

312D/312D L

Hydraulic Excavators

CATERPILLAR®



Engine

Engine Model	Cat® C4.2 ACERT™	
Net Power (SAE J1349)	67 kW	90 hp
Gross Power	72 kW	97 hp

Weights

Operating Weight – Standard Undercarriage	12 920 kg	28,480 lb
Operating Weight – Long Undercarriage	13 450 kg	29,650 lb

312D/312D L Hydraulic Excavator Specifications

Engine

Engine Model	Cat® C4.2 ACERT™	
Gross Power	72 kW	97 hp
Net Power	67 kW	90 hp
SAE J1349	67 kW	90 hp
Bore	102 mm	4.02 in
Stroke	130 mm	5.12 in
Displacement	4.25 L	259.3 in ³

- Net power advertise is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.
- No engine derating required below 2300 m (7,500 ft) altitude.
- The 312D meets U.S. EPA Tier 3 and EU Stage IIIA Directive/97/68/EC emissions requirements.

Weights

Operating Weight – Standard Undercarriage	12 920 kg	28,480 lb
Operating Weight – Long Undercarriage	13 450 kg	29,650 lb

- Standard undercarriage: 500 mm (20") shoe, 3.0 m (9'10") stick, 0.52 m³ (0.68 yd³) bucket.
- Long undercarriage: 600 mm (24") shoe, 3.0 m (9'10") stick, 0.52 m³ (0.68 yd³) bucket.

Swing Mechanism

Swing Torque	30 950 N·m	22,827.5 lb ft
Swing Speed	12.4 rpm	

Drive

Maximum Drawbar Pull	114 kN	25.6 lb
Travel Speed	5.5 km/h	3.4 mph

Hydraulic System

Main Implement System – Maximum Flow (2x)	127 L/min	33.5 gal/min
Maximum Pressure – Implements	30 500 kPa	4,424 psi
Maximum Pressure – Travel	35 000 kPa	5,076 psi
Maximum Pressure – Swing	23 000 kPa	3,336 psi
Pilot System – Maximum Flow	36 L/min	9.51 gal/min
Pilot System – Maximum Pressure	4120 kPa	598 psi
Boom Cylinder – Bore	110 mm	4.3 in
Boom Cylinder – Stroke	1015 mm	39.9 in
Stick Cylinder – Bore	120 mm	4.7 in
Stick Cylinder – Stroke	1197 mm	47.1 in
Bucket Cylinder – Bore	100 mm	3.9 in
Bucket Cylinder – Stroke	939 mm	36.9 in

Service Refill Capacities

Fuel Tank	250 L	66 gal
Cooling System	17.9 L	4.73 gal
Engine Oil	19.5 L	5.1 gal
Swing Drive	3 L	0.79 gal
Final Drive (Each)	3 L	0.79 gal
Hydraulic System (Including Tank)	162 L	42.8 gal
Hydraulic Tank	150 L	39.6 gal

Standards

Cab/FOGS	SAE J1356 FEB88 ISO 10262
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Sound Performance

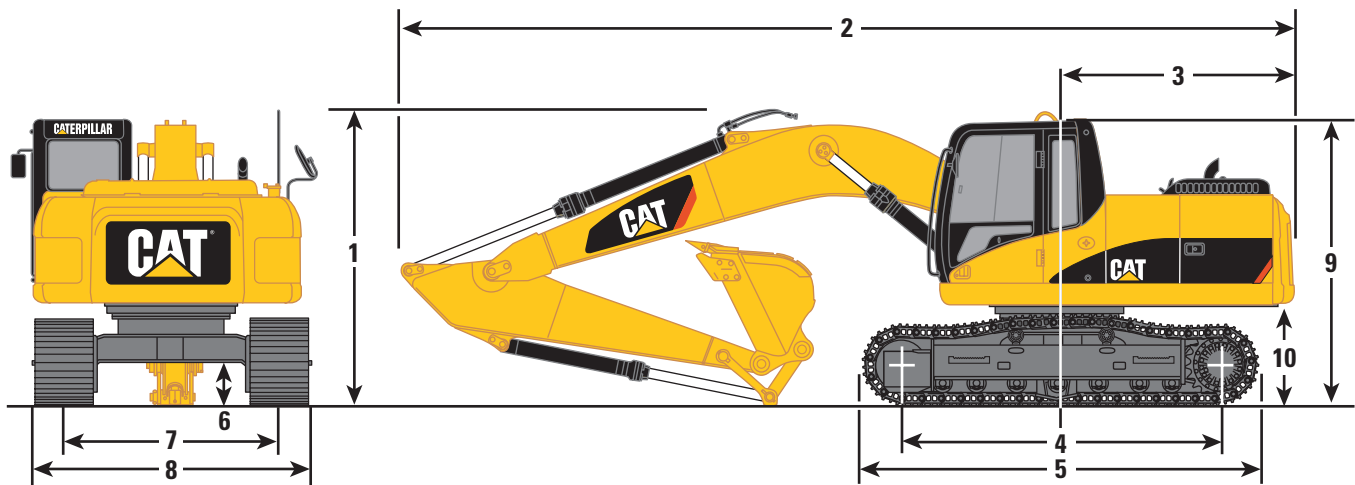
Performance:

- The operator sound exposure Leq (equivalent sound pressure level) measured according to the work cycle procedures specified in ANSI/SAE J1166 OCT 98 is 73 dB(A), at standard ambient, for the cab offered by Caterpillar, when properly installed and maintained and tested with the doors and windows closed.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in noisy environment.

