

Unique Benefits of Medical Coaches' PET/CT Trailers

Monocoque Body Construction

A unique style of construction used by Medical Coaches where the floors, roof and walls are integral to the trailer's overall strength. This particular construction style makes the trailer lighter, easier to maneuver and stronger than the competition. Over 90 percent of over-the-road freight trailers use this construction to reduce weight without sacrificing strength. Main mobile floor is manufactured in one piece (except with joint at partition). Material is encapsulated with reinforced fiberglass coating, eliminating entrance of moisture, the leading cause of floor panel failures. This method has proven flawless in hundreds of medical trailers.

1. Lightest Trailer Weight in Industry

- Our finished units are 2-3 tons lighter than the competition without sacrificing body strength and saving costly tractor diesel fuel.

2. Smooth, Bonded Side Panels – Stronger Than Rivets

- We utilize a special bonding agent (same used in luxury yachts, fighter aircrafts and Formula One racing cars) to join our side sections. The resulting bond is stronger than rivets or welds.
- Rivet free for easy application of signage and a much more professional look.
- .090 aluminum sidewall construction (60 percent thicker than our competitors .050 sides).
- Thicker sidewalls reduce risk of damage from branches, scrapes, stones, etc.
- Our ***sides can be repaired by welding*** in sections and do not require unsightly patches and full panel removal.

3. Trailers Are Shorter, Without Sacrificing Interior Space – Easier to Maneuver and Site

- The ***overall length of our trailers is 48 feet***, allowing for much easier maneuverability in tight locations. Our competitors are 52 to 53 feet because of front-mounted HVAC and generator.
- Turning radius shorter, due to axle(s) location further forward, resulting in shorter wheelbase. Our lighter construction allows this.
- We don't require rear-mounted air conditioners, which are subject to fouling from extreme road debris conditions.

4. Standard Tractors Can Tow Our Trailers

- Full-width towing tractor upper coupling (fifth wheel) pick-up plate, ***allows tractor/trailer coupling at angles other than straight on. Valuable feature when spotting mobile in tight quarters.***
- ***We require a standard towing tractor***, not the more-expensive, long wheelbase models required by our competitors. Saves excess cost for tractor procurement or rental. Improves turning radius; requires less space to park rig.
- Lighter weight of our trailers, coupled with the shorter wheelbase, contributes to less fuel consumption and tire wear.

Special PET/CT Frame

- Same frame used in our TV trailers with 40 foot expandable sides. This frame also allows smooth deployment of the expandable sides on all types of terrain without deflection.
- Extremely strong frame rigidity to maintain table-to-gantry alignment for many years.
- Gantry supports built into frame structure for secure and safe mounting.
- We have road-friendly suspension with custom, high-damping shocks to provide extra protection while traveling down the road.
- PET/CT system is mounted on the approximate center of the suspension system, resulting in a superior ride for the installed equipment. Our lighter trailer also allows this.

Chiller

- In response to recurring problems with the fixed-site chiller, Medical Coaches developed a custom PET/CT chiller.
- Our chiller's output is 12,500 BTU vs. the CPS-supplied 9,000 BTU.
- Our chillers are mounted in a weather-protected compartment ***outside***, with no risk of heat transmission or build-up at the gantry.
- Service, if required, can be performed outside the unit and does not interrupt patient scans.
- Chiller components are standard, off-the-shelf items, readily available in any major city.
- Our new chillers are so reliable, one of our customers purchased 12 systems to replace chillers supplied with his original unit!

Custom Cabinetry

- Interior cabinets are of European design, furnished with stainless steel (not plastic) push button latches and adjustable stainless hidden latches.
- Full solid backing on all cabinets (we do not use the trailer wall for the back). Adds tremendous strength to cabinet structure and prevents deformities after continual use.
- Produced by independent master cabinet maker.

Unbeatable Service Program

- Service 24 hours a day, seven days a week.
- Four-hour response time via toll free number.
- We have local service technicians assigned specifically to your mobile which minimizes response time, any time, day or night.
- Customers are not charged freight, mileage or overtime.
- One phone call problem solving.
- We make it a point to set up our service time around your schedule to avoid interfering with your routes.
- Our goal is to have your unit up and running first and ask questions later.

Heat, Ventilation and Air Conditioning (HVAC)

- We use two Bard 3-ton (72,000 BTUs) units with 8 KW of heat. HVAC units can work independently; should one fail, the other will operate with sufficient (in most cases) capacity to complete patients.
- Spare parts and service for these are accessible throughout the United States.
- Bard units are the most commonly used HVAC for mobile and modular applications.
- In order to ensure our trailers can operate under both extremes of hot and cold, all PET/CT trailers are insulated with both foamed-in-place urethane and dual foil-faced insulation board. As a result, our overall insulation factor is R23. This is one of the best in the industry.

Custom Ceiling

- Our exclusive all-metal (designer aluminum with powder coating finish) ceiling panels contribute to our long service life. Easy to clean, won't stain and allows our exclusive soft-flow air distribution for the air conditioners. Sectional snap-in construction for easy access to lights, wiring, etc.
- Same ceiling used in upper scale hotels and many hospitals.
- No annoying single louvers blowing down your neck.

