



# Cat<sup>®</sup> CB54B

## TANDEM VIBRATORY ROLLER

### Top Features

The Cat<sup>®</sup> CB54B is a 10 ton roller with 1700 mm (67") tandem vibratory drums. It is available in solid or split drum models and excels on a variety of asphalt mix designs as well as other granular materials.

- **Exceptional Visibility and Control** with handwheel steering technology, touch-pad machine functions, ECO-Mode operation, and optional Compaction Control. This machine can be equipped with a Cab or ROPS/FOPS.
- **Smooth Operating Powertrain** with C4.4B engine that meets U.S. EPA Tier 4 Interim and E.U. Stage IIIB emissions standards. The split drum or solid drum designs provide the operator with options to meet paving requirements. The split drum delivers superior mat quality and smooth performance when making turns.
- **Versatile Vibratory Systems** include choice of dual amplitude/dual frequency, 5-amplitude, and VERSA-Vibe™ systems. Multiple options available to match thick and thin lifts as well as various paving speeds.
- **Cat<sup>®</sup> Compaction Control** keeps the operator informed for higher performance and efficiency. Infrared temperature sensors combined with mapping keep the operator informed of when optimal temperatures exist and where compaction has taken place. Temperature Mapping records data for future analysis, while Pass-Count Mapping keeps the operator informed of where mat coverage has taken place and the number of passes made.
- **Industry-Leading Water Spray System** features a single fill point, dual water pumps, triple filtration, intermittent operation and high capacity for optimal performance. An optional freeze protection kit offers protection in cold temperatures.
- **Best Lifetime Value** with ECO-mode operation that conserves fuel, while oil-bath lubrication and 3 yr/3000 hr vibratory drum service interval extends operation and minimizes life-time operating costs.

### Specifications

#### Weights

##### Operating Weight – Split Drum w/ROPS/FOPS/CAB

Standard machine	10 670 kg	23,525 lb
Maximum machine	12 070 kg	26,610 lb
Static linear load	31.5 kg/cm	176 lb/in

##### Operating Weight – Solid Drum w/ROPS/FOPS/CAB

Standard machine	9710 kg	21,407 lb
Maximum machine	10 510 kg	23,171 lb
Static linear load	28.5 kg/cm	160 lb/in

##### Operating Weight – Split Drum w/ROPS/FOPS/CANOPY

Standard machine	10 410 kg	22,950 lb
Maximum machine	11 790 kg	25,995 lb
Static linear load	30.8 kg/cm	173 lb/in

##### Operating Weight – Solid Drum w/ROPS/FOPS/CANOPY

Standard machine	9500 kg	20,945 lb
Maximum machine	10 235 kg	22,564 lb
Static linear load	27.8 kg	156 lb/in

#### Service Refill Capacities

Fuel Tank	208 L	55 gal
Fuel Usage (50% duty)	12 hours	
Cooling System	22 L	5.8 gal
Engine Oil	9 L	2.4 gal
Hydraulic Tank	36 L	9.5 gal
Water Tank	837 L	221 gal

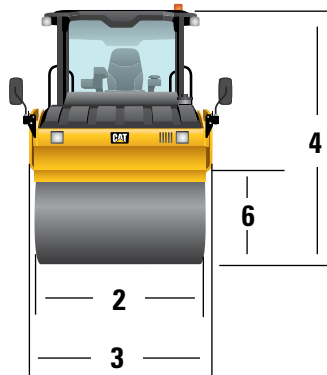
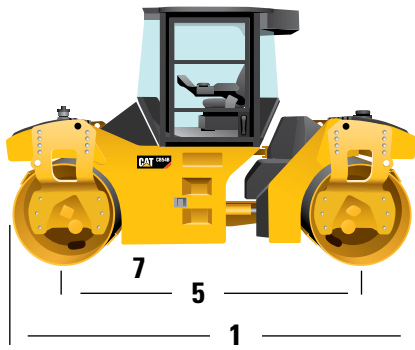
#### Engine – Powertrain

