

## **VEHICLE SPECIFICATIONS LOWERED FLOOR MINI-VAN WITH SIDE ENTRANCE RAMP EQUIPPED for WHEELCHAIR ACCESS**

### **General Information**

Units under these specifications shall be adult seat passenger minivan conversion vans with side entrance manual ramp for two (2) wheelchair locations. The vans shall be new vehicles with full warranties and all parts shall be new and stocked by the distributor. The year model must be the latest current model and stated in the bid. The bidder shall describe the vehicle and equipment they propose to furnish as part of the bid.

The bidder shall certify that the vehicle(s) to be sold under this bid are the same products described in the solicitation specifications; and that the proposed manufacturer is a responsible manufacturer with the capability to produce a vehicle that meets the specifications set forth in the solicitation for bids.

The bidder shall provide a copy of the manufacturer's self-certification information that the vehicle(s) comply with the relevant Federal Motor Vehicle Safety Standards (FMVSS) per 49 CFR Part 663.

The bidder shall certify that the vehicle(s) specified in the bid meet the ADA Accessibility Guidelines for Transit Vehicles.

The bidder shall certify that the vehicle(s) specified in the bid meet Buy American Certification requirements.

Quantity: Minimum **one (1)** vehicles to be purchased with **(76) seventy-six** options to purchase additional vehicles for a maximum of **(76) seventy-six** vehicles per specification. In addition, KPTA/RTEC has the right to assign a portion of the contract awarded, to allow other transit agencies to purchase any remaining options.

Failure of RTEC to specifically identify Federal and State regulations in its specification does not relieve the bidder of the responsibility to meet them.

### **Vehicle Specifications**

#### **General Dimensions**

Overall length 190.5" (Minimum)  
Overall height **74"** (Maximum)  
Overall width **76.9"** (Maximum)  
GVWR **5,500 lbs.** (Minimum)  
Wheel base **121"** (Maximum)  
Rear axle 2400 lbs. (Minimum)

Front axle 2400 lbs. (Minimum)  
Door Opening Height (side Slide Door) 56" (Minimum)  
Ramp Width 30" (Minimum)  
Ramp Length must meet ADA Regulations  
A description of vehicle dimensions must be included with bid.

### **Transmission**

Transmission shall be fully automatic, power shift with automatic overdrive. Transmission shift lever shall be interlocked with starting motor to prevent engaging of starter in any gear position other than neutral or park.

### **Brakes**

Power assisted front and rear disc with 4-wheel anti-lock required. Parking brake shall be foot operated. Mechanical type with brake lever.

### **Tires and Wheels**

Tires and **wheels** shall be OEM and compatible with each vehicle and each GVWR. Tires shall be steel belted radials, all season type. Tire size shall be **P225/65R17** or equivalent. Spare tire and wheel, shall meet standard manufacturer requirement and acceptable for vehicle load range. The spare tire shall be mounted in an accessible location, along with lug wrench and hydraulic jack (to be provided).

Standard wheels and wheel covers.

### **Exhaust**

Stainless steel exhausts system. Must meet U.S. Government noise level and exhaust emission requirements.

### **Suspension**

Fully independent front suspension with struts and heavy-duty rear springs. Load leveling.

### **Instruments and Controls**

The following instruments are to be provided (in addition to the normal steering, braking, and transmission functions):

- Ammeter or Voltmeter
- Speedometer with Recording Odometer
- Oil Pressure Indicator, Standard for the Manufacturer
- Engine Temperature Indicator, Standard for the Manufacturer

Headlight High beam Indicator  
Directional Signal and Flasher Action Lights  
Sun Visor on Drivers and Passenger Sides  
Turn Signal Lever (column mounted)  
Heat & Air Controls, Standard for the Manufacturer  
Two speed wiper control; Pulse Wipers  
Passenger compartment courtesy lights  
Any instruments regularly provided as standard equipment  
Inside hood release  
AM/FM Stereo Radio system with Compact Disk player and digital clock  
Four speakers: (2 in front: 2 in rear) wired to dash  
Power windows and door locks with keyless entry

All controls must be mounted so that door controls or other items do not in any way interfere with the driver's view of or access to other controls.

### **Heating and Ventilation**

#### **Front and Rear heating and Air Conditioning:**

The heating system shall be Manufacturer's standard equipment providing adequate heat and ventilation for both the driver and passenger compartments.

Front window defroster.  
Rear window defroster.  
Standard insulation package to be provided.