Custom Floor

- Main floor base is one-piece construction with seams only at partitions and door openings. Competitors use 4 X 8 plywood panels that tend to delaminate from moisture and "move" at the seams, causing the linoleum to have bumps, crevices and tears.
- Our floor panels are high-grade, custom-laminated plywood encapsulated in a reinforced fiberglass coating to prevent any moisture penetration.
- Panels are custom cut at the factory before lamination to fit perfectly into our trailers.
- Phenolic strips are installed between floor panels and trailer metallic frame to greatly reduce transmission of heat or cold to floor.

Side-Mounted Generator

- Generator ***installed in weather-protected under floor compartment***. Operates ***cleaner, quieter***, and is ***easier to service***. The unit is at ground level with all preventive maintenance possible from front side. Also eliminates need for long wheelbase towing tractor (not front mounted).
 - Clean-flow intake and exhaust air system.
 - ***Electronic diagnosis of generator condition*** can diagnose problems at site.
 - 95 percent of service-oriented parts accessible from the door opening.
 - Equipped with remote diagnostic capabilities by phone modem.
 - Generator is skid mounted (forklift slots) allowing for easy service removal.
 - 70 KW generator with a 100-gallon fuel tank which allows the generator to operate for over 24 hours without a fill.
 - Our generator is built by Detroit Diesel, one of the largest generator and engine manufacturers in the world.
 - Detroit Diesel has over 2,700 locations domestically and worldwide.
 - Users report lower fuel consumption from our generators, due to the electronic controls and sizing unit to fit requirements. They also report lower service expense and elimination of "wet-stacking" that occurs on competitor's units when generators are oversized for the application and run at approximately one-third capacity most of the time.
- ***NOTE:** Most competitors use a front-mounted generator. ***These are hard to service (require stepladder), accumulate road grime, rain, snow and ice and require the actual trailer length to increase up to as much as 53 feet*** (Medical Coaches is 48 feet).

Under-Belly Lift

- ***Patient lift installed in weather-protected under-floor compartment.*** Free from ice, snow, or other debris when deployed for operation (no need to clean off before use). Does not require 9 to 10 inches of reduced interior width in the Operations Room for transit storage. ***Lift is impossible to deploy inadvertently in transit*** as has happened on competitors trailers with fold-up lift.
- ***Safety rails*** for stairs and lift platform constructed of ***lifetime stainless steel***, not aluminum. The rails do not scratch or leave metallic stains on hands and clothes.
- ***Very smooth operation*** in “UP” and “DOWN” mode. Fold-up chair lifts are choppier.
- Manual crank in case of power failure.
- Lift stored underneath gives added flexibility for docking our unit directly against stationary platforms.

Advanced Side Compartment Door Design

- Central electrical locking system for all exterior compartments. Single-point lock and unlock. Saves time and eliminates need for multiple keys and lock freeze-ups.
- Special “key” wrench is supplied which allows doors to be opened in 30 seconds if electric lock fails.
- Hinged service access panel.
- Special molded fiberglass door with substantial internal insulation, raising the “R” factor substantially.
- Our exterior compartment doors are all metal (not aluminum bonded to plywood that tends to oxidize after longer use), formed “box-type” construction. Doors are furnished with two hold-up air springs for safety, lock service panel, and double weather seals.

Pull-Out Steps

- Aluminum safety steps and platform store in underbelly compartment.
- Protected from outside elements while stored.
- Quicker set-up time with no clean up. Light and easy to handle.
- OSHA-compliant stainless steel hand rails.

Simple Sliding Patient Entrance Door

- Sliding patient entrance door. Fast operation, with minimal effort, greatly reducing interior exposure to the elements. Door needs to open just enough to allow stretcher/patient on or off lift.
- Solid transit door over patient entry door. Insures weather-tight seal for transit. Also serves as a canopy over patient lift. Several models available. Double fold for use in close situations; side hinged to meet other requirements; and also available as a removable door for times the mobile may be located at a hospital site for long periods.
- Sliding entrance door, as opposed to an overhead door, increases floor-to-ceiling height and provides superior insulation.
- Easy to move patients in and out.
- Simple to slide open and close with one hand.
- No motors or multiple rollers to fail as in electric roll-up doors.
- Patients can enter without fully opening door.
- Completely weather sealed.

Expandable Sides

- Expanding (pop-out) sides can be deployed individually through separate push-button control, powered by heavy-duty electric motors (an emergency manual over-ride is also provided). Individual operation gives flexibility and safety when deploying or retracting. Expanding side floors operate automatically during deployment or retracting, eliminating the need for an additional operation to lower floors. Also provides a superior weather seal, as there are fewer open joints to seal.
- Our sides are driven from the underside, eliminating any mechanisms from the ceiling and sides (most competitors have an exposed ceiling mechanism).
- We purchase a pre-built system manufactured by the same company who supplies the luxury motor home industry.
- When investigating suppliers for expandable sides we told them that our market was very demanding and required dependable uptime. The company vice president said, "I understand your problems, but try to field a call from Dolly Parton when her sides won't work before a concert." He added, "Our sides always work." We were sold!
- In forty PET and PET/CT trailers we have sold there have been no significant service issues with these mechanisms.