

# Cat® CP74B

Padfoot Drum Vibratory
Soil Compactor

The Cat® CP74B features a padfoot drum and is ideally suited for cohesive and semi-cohesive soil applications.

#### **Comfortable and Ergonomic Operator Station**

- Features pivoting seat with integrated multifunction LCD display and control console.
- Outstanding visibility to the front and rear of machine.
- Low sound levels and vibration for greater operator comfort and productivity.

#### **Rear Vision Camera**

 The rear vision camera enhances visibility for more complete operator control and safety.

#### **Exceptional Propel System**

- Built around the exclusive Cat dual pump propel system, two pumps provide separate dedicated flow to drum drive motor and rear axle motor for exceptional gradeability and traction in forward and reverse.
- Electronic propel control provides more precise machine control.

#### **Virtually Maintenance Free**

- · Maintenance-free hitch bearings.
- Extended maintenance intervals for vibratory system and hydraulic system, providing more uptime and lower maintenance costs.

#### Enhanced Compaction Performance

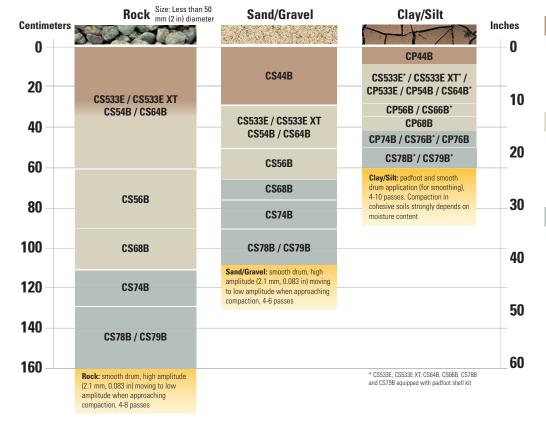
- More weight at the drum and greater amplitutude.
- Automated speed control and vibratory system functions make it easy to ensure consistent, high quality compaction.

#### Technologies that Enhance Quality and Productivity

- Measurement and documentation technologies help the operator determine when compaction has been completed to specification for greater productivity and uniform compaction quality.
- Exclusive Machine Drive Power (MDP) measurement technology available.

### **VIBRATORY SOIL COMPACTOR SELECTION GUIDE**

Assumes density specification is 95% of Standard Proctor and can vary substantially due to different soil conditions.



#### 5 - 71

- Parking lots
  - Residential projects
     Desidential projects
- Building construction
- Pipelaying / TrenchesGolf courses
- Parks
- Production of <100m<sup>3</sup>

## 10 - 12 T

- Road construction
- Residential construction
   Larger earth file
- Larger earth fillsAggregate bases
- Agriculture/Irrigation projects
- Follow a Motor Grader
- Production of ~200 m<sup>3</sup>

#### 16 - 20 T

- Airport Construction
- Railways foundations
- Dams / Large embankment fill
- Rock fills
- Mining applications Drying beds , waste tanks , embankments
- Recycling
- Rock Crushing
- Follow a tractor /scraper
- Land Reclamation (Dredging)
- Production of ~500 m<sup>3</sup>



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### **Technical Specifications**

Engine - Power Train		
Engine Model	Cat C7.1	
Global Emissions	US EPA Tier 3 EU Stage IIIA	
Gross Power ISO 14396	129.0 kW	173.0 hp
Gross Power SAE J1995	130.2 kW	174.6 hp
Net Power ISO 9249*	108.5 kW	145.5 hp
Net Power SAE J1349*	107.2 kW	143.8 hp
Displacement	7.01 L	428 in <sup>3</sup>
Stroke	135 mm	5.3 in
Bore	105 mm	4.1 in
Max. Travel Speed (Forward or Reverse)	11.4 km/h	7 mph
Theoretical Gradeability, no vibration**	57%	

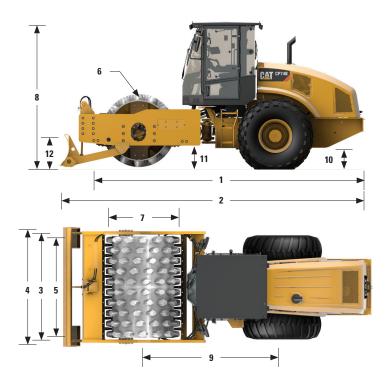
Weights			
Operating Weight w/ open platform	15 830 kg	34,899 lb	
Operating Weight w/ steel sun canopy	15 925 kg	35,109 lb	
Operating Weight w/ ROPS/FOPS canopy	16 100 kg	35,494 lb	
Operating Weight w/ ROPS/FOPS cab	16 420 kg	36,200 lb	
Weight at Drum w/ open platform	10 500 kg	23,149 lb	
Weight at Drum w/ steel sun canopy	10 540 kg	23,237 lb	
Weight at Drum w/ ROPS/FOPS canopy	10 595 kg	23,358 lb	
Weight at Drum w/ ROPS/FOPS cab	10 730 kg	23,656 lb	
Additional Weight w/ Leveling Blade	+ 620 kg	+ 1,373 lb	

