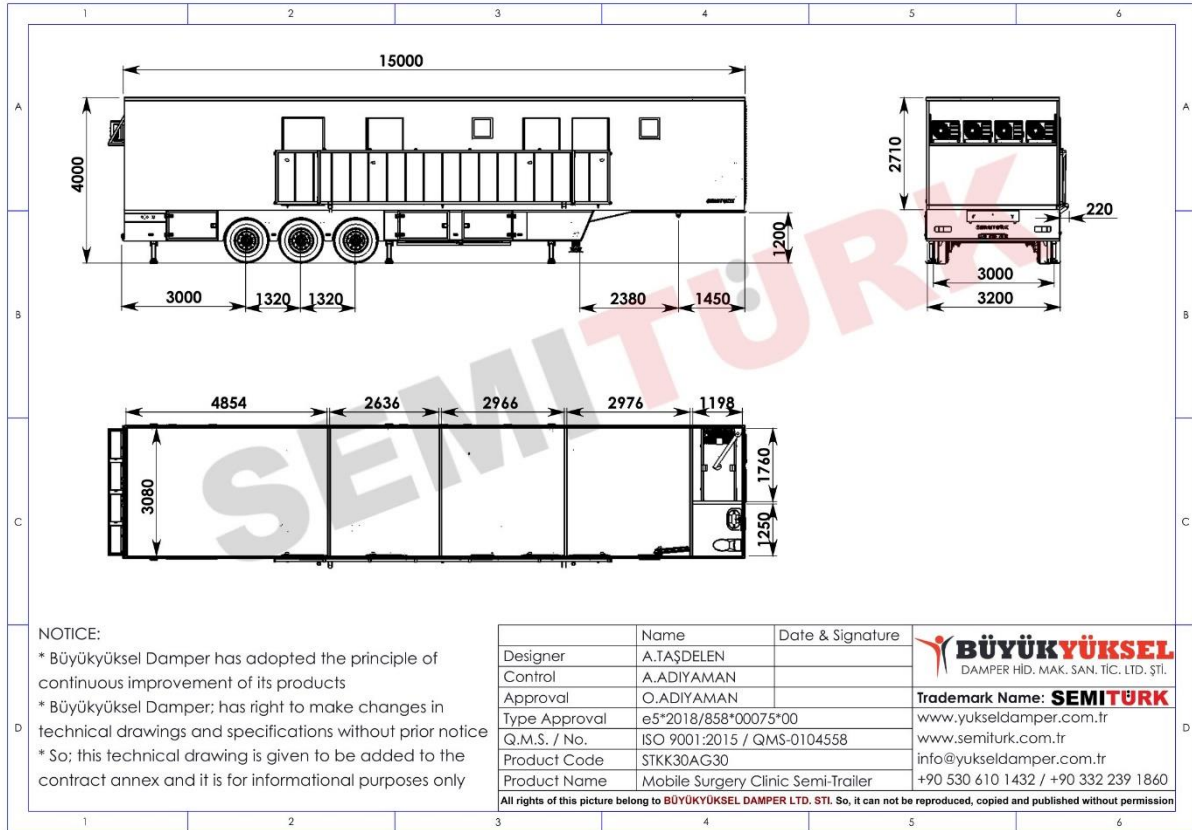




## STKK30AG30 - MOBILE CLINIC - EMERGENCY SERVICE



## STKK30AG30 - MOBILE SURGERY CLINIC - 4 ROOM DESIGN



## STKK30AG30 - MOBILE SURGERY CLINIC - 5 ROOM DESIGN

