

EXHIBIT A2 TO ATTACHMENT A PRICING PAGE - OPTIONS

**CATEGORIES H-I**

ITEM	Bid Price - If applicable to category
1 Additional wheelchair station	\$593.00
2 double mid high seat	\$233.00
3 single mid high seat	\$133.00
4 double foldaway seat	\$525.00
5 single foldaway seat	\$386.00
6 Seat tracks welded to the steel structure of the sidewalls and/or mounted directly to the floor w/steel straps affixed to floor sills.	N/A
6 Additional wheelchair Tie-downs	Included in station above
7 retractable seat belts in lieu of standard belts	\$13 per passenger
8 USR retractable seat belts in lieu of standard belts	\$65, per passenger
9 driver side running board	\$125.00
10 stainless steel wheel inserts	\$268.00
11 Upgrade standard am/fm radio to am/fm/CD	\$406, no radio in base
12 Add 2 speakers to radio system	Included in base for PA
13 Add PA to radio system	Included in base
14 Add power seat base to driver seat	\$281.00 for Ford chassis
Type: <b>Power</b> Model: <b>Adnick brand seat base</b>	\$1,050.00 for GM chassis
Type: <b>Air seat</b> Model: <b>Freedman CL67</b>	
15 Add Plexiglas barrier to driver stanchion/modesty panel	\$250.00
16 Add heated/remote exterior mirrors	\$625.00 FORD
	\$812.00 GMT610
17 Upgrade flooring to colored rubber	\$341.00 21' BUS

			\$373.00	23' BUS
			\$406.00	25' BUS
18	Upgrade flooring to Altro non-skid		\$1,250.00	21' BUS
			\$1,375.00	23' BUS
			\$1,500.00	25' BUS
19	Upgrade to cloth walls		\$525.00	21' BUS
			\$575.00	23' BUS
			\$625.00	25' BUS
20	Upgrade to cloth ceiling		\$210.00	21' BUS
			\$230.00	23' BUS
			\$250.00	25' BUS
21	Upgrade seat covering to level 2		\$6 per passenger	
22	Upgrade seat covering to level 3		\$10 per passenger	
23	Upgrade seat covering to level 4		\$31 per passenger	
24	Upgrade seat covering to level 5		\$50 per passenger	
25	Upgrade seat covering to level 6		\$68 per passenger	
26	Mor/Ryde suspension system	Rear Mor-Ryde only	\$906.00	FORD
			\$856.00	GMT610
27	Air Ride suspension system		N/A on Ford or GMT610	
28	additional 65K BTU heater		\$312.00	
29	additional 45K BTU heater		\$293.00	
30	Increase passenger air conditioning to 55K BTU		\$430.00	Only 21' Crusader
31	Increase passenger air conditioning to 68K BTU	67,000 btu	\$706.00	21' Crusader
			\$276.00	21' Challenger
			\$276.00	23' BUS
			N/A	25' BUS, 67,000 btu included
32	Increase passenger air conditioning to 80K BTU	75,000 btu	\$1,497.00	21' Challenger
			\$1,497.00	23' BUS
			\$977.00	25' BUS, 67,000 btu included

33 Increase passenger air conditioning to 120K BTU	87,000 BTU	\$2,758.00	21' Challenger
		\$2,758.00	23' BUS
		\$2,482.00	25' BUS, 67,000 btu included

34 Optional Engine	Engine type/Size:	<a href="#">Azure Hybrid gas/ electric engine Add \$55,000</a>
	Fuel type: Gas, Diesel, Propane, Other?	<a href="#">Hybrid on E-450 158" wb only using 5.4L gas</a>
	Engine type/Size:	See additional bid prices
	Fuel type: Gas, Diesel, Propane, Other?	See additional bid prices
	Engine type/Size:	See additional bid prices
	Fuel type: Gas, Diesel, Propane, Other?	See additional bid prices

35 roof hatches as emergency escape on buses (Categories A-D).	\$250.00
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Additional Options available:  
All manufacturer's options are available – call Supplier for pricing for additional items end users may require.

