

**CB22
CB24
CB32
CC24**

Utility Compactors



	CB22	CB24	CB32	CC24
CAT® C1.5 Diesel Engine				
Gross Power (SAEJ1995) @2800 rpm			24.6 kW (33 hp)	
Net Power (ISO9249) @2800 rpm			23.7 kW (31.8 hp)	
Operating Weight (with ROPS)	2500 kg (5,512 lb)	2700 kg (5,952 lb)	3230 kg (7,121 lb)	2400 kg (5,291 lb)
Compaction Width	1000 mm (39")	1200 mm (47")	1300 mm (51")	1200 mm (47")

Caterpillar® C1.5 Engine

The C1.5 engine provides efficient power while meeting U.S. EPA Tier 4a engine emission requirements.

Power

The liquid-cooled, three cylinder C1.5 engine provides a gross power of 24.6 kW (33 hp) for good performance and reliability in all working conditions.

Large Cooling System

The large cooling system with integrated water and oil coolers keep engine temperatures low in order to maximize fuel efficiency and minimize emissions.

Low Sound Levels

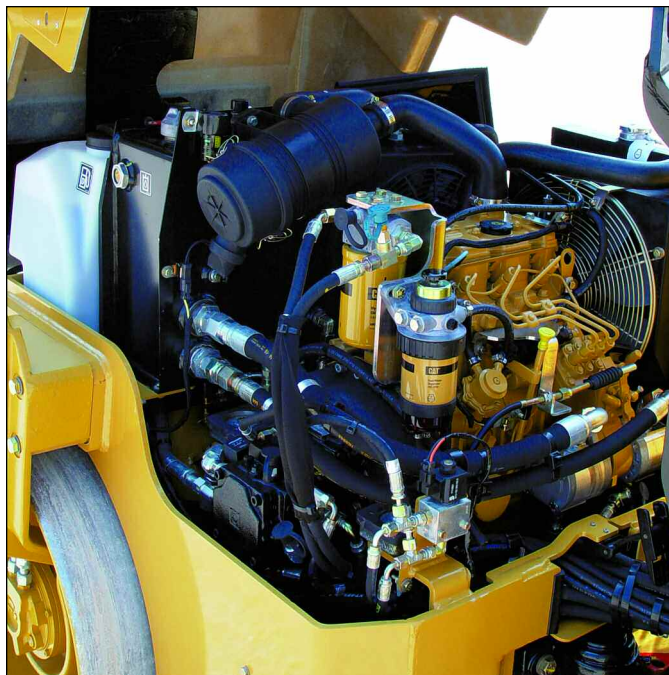
The shape of the fan and the slower rotating speed contribute to quieter operation that benefits operator and surrounding environment, an important feature when working in commercial areas.

500 Hour Oil Change Interval

The C1.5 engine only requires a 500 hour oil change interval. This long interval reduces service requirements and maximizes machine uptime.

Traction Control (Optional)

The optional traction control system transfers torque between the front and rear drums (CB22, CB24, CB32) or between the two sets of rear tires (CC24), when slippage occurs.



Operator's Station

The comfortable operating environment with three-position seating promotes day-long productivity, while the smooth operating propel system offers good control in tight quarters.

Operator's Station

The operator's station incorporates a fully-equipped console and an adjustable suspension seat. Arm and wrist rests provide better operator comfort for day-long productivity. The steering wheel includes a steering knob for easy maneuverability in turns.

Smooth Operation

The hydraulic propel lever's two step regulating curve provides smooth and precise control at low speed. Machine speed increases gradually in the first half of lever stroke for optimum control in confined areas. The second half of lever stroke enables the maximum propel speed to be reached quickly.

Instrument Panel

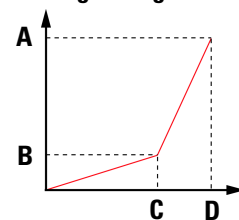
The easy-to-understand instrument panel integrates a fuel level indicator, hour meter and light indicators for machine functions. The key switch includes an automatic engine pre-heat feature that improves cold-weather starting.

Foldable ROPS (Optional)

The foldable ROPS folds forward or backward without the use of special tools.



Hydraulic Propel Lever's Regulating Curve



- A** Maximum Speed
- B** Low Speed
- C** Half Stroke
- D** Maximum Stroke

Vibratory System

The dual-frequency vibratory system provides good balance between frequency and amplitude in order to meet various job site conditions.

