



## Trailers:

3' x 7', 4' x 8', 5' x 9', 5' x 10'

7' x 10', 7' x 12', 7' x 14', 7' x 16'



## Truck Bodies:

Pick Up Truck Bodies 3' x 7', 4' x 8', 5' x 6', 5' x 8'

Flat Bed Truck Bodies 5' x 9', 5' x 10', 7' x 10', 7' x 12',  
7' x 14', 7' x 16'

## Here's why we think Polar Temp Refrigerated Transports, Truck Bodies and Pallet Load Boxes are better . . .

**Sheet Metal and Foamed-In-Place Polyurethane Construction.** (3' x 7', 4' x 8', 5' x 6', 5' x 8', 5' x 9', 5' x 10') Pre-painted steel exterior and G90 galvanized interior are used because of their long-lasting strength and durability and well known in the insulated storage container industry. Fiberglass, wood frame and other converted trailers are not as strong and durable and are not designed to withstand the rigors of the road. Additionally, wall, ceiling and floor foam thickness is 3" giving an average 20.1 insulating R-Value. The door and door frame area are 4" thick giving extra support in the area of the transport that gets the most abuse and gives an average of 26.8 insulating R-Value.

**Sheet Metal and Foam Extruded Polystyrene Panel Construction.** (7' x 10', 7' x 12', 7' x 14' and 7' x 16') Pre-painted steel exterior and G90 galvanized interior are used because of their long-lasting strength and durability. These panels are securely joined at the wall joints with tongue and groove with cam-locks and with (Very High Bond) VHB double sided tape. 3M™ VHB™ tapes are high-strength bonding tapes and a proven alternative to screws, rivets, welds and other mechanical fasteners. Unlike screws or rivets – which join materials at a single point – high-strength bonding tape permanently adheres one substrate to another while spreading the stress load across the entire length of the joint. Once materials are joined with 3M™ VHB™ Tape a virtually indestructible "weld" is created. Fiberglass and wood trailers along with other converted trailers may not be as strong and durable. Additionally, wall, ceiling, floor, door and door frame foam thickness is 4" giving an average 28.8 insulating R-Value and giving extra support at the area that gets the most abuse.

**Sheet Metal Foamed-In-Place Insulated Doors with PVC Breaker Strips and Replaceable Gaskets.** Polar Temp transport doors are foamed-in-place with a (Polyvinyl Chloride) PVC rigid profile recessed door opening adding strength and since it is foamed insulated in a rigid foam fixture adds considerable strength, durability and reliability. This is the same technique used by most large walk-in door manufacturers with years of experience. The door gasket is flexible PVC and is easily replaceable and cleanable. Some of our competitors compromise strength, durability, dependability and reliability by using wood with sheet metal interior and exterior door panels and offer no easy gasket replacement.

**Insulated Floor with Added Support.** Polar Temp Transport floors have added strength by using 2" x 6" treated wood clad with metal assembly at the sides and center of the floor. Then, additionally, to disperse the product weight load the floor has a .080" tread bright aluminum skid resistant sheet the entire floor area.

**Powered By Standard 115-Volt (15 Amp) Current.** ½ HP systems powered by are 15 amp circuits. ¾ HP systems are powered by 20 amp circuits. Also, Polar Temp refrigeration systems can be powered by an optional generator. Generators available include an 8,000-watt run with 10,500-watt start-up capacity for ½ HP systems and a 10,000-watt run with 13,500-watt start-up capacity.

**Generator and Utility Storage Box Mounting Plate.** Our sturdy extended tongue design provides a mounting area for a utility storage box generator. The storage area is perfect for storing tools, power cord, etc. and is lockable. (Generator and heavy duty extension cord sold separately.)

**Foam Insulation:** Ratings listed above are recited as a result of independent lab testing per DOE specifications. Our insulation ratings listed above are based on an average taken at 3 different temperature ranges therefore an average is recited in the statements above. R-Values range from 6.3 per inch to 8.1 per inch depending on the foam used in Polar Temp's application and design size shown above. As a result of using quality foam insulating products, both rigid extruded panels and foamed-in-place process, our units will pull down to temperature faster, stay colder longer and use less energy.