Bidders shall submit pricing for Options as a percentage discount off Bidders list price. **10%**

Optional Custom painting and/or graphics well as the body.

<a href="#">Paint skirts gray</a>	\$406.00
<a href="#">Paint bus 1 color, non-metallic</a>	\$1,875.00
<a href="#">One-color stock vinyl 6" stripe</a>	\$403.00

Optional paint schemes for the cab as well as the body **Contact dealer for Quote**

## Category I - 2

### 12-16 passenger Mid-size, light duty, Standard Floor Must meet applicable FMVSS and ADA requirements

#### GENERAL

It is the intent of these Technical Specifications to describe the requirements for the purchase and delivery of cutaway buses for use in fixed route, paratransit and on-demand operating environments.

The purpose of these specifications is to describe a light duty bus suitable for transporting both ambulatory and non-ambulatory passengers in both rural and urban areas.

The bus body is to be mounted on a Cut-Away Chassis as described in the chassis specifications.

#### 1. **CLASSIFICATION:** Small Size Standard Floor Bus

This specification is for a Small Size Standard -Floor Commercial bus of the "Body-on-Chassis" type.

The bus shall have a standard power ramp to facilitate entry by passengers including those in a wheelchair.

The bus shall meet all requirements of the Americans With Disabilities Act even though the specific items may not be listed in detail in this specification.

The bus shall be of the Standard Floor type.

#### 2. **CONFORMITY**

- a. All bidders must conform to these specifications and the product they furnish shall be of first class quality and the workmanship shall be the best obtainable in various trades.
- b. The design of the body, chassis, and equipment the contractor proposes to furnish shall be of the latest design and model so as to produce a vehicle of substantial and durable construction in all respects.
- c. No advantage shall be taken by the contractor in the omission of any part or detail which is required to make the buses fully serviceable and durable operational vehicles in all respects even though such parts or detail are not mentioned in these specifications.
- d. All units or parts not specified shall be manufacturer's standard units. In all cases, material and dimensions shall be furnished as specified.
- e. The vehicle and all related equipment provided under this Contract shall meet all applicable State and Federal laws, vehicle codes, regulations, and standards.

#### 4. **MAINTAINABILITY**

Prime consideration shall be given to the ease of maintaining the buses. Bus components and systems, both mechanical and electrical, that require periodic physical work or inspection processes, shall be installed so that a minimum of time is consumed in gaining access to the critical areas. To the extent possible, disassembly of portions of the bus structure and equipment to gain access to these areas will be minimized.

Each bus shall be designed to facilitate the disassembly, reassembly, servicing, or maintenance thereof by the use of tools and items which are normally available as commercial standard items.

**5. SERVICIBILITY**

Each bus shall be designed and built with ease of service in mind. The front, full width hood shall open as a single panel and when in the open position shall be in front of the windshield to provide service access to the following systems and components:

- Service check and;
- The addition of fluids for engine, transmission and power steering oils, brake hydraulic fluid, coolant and windshield washer fluid and battery water.

Components accessible for service shall include at a minimum the master wheelchair lift circuit breaker (if selected), radiator, electronic control module windshield wiper motors, and the brake interlock assembly. The hood shall be latched by a primary cable release and a secondary hand release. Interior engine accessibility shall be through the sound deadened and heat insulated engine cover. This cover shall be neoprene gasket sealed and mechanical latch retained.

**6. VEHICLE DESCRIPTION****6.1 GENERAL DESCRIPTION**

- a. The vehicle shall be a "cutaway type" bus utilizing the most current model year cutaway chassis and be designed and constructed to ensure a minimum service life of at least 4 years/100,000 miles in daily service. The vehicle shall be capable of operating at least 25,000 miles annually, including the last year of service.
- b. Under normal operating service during the life of the bus, the basic structures shall withstand fatigue that is sufficient to cause Class 1 or Class 2 failures as defined by the Surface Transportation and Uniform Relocation Assistance Act (STURAA) of 1987. The structure shall also withstand impact and inertial loads due to normal street travel throughout the bus service life without permanent deformation or damage. The basic design shall incorporate all standard medium-duty bus features.