Dual Frequency Vibratory System

The standard vibratory system incorporates two frequencies of 63 Hz (3,780 vpm) and 55 Hz (3,300 vpm) that offer flexibility for a variety of mix types and job site conditions.

Vibratory Selection

A vibratory selection switch provides standard front or both drum vibratory capabilities. Vibratory selection for the rear drum is optional.

Automatic Vibratory Control

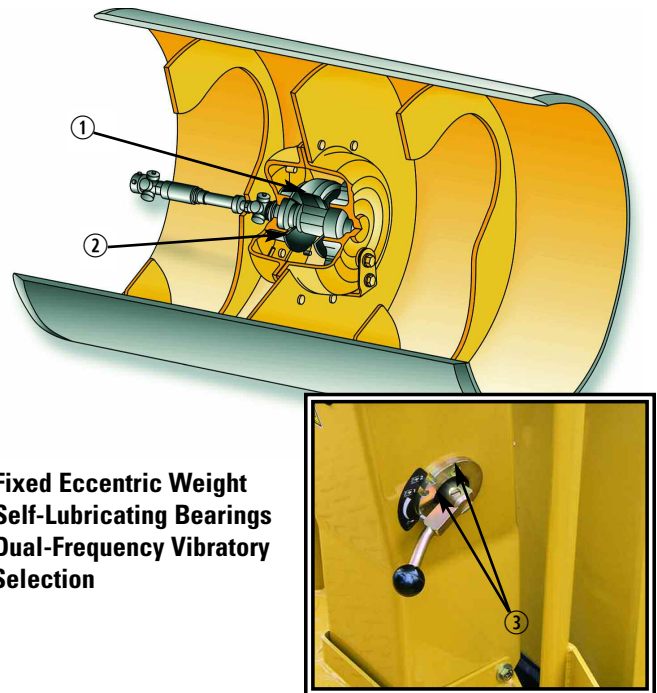
The vibratory system includes an automatic start feature that activates whenever the propel lever is moved from the neutral position.

Pod-style Eccentric Weights

The time-tested design of the eccentric weights are enclosed in a pod-style housing, providing cleanliness that extends bearing life.

Rear Drum Vibratory Delay (Optional)

The rear drum vibratory delay feature controls the start of the rear drum in order to assist power management on slopes.



- 1 Fixed Eccentric Weight
- 2 Self-Lubricating Bearings
- 3 Dual-Frequency Vibratory Selection

Water Spray System

Corrosion-proof components provide long life and reliable operation, while the large water capacity extends operating intervals.

Water Tank

A 150 L (39.6 gal) high-capacity polyethylene water tank is enclosed within the machine frame, providing extended operation. An additional tank with a 90 L (23.7 gal) capacity provides a total water capacity of 240 L (63.4 gal). A newly designed drain allows the entire system to be drained quickly.

Extended Operating Intervals

The standard 150 L (39.6 gal) tank provides an operating interval of 1.5 hours between refills. An additional 90 L (23.7 gal) tank extends the interval by an additional hour, while the intermittent spray mode doubles the operating time.

Water Pump and Filters

The extended life water pump and filters are conveniently located for easy access, while providing optimum spray and flow. Triple water filtration increases machine uptime, leading to higher productivity.

Retractable Self-Adjusting Scrapers

The retractable, self-adjusting scrapers utilize a hardened compound that provides durability. The ability to retract the scrapers when moving between job sites extends the service life and lowers owning and operating costs.



- 1 Drop-Stop Spray Nozzle

Versatile Machines

The CB22, CB24, CB32 and CC24 utility compactors offer versatility for a variety of applications.

CB22

The CB22 is equipped with a 1.0 m (39") drum that provides a good balance of weight and power for good performance in tough applications.

CB24

The dimensions of the CB24 provide excellent maneuverability for working in tight areas, while the drum width and high static force perform well on larger job sites.

CB32

The 1.3 m (51") drums make this machine an excellent choice for thin asphalt lifts and larger job sites. The wider drum evenly distributes the weight across the entire width for better results on tender mixes.

CC24

The CC24 incorporates a steel front drum with rear pneumatic tires. The pneumatic tires provide even compaction on uneven surfaces. Four, 6-ply rubber tires generate high contact pressures that penetrate deep into the lift and horizontal pressures create a smooth, tight mat finish.



Application Profile

The following chart provides a guide to choosing the utility compactor that best fits your everyday needs.