### **Air Conditioner**

The vehicle shall be equipped with Front and Rear heating and Air Conditioning. The front shall be CFC-free refrigerant, manual Dual Zone Temperature Control for both front and rear of vehicle.

### **Bumpers**

Manufacturer's standard front and rear bumpers.

### **Undercoating**

Complete undercoating with corrosion protection minimum 5-years warranty.

### **Exterior**

The paint shall be bright white of standard manufacturer paint or color chosen at time of order.

Flares shall be constructed of formed plastic and painted to match the exterior color of the vehicle. A molded step shall be incorporated into the driver and passenger front

flares to aid entry and egress via the front doors. Beneath the flare's molded step surface shall be an adjustable steel support structure capable of supporting 400 lbs. with less than 1/8" deflection, which fastens directly to the vehicle's body structure. The flare's molded step surface shall have a minimum clear vertical width of 4.5", a minimum length of 18", and utilize an anti-skid material which defines the step surface.

### **Exterior Lighting**

All exterior lighting will be Manufacturer's standard equipment and must meet U.S. Department of Transportation requirements.

Directional signals shall meet all Federal Motor Vehicle Standards, front and rear. In addition to directional signals, rear lamps shall consist of red combination stop/tail lights.

Four-way emergency flasher must be provided.

A rear license plate light shall be provided.

Two back-up lights shall be provided, automatically switched when vehicle is in reverse.

Lighting over wheel chair ramp door shall be in accordance with ADA requirements.

### **Interior**

All interior panels, upholstery and trim shall harmonize with exterior vehicle, black or gray standard color to be chosen at time of order.

Vehicle shall have priority seating signs for at least one set of forward-facing seats.

### **Interior Lighting**

Front, Intermediate and rear courtesy/reading lamps are to be provided.

### **Seating**

The driver's seat is to be standard OEM with armrests including retractable seatbelt and shoulder harness.

The front passenger seat is to be removable to allow for forward facing wheelchair position, high backed with armrests including retractable seatbelt and shoulder harness.

Additional passenger seats include a 3-Passenger stationary bench seat across the rear of the van. Retractable seatbelts are to be located at each passenger seating position. A fold away footrest shall be located at passenger seat.

Two forward facing wheel chair positions. The wheelchair positions must meet the requirements of the ADA act.

Extra-long seat belts with shoulder harness and lap belts shall be provided at wheel chair positions to accommodate wheel chair and passenger. All vehicles must have a pouch mounted to store these devices when they're not in use.

All seats are to be covered in vinyl or upholstery black or gray in materials that meet FMVSS 302 burn resistance requirements. Color to be chosen at time of order.

Two sets of seat belt extensions shall be provided.

### **Rear Door**

A hinged rear door that can be opened from inside and out shall be provided.

### **Passenger Doors**

Side doors shall be sliding. The height of the wheelchair/ramp entrance opening shall be a minimum of 56" and the width shall accommodate a 30" platform ramp.

### **Mirrors**

Right and left hand side mirrors.

Adequate rearview mirror shall be installed for driver's view of interior and rear of vehicle. Interior mirror for monitoring the passenger compartment, which shall be either clear-view laminated glass or clear-view glass bonded to the back that retains the glass in the event of breakage.

### **Windows**

All windows shall be of single density, tempered glass. Windows shall be provided on the passenger side and rear, in addition to the driver's window.

Windshield and rear glass shall be factory tinted. Side glass shall be privacy glass and should have opening for ventilation.

### **Windshield Wipers**

Heavy-duty electric two-speed windshield wipers controlled by a variable speed switch shall be furnished. Windshield washer to be included. Wiper to also be included on lift gate with continuous and intermittent delay modes.

### **Air Bags**

Drivers and Passenger Sides

### **Warranty**

Manufacturers Standard

### **Body Specifications**

Completely insulated-extended length

### **Chassis**

New Lowered Floor Mini-Van with 2 wheelchair locations and manual ramp.

### **Engine**

Gasoline, Six (6) Cylinders, Electronic fuel injection.

### **Radiator and Cooling System**

The cooling system designed to prevent engine overheating during prolonged idling at high ambient temperatures.

Radiator filled with all weather coolant, permanent type, twenty-eight (28) degrees below zero.

### **Electrical System**

The electrical system shall have a battery of total capacity of at least 730 CCA. The battery shall be maintenance free 12 volts.

Alternator shall be at a minimum of 160 amps.

A horn shall be provided. Installation of horn shall be such as to afford protection from wheel wash.

Reverse Alarm shall be fully operational alarm when the vehicle is engaged in reverse.