All failures involving basic body, structure, axles and suspension are considered structurally related failures for purposes of this specification.

- c. The bus, at GVWR and under static conditions, shall not exhibit deformation or deflection that impairs operation of doors, windows or other mechanical elements. Static conditions include the vehicle at rest with any wheel or dual set of wheels in a six-inch deep hole or with any one tire or any dual set completely deflated.
- d. All failures involving basic body, structure, axles and suspension are considered structurally related failures for purposes of this specification.
- e. The bus shall be new and unused, of current production model, with the latest design features. The unit shall be delivered fully operational and ready for field use with all necessary maintenance equipment and accessories.

The bus shall, in all respects, be equipped to operate legally on State highways, night and day, and shall, in all respects, conform to State and Federal regulations pertaining to the equipment herein described. All parts of this vehicle shall conform with the applicable provisions of the Code of Regulations, Motor Carrier Safety Regulations and requirements under the Americans with Disabilities Act (ADA) Final Guidelines for Transportation Vehicles, 49CFR, Part 38, Subpart B in effect as of September 6, 1991 or as modified subsequently.

- g. Pedestrian Safety – Exterior protrusions greater than .50 inches and within 80 inches of the ground shall have a radius no less than the amount of the

protrusion. The left and right side rear-view mirrors and required running lights and reflectors shall be exempt from the protrusion requirement.

Grills, doors, bumpers and other features on the sides and rear of the buses shall be designed to minimize the ability of unauthorized riders to secure toeholds, and handholds.

## 6.2 OVERALL PERFORMANCE

- a. The bus shall achieve normal operation in ambient temperature ranges of -10° F to 110° F, at relative humidity between 5% and 100%, and at altitudes up to 3,000 feet above sea level. Degradation of performance due to atmospheric conditions shall be minimized at temperatures below -10° F, above 110° F, or altitudes above 3,000 feet.
- b. Special equipment or procedures may be employed to start the bus after being exposed for more than four hours to temperatures less than 30° F without the engine in operation. Speed, gradability, and acceleration performance requirements shall be met at, or corrected to, 77° F, 29.31 inches Hg, dry air per SAE J1995. The interior climate control system shall perform in accordance with this Technical Specification.
- c. No electrical and electronic subsystem or component shall generate, or be affected by, electromagnetic interference or radio frequency interference (EMI/RFI) that can disturb the performance of electrical/electronic equipment as defined in SAE J1113.
- e. Each bus shall conform to the air pollution control standards of the U.S. Environmental Protection Agency (EPA) and all applicable state and local regulations at time of manufacturing.

## 6.4 CLEARANCES

- a. Ground – each bus shall have a minimum 9.5-inch ground clearance at any position under the bus, excluding axle zones.
- b. Angles – each bus shall have a minimum angle of approach of 21 degrees, minimum angle of departure of 10 degrees and minimum breakover angle of 15 degrees so they may safely negotiate varying driving conditions in their service area.

## 6.5 VEHICLE WEIGHT

It shall be a design and engineering goal of these buses to be as light in weight as possible without any degradation of safety, appearance, comfort or performance.

## 7. **DRIVE TRAIN / UNDERCARRIAGE**

### 7.1 FRONT AXLE

- a. The front axle shall be the chassis manufacturer's Heavy-Duty standard and shall be manufactured and installed with proper wheel and axle geometry so that imperfect axle operation will not be encountered in service.

### 7.2 REAR AXLE

- a. The rear axle shall be the chassis manufacturer's Heavy-Duty standard unit

7.3 AXLE STOPS

Rubber axle stops shall be provided between the axle and the frame on each side of both axles to prevent axle and/or frame damage in severe bounce conditions.

7.4 SHOCK ABSORBERS

Shock absorbers suitable for the vehicle application shall be installed and used in lieu of the shock absorbers provided by the chassis manufacturer.