Material	Application	Layer Thickness mm (in)	CB22	CB24	CC24	CB32
Asphalt	Walking Paths, Driveways, Patchwork	25-50 (1-2)	Better	Better	Better	Good
		50-100 (2-3)	Better	Better	Better	Better
	Parking Lots, City Streets	25-50 (1-2)	Best	Best	Best	Best
		50-100 (2-3)	Best	Best	Best	Best
	Roads, Highways	25-50 (1-2)	Better	Better	Better	Best
		50-100 (2-3)	Better	Better	Better	Better
Soil	Landscaping	<100 (4)	Better	Better	Better	Good
	Small Area	<100 (4)	Better	Better	Better	Good
	Medium Area	<100 (4)	Best	Best	Best	Better

Reliability and Serviceability

These machines provide the reliability and serviceability that you've come to expect from Caterpillar. Time tested features ensure that machine uptime is maximized.

Easy Access

The vertical lift engine enclosure allows easy access to the engine oil filter, hydraulic filter, vibe block, radiator and propel pumps, making routine service quicker than ever.

Water Spray System

The filters in the water spray system can be easily removed without the use of special tools.

Extended Life Oils

Extended life oils increase maintenance intervals for the engine oil, hydraulic system and vibratory system. An oil-bath lubricates the eccentric weight bearings, extending routine maintenance to 3 year/3000 hour intervals. Remote-mounted drains provide simplified collection of fluids.

Quick-Connect Hydraulic Test Ports

The quick-connect hydraulic test ports simplify collection and system diagnosis.

Color-coded Electrical System

Electrical wiring is color-coded and numbered for simple troubleshooting. Nylon-braided wrap and all-weather connectors ensure electrical system integrity.



Engine

Caterpillar C1.5 three cylinder, diesel engine meets engine emission requirements.

Gross Power

SAE J1995	24.6 kW	33 hp
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Net Power

ISO 9249	23.7 kW	31.8 hp
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Specifications

Bore	84 mm	3.30"
Stroke	90 mm	3.54"
Displacement	1.5 L	92 in ³

- The net power ratings apply at a rated speed of 2800 RPM when tested under the reference conditions for the specific standard.
- The net power advertised is the power available at the flywheel when the engine is equipped with alternator, air cleaner and muffler.

Transmission

CB22, CB24 and CB32

A variable displacement piston pump supplies pressure flow to the fixed displacement hydraulic motors that drive the front and rear drums.

CC24

A variable displacement piston pump supplies pressure flow to the fixed displacement hydraulic motors that drive the front drum. The pump also supplies pressure flow to the two, fixed displacement motors that drive the rear wheels.

Speed Range

0-10.5 km/hr (0-6.5 mph)

Steering System

A priority-demand hydraulic power assist steering system provides smooth machine handling.

Minimum Turning Radius

CB22	
Inside drum edge	2.64 m (8' 8")
Outside drum edge	3.64 m (11' 11")
CB24/CC24	
Inside drum edge	2.54 m (8' 4")
Outside drum edge	3.74 m (12' 3")
CB32	
Inside drum edge	2.49 m (8' 2")
Outside drum edge	3.79 m (12' 5")

Steering Angle 35°

Instrumentation

The control console includes: steering wheel with knob, water spray system switch, vibratory drum selector switch, horn, hazard flasher control, turn signals, warning and working light switches, engine start switch with preheat and the secondary brake.

The instrument panel cluster integrates the fuel level indicator, service hour meter and also the light indicators for: roading lights, secondary brake, hydraulic oil temperature, engine coolant temperature, alternator, engine oil pressure, vibration on, engine preheat and the turn signals.

The vibratory system is actuated with a switch on the top of the propel lever. When the vibratory system is activated, a vibration indicator light illuminates.

The engine throttle control is operated via a three-position lever for low, intermediate and high engine speed.

The control console, engine compartment and literature compartment are equipped with lockable covers.

Water Spray System

The water spray system includes easy to clean spray bars that are constructed of stainless steel for corrosion resistance. The water tank is constructed of reinforced polyethylene. An intermittent spray setting operates the pump for 10 seconds and shuts off for 10 seconds, providing twice the tank life over the continuous spray setting. Triple water filtration includes a filter in the tank fill spout, an in-line filter at the water pump and filters in each spray nozzle.