The bidder shall provide Back-up Sonar.

Electrical system and equipment shall comply with all applicable FMVSS and shall also conform to all the applicable SAE recommended standards and practices.

Electrical system shall incorporate a warning light and audible buzzer, to indicate a door not fully closed.

All wiring shall be secured to the body or frame with straps in order to prevent sagging and movement, which results in chafing, pinching, snagging, or any other damage.

### **Fuel System**

Fuel tank shall be a minimum capacity of at least 20 U.S. gallons. The fuel system shall be designed to prevent any fumes from escaping into passenger compartment. Evaporative emission controls required.

**Steering**

Power assisted steering with tilt wheel and cruise control.

**Fire Extinguisher**

One (1) five (5) pound dry-chemical type with flexible discharge hose of sufficient length for directional use extinguisher is to be mounted securely in bracket near the driver in full view and instantly accessible.

**Biohazard Kit**

One (1) kit mounted to meet OSHA bloodborne pathogens spill cleanup kit, regulation CFR1910.1030.

**First Aid Kit**

Kit with metal case mounted securely to the inside of the vehicle near driver 16 unit conforms to D.O.T. and OSHA requirements.

**Lug-Wheel Jack**

Standard mounted.

**Reflective Kit**

One (1) D.O.T. reflective triangle kit-mounted.

**Delivery**

Delivery time schedule must be stated in bid (not an approximate or indefinite delivery schedule.)

Vehicles will not be considered delivered if they have arrived in a condition that does not meet the purchaser's bid specifications.

Vehicle(s) shall be delivered to the purchaser's address during purchaser's regular hours of operation.

Payments for the vehicles will not be made until they have passed delivery inspection.

**Construction**

The entire body structure shall be built as an integral unit adequately reinforced at all joints and corners where stress concentration may occur to adequately carry required loads and withstand road shock. Steel safety frame (floor, walls, roof, front, and rear) shall be securely welded together to provide an integral one-piece body structure. Exterior body skin to be **aluminized** steel. No fasteners to be exposed to exterior finish.

### **Modifications**

All modifications shall be effected in good workmanlike manner. Sheet metal fit-ups shall be properly executed and concealed. Paint finish and window glass shall be free of any defects due to welding or re-assembly.

Modifications to OEM floor plan/frame shall be of highest possible quality construction. Modification of floor and frame shall provide reinforcement to a degree that the structural integrity of the OEM vehicle is not degraded. Any such modifications shall be properly sealed to prevent entrance of exhaust fumes, moisture, and dust.

All welds shall be made in a workmanlike manner, properly fused, of ample penetration, and shall, on all exposed surfaces where practicable, be smoothly finished. Intermittent or spot welds shall be spaced and proportioned as to provide ample strength for the purpose. All welded joints shall be spaced and proportioned as to provide ample strength for the purpose. All welded joints shall be cleaned and primed. All welds shall be relatively free of slag inclusions, undercut, roll, blowholes, unfilled craters, improper fit-up and porosity. Fillet weld sizes shall be at least equal to the thickness of the least of the joined plates.

### **Lowered Floor Material Specifications**

All flooring modifications shall be executed in **16-gauge aluminized steel**. Such modifications shall not degrade the structural integrity of the OEM vehicle.

The lowered floor shall be securely fastened to steel chassis or body and covered from wall to wall with industrial grade, non-slip vinyl flooring. All edges will be properly sealed to prevent entrance of moisture that could cause bulging, ply-separation and/or material failure.

All joints will be butt type. Floor covering shall be **altro flooring or approved equal**.

Due to lowering of the floor, the **fuel tank shall be relocated behind rear axle**. A full-length fuel tank skid plate shall be provided, that protects the front, underside and rear of the fuel tank. The skid plate shall be constructed of 12-gauge material, and bolted to the frame.

### **Fuel Tank**



Fuel tank shall be OEM with OEM capacity of (20) gallons minimum. Tank, fuel lines and hardware must meet all current FMVSS, including FMVSS 301, as well as all current CARB and EPA requirements and must be OEM equivalent in connection types, etc. The use of worm clamps is limited to that of the OEM. Tank shall be calibrated with the OEM dash fuel gauge.

The entire body frame understructure of the vehicle shall be rust proofed and fully undercoated with non-flammable material. Such material shall be applied in a continuous and uniform coating to all-metal panels and splash pans under the vehicle for protection against rust and corrosion.

