Cat® CB7

Asphalt Compactor

The Cat® CB7 Asphalt Compactor offers enhancements that simplify operation, provide versatility, and deliver excellent fuel economy. Rotary dials, oscillatory vibration, and 360° seating make this compactor a perfect match for urban streets, highways, and other intermediate-type applications.

Simple to Operate, Comfortable, Easy to Learn

- Large, full-color displays keep the operator informed of machine functions including water and fuel levels, impact spacing, and mat temperature.
- Innovative hand-wheel steering technology delivers precise control and good forward visibility.
- Easily activate the vibratory system, water spray system and optional drum offset with the multi-function propel handle.
- Machine functions with LED indicators have been independently grouped for simplified control and quick activation.
- Rotary dials with green light indicators provide a quick visual reference and fingertip feel for easy adjustment to speed control and water spray timers.
- ROPS and Cab options deliver excellent comfort and visibility. The cab option offers heat and air-conditioning as standard equipment.

Work Safer with Enhanced Visibility

- Optional top down, 360° viewing utilizes cameras mounted in each corner of the ROPS for excellent work-zone visibility. This option utilizes a high-definition display mounted to a swivel on the upper left side of the ROPS/Cab.
- Optional fore and aft cameras mounted in the front and rear bumpers provide outstanding visibility when approaching obstacles. The camera view is integrated into the main operating display.
- Optimize sight lines with the 360° seating option; always face the direction of travel.
- LED lighting delivers excellent job site illumination while conserving energy. Strategically placed lighting illuminates the sides of the machine, drum surfaces, and drum edges.
- A green-light beacon mounted on the ROPS/Cab provides indication of seat belt utilization. Beacon illumination can be tailored to "ON" or "OFF" when in compliance.

Easy Vibratory System Setup

- Two-amplitude/two-frequency vibratory system automatically optimizes amplitude and frequency with a single switch for simple thin/thick lift operation.
- Reach compaction goals with automatic speed control; green indicators help ensure travel speed matches the correct impact spacing.
- The automatic vibratory on/off feature activates or deactivates the vibratory system according to the propel lever position to help prevent over compaction when changing direction or when coming to a stop. The system is adjustable through the "Job Aids" menu in the display.
- Built-in application profiles can be created and saved to offer quick, repeatable setup for vibratory frequency, propel mode, impact spacing, water spray timer, and water spray mode.
- Edge management options include an edge cutter wheel that vertically slices the asphalt for easy removal to enhance joint matching capability, while bevel options provide sloped edge profiles.
- Front and rear split drum options simplify manueverability in tight spaces. When turning, the outside drum half rotates faster than the inside drum half to help prevent tearing and shoving of the asphalt.

Better Fuel Economy

- The C3.6 engine delivers 74.4 kW (100 hp) of power and meets U.S. EPA Tier 4 Final and EU Stage V emission standards.
- The Cat® C3.6 engine and standard Eco-mode combine to provide good fuel economy.
- Eco-mode modifies engine speed based on load requirements; high amplitude vibration utilizes higher engine speeds, while static rolling conserves fuel and operates at low engine speed with lower sound levels.

CAT®

Ensure Mat Coverage with Compaction Control

- Pass-count and Temperature Mapping combines infrared temperature sensors with GPS mapping to keep the operator informed of current asphalt temperatures, machine position, pass-count, and layer coverage. The mapping display provides an enhanced on-screen visual for easy recognition and touchscreen capability for simplified setup.
- Compaction Meter Value (CMV) utilizes a drum-mounted accelerometer to measure the combined stiffness of the asphalt layer, base layer, and sub-base layer to indicate road structure quality beneath the surface.

Prevent Build-Up, Keep the Drum Surfaces Wet

- The high capacity water tank with dual fill ports provides long durations between refills. An optional step can be mounted to the left-side rear drum support to assist with refills.
- Dual water pumps provide back-up capability and alternate with the direction of travel to maximize service life.
- Triple filtration helps prevent clogs with filters located at the fill point, water pumps, and spray nozzles.
- The automatic on/off feature deactivates the water spray system when the propel lever moves to neutral and activates the system when the propel lever moves from neutral. System setup is located in the "Settings" menu.
- A simple rotary dial provides adjustable spray settings and intermittent modes that help conserve water.
- The integrated freeze protection kit (optional) provides protection in cold temperatures when the machine is not in use.

