



# Cat® 304

## MINI EXCAVATOR

### FEATURES:

The Cat® 304 Mini Excavator delivers power and performance in a compact size to help you work in a wide range of applications.

### ALL DAY COMFORT

- Choose either a canopy (not available in some regions) or a sealed and pressurized cab which can be equipped with air conditioning, adjustable wrist rests, and a suspension seat to help keep you working comfortably all day long.

### EASY TO OPERATE

- Controls are easy to use and the intuitive Next Generation LCD monitor provides easy to read machine information. An advanced touchscreen monitor can also be equipped as an upgrade option.

### STICK STEER TRAVEL MODE

- Moving around the job site is even easier with the Cat Stick Steer option. Easily switch from traditional travel controls with levers and pedals to joystick controls to move the machine and to operate the blade. The benefit of less effort and improved control is in your hands!

### BIG PERFORMANCE IN A SMALL MACHINE

- Strong lift and dig performance helps you get the job done faster. The reduced radius tail swing design provides exceptional stability and performance. With a maximum width of 1700 mm (67 in), the 304 can access those hard to get into areas. Dozer float allows for easy clean up. An angle blade is also an option for finished grading and easier backfilling applications.

### SAFETY ON THE JOB SITE

- Your safety is our top priority. The Cat mini excavator is designed to help keep you safe on the job. Courtesy work lights and a fluorescent retractable seat belt are just a couple of the safety features we've built into the machine.

### SIMPLE SERVICE FOR LESS DOWNTIME

- Maintenance is quick and easy on the Cat mini excavator. Routine check points are easy to access at ground level through the side doors.

### LOWER OPERATING COSTS

- Equipped with features such as auto idle, auto engine shutdown, and efficient hydraulics with a variable displacement pump, the Cat mini excavator was designed with reducing your operating costs in mind.

### UNMATCHED DEALER SUPPORT

- Your Cat dealer is here to help you reach your business goals. From providing equipment solutions to operator training to service needs and beyond, your Cat dealer is ready to help.

## Specifications

### Engine

Engine Model	C1.7 Turbo	
<b>Net Power @ 2,400 rpm</b>		
ISO 9249, 80/1269/EEC	33.6 kW	45.0 hp
<b>Gross Power @ 2,400 rpm</b>		
SAE J1995:2014	36.1 kW	48.4 hp
Bore	84.0 mm	3.3 in
Stroke	100.0 mm	3.9 in
Displacement	1.662 L	101 in <sup>3</sup>

- Meets U.S. EPA Tier 4 Final and EU Stage V emission standards.
- Net power advertised is the power available at the flywheel when the engine is at rated speed and rated power when the engine is installed with the factory configured fan, air intake system, exhaust system, and alternator with a minimum alternator load.

### Weights

Minimum Operating Weight with Canopy*	3925 kg	8,655 lb
Maximum Operating Weight with Canopy**	4375 kg	9,647 lb
Minimum Operating Weight with Cab*	4025 kg	8,875 lb
Maximum Operating Weight with Cab**	4475 kg	9,867 lb

\*Minimum Weight is based on rubber tracks, operator, full fuel tank, standard stick, straight blade, no bucket and no extra counterweight.

\*\*Maximum Weight is based on steel tracks, operator, full fuel tank, long stick, straight blade, extra counterweight and no bucket.



# 304 Mini Excavator

## Weight Increase from Minimum Configuration

Counterweight	225 kg	496 lb
Long Stick	30 kg	66 lb
Steel Tracks	195 kg	430 lb
Angle Blade	110 kg	243 lb

## Travel System

Travel Speed – High	5.2 km/h	3.2 mph
Travel Speed – Low	3.5 km/h	2.2 mph
Maximum Traction Force – High Speed	19 kN	4,271 lbf
Maximum Traction Force – Low Speed	32.6 kN	7,329 lbf
Ground Pressure – Minimum Weight	28.7 kPa	4.2 psi
Ground Pressure – Maximum Weight	33.8 kPa	4.9 psi
Gradeability (maximum)	30 degrees	

## Service Refill Capacities

Cooling System	11.0 L	2.9 gal
Engine Oil	6.0 L	1.6 gal
Fuel Tank	63.0 L	17.0 gal
Hydraulic Tank	52.0 L	14.0 gal
Hydraulic System	65.0 L	17.0 gal

