



# Cat<sup>®</sup> CP54B

## Padfoot Drum Vibratory Soil Compactor

The Cat<sup>®</sup> CP54B 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.

### 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.

### 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

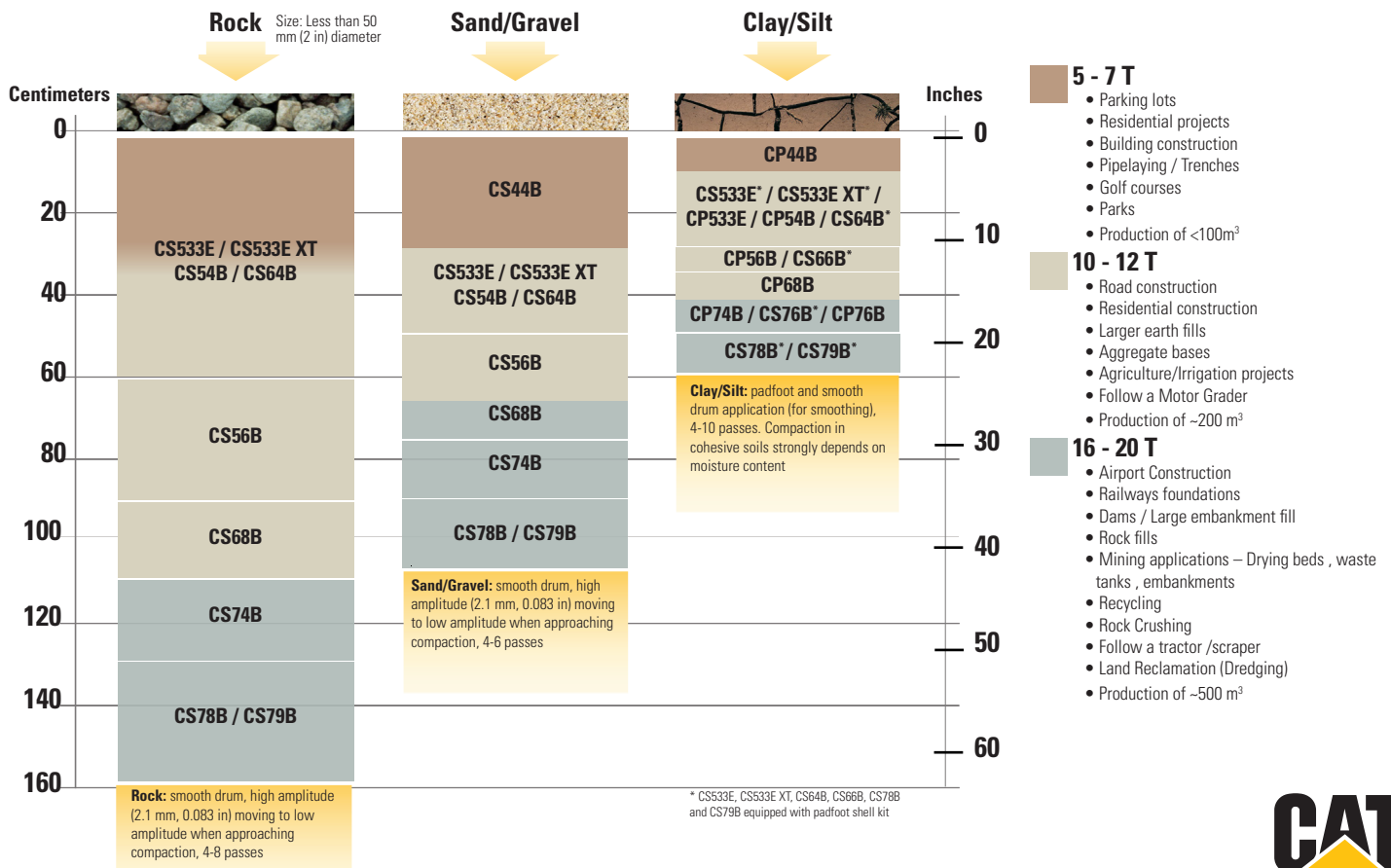
- More weight at the drum and greater amplitude.
- Auto-vibe function makes it easy to ensure consistent, high quality compaction.

### Cat Compaction Control - Machine Drive Power (MDP)

- Helps operator determine when compaction has been completed to specification for greater productivity and uniform compaction quality.

