



816

Landfill Compactor

Technical Specifications

Configurations and features may vary by region. Please consult your Cat® dealer for availability in your area.

Table of Contents

Specifications	2
Engine	2
Operating Specifications	2
Transmission	2
Hydraulic System Lift/Tilt	2
Hydraulic System - Steering	2
Service Refill Capacities	2
Air Conditioning System	3
Axles	3
Brakes	3
Sound Performance	3
Blades	3
Wheels	3
Dimensions	4
Standard and Optional Equipment	5
816 Environmental Declaration	7

816 Landfill Compactor Specifications

Engine

Engine Model	Cat C7.1	
Emissions Option 1	U.S. EPA Tier 4 Final/EU Stage V/Korea Stage V and Japan 2014	
Rated Speed	2,200 rpm	
Net Power (SAE J1349:2011)	186 kW	249 hp
Net Power (ISO 9249:2007)	186 kW	249 hp
Gross Power (SAE J1995:2014)	212 kW	284 hp
Engine Power (ISO 14396:2002)	205 kW	275 hp
Peak Torque @ 1400 rpm	1223 N·m	902 lbf-ft
Torque Rise	52%	

- Net power advertised is the power available at the engine flywheel when the engine is equipped with a fan, air cleaner, aftertreatment, and alternator.

Emissions Option 2	Brazil MAR-1, emitting equivalent to U.S. EPA Tier 3/EU Stage IIIA	
Rated Speed	2,200 rpm	
Net Power (SAE J1349:2011)	186 kW	249 hp
Net Power (ISO 9249:2007)	186 kW	249 hp
Gross Power (SAE J1995:2014)	213 kW	286 hp
Engine Power (ISO 14396:2002)	205 kW	275 hp
Peak Torque @ 1400 rpm	1016 N·m	749 lbf-ft
Torque Rise	26%	

- Net power advertised is the power available at the engine flywheel when the engine is equipped with a fan, air cleaner, muffler, and alternator.

Bore	105 mm	4.1 in
Stroke	135 mm	5.3 in
Displacement	7.01 L	427.8 in ³
High Idle Speed	2,270 rpm	
Low Idle Speed	800 rpm	
Maximum Altitude without Derating	3000 m	9,842.5 ft

Operating Specifications

Operating Weight (Tier 4 Final/Stage V)	26 052 kg	57,345 lb
Operating Weight (Tier 3/Stage IIIA equivalent)	25 761 kg	56,793 lb

Transmission

Transmission Type	Cat Planetary Power Shift	
Forward – First	5.4 km/h	3.4 mph
Forward – Second	8.5 km/h	5.3 mph
Reverse – First	6.0 km/h	3.7 mph
Reverse – Second	8.8 km/h	5.5 mph

Hydraulic System Lift/Tilt

Lift/Tilt System – Circuit	Pilot Operated LS Valve with EH	
Lift/Tilt System	Variable Displacement Piston	
Max Flow at 2,200 rpm	89 L/min	23.5 gal/min
Relief Valve Setting – Lift/Tilt	22 000 kPa	3,190 psi
Cylinders, Double Acting: Lift, Bore, Stroke	120 mm × 915 mm	4.7 in × 36.0 in
Pilot System	Open Center, Fixed Displacement Gear	
Pilot Relief Valve Setting	21 000 kPa	3,046 psi

Hydraulic System - Steering

Steering System – Circuit	Pilot, Load Sensing	
Steering System – Pump	Variable Displacement Piston	
Max Flow @ 2,200 rpm	147 L/min	38.8 gal/min
Relief Valve Setting – Steering	27 600 kPa	4,003 psi
Total Steering Angle	84°	
Steering Cycle Time (high idle)	3.0 sec	
Steering Cycle Time (low idle)	8.2 sec	

Service Refill Capacities

Fuel Tank	500 L	132.1 gal
Diesel Exhaust Fluid Tank	16 L	4.2 gal
Cooling Systems – Tier 4 Final/Stage V	81 L	21.4 gal
Cooling Systems – Tier 3/Stage IIIA equivalent	73 L	19.3 gal
Engine Crankcase	20 L	5.3 gal
Transmission	56 L	14.8 gal
Differentials and Final Drives – Front	43 L	11.4 gal
Differentials and Final Drives – Rear	43 L	11.4 gal
Hydraulic System – Implement/Steering	175 L	46.2 gal
Hydraulic Tank Only	75 L	19.8 gal

- Cat U.S. EPA Tier 4 Final/EU Stage V diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels** up to:
 - 20% biodiesel FAME (fatty acid methyl ester)*
 - 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or “Caterpillar Machine Fluids Recommendations” (SEBU6250) for details.

* Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel (for use of blends higher than 20% biodiesel, consult your Cat dealer).

** Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.

– Cat DEO-ULS™ or oils that meet the Cat ECF-3, API CJ-4, API CK-4, and/or ACEA E9 specifications are required.

– Diesel Exhaust Fluid (DEF) that meets all requirements defined in ISO 22241-1:2006.

Air Conditioning System

- The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a or R1234yf. See the label or instruction manual for identification of the gas.
- If equipped with R134a (Global Warming Potential = 1430), the system contains 1.4 kg (3.1 lb) of refrigerant which has a CO₂ equivalent of 2.002 metric tonnes (2.206 tons).

Axles

Front	Planetary – Fixed
Rear	Planetary – Oscillating
Oscillation Angle	±6°

Brakes

Service Brakes	Single Disc Wet (Enclosed) 2 WHL
Parking Brake	Drum and Shoe, Spring Applied, Hydraulic Released

Sound Performance

Tier 4 Final/Stage V

Operator Sound Pressure Level (ISO 6396:2008)	72 dB(A)
Machine Sound Power Level (ISO 6395:2008)	111 dB(A)
Operator Sound Pressure Level (ISO 6396:2008)	70 dB(A)*
Machine Sound Power Level (ISO 6395:2008)	109 dB(A)*

Tier 3/Stage IIIA

Operator Sound Pressure Level (ISO 6396:2008)	72 dB(A)
Machine Sound Power Level (ISO 6395:2008)	112 dB(A)
Operator Sound Pressure Level (ISO 6396:2008)	70 dB(A)*
Machine Sound Power Level (ISO 6395:2008)	110 dB(A)*

* Sound suppression equipped

- The machine sound power level was measured according to ISO 6395:2008. The measurement was conducted at maximum engine cooling fan speed.
- The operator sound pressure level was measured according to ISO 6396:2008. The measurement was conducted at maximum engine cooling fan speed.
- Hearing protection may be needed when the machine is operated with a cab that is not properly maintained or when the doors or windows are open for extended periods or in a noisy environment.

Blades

Straight Blade

Capacity	10.00 m ³	13.08 yd ³
Overall Width	3656 mm	12.0 ft
Height	1961 mm	6.4 ft
Height of Cutting Edge	990 mm	3.2 ft
Digging Depth	362 mm	1.2 ft
Ground Clearance	1140 mm	3.7 ft
Turning Radius – Outside Corner of Blade	6473 mm	21.2 ft
Turning Radius – Inside Corner of Blade	2910 mm	9.5 ft
Weight	2063 kg	4,548 lb
Total Operating Weight	26 052 kg	57,345 lb

Wheels

Combination Tips

Weight (Group)	6148 kg	13,554 lb
----------------	---------	-----------

Plus Tips

Weight (Group)	6342 kg	13,982 lb
----------------	---------	-----------

Paddle Tips

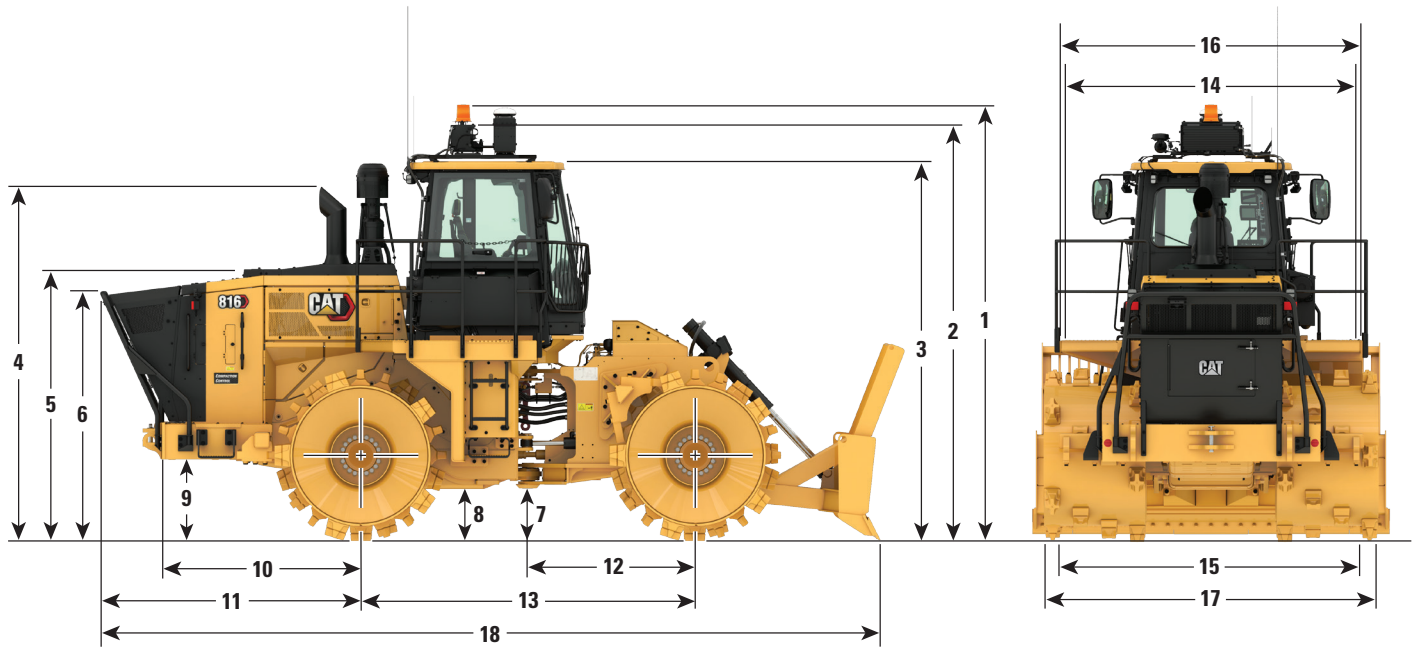
Weight (Group)	5954 kg	13,126 lb
----------------	---------	-----------