## Hydraulic System

Load Sensing Hydraulics with Variable Displacement Piston Pump		
Pump Flow @ 2,400 rpm	96 L/min	25 gal/min
Operating Pressure – Equipment	245 bar	3,553 psi
Operating Pressure – Travel	245 bar	3,553 psi
Operating Pressure – Swing	180 bar	2,611 psi
Auxiliary Circuit – Primary		
Flow*	65 L/min	21 gal/min
Pressure*	245 bar	3,553 psi
Auxiliary Circuit – Secondary		
Flow*	28 L/min	7.0 gal/min
Pressure*	245 bar	3,553 psi
Digging Force – Stick (standard)	21.0 kN	4,721 lbf
Digging Force – Stick (long)	19.2 kN	4,316 lbf
Digging Force – Bucket	38.2 kN	8,588 lbf

\*Flow and pressure are not combinable. Under load, as flow rises pressure goes down.

## Swing System

Machine Swing Speed	9.0 rpm
Boom Swing – Left	78 Degrees
Boom Swing – Right	50 Degrees

## Blade

Width (Straight)	1700 mm	66.9 in
Height (Straight)	360 mm	14.2 in
Width (Angle)	1700 mm	66.9 in
Height (Angle)	360 mm	14.2 in
Angle Blade – Left	25 Degrees	
Angle Blade – Right	25 Degrees	

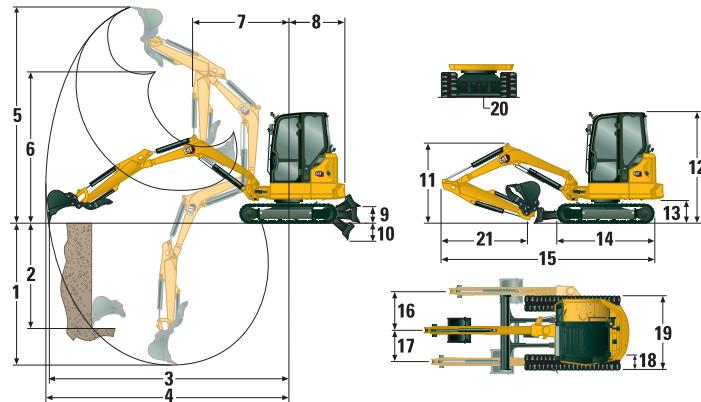
## Certification – Cab and Canopy

Roll Over Protective Structure (ROPS)	ISO 12117-2:2008
Tip Over Protective Structure (TOPS)	ISO 12117:1997
Top Guard	ISO 10262:1998 Level I

## Sound

Operator Sound Pressure Level (ISO 6396:2008)	76 dB(A)
Exterior Sound Power Level (ISO 6395:2008)	97 dB(A)

• European Union Directive "2000/14/EC"



## Dimensions

	Standard Stick	Long Stick
<b>1</b> Dig Depth	3210 mm (126.4 in)	3510 mm (138.2 in)
<b>2</b> Vertical Wall	2395 mm (94.3 in)	2535 mm (99.8 in)
<b>3</b> Maximum Reach at Ground Level	5200 mm (204.7 in)	5445 mm (214.4 in)
<b>4</b> Maximum Reach	5330 mm (209.8 in)	5570 mm (219.3 in)
<b>5</b> Maximum Dig Height	5040 mm (198.4 in)	5125 mm (201.8 in)
<b>6</b> Maximum Dump Clearance	3645 mm (143.5 in)	3740 mm (147.2 in)
<b>7</b> Boom in Reach	2255 mm (88.8 in)	2340 mm (92.1 in)
<b>8</b> Tail Swing		
without Counterweight	1205 mm (47.4 in)	1205 mm (47.4 in)
with Counterweight	1300 mm (51.2 in)	1300 mm (51.2 in)
<b>9</b> Maximum Blade Height	420 mm (16.5 in)	420 mm (16.5 in)
<b>10</b> Maximum Blade Depth	475 mm (18.7 in)	475 mm (18.7 in)
<b>11</b> Boom Height in Shipping Position	1620 mm (63.8 in)	1910 mm (75.2 in)
<b>12</b> Overall Shipping Height	2540 mm (100.0 in)	2540 mm (100.0 in)
<b>13</b> Swing Bearing Height	557 mm (21.9 in)	557 mm (21.9 in)
<b>14</b> Overall Undercarriage Length	2210 mm (87.0 in)	2210 mm (87.0 in)
<b>15</b> Overall Shipping Length†	4950 mm (194.9 in)	4950 mm (194.9 in)
<b>16</b> Boom Swing Right	730 mm (28.7 in)	730 mm (28.7 in)
<b>17</b> Boom Swing Left	530 mm (20.9 in)	530 mm (20.9 in)
<b>18</b> Track Belt/Shoe Width	350 mm (13.8 in)	350 mm (13.8 in)
<b>19</b> Track Width	1700 mm (66.9 in)	1700 mm (66.9 in)
<b>20</b> Ground Clearance	305 mm (12.0 in)	305 mm (12.0 in)
<b>21</b> Stick Length	1395 mm (54.9 in)	1695 mm (66.7 in)