7.5 BRAKES

- a. The braking system provided shall minimally comply with FMVSS 105 and 106. It shall be a "dual" or "split" hydraulic braking system featuring; hydro-boost assisted, anti-lock braking (ABS) and disc-type brakes at both the front and rear axles. All brake friction material shall be "asbestos-free".
- b. A "self-adjusting" parking brake system shall be provided. The parking brake system shall be applied with a foot pedal and a warning light located on the dashboard shall illuminate when the parking brake is applied. The parking brake friction material shall be "asbestos-free".

7.6 TIRES

- a. Six identical steel belted radial tires designed for primary use on "highways" shall be provided with each bus. The tires shall be rated to meet or exceed the GVWR of the chassis and shall be designed for use on the steel wheels provided with each bus.
- b. All tires must be "dual-planed or dynamically" balanced and inflated for rated GVWR rating prior to performing any road test.

7.7 WHEELS

Six matching O.E.M. steel wheels with a rated capacity that meets or exceeds the GVWR of the chassis shall be provided with each vehicle. The wheels shall be designed to mount and operate properly on a fully assembled bus without any type of interference and shall not negatively affect the handling or operation of the bus at anytime.

7.8 GVWR

The chassis Gross Vehicle Weight Rating "GVWR" shall be applicable to the size and capacity of the designed vehicle

7.9 SUSPENSION

- a. The front suspension shall consist of coil-type springs rated equal to or exceeding the vehicle's front GVWR.
- b. The rear suspension shall consist of two-stage, multi leaf-type springs rated equal to or exceeding the vehicle's rear GVWR. The use of a spring leaf or comparable method may be utilized on the wheelchair lift side of the bus in order to maintain a level bus. In any case the method utilized to level the bus must be approved by the chassis manufacturer.

7.10 STEERING

Each bus shall be equipped with power-assisted steering installed by the chassis manufacturer. The steering column shall have a tilt feature.

**7.11 ENGINE**

- a. A front mounted O.E.M. gasoline engine shall be provided. The engine shall be certified to all applicable Federal EPA and State of California (CARB) emissions standards at time of manufacture.
- b. The exhaust system shall be O.E.M. stainless steel exhaust pipes, muffler and catalytic converter, properly installed with heat shields and baffles. The tailpipe shall be so designed as to direct exhaust toward the rear of the bus.

**7.12 TRANSMISSION**

The transmission shall be automatic with a minimum of five (5) forward speeds. The gear shift selector shall incorporate a "Park" position and an "overdrive gear over-ride" feature. A heavy duty auxiliary "air to transmission fluid" cooler shall be provided and installed by the chassis manufacturer.

**7.14 DRIVE SHAFT**

- a. The drive shaft(s) shall be the largest available. The drive shaft shall be easily removed from the bus without the disassembly of the universal joints. Universal joints shall be equipped with lube fittings.
- b. Two drive shaft guards shall be installed to prevent contact with the undercarriage of the bus and the ground in the case of drive shaft universal joint failure.

**7.15 FUEL TANK**

- a. The largest fuel tank capacity from the chassis manufacturer is required. The fuel tank must be installed by the chassis manufacturer; fully compliant with California Air Resources Board (CARB) standards and must not be modified in any way.
- b. Access to the fuel level sending unit and fuel pick-up tube shall not require the removal of the fuel tank from the bus and shall occur through an access panel in the bus floor. The access through the bus floor shall minimally be 10"x10" and fully framed. The cover shall seal-out moisture, dirt and exhaust fumes from entering the bus. Wiring, cables or hoses shall not be routed across the access opening.

**8. ELECTRICAL****8.1 ELECTRICAL SYSTEM**

The electrical system shall be designed to provide and distribute 12-volt DC power to all electrical components in the bus.

**8.2 WIRING AND HARNESSSES**

- a. All general purpose wiring shall meet the requirements of SAE J1127 & J1128, types GXL and SGX. Precautions shall be taken to avoid damage from heat, water, solvents, or chafing by proper routing, clamping, and the use of grommets or suitable elastomeric cushion materials.
- b. All exterior electrical connectors shall be coated with di-electric spray to protect them from moisture and corrosion.

