

**STATE OF LOUISIANA
DIXON CORRECTIONAL INSTITUTE
TECHNICAL SPECIFICATIONS FOR**

TRUCK, CAB & CHASSIS, 19,500# GVWR, WITH 41' AERIAL DEVICE

GENERAL

This specification sets forth the minimum requirements for a 4wd regular cab class 6 truck (19,500# gvwr) outfitted with a flat bed and an insulated aerial device with an articulating, telescoping boom, material handling jib, and a dual 2-man fiberglass platform.

Equipment shall be new, and must meet all state and Federal safety and emission standards in effect at time of order.

1. Cab & Chassis

- 1.1. GVWR: 19,500 lbs.
- 1.2. Frame: 600,000 RBM (Resisting Bending Movement)
- 1.3. Cab to axle (CA) and axle to end of frame (AF)
 - 1.3.1. CA: 84.1 inch
 - 1.3.2. AF: 50.8 inch
- 1.4. All steel front bumper and 2 frame mounted tow hooks
- 1.5. Cab
 - 1.5.1. Conventional day cab
 - 1.5.2. Tinted safety glass
 - 1.5.3. Cab entry handles, driver and passenger side
 - 1.5.4. Outside mirrors, driver and passenger side
 - 1.5.4.1. Power adjustable
 - 1.5.4.2. Heated
 - 1.5.4.3. Convex spot mirrors
 - 1.5.5. Manufacturer's highest level sound insulation package
 - 1.5.6. 40/20/40 vinyl split bench seat with fold down center console/arm rest
 - 1.5.7. Gauge package including the following:
 - 1.5.7.1. Coolant temperature
 - 1.5.7.2. Fuel
 - 1.5.7.3. Oil pressure
 - 1.5.7.4. Speedometer
 - 1.5.7.5. Tachometer
 - 1.5.7.6. Gear indicator
 - 1.5.7.7. Odometer
 - 1.5.7.8. Trip odometer
 - 1.5.7.9. Auto transmission temperature
 - 1.5.8. Dual sun visors
 - 1.5.9. Two (2) cup holders, mounted in dash or center console
 - 1.5.10. Climate control, including air conditioning, heater, and defroster
 - 1.5.11. Power windows and door locks
 - 1.5.12. Tilting and telescoping steering wheel
 - 1.5.13. Driver and passenger airbags
 - 1.5.14. Running boards/cab entry steps

1.6. Engine and fuel

- 1.6.1. 6.7L I-6 OHV diesel direct injection, 24 valve intercooled, 8 cylinder
- 1.6.2. 800 HP FT-LBS @ 1800 rpm
- 1.6.3. Fuel tank: 52 gallon minimum capacity

1.7. Transmission

- 1.7.1. 6-Speed electronic sequential shift control automatic, with overdrive, lock-up driver selections with PTO provision
- 1.7.2. To be filled with manufacturer approved synthetic lubricants

1.8. PTO

- 1.8.1. PTO must be activated by dash mounted factory upfitter switch
- 1.8.2. Indication of PTO engagement should be accomplished by lighted switch or separate dash mounted indicator light

1.9. Front Axle

- 1.9.1. 7,250 lbs. GAWR @ ground capacity
- 1.9.2. Shock absorbers, heavy duty
- 1.9.3. Integral power steering

1.10. Rear axle

- 1.10.1. 13,500 lbs. GAWR @ ground capacity
- 1.10.2. Shock absorbers, heavy duty
- 1.10.3. Limited slip or locking differential

1.11. Brakes: Power assist 4-wheel disc brakes with ABS**1.12. Wheels & Tires**

- 1.12.1. 6.0"x19.5", 10 bolt steel wheels
- 1.12.2. First line, first quality wheels
 - 1.12.2.1. Front – 225/70R19.5, all terrain
 - 1.12.2.2. Rear – 225/70R19.5, dual on/off road tread
- 1.12.3. Combined load ratings must be compatible with axle ratings and GVWR

1.13. Chassis Electrical System and Lights

- 1.13.1. 12-volt system
- 1.13.2. Alternator 180 amp
- 1.13.3. Dual batteries with 1460 CCA combined
- 1.13.4. Six (6) overhead mounted, rocker-style, factory installed, body circuit switches (upfitter switches) for simple on/off functions for accessories (PTO, warning lights, etc.; one (1) assigned to activate the PTO; one (1) assigned to operate the flashing warning lights; one(1) assigned to enable the perimeter lighting circuits, one (1) assigned to operate the cargo light, one (1) assigned to operate the corner strobe lights, and one (1) blank to be assigned by DCI personnel
- 1.13.5. Headlights:
 - 1.13.5.1. Automatic daytime running lights
 - 1.13.5.2. Automatic on with low ambient light levels
 - 1.13.5.3. Warning buzzer/alarm when headlight switch is on and ignition switch is in off position
- 1.13.6. Roof mounted clearance marker lights
- 1.13.7. Cruise control