†Overall Shipping Length depends on blade position during shipment.

**Cab**

Lift Capacities – Minimum Configuration			Lift Point Radius – 3 m (9.8 ft)			Lift Point Radius – 4.5 m (14.8 ft)			Lift Point Radius (Maximum)		
			Over Front		Over Side	Over Front		Over Side	Over Front		Over Side
Lift Point Height		Blade Down	Blade Up	Blade Down		Blade Up	Blade Down		Blade Up		
3 m (9.8 ft)	Standard Stick	kg (lb)	*941 (*2,075)	*941 (*2,075)	*941 (*2,075)				*698 (*1,539)	*698 (*1,539)	*698 (*1,539)
	Long Stick	kg (lb)							*699 (*1,541)	*699 (*1,541)	*699 (*1,541)
1.5 m (4.9 ft)	Standard Stick	kg (lb)	*1522 (*3,356)	1213 (2,675)	1031 (2,273)	*1040 (*2,293)	662 (1,460)	573 (1,263)	*698 (*1,539)	*698 (*1,539)	555 (1,224)
	Long Stick	kg (lb)	*1333 (*2,939)	*1333 (*2,939)	1029 (2,269)	*1008 (*2,223)	652 (1,438)	562 (1,239)	*711 (*1,568)	582 (*1,283)	502 (1,107)
0 m (0 ft)	Standard Stick	kg (lb)	*2006 (*4,423)	1148 (2,531)	969 (2,137)				*846 (*1,865)	656 (*1,446)	566 (1,248)
	Long Stick	kg (lb)	*1933 (*4,262)	1128 (2,487)	950 (2,095)	*1142 (*2,518)	630 (1,389)	541 (1,193)	*861 (*1,899)	591 (*1,303)	508 (1,120)

Minimum Weight includes cab, rubber tracks, no counterweight, operator, full fuel tank and straight blade.

Lift Capacities – Maximum Configuration			Lift Point Radius – 3 m (9.8 ft)			Lift Point Radius – 4.5 m (14.8 ft)			Lift Point Radius (Maximum)		
			Over Front		Over Side	Over Front		Over Side	Over Front		Over Side
Lift Point Height		Blade Down	Blade Up	Blade Down		Blade Up	Blade Down		Blade Up		
3 m (9.8 ft)	Standard Stick	kg (lb)	*941 (*2,075)	*941 (*2,075)	*941 (*2,075)				*698 (*1,539)	*698 (*1,539)	*698 (*1,539)
	Long Stick	kg (lb)							*699 (*1,541)	*699 (*1,541)	*699 (*1,541)
1.5 m (4.9 ft)	Standard Stick	kg (lb)	*1522 (*3,356)	*1522 (*3,356)	1266 (2,792)	*1040 (*2,293)	780 (1,720)	714 (1,574)	*698 (*1,539)	*698 (*1,539)	*698 (*1,539)
	Long Stick	kg (lb)	*1333 (*2,939)	*1333 (*2,939)	*1333 (*2,939)	*1008 (*2,223)	769 (1,696)	703 (1,550)	*711 (*1,568)	*711 (*1,568)	*711 (*1,568)
0 m (0 ft)	Standard Stick	kg (lb)	*2006 (*4,423)	1349 (2,975)	1204 (2,655)				*846 (*1,865)	*846 (*1,865)	709 (1,563)
	Long Stick	kg (lb)	*1933 (*4,262)	1329 (2,930)	1185 (2,613)	*1142 (*2,518)	748 (1,649)	682 (1,504)	*861 (*1,899)	702 (1,548)	641 (1,413)

Maximum Weight includes cab, steel tracks, counterweight, operator, full fuel tank and angle blade.