**8.3 ELECTRICAL JUNCTION PANEL**

- a. Electrical panels installed by the body builders shall be located for easy access. Circuit breaker circuit protection shall be standard but spade type fuses may be used when expressly required by the component manufacturer. All fuse and relay identification shall be incorporated within the electrical panel. The power distribution post must be directly tied to the distribution center for minimum heat build-up. Interior lights including reading, dome and destination sign must be relay operated to increase the dependability of the driver switches.

**8.4 DRIVER SWITCH PANEL**

The driver switch panel shall be located for driver convenience, maximization of visibility and knee room. All panel switches and function lights must use the same cut-out within the panel to allow for changes in location. The O.E.M. cigarette lighter/power distribution plug must remain available to the driver. All add-on A/C systems must use the O.E.M. rear A/C switch when available on the chassis.

**8.5 ELECTRICAL CHARGING SYSTEM**

The vehicle charging system shall be equipped with one alternator of 12-volt potential having the largest charging capacity available from the chassis manufacturer. The alternators shall be of the chassis manufacturer's design and installation.

**8.6 BATTERIES**

- a. Batteries shall be dual, maintenance free 12-volt DC type with minimum of 1200 cold cranking Amps (CCA).
- b. The batteries shall be mounted in individual trays on the outside of the right frame rail.
- c. The positive and ground battery cables shall be 4.0 gauge continuous run without any splices.

**9. BUS BODY****9.1 BODY FRAME STRUCTURE**

Multi-point rubber isolators shall be used to mount the body to the cab chassis. Bus body shall be designed with passenger safety paramount. Industry standards shall be employed to construct a body that serves the needs of purchasers in all areas including safety, longevity, ease of service and applicability to arena of use.

**9.2 BODY DESIGN**

The buses shall have a clean, smooth, sleek design, correctly proportioned and properly balanced. The exterior and body features, including chassis and body grills and louvers, shall be shaped to allow complete and easy cleaning by automatic bus washers without snagging washer brushes. Water and dirt shall not be retained in or on any body feature to freeze or bleed out onto the buses after leaving the washer.

- a. Body, windows and doors shall be sealed to prevent leaking of water, air or dust in routine service, or of cleaning liquids in automatic bus washers, for the life of the bus under normal use (normal wear and tear excluded). Accumulation of spray and splash on any window of the bus, generated by the bus wheels on a wet road, shall be minimized. A driprail with water deflector will be placed directly above the passenger windows and entry/lift door starting directly behind the front cap seam and ending at the rear cap seam.
- b. Each bus shall be water-leak tested for minimum of 10 minutes in a water-spray booth specifically designed for such tests. Any leaks detected during the test are to be repaired immediately and extreme leaks shall require a second water-leak test to assure repairs were effective. Extreme leaks are defined as any leak that creates a stream of water that rapidly pools on the interior of the bus. During

leak testing, particular attention is to be paid to windows, doors and seams. Leaks at the entry or wheelchair-lift doors or at window locations that egress back to the outside of the buses shall not be regarded as defects and shall not require repair.

9.3 BODY MATERIALS

The construction and materials shall be designed to form a unibody design, reducing maintenance, extending durability, providing consistency of appearance throughout the life of the buses, and have a low sound and temperature absorption rate.

Detailing shall be kept simple without exposed fasteners or protruding moldings. Add-on devices and trim shall be minimized and, where necessary, integrated into the basic design.

9.4 FINISH AND COLOR

All exterior surfaces shall be smooth and free as possible of visible fasteners, wrinkles and dents. Since a commercial bus appearance is desired, an exposed, riveted-type body construction shall not be accepted. Both exterior and interior surfaces to be painted shall be properly cleaned and primed, as appropriate, for the paint being used. This cleaning process shall be done prior to the application of the paint to assure a proper bond between the base surface and successive coats of original paints.

High gloss, gel coat white paint shall be applied smoothly and evenly with the finished surface free as possible of dirt, runs, orange peel and other imperfections. All exterior finished surfaces shall be impervious to diesel fuel, gasoline and commercial applications of commonly used graffiti removing chemicals.

9.5 BODY PANEL ASSEMBLY

The sidewalls, rear crown wall, roof, and front roof crown shall be interlocked forming a unibody design without exposed fasteners or protruding moldings. Body assembly shall meet or exceed FMVSS 220 and FMVSS 221 requirements.