Vibratory System Specifications			
Frequency			
Standard	28 Hz	1680 vpm	
<b>During Eco-mode Operation</b>	25.5 Hz	1527 vpm	
Optional Variable Frequency	23.3-28 Hz	1400-1680 vpm	
Nominal Amplitude @ 30.5 Hz (1830 vpm)			
High	2.1 mm	0.083 in	
Low	0.98 mm	0.039 in	
Centrifugal Force @ 30.5 Hz (1830 vpm)			
Maximum	332 kN	74,600 lb	
Minimum	166 kN	37,300 lb	

Service Refill Capacities			
Fuel Tank, total capacity	332 L	88 gal	
Cooling System	28.2 L	7.5 gal	
Engine Oil w/ Filter	17.4 L	4.6 gal	
Eccentric Weight Housings (combined)	26 L	6.9 gal	
Axle and Final Drives	18 L	4.8 gal	
Hydraulic Tank (service refill)	50 L	13.2 gal	

<sup>\*</sup> Net power advertised is the power available at the engine flywheel when equipped with a fan at maximum speed, air cleaner, and alternator. \*\* Actual gradeability may vary based on site conditions and machine configuration. Refer to the Operation and Maintenance Manual for more information.

# Cat® CP74B Drum Vibratory Soil Compactor



	Dimensions		
1	Overall Length	6.05 m	19.9 ft
2	Overall Length w/ optional Leveling Blade	6.55 m	21.5 ft
3	Overall Width	2.33 m	7.64 ft
4	Overall Width w/ optional Leveling Blade	2.50 m	8.25 ft
5	Drum Width	2134 mm	84 in
6	Drum Shell Thickness	40 mm	1.6 in
7	Drum Diameter	1549 mm	60.9 in
8	Overall Height	3.11 m	10.2 ft
9	Wheelbase	2.9 m	9.5 ft
10	Ground Clearance	445 mm	17.5 in
11	Curb Clearance	497 mm	19.6 in
12	Optional Leveling Blade Height	688 mm	27.1 in
	Inside Turning Radius	3.68 m	12.07 ft
	Hitch Articulation Angle	34°	
	Hitch Oscillation Angle	15°	

Padfoot Specifications			
Number of Pads	140		
Pad Height, oval pads	127 mm	5 in	
Pad Face Area, oval pads	74.4 cm <sup>2</sup>	11.5 in <sup>2</sup>	
Pad Height, optional square pads	100 mm	3.9 in	
Pad Face Area, optional square pads	123 cm <sup>2</sup>	19.1 in²	
Number of Chevrons	14		

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### **Standard and Optional Equipment**

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

	Standard	Optional
OPERATOR ENVIRONMENT		
Steel Sun Canopy with Handrails/Guardrails, Floor Mat	<b>√</b>	
Vinyl Adjustable Pivoting Seat with Integrated Console and LCD Display	✓	
Adjustable Tilting Steering Column with Integrated Cup Holders	✓	
Rear Vision Camera with Color Touchscreen Display	✓	
Seat Belt	✓	
12-volt Power Outlet	✓	
Horn, Backup Alarm	✓	
ROPS/FOPS Canopy		✓
ROPS/FOPS Cab with Climate Control		✓
Internal Rear View Mirror		✓
External Rear View Mirrors		✓
Sun Visor		✓
Cab Internal Roll-down Sun Screen		✓
VIBRATORY SYSTEM		
Padfoot Drum	✓	
Dual Amplitude, Single Frequency	✓	
Dual Pod-Style Eccentric Weight Housings	✓	
Auto-vibe Function	✓	
Dual Adjustable Steel Scrapers	✓	
Leveling Blade		✓
Variable Frequency		✓

	Standard	Optional
POWER TRAIN		
Cat C7.1 Diesel Engine	✓	
Air Cleaner, Dual Element	✓	
Three-Speed Throttle Switch, Eco-mode and Automatic Speed Control	✓	
Dual Propel Pumps; One for Drum Drive, One for Rear Axle	✓	
Fuel Filter, Water Separator, Priming Pump, Water Indicator	✓	
Tilting Radiator/Hydraulic Oil Cooler	✓	
Dual Braking System	✓	
Two-speed Hydrostatic Transmission	✓	
Transmission Guard		✓
CAT COMPACTION CONTROL TECHNOLOGY		
Measure - Machine Drive Power		✓
Map - SBAS GNSS Mapping		✓
Connect - Machine to Machine Communication		✓
ELECTRICAL		
24 volt Electrical System	✓	
100 ampere Alternator	✓	
750 Cold-cranking Amps Battery Capacity	✓	
OTHER		
Product Link™	✓	
Sight Gauges for Hydraulic Oil Level and Radiator Coolant Level	✓	
S·O·S <sup>SM</sup> Sampling Valves: Engine Oil, Hydraulic Oil and Coolant	✓	
Upgraded Halogen Light Package		✓
Rotating Beacon		✓
Fuel Fill Access Door		✓

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

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



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