Frame

The frame is fabricated from heavy gauge steel plate and joined at the center articulation pivot. Two self-aligning bearings on the pivot housing provide a ± 35 degree steering angle, and a horizontal pin provides a ± 10 degree oscillation angle. The articulation pivot is structurally reinforced for extended service life. For transport purposes, the articulation pivot can be secured at the zero degree steering angle.

Brakes

The braking system will automatically engage if a pressure drop in the hydraulic system occurs.

Service

The service braking system consists of a closed-loop, hydrostatic system that provides dynamic braking during machine operation.

Secondary

A spring-applied, pressure-released brake inside of each propel motor immobilizes the machine. The secondary brake can be activated by a switch on the operator's console or when the engine is shut off.

Electrical System

The 12-volt electrical system includes one maintenance-free Cat® battery with 650 cold cranking amps. The wiring is color-coded, numbered and wrapped in nylon braid. The system includes a 65-amp alternator.

Optional Equipment

Battery Disconnect Switch
Biodegradable Hydraulic Oil
Cocoa Mats
Light Protector Grids
Light Package (Roading and Working)
Non-Machined Drum Edges
Roll-Over Protective Structure (ROPS)
ROPS (Foldable)
Single Lifting Point
Spark Arrestor Muffler
Step Guard
Sun Canopy
Suspension Seat with Seat Switch
Tire Spray System (CC24 only)
Traction Control
Warning Beacon
Water Tank (additional CB22, CB24, CB32)

Wheels and Tires (CC24)

The four, 9.5/65-15 tires are mounted on a fixed axle. Each wheel includes a retractable, self-loading, self-adjusting scraper that helps remove asphalt and soil particles from the tires.

Tire Spray System (CC24)

The optional tire spray system allows a solvent to be sprayed on the tire surfaces in order to prevent asphalt from adhering to the tires. One spray nozzle is positioned above each tire. The system is controlled with an on/off switch on the control console.

Service Refill Capacities

	Liters	Gallons
Fuel Tank	56	14.7
Engine Oil w/Filter	6	1.5
Hydraulic Oil Tank	36.6	9.6
Water Tank	150	39.6
additional tank	90	23.7
Tire Spray System	90	23.7

Dimensions

	CB22	CB24	CB32	CC24
A Length — mm (in)	2500 (98)	2500 (98)	2500 (98)	2513 (99)
B Wheelbase — mm (in)	1800 (71)	1800 (71)	1800 (71)	1827 (72)
C Drum Diameter — mm (in)	700 (27.6)			
Drum Shell Thickness — mm (in)	13.5 (0.53)			
Tire Size (CC24)				9.5 x 65-15, 6-Ply
D Height at ROPS — mm (in)	2680 (106)	2680 (106)	2688 (106)	2673 (105)
E Transport Height — mm (in)	1801 (71)			
F Ground Clearance — mm (in)	262 (10)			
G Curb Clearance — mm (in)	520 (20)			
H Compaction Width — mm (in)	1000 (39)	1200 (47)	1300 (51)	1200 (47)
I Machine Width — mm (in)	1098 (43)	1298 (51)	1398 (55)	1298 (51)