Engine Model	Cat <sup>®</sup> C4.4 with ACERT™ Technology	
Number of Cylinders	4	
Rated Speed	2200 rpm	
Bore	105 mm	4.13"
Stroke	127 mm	5"
Gross Power:		
Tier 4 Interim, Stage IIIB	98 kW	131 hp (l), 133.2 hp (m)
Speed Ranges:		
Low	0 - 7 km/hr	4.3 mph
High	0 - 12 km/hr	7.5 mph
Gradeability (no vibrate):		
Solid drum	38°	
Split drum	44°	
Steering (Inside)	4.3 m	(14' 1")
Articulation Angle	35°	
Drum Offset	170 mm	(6")



# CB54B Tandem Vibratory Roller

## Dimensions



<b>1</b> Overall Length	4565 mm	14' 9"
<b>2</b> Drum Width	1700 mm	67"
Drum Offset	170 mm	6"
Drum Shell Thickness	17 mm	0.67"
Drum Diameter	1198 mm	47"
<b>3</b> Overall width	1872 mm	6' 2"
<b>4</b> Height at ROPS/FOPS	2982 mm	9' 9"
Height at Cab	2982 mm	9' 9"
<b>5</b> Wheelbase	3300 mm	10' 10"
<b>6</b> Curb Clearance	934 mm	37"
<b>7</b> Ground Clearance	268 mm	10"

## Vibratory Systems

### Dual Amplitude, Dual Frequency - Split Drum

Frequency – Hz (vpm)	42/53.3	(2520/3200)
Amplitude – mm (in)	0.61 - 0.33	(0.024 - 0.013)

### Dual Amplitude, Dual Frequency - Solid Drum

Frequency – Hz (vpm)	43/63.3	(2580/3800)
Amplitude – mm (in)	0.82 - 0.32	(0.032 - 0.012)

### Dual Amplitude, Dual Frequency - Solid Drum

Frequency – Hz (vpm)	43/53.3	(2580/3200)
Amplitude – mm (in)	0.82 - 0.32	(0.032 - 0.012)

### Versa-Vibe™ - Solid Drum

Frequency – Hz (vpm)	43	(2580)
Amplitude – mm (in)	high	0.86 (0.034)
	low	0.72 (0.028)
Frequency – Hz (vpm)	63.3	(3800)
Amplitude – mm (in)	high	0.39 (0.015)
	low	0.26 (0.010)

### Five amplitude - Solid Drum

Frequency – Hz (vpm)	43	(2580)
Amplitude – mm (in)	high	1.06 (0.042)
	medium high	0.91 (0.036)
	medium	0.73 (0.029)
	medium low	0.54 (0.021)
	low	0.34 (0.013)

## Standard and Optional Equipment

### STANDARD EQUIPMENT:

- 12-Volt Electrical System
- 120 Amp Alternator
- 837 L (221 gal) Water Tank Capacity
- 5-Amplitude Vibratory System
- Locking Engine Compartment
- ROPS/FOPS Platform
- Triple Filtered Water Spray System
- Two-Speed Hydrostatic Transmission
- Sealed Pod Vibratory System
- Solid Drums
- Suspension Seat
- Working Lights

### OPTIONAL EQUIPMENT:

- Air Conditioning
- Air Suspension Seat w/Heat
- Bio-Degradeable Oil
- Chip Spreader Ready (split drum)
- Compaction Control
  - Infrared Temperature Gauge
  - Temperature Mapping
  - Pass-count Mapping
- Edge Cutter
- Freeze Protection Kit
- High Ambient Cooling System
- Halogen Lights w/Drum Edge Lights
- High Intensity Discharge (HID) Lights w/Drum Edge Lighting
- Mirrors
- Product Link
- Recording Module (cab only)
- Roading Lights
- ROPS/FOPS Cab
- Split Drums
- Warning Beacon
- Water Distribution Mats (cocoa)
- Water Distribution Mats (rubber)

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at [www.cat.com](http://www.cat.com)

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