Outside Diameter	1717 mm	67.6 in
Drum Diameter	1400 mm	55.1 in
Drum Width	1016 mm	40.0 in
Tips per Row	5	
Tips per Wheel	20	
Replaceable	Weld On	
Width Over Drums	3338 mm	131.4 in
Tip Height	159 mm	6.25 in

816 Landfill Compactor Specifications

Dimensions

All dimensions are approximate.



1 Height to Top of Beacon	4368 mm	14.3 ft
2 Height to Top of A/C Condenser	4161 mm	13.7 ft
3 Height to Top of Cab Roof	3878 mm	12.7 ft
4 Height to Top of Exhaust Pipe	3547 mm	11.6 ft
5 Height to Top of Hood	2770 mm	9.1 ft
6 Height to Top of Rear Compactor Guard	2499 mm	8.2 ft
7 Ground Clearance to Hitch	519 mm	1.7 ft
8 Ground Clearance to Transmission Guard	516 mm	1.7 ft
9 Ground Clearance to Bottom of Bumper	818 mm	2.7 ft
10 Center Line of Rear Axle to Bumper	1990 mm	6.5 ft
11 Center Line of Rear Axle to Rear Compactor Guard	2614 mm	8.6 ft
12 Center Line of Front Axle to Hitch	1675 mm	5.5 ft
13 Wheelbase	3350 mm	11.0 ft
14 Width Over Front Striker Bars	3000 mm	9.8 ft
15 Width Over Rear Striker Bars	3036 mm	10.0 ft
16 Width Over Platform	3140 mm	10.3 ft
17 Width Over Drums	3338 mm	11.0 ft
18 Overall Machine Length with Straight Blade	7806 mm	25.6 ft

816 Landfill Compactor Standard and Optional Equipment

Standard and Optional Equipment

Standard and optional equipment may vary. Consult your Cat® dealer for details.