Compaction Options Include Oscillation

- Oscillatory vibration on the rear drum combined with standard vertical vibration on the front drum delivers both performance and versatility.
- The Oscillation System utilizes the proven pod-style eccentric weight technology developed by Caterpillar.
- A 2 year/2000 hour service interval helps maximize uptime and limit maintenance costs.
- A durable power-transmission belt delivers 2-times the load capacity of timing belt systems, leading to extended life.
- Standard drum shells offer exceptional long-term life on a variety of mix designs while delivering outstanding mat texture, density, and smoothness.

VisionLink™

- VisionLink® is a cloud-based software application that provides data to your desktop or mobile device, taking the guesswork out of fleet management with key insights to maximize performance – regardless of fleet size or equipment manufacturer.
- The system provides maintenance needs, machine hours, location, fuel usage, idle time, diagnostic codes, and other machine data to your mobile device, desktop or through an API to other software applications.

Standard and Optional Equipment

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

	Standard	Optional
OPERATING ENVIRONMENT		
180° seat positioning w/sliding station	✓	
360° seat positioning w/sliding station		✓
Adjustable armrests	✓	
Application profiles	✓	
Full-color display with touch-screen operation	✓	
Platform - Cab		✓
Platform - ROPS/FOPS	✓	
Propel lever with 4-button control	✓	
Steering wheel - fixed position, left side	✓	
Steering wheel - elevated position, left side		✓
Suspension seat - no heat	✓	
Suspension seat - with heat		✓
Seat headrest		✓
Seat belt - 76 mm (3") high visibility	✓	
Vandalism protection	✓	
TECHNOLOGY		
CMV accelerometer - front drum		✓
GNSS Mapping - Temperature and Pass-count		✓
Infrared asphalt temperature sensors		✓
VisonLink®	✓	
- Remote Flash	✓	
- Remote Troubleshooting	✓	
POWERTRAIN		
Cat® C3.6, 4-cylinder	✓	
Hitch - offset		✓
Hydraulic oil - biodegradeable		✓
ELECTRICAL SYSTEM		
150 amp alternator	✓	
12-volt charging system	✓	
Automotive-type fuse system	✓	
Batteries - maintenance-free	✓	
Cat Electronic Technician (Cat ET)	✓	
Remote start/charge receptacle	✓	

	Standard	Optional
VIBRATORY SYSTEM		
Edge management - cutoff, bevel		✓
Mats - cocoa		✓
Mats - water distribution		✓
Rear drum oscillation kit - field installed drum		✓
Split drums - front and rear		✓
Two amplitude/two frequency - both drums	✓	
Two amplitude/two frequency w/ rear drum oscillation		✓
SERVICE AND MAINTENANCE		
2 yr/2000 hr Oscillatory vibration system service interval	✓	
3 yr/3000 hr conventional vibratory system service interval	✓	
Freeze protection kit - water spray system		✓
Grouped filters with ground level access	✓	
Maintenance-free hitch	✓	
Remote access drains	✓	
Sampling ports for Scheduled Oil Sampling (S·O·S℠)	✓	
Sight Gauges	✓	
- Engine coolant	✓	
- Hydraulic oil	✓	
SAFETY		
Alarm, back-up	✓	
Cameras - 360° viewing ROPS mounted		✓
Cameras - front and rear bumper mounted		✓
Horn, warning - front and rear	✓	
LED working lights	✓	
LED working lights with turn signals		✓
LED auxiliary lights - 1000/2000 Lumin		✓
Mirror package		✓
Step - front drum fuel fill	✓	
Step - rear drum, left side water spray fill		✓
Warning beacons - LED	✓	

Cat® CB7 Asphalt Compactor

Technical Specifications

PowerTrain		
Engine Model	Cat C3.6	
Engine power @ 2400 rpm (ISO 14396-2002)	74.4 kW	100 hp
Meets U.S. EPA Tier 4 Final and EU Stage V emission standards.		
Speed – Operating	0-7 km/h	0-4 mph
Speed – Travel	11 km/h	0-7 mph
Gradeability	32%	