## VIBRATORY SOIL COMPACTOR SELECTION GUIDE

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



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## Technical Specifications

### Engine - Power Train

Engine Model	Cat C4.4	
Global Emissions	US EPA Tier 3 EU Stage IIIA	
Gross Power ISO 14396	96.5 kW	129.4 hp
Displacement	4.4 L	268.5 in <sup>3</sup>
Stroke	127 mm	5 in
Bore	105 mm	4.1 in
Max. Travel Speed (Forward or Reverse)	11.2 km/h	7 mph
Theoretical Gradeability, no vibration*	54%	

### Weights

Operating Weight w/ open platform	10 545 kg	23,248 lb
Operating Weight w/ steel sun canopy	10 645 kg	23,468 lb
Operating Weight w/ ROPS/FOPS canopy	10 820 kg	23,854 lb
Operating Weight w/ ROPS/FOPS cab	11 135 kg	24,539 lb
Weight at Drum w/ open platform	6170 kg	13,603 lb
Weight at Drum w/ steel sun canopy	6200 kg	13,669 lb
Weight at Drum w/ ROPS/FOPS canopy	6260 kg	13,801 lb
Weight at Drum w/ ROPS/FOPS cab	6395 kg	14,092 lb

### Vibratory System Specifications

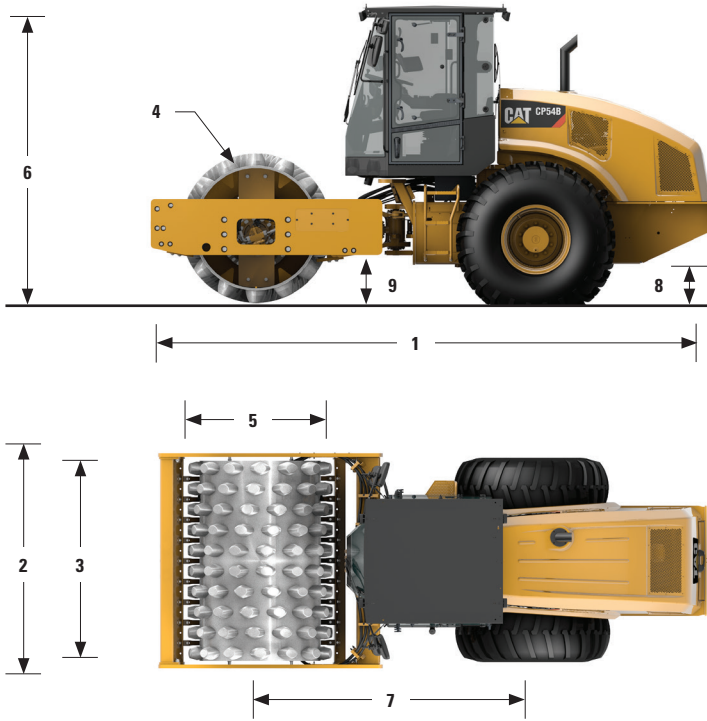
Frequency		
Standard	30.5 Hz	1830 vpm
During Eco-mode Operation	27.7 Hz	1664 vpm
Optional Variable Frequency	23.3-30.5 Hz	1400-1830 vpm
Nominal Amplitude @ 30.5 Hz (1830 vpm)		
High	1.9 mm	0.075 in
Low	0.88 mm	0.035 in
Centrifugal Force @ 30.5 Hz (1830 vpm)		
Maximum	266 kN	59,800 lb
Minimum	133 kN	29,900 lb

### Service Refill Capacities

Fuel Tank, total capacity	242 L	64 gal
Cooling System	25.4 L	6.7 gal
Engine Oil w/ Filter	8.5 L	2.2 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

\* Actual gradeability may vary based on site conditions and machine configuration. Refer to the Operation and Maintenance Manual for more information.

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## Dimensions

1	Overall Length	5.85 m	19.21 ft
2	Overall Width	2.30 m	7.53 ft
3	Drum Width	2134 mm	84 in
4	Drum Shell Thickness	25 mm	1 in
5	Drum Diameter (oval pads)	1549 mm	60.9 in
	Drum Diameter (optional square pads)	1493 mm	58.7 in
6	Maximum Overall Height	3.11 m	10.2 ft
7	Wheelbase	2.9 m	9.5 ft
8	Ground Clearance	450 mm	17.7 in
9	Curb Clearance	551 mm	21.7 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 in <sup>2</sup>
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
<b>OPERATOR ENVIRONMENT</b>		
Open Platform with Handrails/Guardrails, Floor Mat	✓	
Vinyl Adjustable Pivoting Seat with Integrated Console and LCD Display	✓	
Adjustable Tilting Steering Column with Integrated Cup Holders	✓	
Seat Belt	✓	
12-volt Power Outlet	✓	
Horn, Backup Alarm	✓	
Steel Sun Canopy		✓
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		✓
<b>VIBRATORY SYSTEM</b>		
Padfoot Drum	✓	
Dual Amplitude, Single Frequency	✓	
Dual Pod-Style Eccentric Weight Housings	✓	
Auto-vibe Function	✓	
Dual Adjustable Steel Scrapers	✓	
Variable Frequency		✓

	Standard	Optional
<b>POWER TRAIN</b>		
Cat C4.4 Diesel Engine	✓	
Air Cleaner, Dual Element	✓	
Eco-mode	✓	
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		✓
<b>CAT COMPACTION CONTROL TECHNOLOGY</b>		
Measure - Machine Drive Power		✓
Map - SBAS GNSS Mapping		✓
Connect - Machine to Machine Communication		✓
<b>ELECTRICAL</b>		
24 volt Electrical System	✓	
75 ampere Alternator	✓	
750 Cold-cranking Amps Battery Capacity	✓	
<b>OTHER</b>		
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		✓
Containerized Shipping		✓



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