	Standard	Optional		Standard	Optional
POWERTRAIN			OPERATOR ENVIRONMENT (CONTINUED)		
Advanced Productivity Electronic Control System (APECS)	✓		Camera, rear vision	✓	
Air-to-air aftercooler	✓		Cat Compact RTK Mapping (available through SITECH only)		✓
Antifreeze, -50° C (-58° F)		✓	Cat Compact SBAS Mapping (available through SITECH only)		✓
Axles, no spin front, rear differential		✓	Coat and hard hat hooks	✓	
Axles, no spin front, open differential rear		✓	Electro-hydraulic controls – floor mounted	✓	
Axles, open differential front, no spin rear		✓	Fingertip shifting controls	✓	
Brakes, full hydraulic, enclosed, wet multiple disc service brakes	✓		Flip-up armrest	✓	
Cat clean emission module (U.S. EPA Tier 4 Final/EU Stage V only)	✓		Heater and defroster	✓	
Electro hydraulic parking brake	✓		Horn group (trumpet)	✓	
Electronic Clutch Pressure Control (ECPC)	✓		Implement hydraulic lockout	✓	
Engine, Cat C7.1 configured for two emissions options: Tier 4 Final/Stage V or emitting equivalent to Tier 3/Stage IIIA	✓		Instrumentation, gauges: DEF fluid level (Tier 4 Final/Stage V only), engine coolant temperature, fuel level, hydraulic oil temperature, speedometer/tachometer, torque converter temperature	✓	
Engine driven cooling fan – suction	✓		Instrumentation, warning indicators: action alert system – three categories, brake oil pressure, electrical system – low voltage, engine failure malfunction alert and action lamp, parking brake status	✓	
Fuel priming pump (electric)	✓		Internal four-post rollover protective structure (ROPS/FOPS)	✓	
Fuel-to-air cooler	✓		Light, cab – dome	✓	
Ground level engine shutoff	✓		Lunchbox and beverage holders	✓	
Heater, engine coolant, 120V		✓	Mirror, internal (panoramic)	✓	
Heater, engine coolant, 240V		✓	Mirrors, heated, rearview (externally mounted)	✓	
Muffler under hood (Tier 3/Stage IIIA equivalent only)	✓		Precleaner, cab – powered		✓
Radiator, unit core	✓		Premium plus seat containing forced air heating and cooling, 2-way thigh adjustment, power lumbar and back bolster adjustment, ride stiffness adjustment, dynamic end dampening, and leather finish	✓	
Starting aid (ether)	✓		Radio, AM/FM/Aux/USB/Bluetooth®		✓
Throttle lock	✓		Radio, CB (ready)	✓	
Torque converter	✓		Radio ready for entertainment: antenna, speakers, converter (12V, 10-15 amp)	✓	
Transmission, planetary with 2 forward/2 reverse speed range control	✓		Seat belt with minder, retractable, 76 mm (3 in) wide	✓	
ELECTRICAL			Steering and Transmission Integrated Control (STIC™) system with lockout	✓	
Alarm, back-up	✓		Sun visor, front	✓	
Alternator, 150 amp	✓		Transmission gear (indicator)	✓	
Auxiliary start receptacle	✓		Vital Information Management System (VIMS™): graphical information display, external data port, customizable operator profiles, event indicator light on rear grill	✓	
Batteries, maintenance-free	✓		Wet-arm wipers/washers (front and rear): intermittent wipers (front and rear)	✓	
Electrical system, 24V	✓				
Ground level lockable master disconnect switch	✓				
Lights, standard or LED		✓			
Light, warning unswitched (LED strobe)	✓				
Lighting system (front and rear)	✓				
Starter, electric	✓				
OPERATOR ENVIRONMENT					
12V power port for mobile phone or laptop connection	✓				
Air conditioner with roof-mounted condenser	✓				
Cab, sound-suppressed pressurized	✓				
Cab glass, laminated and tinted, rubber mounted	✓				

816 Landfill Compactor Standard and Optional Equipment

Standard and Optional Equipment (continued)

Standard and optional equipment may vary. Consult your Cat dealer for details.

	Standard	Optional		Standard	Optional
GUARDS			OTHER STANDARD EQUIPMENT		
Guards, axle (front and rear)	✓		Doors, service access (locking)	✓	
Guard, cab window	✓		Ecology drains for engine, radiator, transmission, hydraulic tank	✓	
Guards, crankcase and power train, hinged	✓		Engine, crankcase, 500 hour interval with CJ-4 oil	✓	
Guard, driveshaft	✓		Emergency egress	✓	
Guard, radiator	✓		Fire suppression ready	✓	
BLADES			Fuel tank, 500 L (132.1 gal)	✓	
Bulldozer blades		✓	Hitch, drawbar with pin	✓	
Dozer arrangement (no blade)	✓		Hoses, Cat XT™	✓	
Dozer arrangement: tilt (no blade)		✓	Hydraulic, engine, and transmission oil coolers	✓	
FLUIDS			Oil change system, high speed	✓	
Antifreeze, -50° C (-58° F)		✓	Oil sampling valves	✓	
Antifreeze, premixed 50% concentration extended life (-34° C/-29° F)	✓		Steering, load sensing	✓	
TECHNOLOGY PRODUCTS			Total hydraulic filtration system	✓	
Product Link™ – cellular, satellite	✓		Vandalism protection caplocks	✓	
WHEELS AND CLEANER BARS			Venturi stack	✓	
Wheels and tips: wheel arrangements – 6.25" combination tips	✓		SPECIAL ARRANGEMENTS		
Wheels and tips: wheel arrangements – 6.25" paddle tips, 6.25" plus tips		✓	Engine precleaners – turbine	✓	
Striker bars	✓		Engine precleaners – dual stage		✓
Striker bars with cleaner fingers		✓	Engine, sound suppression		✓
			MISCELLANEOUS		
			CE/UKCA Certification (standard where regulations require it)		✓
			Plate – year of manufacture		✓

The following information applies to the machine at the time of final manufacture as configured for sale in the regions covered in this document. The content of this declaration is valid as of the date issued; however, content related to machine features and specifications are subject to change without notice. For additional information, please see the machine's Operation and Maintenance Manual.