9.6 INSULATION

The insulation shall provide a minimum R-6 thermo-barrier and sound absorption. Insulation shall comply with all Federal requirements in FMVSS 302.

9.7 UNDERCOATING

- a. The entire underside of the body including floor members, side panels below floor level (if metal), and fender wells shall be undercoated at the time of manufacture.
- b. The subfloor understructure shall be completely undercoated and 100% sealed from moisture penetration prior to being installed on steel frame understructure.

9.8 BUMPERS

Front bumper shall be chassis O.E.M., body contoured, reinforced with wrap-around ends. Front bumper shall be chrome plated, thick carbon steel with formed plastic ground effects trim. Rear bumper shall be powder coated wrap around channel.

9.9 WHEEL HOUSINGS

Housings shall be fastened to the floor structure and properly sealed and undercoated.

9.10 SKIRTS, FENDERS, AND MUD FLAPS

Skirts shall be integral, full-length with replaceable contoured wheelwell fenders. Mud flaps shall be made of rubber composite and installed behind the front and rear tires.

9.11 EXTERIOR MIRRORS

Each bus shall be equipped with a fully adjustable rectangular mirror with a convex adjustable diminishing mirror mounted below. Mirror head and rigid adjustable support shall be powder coated finish or stainless steel.

9.12 EXTERIOR LIGHTING

All exterior lighting shall conform to all state regulations and FMVSS 108 requirements. Incandescent type exterior lighting shall be provided.

a. HEADLAMPS

Headlamps shall be single, sealed beam automotive type with tilt-ray features controlled by a lever operated dimmer switch mounted on the steering column.

b. STOP, TAIL, DIRECTIONAL, CLEARANCE, IDENTIFICATION & BACK-UP LIGHTS

Stop and tail lights shall be combination lens, mounted on the rear corners. Back-up lights shall be grouped with and below the stop and tail lights. Front directional lights shall be body corner contoured and mounted horizontally with one (1) on each side. Identification and clearance lights roof mounted consisting of five (5) amber at the front and seven (7) red rectangular lights at the rear. Front side marker lights shall be amber and incorporated with the parking lights. The rear side marker lights shall be red rectangular lights.

c. STEPWELL LIGHTS

Stepwell lights shall be suitably mounted so that the entire stepwell and a portion of the ground area outside the bus is sufficiently illuminated. The step lights shall be extinguished when the front door is closed.

d. FRONT AND SIDE REFLECTORS AND DIRECTIONAL LIGHTING

Front and side reflectors shall be incorporated with the parking lights. Rear, side reflectors and rear reflectors shall be mounted on the rear corners above the bumper.

Front directional lights shall be incorporated with the parking lights. Rear directional lights shall be amber in color and grouped with the stop, tail, and back-up lights.

**10. INTERIOR**

10.1 ENTRANCE STEPWELL

- a. Steps shall be formed and weld fabricated & powder coated.
- b. Standard entry steps shall provide easy entry and egress for passengers of every demographic.
- c. shall be bright white in color and shall be undercoated on the underside.
- d. Steps shall be covered with .125" thick rubber flooring on all risers and sides, and 3/16" thick ribbed rubber step treads with contrasting nosing that is properly sealed.

10.2 BUS SUB FLOOR

The floor structure shall be load tested to minimize deflection at the perimeter. All surface irregularities shall be filled and subfloor sanded smoothly.

Subfloor shall be underlayment grade plywood with a solid cross band that is pattern cut, edge sealed, and fastened with counter sunk screws installed throughout the entire floor structure.

### 10.3 FLOOR COVERING

Black, transit grade rubber flooring shall be provided. The flooring shall be ribbed in the aisle and smooth under the seats. All joints shall be sealed to prevent moisture intrusion onto the subfloor. The flooring shall provide excellent resistance to cold & heat, scarring & denting and tearing.

The driver's area shall be covered with sound deadening, non-skid black floor mat.