**Auto Electric Defrost System.** Polar Temp uses an 800 watt electric defrost system that is time initiated and time or temperature terminated. Depending on the system desired, defrost duration between cycles can be adjusted by the customer. Electronically controlled systems are programmed at the manufacturing facility and are normally set to defrost every 60 to 180 minutes of compressor run time for a minimum of 15 minutes and a maximum of 25 minutes or terminate at 55 degrees in the evaporator coil area whichever comes first. Those systems incorporating an electronic control system also have fault code systems that identify several possible component failures such as a "defrost termination sensor" or "air sensor". And additionally, the electronic controls offer the "voltage protection" feature which in the event of low voltage or high voltage will save costly premature compressor failure.

**Polar Temp Standard Refrigeration Systems.** Polar Temp keeps it simple, yet reliable, dependable and durable. All refrigeration systems use thermal expansion valves adding to the efficiency of the R404A refrigerant system. Copeland brand "K" body semi hermetic compressors are standard. Heat Exchangers used increase efficiency meaning the same refrigerant capacity can be produced with smaller exchange surfaces at the condenser and evaporator, with an associated reduction in piping volume, i.e. a higher heat exchange efficiency means smaller systems and lower refrigerant charge. Assembly of our own refrigeration systems means better control over quality producing dependable long lasting leak free refrigeration systems. All piping is made of reliable copper tubing. The condenser and evaporator are made of copper tube and aluminum fin giving efficient heat transfer.

**Mechanical or Digital Electronic Controls.** Both mechanical control and electronic control types are available. Some in depth information is described above in the Auto Electric Defrost description above; however, many of the same functions are available when a cold wall system is desired.

**Storage Area Strip Curtains.** Polar Temp offers strip curtains to be used at the entry door resulting in a reduced heat load infiltrating the storage area saving you money as a result. Strip curtains keep the cold air in and the hot air out while loading and unloading.

**Interior and Auxiliary Lighting.** Both 12 and 120 volt interior lighting is available for the interior of the trailer. Also, a spotlight is available for exterior lighting.

**Axles.** The safest and most proven suspension system available comes with springs and equalizers. This allows all four tires to remain in contact with the road. All trailers come standard with two axles with electric brakes. Easy lube hubs allow you to grease bearings without disassembly.

**Tires and Wheels.** White painted corrosion resistant wheels that exceed the rated capacity of the trailer are standard. Highest quality tires are used to match trailer capacity. These properly matched accessories eliminate possibilities of sway. Wheels are fastened adequately with six or eight lug nuts depending on the axle load capacity.

**Fender Wells.** All steel fender wells are welded in place then primed and painted forming a truly unitized fender. They are then securely bolted or welded to the trailer frame.

**Chassis.** Heavy-duty 2" x 4" x 1/4" or 2" x 5" x 5/16" tubular steel main rails with 3" x 3" x 1/4" steel angle cross members combine to form a robustly constructed trailer frame.

**Chassis Paint.** We wipe the trailer substrate with high grade grease and wax remover. Then we sand the trailer frame with 80 grit sand paper and smooth areas such as fenders we sand with 180 grit sand paper. Again we repeat the preparation process with a grease and wax remover. After the metal is clean and free of oil and other contaminants we apply a corrosive resistant primer with a catalyst. And the final step is to apply the color top coat with a catalyst of your choice. Our paint is a marine grade durable coating.

**Hitch Jack.** A side or top turn tongue jack with foot rated at 7,000 lbs. static and 5,000 lift is located at the hitch allowing easy raising and lowering for hook-up and disconnect from your vehicle. Heavier jacks are also available upon request.

**Safety Chains.** 6 foot safety chains with hooks is provided on all trailers for safety.

**Signal, Stop, and Marker Lights.** A standard 7-pin trailer light kit is used and fits most new vehicles today.

**Break-A-Way Kit.** Another important safety feature is the Break-Away Kit that in the event of the trailer coming detached from a vehicle, the Break A-way Kit powered separately from the pulling vehicle activates the trailer brakes.

**Hitch Assembly.** In order to transfer hitch assembly stress into the main chassis and into the superstructure, we extend the tubular steel "A" frame hitch to the front of the chassis where it is welded securely to the heavy tubular front cross member. The weight capacity of our trailer requires the use of a 2 5/16" ball.

**Frame Radius Corners.** The steel tubes used for the trailer chassis incorporate radius corners that add strength and are an integral part of most edges on the trailer structure.

**Body Mounting.** Trailer bodies are mounted securely between the tubular frames of the trailer with 1/2" diameter bolts. Robust 1/4" aluminum angle wall bumpers are used at each side of the interior floor where bolts extend through the floor to the heavy angle iron supports of the trailer.