- 1.13.8. Intermittent windshield wipers with washers
- 1.13.9. Self-cancelling directional signals
- 1.13.10. Backup alarm, 97dba
- 1.13.11. Backup camera
- 1.13.12. AM/FM radio with auxiliary front input, Bluetooth/hands free function and steering wheel controls
- 1.13.13. 110V power outlet
- 1.13.14. Two (2) 12V accessory power outlets with covers, mounted in dash (for cell phone chargers, GPS devices, etc.). One (1) 12V power outlet and one (1) USB charging outlet will also satisfy this requirement

1.14. Paint

- 1.14.1. Cab: Manufacturer's standard, white
- 1.14.2. Chassis: Manufacturer's standard black

1.15. FMCSA/DOT Mandated Safety Items

- 1.15.1. One (1) UL listed, 5 B:C rated, or higher, fire extinguisher securely mounted in cab
- 1.15.2. One (1) set of three (3) bidirectional reflective triangles conforming to FMVSS No. 125

2. Aerial Device

Terex Hi-ranger LTM 40 or equal: insulated, articulating, telescopic

2.1. Working Capacities

- 2.1.1. Ground to bottom of platform: 40 ft.
- 2.1.2. Working height: 45.4 ft.
- 2.1.3. Maximum horizontal side reach: 30 ft. to edge of platform
- 2.1.4. Continuous rotation
- 2.1.5. 500 lbs. platform capacity
- 2.1.6. Dielectric rating: Category C, 46 kv and below

2.2. Hydraulics

- 2.2.1. Electric shifted PTO and pump
- 2.2.2. 15 gallon reservoir
- 2.2.3. 3000 psi. maximum operating pressure
- 2.2.4. Open center
- 2.2.5. Hydraulic tool circuit at platform with quick disconnect couplings and control valve

2.3. Features and options

- 2.3.1. Dual (2)-man platform, 24"x48"x42"
 - 2.3.1.1. Fiberglass
 - 2.3.1.2. Platform liner
 - 2.3.1.3. Platform cover, vinyl
 - 2.3.1.4. One (1) Platform Step
- 2.3.2. Hydraulic boom extension (telescoping)
- 2.3.3. Material handling jib and winch
 - 2.3.3.1. 36" long stick
 - 2.3.3.2. 1000 lb. capacity
 - 2.3.3.3. Removable jib arm
- 2.3.4. 12 VDC powered secondary stowage system
 - 2.3.4.1. Controls at platform and pedestal

2.3.5. Outriggers**2.3.5.1. Hydraulic A-frame with integrated sub-base****2.3.5.2. Rear H-Frame Outriggers****2.3.5.3. Maximum spread: 115"****2.3.5.4. Electric interlock****2.3.6. One (1) safety harness and 4.5 ft. lanyard, size medium to X-large****2.3.7. Slope indicator****2.4. Upper Platform Controls****2.4.1. Single handle****2.4.2. Engine start/stop****2.4.3. Emergency stop****2.5. Paint: Manufacturer's standard, white****3. Flatbed Body****3.1. Basic construction****3.1.1. 16 ft. Flatbed with full sub-frame painted white****3.1.2. One (1) 24" x 24" x 96" Diamond tread aluminum straight side tunnel truck tool box with shelf****3.1.3. Two (2) 18" x 18" x 24" Diamond tread aluminum underbody truck box****3.1.4. Two (2) 18" x 18" x 60" Diamond tread aluminum underbody truck box****3.2. Features and accessories****3.2.1. Chock holders****3.2.1.1. One holder on each side of body under deck****3.2.1.2. One pair of heavy rubber wheel chocks****3.2.2. Outrigger Pads****3.2.2.1. Two (2) pairs of outrigger pads, 18"x18", black nylon****3.2.2.2. Outrigger pad storage under body****3.2.3. ICC rear bumper****3.2.3.1. 2" receiver hitch, 10k lb. capacity****3.2.3.2. Safety chain d-rings****3.2.3.3. Combination 7-pin and 4-pin trailer electrical receptacle****3.2.4. Rubber mud flaps****3.2.5. All walking surfaces coated with slip resistant coating (sprayed bed liner)****3.2.6. Six (6) floor mounted tie downs in bed, one (1) in each corner and one (1) at the midpoint of each side****3.2.7. Bulkhead Mounted (2) mini light bars****3.3. Platform rest with rubber tube****3.4. Paint****3.4.1. Body: Manufacturer's standard, white****3.4.2. Frame mounted and underbody components: Manufacturer's standard black (Except aluminum boxes)****4. Lighting, Wiring and High Visibility Conspicuity Tape****4.1. General****4.1.1. Refer to lighting layout illustrations below**