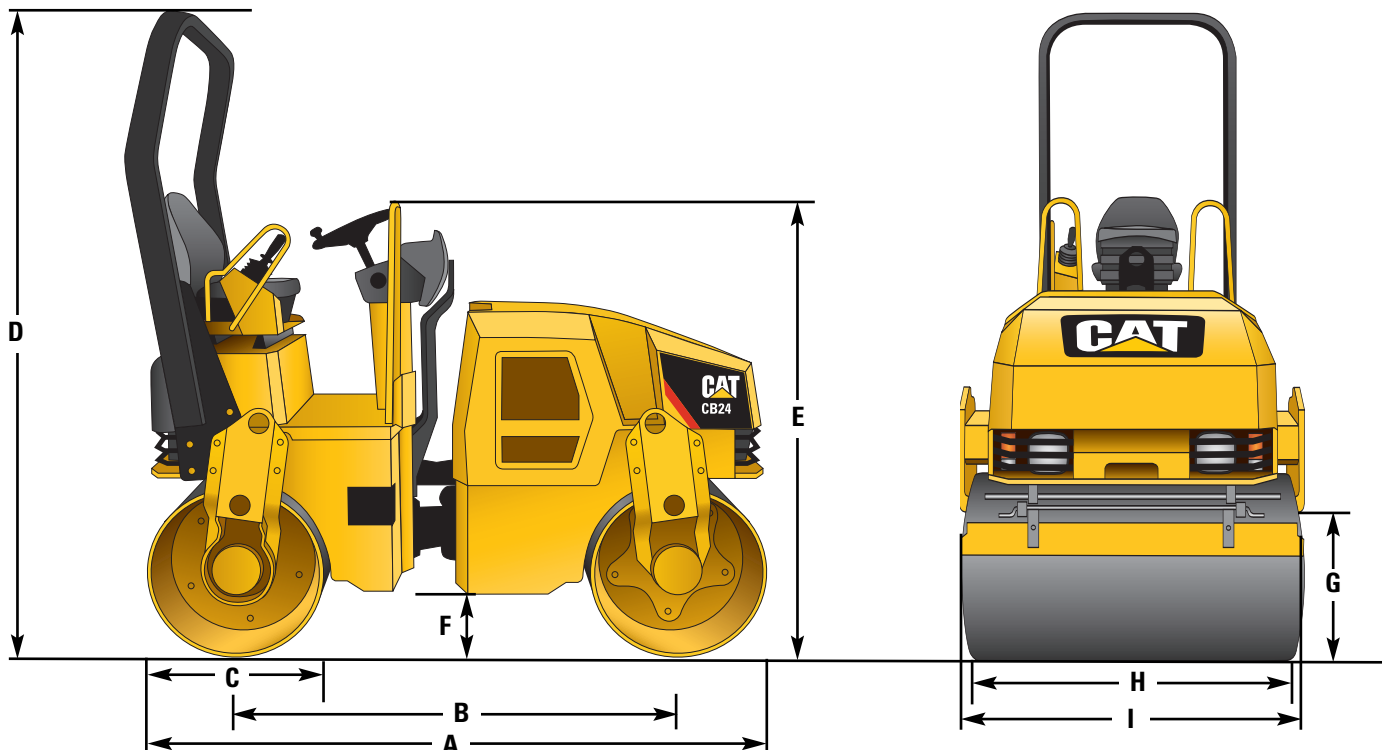
Weights

w/ROPS — kg (lb)	2500 (5,512)	2700 (5,952)	3230 (7,121)	2400 (5,291)
at front drum — kg (lb)	1210 (2,668)	1280 (2,820)	1570 (3,461)	1340 (2,954)
at rear drum — kg (lb)	1290 (2,840)	1420 (3,131)	1660 (3,660)	—
at rear wheels — kg (lb)	—	—	—	1050 (2,315)
per wheel — kg (lb)	—	—	—	262 (579)

Operating weights include lubricants, 80 kg (176 lb) operator, full fuel tank, full hydraulic system, half-full water tank and standard ROPS.

Compaction Characteristics

Frequency — Hz (vpm)	63/55 (3,780/3,300)			
Amplitude — mm (in)	0.50 (0.020)	0.50 (0.020)	0.30 (0.012)	0.50 (0.020)
Vibratory Drum Selection	Front or Both, (Rear is Optional)			
Centrifugal Force — kg (lb)	27.6 (6,210)	31.3 (7,043)	31.3 (7,043)	31.3 (7,043)
	21 (4,725)	23.9 (5,378)	23.9 (5,378)	23.9 (5,378)
Static Linear Load — kg/cm (lb/in)	12.5 (70)	11.3 (63)	12.5 (70)	10.0 (56)



Caterpillar offers a comprehensive line of Utility Compactors.

Contact your local Caterpillar® Dealer to learn more about the complete line of Caterpillar® Paving Products.



	CB14	CB14 XW	CB14 Full Flush
Operating Weight - kg (lb)	1620 (3,571)	1840 (4,057)	1600 (3,527)
Drum Width - mm (in)	800 (31)	1000 (39)	900/800 (35/31)
Frequency - Hz (vpm)	53.3 (3,780)	—	—
Centrifugal Force - kN (lb)	10.3 (2,318)	11.4 (2,565)	10.3 (2,318)
Gross Power - kW (hp)		16.1 (21.6)	



	CB34	CB34 XW	CC34
Operating Weight - kg (lb)	3940 (8,688)	4200 (9,259)	3670 (8,071)
Drum Width - m (in)	1.30 (51)	1.40 (55)	1.30 (51)
Frequency - Hz (vpm)	69/61 (3,780/3,300)	53/48 (3,180/2,880)	69/61 (3,780/3,300)
Centrifugal Force - kN (lb)	33.1 (7,448)	29.5 (6,638)	33.1 (7,448)
Gross Power - kW (hp)		34.1 (46)	

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