### 10.4 INTERIOR PANELS

- a. The interior body panels including the wall and ceiling panels shall be highly durable and resistant to vandalism and easy to clean.
- b. Smooth sidewall panels shall be installed from the seat rail to the ceiling body liner. Panels shall be installed in sections from the seat track to the floor.
- c. A front ceiling closure shall be installed. The panel shall allow accessibility for wiring harness connections, and optional driver storage, or front destination sign, and shall provide a bright, easy-to-maintain entryway ceiling
- d. An entry door header panel shall be molded to fit the roof contour. An access cover shall provide easy access to the door mechanism.

### 10.5 WINDOWS

- a. All windows shall meet all State and Federal Safety regulations. The windshield shall be AS-1, the driver's side window shall be AS-2, and the passenger windows shall be AS-3 in quality.
- b. The windshield shall be front body cab contoured single piece .25" thick tinted, laminated safety float glass. The windshield shall be bonded in place for a secure watertight seal.
- c. The driver's roadside window shall be standard O.E.M. roll-up vertical glass design glazed with tinted .125" thick, tempered safety glass.
- d. Each driver curbside window shall be one-piece, minimum AS-2 rated safety glass.
- e. Door windows shall be fully encapsulated. Windows shall be tinted, tempered safety glass that is FMVSS 217 certified. Full-length windows shall be provided in each passenger door panel and in the upper portion of the lift door panels in line with the passenger side windows.
- f. Passenger side windows shall be top T-slider ventilating style or non-ventilating type as required by the floor plan design. Glazing shall provide 31% light transmission. All passenger side windows shall meet FMVSS 217 requirements.

### 10.6 PASSENGER DOORS

- a. The passenger door frame shall be located opposite of driver and bright white to match vehicle exterior base color. The 30" passenger door shall be standard.
- b. The door shall include a two (2) panel design. Vertical door shafts shall be an integral part of the door panels. The top portion of the shaft shall be designed to prevent the door panels from rotating out of alignment.

- c. Perimeter door edges shall be sealed with neoprene bulb seals. The center of the door assembly shall be equipped with overlapping neoprene 2" leading edge seals. Seals shall overlap front to rear to provide an air and watershed.
- d. The door panels shall be manually operated by the driver by actuation of a push/pull rod assembly with a two (2)-position arm located to the right of the driver.

10.7 WINDSHIELD WIPERS AND WASHERS

- a. O.E.M. two (2)-speed, intermittent electric wipers shall be provided with variable speed control to allow timed intermittent windshield wiping.
- b. Arms shall be of single type and park at the lower edge of the windshield.
- c. The washer shall be powered by an electric pump with washer reservoir and supply nozzles.

10.8 DRIVER'S CONTROLS AND INSTRUMENTATION

The driver's area shall consist of an ergonomically designed molded dash console and molded driver's console complete with controls and instrumentation. All system control switches shall be labeled and illuminated. The instrument panel shall be equipped with speedometer, fuel gauge, engine oil pressure and coolant temperature gauge, and voltmeter; and tell-tale lights to indicate charge system, four-wheel rear anti-lock brakes, air bag, check engine, park brake, and high beam. A separate driver's area heater and air conditioning control panel shall also be provided.

10.9 DRIVER'S SEAT

The driver's seat shall be High-Back with a tilting back, 6" fore and aft adjustment and adjustable lumbar support. It shall be mounted to the O.E.M. chassis base and incorporate the seat belt pre-tensioning device.

10.10 PASSENGER SEATING

Passenger seating shall be low-back, individually contoured and meet all applicable federal motor vehicle safety standards for strength and safety including 210 for seat belts. Features include:

- Ultra-thin type backrest for added hip-to-knee room and lumbar support
- Molded seat and back cushions for comfort and long lasting support
- Wire mesh-grid seat springs for even support

All seats shall be floor and side wall track mounted for ease of seat removal. Where exposed, the track shall be covered with a vinyl track plug strip. The seat-tracking system shall be incorporated into the bus to provide secure seat anchorage, to improve the floor-to-body securement, and to provide additional side crash barrier around the perimeter of the body structure.