### **Ramp**

The ramp shall be a manually operated fold down type. The ramp shall provide a straight inclined surface from the ground to the van floor level. This should be approximately 12" from the van floor level to ground level. The ramp shall allow a wheelchair containing a handicapped person to be pushed from the ground level into each van or rolled out of each van down to ground level. Protective edge flanges shall be provided on the ramp to prevent the wheels of a wheelchair from rolling off the edge of the ramp. No center steps or toe-cleats will be allowed with this conversion.

The ramp shall have a width of at least 30" and length of 52" at minimum. The gradient must meet ADA requirements.

The ramp shall be constructed of 1/4" aluminum gray powder coated.

### **Ramp Side Door**

The ramp shall be manual, mounted to the chassis frame without structural changes in the frame and located at the side of the van. The door that the ramp is located shall have a minimum height of 56" and minimum width of 31.5". The wheelchair lift door shall be constructed of gauge steel.

### **Capacity**

Minimum of 800 pounds.

### **Mechanism**

Shall be manual type. Nonworking parts, such as platform, frame, and attachment hardware that would not be expected to wear, shall have a safety factor of at least three, based on the ultimate strength of the material.

### **Controls**

Controls shall provide other appropriate fail-safe mechanisms or systems, to ensure that the vehicle cannot be moved when the ramp is not stowed and so the ramp cannot be deployed unless the interlocks or systems are engaged.

Wheelchair ramp must meet the requirements of ADA.

### **Emergency Controls**

No emergency method, manual or otherwise, shall be capable of being operated in a manner that could be hazardous to the ramp occupant or to the operator.

### **Ramp Platform Surface**

The platform surface shall be free of any protrusions over ¼ inches high and shall be non-skid aluminum alloy or equivalent with a minimum weight capacity of 800 lbs. The platform shall have a minimum clear width of 30 inches measured from the platform surface to 30 inches above the platform and a minimum clear length of 52 inches measured from 2 inches above the surface of the platform.

### **Securement Devices**

Design Load: Securement systems, and their attachments to such vehicles, shall withstand a force in a forward longitudinal direction of 2,500 pounds per securement leg, and a minimum of 5,000 pounds for each mobility aid.

Location and Size: The securement system shall be placed as near to the accessible entrance as practical and shall have a clear floor area of 30 inches by approximately 44 inches. Not more than 6 inches of the required clear floor space may be accommodated for footrests under another seat provided there is a minimum of 9 inches from the floor to the lowest part of the seat overhanging the space.

Securement System: The securement system shall secure common wheelchairs and mobility aids and shall be easily attached by a person familiar with the system and mobility aid and having average dexterity. Wheelchair securing spaces shall be located so that the wheelchairs are locked. Tie downs for wheelchair positions are to be of the four-point system with four tie downs securing the chair to the floor of the vehicle. Q-Straint fully automatic QRT deluxe retractor (dual knobs) mounted onto L track fitting forward facing mobility aid securement and occupant restraint system or approved equal. This system must be able to withstand a crash test of 30 mph and 20 g's without damage to the wheelchair or its occupant. Tie down system must be a complete package.

Seat belts and shoulder harnesses with heavy-duty retractors and sleeves to keep belts off the floor shall be provided for each wheelchair position. A detachable shoulder harness that matches the Passenger Occupant Restraint system is required. Acceptable passenger occupant restraint systems are Q'Straint QRT Max System or approved equal. Standard OEM restraints lap or shoulder system is not acceptable in wheelchair positions.

Orientation: The securement shall be installed so that the secure wheelchair or mobility aid is facing toward the front of the vehicle.

Movement: When the wheelchair or mobility aid is secured in accordance with manufacturer's instructions, the securement system shall limit the movement of an occupied wheelchair or mobility aid to no more than 2 inches in any direction.

Stowage: When not being used, the securement system shall not interfere with passenger movement, shall not present any hazardous condition, and shall be reasonably protected from vandalism.

Platform Gaps: Any openings between the platform surface and the raised barriers shall not exceed 5/8 inch wide. When the platform is at vehicle floor height with the inner barrier down or retracted, gaps between the forward edge of the ramp shall not exceed 2 inch horizontally and 5/8 inch vertically. The ramp shall be furnished with reflector tape on each side.

Platform Barriers: The ramp platform shall be equipped with barriers to prevent any of the wheels of a wheelchair or mobility aid from rolling off the platform.

Boarding Direction: The ramp shall permit both inboard and outboard facing of wheelchairs and mobility aids.

Inside Track: The inside track shall be approximately 54" long and a minimum of 44" wide.