**Canopy**

Lift Capacities – Minimum Configuration			Lift Point Radius – 3 m (9.8 ft)			Lift Point Radius – 4.5 m (14.8 ft)			Lift Point Radius (Maximum)		
			Over Front		Over Side	Over Front		Over Side	Over Front		Over Side
Lift Point Height		Blade Down	Blade Up	Blade Down		Blade Up	Blade Down		Blade Up		
3 m (9.8 ft)	Standard Stick	kg (lb)	*941 (*2,075)	*941 (*2,075)	*941 (*2,075)				*698 (*1,539)	*698 (*1,539)	*698 (*1,539)
	Long Stick	kg (lb)							*699 (*1,541)	585 (*1,541)	585 (1,290)
1.5 m (4.9 ft)	Standard Stick	kg (lb)	*1522 (*3,356)	1176 (2,593)	1000 (2,205)	*1040 (*2,293)	640 (1,411)	555 (1,224)	*698 (*1,539)	*698 (*1,539)	537 (1,184)
	Long Stick	kg (lb)	*1333 (*2,939)	*1333 (*2,939)	999 (2,203)	*1008 (*2,223)	630 (1,389)	544 (1,200)	*711 (*1,568)	562 (*1,239)	485 (1,069)
0 m (0 ft)	Standard Stick	kg (lb)	*2006 (*4,423)	1111 (2,450)	939 (2,070)				*846 (*1,865)	634 (*1,398)	548 (1,208)
	Long Stick	kg (lb)	*1933 (*4,262)	1091 (2,406)	919 (2,026)	*1142 (*2,518)	608 (1,341)	523 (1,153)	*861 (*1,899)	570 (1,257)	490 (1,080)

Minimum Weight includes canopy, rubber tracks, no counterweight, operator, full fuel tank and straight blade.

Lift Capacities – Maximum Configuration			Lift Point Radius – 3 m (9.8 ft)			Lift Point Radius – 4.5 m (14.8 ft)			Lift Point Radius (Maximum)		
			Over Front		Over Side	Over Front		Over Side	Over Front		Over Side
Lift Point Height		Blade Down	Blade Up	Blade Down		Blade Up	Blade Down		Blade Up		
3 m (9.8 ft)	Standard Stick	kg (lb)	*941 (*2,075)	*941 (*2,075)	*941 (*2,075)				*698 (*1,539)	*698 (*1,539)	*698 (*1,539)
	Long Stick	kg (lb)							*699 (*1,541)	585 (*1,541)	585 (1,290)
1.5 m (4.9 ft)	Standard Stick	kg (lb)	*1522 (*3,356)	1176 (2,593)	1000 (2,205)	*1040 (*2,293)	640 (1,411)	555 (1,224)	*698 (*1,539)	*698 (*1,539)	537 (1,184)
	Long Stick	kg (lb)	*1333 (*2,939)	*1333 (*2,939)	999 (2,203)	*1008 (*2,223)	630 (1,389)	544 (1,200)	*711 (*1,568)	562 (*1,239)	485 (1,069)
0 m (0 ft)	Standard Stick	kg (lb)	*2006 (*4,423)	1111 (2,450)	939 (2,070)				*846 (*1,865)	634 (*1,398)	548 (1,208)
	Long Stick	kg (lb)	*1933 (*4,262)	1091 (2,406)	919 (2,026)	*1142 (*2,518)	608 (1,341)	523 (1,153)	*861 (*1,899)	570 (1,257)	490 (1,080)

Maximum Weight includes canopy, steel tracks, counterweight, operator, full fuel tank and angle blade.

\*The above loads are in compliance with hydraulic excavator lift capacity rating standard ISO 10567:2007 and they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. The excavator bucket weight is not included on this chart.