- 4.1.2. Truck must be delivered with warning lights and high visibility reflective conspicuity tape installed in accordance with the below specifications and layout
- 4.1.3. All warning lights to be sealed light emitting diode (LED) type, with plug-in connectors
- 4.1.4. 6" oval lights and round clearance marker lights must be grommet mounted
- 4.1.5. Warning lights shall be installed by an upfitter who is experienced in and regularly engages in the installation of automotive electronics and warning lights
- 4.1.6. Installer shall use vehicle and lighting manufacturers' guidance along with industry best practices and techniques to ensure that light are installed in a safe and neat manner
- 4.1.7. All wiring and cables should be color coded, heat shrink wrapped and logically rerouted, secured, and protected with convoluted loom where possible
- 4.1.8. All wiring splices must be made using butt or parallel crimp connectors
- 4.1.9. Non-metallic/rubber grommets shall be used where wires and cables penetrate any cab panels, body panels, or chassis structure
- 4.1.10. All cab and body penetrations shall be adequately sealed to prevent water from entering
- 4.1.11. All warning lights to be controlled by a single in-cab, dash-mounted upfitter switch. The switch must be labeled to read "Warning Lights"
- 4.1.12. All lighting must meet Federal and state requirements

4.2. Convenience lighting

- 4.2.1. LED cargo bed lights Tow (2) Ecco EW 2019 mounted on bulkhead
- 4.2.2. Five (5) undercarriage perimeter lights, waterproof, 13"L Maxxima #M84420-E or equal

4.3. Mini light bars

- 4.3.1. Two (2) mini (17") light bars installed in the locations shown below
- 4.3.2. Sound Off Signal-n-Roads Mini or equal satisfying the following requirements
- 4.3.3. Lengths are nominal and +/-1" is acceptable
- 4.3.4. Dual color – 12 diodes per pod/module (equal number of green and amber)
- 4.3.5. Each pod/module must be capable of fully displaying both green and amber
- 4.3.6. Flash pattern capable of alternating between an asymmetric, low-frequency, "wig-wag" pattern and low-frequency double or quad flash
- 4.3.7. UV resistant clear polycarbonate lens
- 4.3.8. 10-16 VDC
- 4.3.9. Light bars shall meet all applicable federal/state laws and regulations
- 4.3.10. Shall be SAE J845 360-degree Class 1 certified

4.4. Perimeter Warning Lights

- 4.4.1. Ecco ED 37777 AG surface mount perimeter lighthouse or equal satisfying the following requirements
- 4.4.2. Four (4) perimeter lights, two (2) front and two (2) rear, installed in the locations shown below
- 4.4.3. Size: Length: 4.25-5.25 inch, Width: 1.0-2.0 inch, Height: 0.3-0.4 inches
- 4.4.4. 12-24 VDC
- 4.4.5. UV resistant clear polycarbonate lens, black bezel trim
- 4.4.6. 6 diodes – dual color – (equal number of green and amber)
- 4.4.7. Lighthouse shall meet all applicable federal/state laws and regulations
- 4.4.8. Shall be SAE J595 Class 1 certified

4.5. Oval Warning Light

- 4.5.1. Three (3) lights required, installed in the locations shown below

- 4.5.2. 6" L x 2 1/4" W, recessed, grommet, snap-in mount
- 4.5.3. Clear polycarbonate lens
- 4.5.4. Dual color – half amber, half green
- 4.5.5. Capable of double or quad flash pattern
- 4.5.6. 12-24 VDC, with plug-in connector
- 4.5.7. Shall be SAE J595 Class 2 certified

4.6. High Visibility Reflective Tape

- 4.6.1. DOT C2 approved high visibility reflective conspicuity tape, 2" wide, with alternating 6" segments of red and white, shall be placed above the rear wheels as shown below
- 4.6.2. High visibility reflective conspicuity tape, 2" wide, with alternating 6" segments of green and high visibility yellow, shall be placed on the rear of the body as shown below

4.7. Warning lights and Conspicuity Tape Layout: The following pictures are intended to show a general representation of a truck with an aerial device. Only the labeled lighting and conspicuity tape details apply here. No other features of the trucks shown are intended to be included unless state elsewhere.

Ford F550 Diesel Cab & Chassis w/Terex Hi-ranger LTM 40 Articulating Aerial Device or Equal