10.11 COURTESY LIGHTS-INCANDESCENT

Interior courtesy lights shall be located in the ceiling cove as incandescent light fixtures and mounted as a minimum three (3) on each side to provide passenger compartment lighting. A single driver's light fixture shall be provided with a separate control.

10.12 INTERIOR MIRRORS

Each bus shall be equipped with a fully adjustable rear view mirror mounted in easy reach for driver's viewing of the passenger compartment.

10.13 PASSENGER ASSISTS

Front stanchions at entry door and behind driver compartment shall be stainless steel tubing with brushed finish. Rear stanchions and all optional handrails shall be stainless steel tubing with brushed finish. Stanchions shall meet all applicable ADA requirements.

10.14 MODESTY PANELS

A modesty panel assembly shall be installed behind the entry door stepwell.

**Wheelchair Accessibility System**

Each bus shall meet all applicable Federal A.D.A regulations and shall provide safe and comfortable accessibility for disabled passengers.

**Wheelchair Lift**

Each bus shall be equipped with a fully automatic lift with a platform clear size of 32" x 51" equipped with edge barriers and side assist rails. The lift shall stow in a vertical position behind the side lift doors. All lifts shall be FMVSS 403/404 compliant.

**Wheelchair and Passenger Restraint System**

Each bus shall be equipped with Q'Straint or approved equal four (4)-point, flush mounted, floor support wheelchair and passenger restraint system with shoulder harness to provide maximum passenger safety. Each wheelchair position shall have an adjustable woven restraint belt with integral lap and torso restraints. Belts shall store in a convenient storage compartment.

**Wheelchair Lift Doors****Heavy Duty Wheelchair Lift Doors**

The wheelchair doorframe structure shall in bright white to match vehicle exterior base color. A water deflector shall be integrated into doorframe structure at the top.

Door panel holders shall be gas shock type mounted at the top and shall allow door panels to open to a minimum of 100 degrees from the closed position. Wheelchair door clear opening dimensions shall be ADA compliant.

**Transmission Interlock**

A panel door switch controlling the lift system shall be provided to interlock the lift doors. The system shall require the transmission to be in the "Park" position and the park brake engaged before the lift can be operated.

**Lift Lights**

The curb and the lift area shall be illuminated by an exterior mounted light controlled by the lift door switch.

**11. CLIMATE CONTROL**11.1 DRIVER'S HVAC

Driver's area shall be heated and cooled by a chassis O.E.M. forced air heater/defroster and air conditioning system. Both heat and cool shall be controlled by dash mounted controls. The system shall have 4-speed fans with fresh air mode. Windshield airflow shall be through molded dash air ducts providing constant and even air diffusion.

11.2 PASSENGER COMPARTMENT HVAC

The passenger compartment shall be heated and cooled by separate, systems as selected below. The passenger heater shall be hot water, forced air type with 65,000 BTU capacity, providing undiffused airflow with heaters located under the seats. One chassis provided master shut-off valve shall be located underneath the driver's area. The passenger air conditioner shall be sized according to and appropriately for the size of bus

body. The evaporator shall be rear ceiling mounted. The condenser shall be under-skirt mounted. The refrigerant compressor shall be polygroove belt driven off of the engine. Refrigerant type shall be R134A.

**12. SAFETY EQUIPMENT**

- a. One five-pound ABC Fire extinguisher shall be provided.
- b. One three piece warning triangle flare kit conforming to FMVSS 125 shall be provided.
- c. One First Aid Kit, 16 unit content minimum, shall be provided.

**13. DELIVERY**

- a. All deliveries shall be made Monday through Friday, except for holidays. Prior notice of intent to deliver vehicles must be given in advance, with delivery occurring during normal business hours.
- b. Certificates of Origin and invoices must be delivered with the vehicle.
- c. Vehicles are to be delivered having been properly serviced, including all lubricants and fluids filled to the proper level.
- f. Delivery documentation:
  - Warranty for vehicle and its subsystems.
  - Owner's Manual
  - Detailed maintenance and inspection schedule for the vehicle and subsystems
  - Written or video instructions on the use of the wheelchair restraint system