For more information on sustainability in action and our progress, please visit <https://www.caterpillar.com/en/company/sustainability>.

Engine

- The Cat® C7.1 engine is available in configurations that meet U.S. EPA Tier 4 Final, EU Stage V, Korea Stage V, and Japan 2014 emission standards or Brazil MAR-1, emitting equivalent to U.S. EPA Tier 3/ EU Stage IIIA.
- Cat U.S. EPA Tier 4 Final/EU Stage V diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels*** up to:
 - ✓ 20% biodiesel FAME (fatty acid methyl ester)*
 - ✓ 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels
- Cat engines emitting equivalent to U.S. EPA Tier 3/EU Stage IIIA, are compatible with diesel fuel blended with the following lower-carbon intensity fuels up to:
 - ✓ 20% biodiesel FAME (fatty acid methyl ester)**
 - ✓ 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.

* Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel.

** For use of blends higher than 20% biodiesel, consult your Cat dealer.

*** Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.

Air Conditioning System

- The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a or R1234yf. See the label or instruction manual for identification of the gas.
- If equipped with R134a (Global Warming Potential = 1430), the system contains 1.4 kg (3.1 lb) of refrigerant which has a CO₂ equivalent of 2.002 metric tonnes (2.206 tons).

Paint

- Based on best available knowledge, the maximum allowable concentration, measured in parts per million (PPM), of the following heavy metals in paint are:
 - Barium < 0.01%
 - Cadmium < 0.01%
 - Chromium < 0.01%
 - Lead < 0.01%

Sound Performance

Tier 4 Final/Stage V

Operator Sound Pressure Level (ISO 6396:2008)	72 dB(A)
Machine Sound Power Level (ISO 6395:2008)	111 dB(A)
Operator Sound Pressure Level (ISO 6396:2008)	70 dB(A)*
Machine Sound Power Level (ISO 6395:2008)	109 dB(A)*

Tier 3/Stage IIIA

Operator Sound Pressure Level (ISO 6396:2008)	72 dB(A)
Machine Sound Power Level (ISO 6395:2008)	112 dB(A)
Operator Sound Pressure Level (ISO 6396:2008)	70 dB(A)*
Machine Sound Power Level (ISO 6395:2008)	110 dB(A)*

* Sound suppression equipped

- The machine sound power level was measured according to ISO 6395:2008. The measurement was conducted at maximum engine cooling fan speed.
- The operator sound pressure level was measured according to ISO 6396:2008. The measurement was conducted at maximum engine cooling fan speed.
- Hearing protection may be needed when the machine is operated with a cab that is not properly maintained or when the doors or windows are open for extended periods or in a noisy environment.

Oils and Fluids

- Caterpillar factory fills with ethylene glycol coolants. Cat Diesel Engine Antifreeze/Coolant (DEAC) and Cat Extended Life Coolant (ELC) can be recycled. Consult your Cat dealer for more information.
- Cat Bio HYDO™ Advanced is an EU Ecolabel approved biodegradable hydraulic oil.
- Additional fluids are likely to be present, please consult the Operations and Maintenance Manual or the Application and Installation guide for complete fluid recommendations and maintenance intervals.

Features and Technology

- The following features and technology may contribute to fuel savings and/or carbon reduction. Features may vary. Consult your Cat dealer for details.
 - Automatic engine and electrical system shutdown controls conserve fuel by reducing unnecessary idling
 - Throttle lock reduces fuel burn further by maintaining constant speed and also reduces operator fatigue
 - Advanced Productivity Electronic Control System (APECS) transmission controls delivers greater momentum on grades and saves fuel by carrying that momentum through the shift points
 - Extended maintenance intervals reduce fluid and filter consumption
 - Cat clean emissions module includes Diesel Particulate Filter (DPF), Diesel Oxidation Catalyst (DOC), and Selective Catalytic Reduction (SCR) technologies to reduce the engine's emissions



オフロード法2014年
基準適合



For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com.

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

© 2024 Caterpillar. All Rights Reserved. CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, DEO-ULS, VIMS, Product Link, XT, STIC, "Caterpillar Corporate Yellow", the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

AEXQ2932-02 (11-2024)
Replaces AEXQ2932-01
Build Number: 11A
Global