# 304 Mini Excavator

## Standard and Optional Equipment

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

	Standard	Optional	Standard	Optional
<b>ENGINE</b>				
Cat® C1.7 Turbo Engine (U.S. EPA Tier 4 Final/EU Stage V)	✓			
Automatic Engine Idle	✓			
Automatic Engine Shutdown	✓			
Automatic Two Speed Travel	✓			
Fuel Water Separator	✓			
Power on Demand (not available in all regions)	✓			
Variable Displacement Piston Pump	✓			
Load Sensing/Flow Sharing Hydraulics	✓			
<b>HYDRAULICS</b>				
Smart Tech Electronic Pump	✓			
Accumulator	✓			
Automatic Swing Brake	✓			
Auxiliary Hydraulic Lines	✓			
One and Two Way Auxiliary Flow	✓			
Continuous Auxiliary Flow	✓			
Auxiliary Line Quick Disconnects	✓			
<b>OPERATOR ENVIRONMENT</b>				
Canopy or Cab (Canopy not available in some regions)	✓			
Cab with Air Conditioning		✓		
Cab with Heater		✓		
Top Guard ISO 10262:1998 Level I	✓			
ROPS – ISO 12117-2:2008	✓			
TOPS – ISO 12117:1997	✓			
Stick Steer Mode	✓			
Travel Cruise Control	✓			
Control Pattern Changer (optional in some regions)	✓			
Adjustable Wrist Rests	✓			
Washable Floor Mat	✓			
Travel Pedals and Hand Levers	✓			
No Travel Pedals and Hand Levers (optional in some regions)		✓		
Machine Security	✓			
Standard Key with Pass Code	✓			
Push to Start with Key Fob/Pass Code		✓		
Fabric Suspension Seat (Cab only)	✓			
Vinyl Suspension Seat (Canopy only)	✓			
Hydraulic Lockout – All Controls	✓			
Retractable High Visibility Seat Belt (75 mm/3 in)	✓			
Coat Hook	✓			
Cup Holder	✓			
Storage Pocket	✓			
Skylight	✓			
Mounting Bosses for Front	✓			
Signaling/Warning Horn	✓			
Interior Light (Cab only)	✓			
Boom Light, Halogen (not available in all regions)	✓			
LED Front Lights	✓			
LED Front and Rear Lights	✓			
LED Boom Light	✓			
Utility Space for Mobile Phone	✓			
Mirrors, Left, Right and Rear		✓		
Camera		✓		
Radio – Bluetooth®, Auxiliary, Microphone, USB (charging only) (Cab only)		✓		
<b>OPERATOR ENVIRONMENT (continued)</b>				
Next Generation Color LCD Monitor (IP66)		✓		
– Fuel Level and Coolant Temperature Gauges		✓		
– Maintenance and Machine Monitoring		✓		
– Performance and Machine Adjustments		✓		
– Numeric Security Code		✓		
– Multiple Languages		✓		
– Hour Meter with Wake Up Switch		✓		
– Jog Dial (cab only)		✓		
Next Generation Advanced Monitor		✓		
– Touch Screen		✓		
– Site Reference System		✓		
– High Definition Camera Capable (IP68 and IP69K)		✓		
– Numeric Security Code		✓		
<b>UNDERCARRIAGE</b>				
Rubber Belt (350 mm/13.8 in)		✓		
Steel Track (350 mm/13.8 in)		✓		
Steel Track with Rubber Pads		✓		
Dozer Straight Blade		✓		
Dozer Blade Float		✓		
Angle Blade		✓		
Tie Downs on Track Frame		✓		
<b>BOOM, STICK AND LINKAGES</b>				
One Piece Boom (2500 mm/98.4 in)		✓		
Standard Stick (1395 mm/54.9 in)		✓		
Long Stick (1695 mm/66.7 in)		✓		
Front Shovel Capable		✓		
Pin-On		✓		
Dual Lock Manual Coupler		✓		
Hydraulic Coupler		✓		
Thumb Ready		✓		
Certified Lifting Eye		✓		
Attachments including Couplers, Thumbs, Buckets, Augers and Hammers		✓		
2nd Auxiliary Hydraulic Lines		✓		
Bucket Divert Lines		✓		
Boom Lowering Check Valve		✓		
Stick Lowering Check Valve		✓		
Hydraulic Quick Coupler Lines		✓		
<b>ELECTRICAL</b>				
12 Volt Battery		✓		
Software (machine and monitor)		✓		
Maintenance Free Battery		✓		
Battery Disconnect		✓		
12 Volt Power Socket		✓		
Product Link™ PL243 (regulations apply)		✓		
Product Link PLE643 (regulations apply)		✓		
Travel Alarm (optional in some regions)		✓		
<b>GUARDING</b>				
Polycarbonate Half Height Front Guard (Canopy only)		✓		
Polycarbonate Front Guard (ISO 10262:1998 Level I and EN356 P5A)		✓		
Heavy Duty Front Guard ISO 10262:1998 Level II		✓		
Heavy Duty Top Guard 10262:1998 Level II (Cab only)		✓		
<b>OTHER</b>				
Bio Oil Capable		✓		
Eco Drain		✓		
Water Jacket Heater		✓		
Counterweight (225 kg/496 lb)		✓		

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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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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Build Number: 07A

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