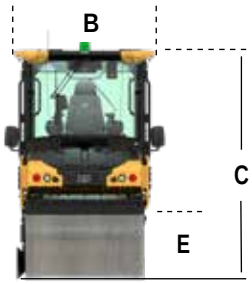
Machine Weight		
Operating Weight – ROPS	8625 kg	19,015 lb
Maximum Weight – ROPS	8995 kg	19,834 lb
Static Linear Load – ROPS	30.0 kg/cm	168 lb/in
Operating Weight – Cab	8885 kg	19,588 lb
Maximum Weight – Cab	9255 kg	20,404 lb
Static Linear Load – Cab	30.8 kg/cm	172 lb/in

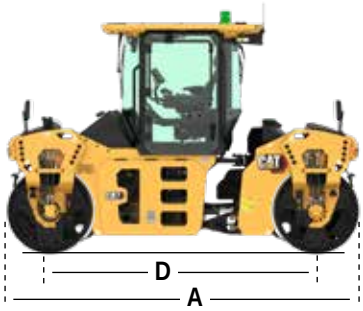
Operating Weights are approximate and include coolant, lubricants, full fuel tank , 50% water and 75 kg (165 lb) operator.

Service Refill Capacities		
Fuel Tank	137 L	36 gal
Water Spray Tank	740 L	195 gal
Cooling System	21 L	5.5 gal
Engine Oil	10.6 L	2.8 gal
Hydraulic Tank	32 L	8.5 gal
DEF Tank	7.9 L	2 gal

Dimensions			
A	Overall Length	4558 mm	14' 11"
B	Overall Width	1977 mm	6' 6"
	Drum Width	1500 mm	59"
	Drum Offset	170 mm	6"
	Drum Shell Thickness	16 mm	0.67"
	Drum Diameter	1108 mm	44"
C	Height at ROPS/FOPS	2984 mm	9' 10"
D	Wheelbase	3300 mm	10' 10"
	Ground Clearance	240 mm	9.5"
E	Curb Clearance	897 mm	35"

Vibratory Systems		
2-Amplitude, 2-Frequency		
Frequency – Hz (vpm)	53.3	3200
Amplitude – mm (in)	0.65	0.026
Centrifugal Force – kN (lbF)	78.3	17,602
Frequency – Hz (vpm)	63.3	3800
Amplitude – mm (in)	0.31	0.012
Centrifugal Force – kN (lbF)	53.3	11,982
2-Amplitude, 2-Frequency – CE, VT1*		
Frequency – Hz (vpm)	50	3000
Amplitude – mm (in)	0.65	0.026
Centrifugal Force – kN (lbF)	68.8	15,466
Frequency – Hz (vpm)	57	3420
Amplitude – mm (in)	0.31	0.012
Centrifugal Force – kN (lbF)	43.2	9,703
** Meets French VT1 Method Spec Classification*		
Oscillation – Rear Drum		
Frequency – Hz (vpm)	40	2400
Amplitude – mm (in)	1.31	0.052
Centrifugal Force – kN (lbF)	75.3	16,928
Frequency – Hz (vpm)	33	1980





Environmental Declaration

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 www.caterpillar.com/en/company/sustainability.html.

ENGINE

- The Cat® C3.6 engine is available in configurations that meet U.S. EPA Tier 4 Final and EU Stage V emission standards.
- Cat 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.*

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

With cooling fan speed at 70% of maximum value, engines meeting U.S. EPA Tier 4 Final or EU Stage V, with open ROPS, solid drum, and two amplitude vibratory system:

Operator Sound Pressure Level (ISO 6396:2008) – 90 dB(A)
Exterior Sound Power Level (ISO 6395:2008) – 107 dB(A)

With cooling fan speed at 70% of maximum value, engines meeting U.S. EPA Tier 4 Final or EU Stage V, with cab, split drum, and two amplitude vibratory system:

Operator Sound Pressure Level (ISO 6396:2008) – 74 dB(A)
Exterior Sound Power Level (ISO 6395:2008) – 106 dB(A)

- The dynamic operator sound pressure level measurements are performed according to the dynamic test procedures that are specified in ISO 6396:2008. The measurements were made with the cab doors and the cab windows closed.
- The dynamic spectator sound power level measurements are performed according to the dynamic test procedures that are specified in ISO 6395:2008.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows 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.
  – Eco-mode operates at lower engine rpm to reduce fuel consumption
  – Variable speed, hydraulic fan helps reduce power demand
  – Auto-idle shutdown conserves fuel
  – Compaction control option helps increase operator efficiency
  – Extended maintenance intervals reduce fluid and filter consumption

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.

QEHQ3261 (1-2024)
Build Number:02B