312D/312D L Hydraulic Excavator Specifications

Dimensions

All dimensions are approximate.



Boom Options	Reach	Reach	Reach
Stick Options	2.5 m (8'2")	2.8 m (9'2")	3.0 m (9'10")
1 Shipping Height	2830 mm (9'3")	2970 mm (9'9")	2830 mm (9'3")
2 Shipping Length	7610 mm (25'0")	7590 mm (24'11")	7610 mm (25'0")
3 Tail Swing Radius	2140 mm (7'0")	2140 mm (7'0")	2140 mm (7'0")
4 Length to Center of Rollers			
312D	2780 mm (9'1")	2780 mm (9'1")	2780 mm (9'1")
312D L	3040 mm (10'0")	3040 mm (10'0")	3040 mm (10'0")
5 Track Length			
312D	3490 mm (11'5")	3490 mm (11'5")	3490 mm (11'5")
312D L	3750 mm (12'4")	3750 mm (12'4")	3750 mm (12'4")
6 Ground Clearance	430 mm (1'5")	430 mm (1'5")	430 mm (1'5")
7 Track Gauge			
312D	1990 mm (6'6")	1990 mm (6'6")	1990 mm (6'6")
312D L	1990 mm (6'6")	1990 mm (6'6")	1990 mm (6'6")
8 Transport Width	500 mm (20") Shoes	600 mm (24") Shoes	700 mm (28") Shoes
312D	2490 mm (8'2")	2590 mm (8'6")	2690 mm (8'10")
312D L	2490 mm (8'2")	2590 mm (8'6")	2690 mm (8'10")
9 Cab Height	2760 mm (9'1")	2760 mm (9'1")	2760 mm (9'1")
10 Counterweight Clearance	915 mm (3'0")	915 mm (3'0")	915 mm (3'0")

Operating Weights

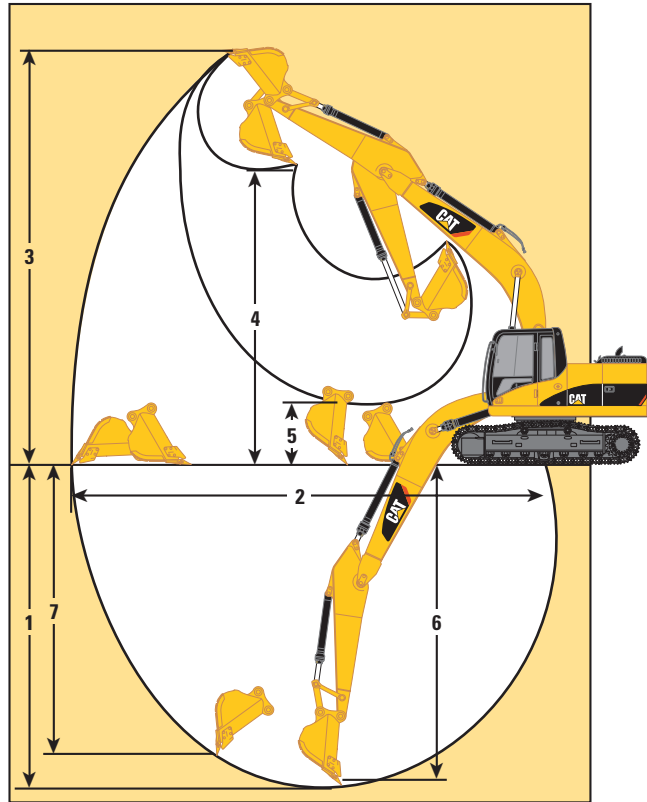
Caterpillar designed and built track-type undercarriage.

Track Width		Operating Weight 2.5 m (8'2")		Operating Weight 2.8 m (9'2")		Operating Weight 3.0 m (9'10")		
312D	500 mm (20") triple grouser	12 860 kg	28,340 lb	12 900 kg	28,430 lb	12 920 kg	28,480 lb	
	600 mm (24") triple grouser	13 090 kg	28,850 lb	13 130 kg	28,940 lb	13 150 kg	29,000 lb	
	700 mm (28") triple grouser	13 340 kg	29,420 lb	13 380 kg	29,500 lb	13 410 kg	29,560 lb	
	770 mm (30") triple grouser	13 480 kg	29,720 lb	13 520 kg	29,800 lb	13 540 kg	29,860 lb	
		Blade: add						
	500 mm (20") triple grouser	w/Blade	13 650 kg	30,100 lb	13 690 kg	30,180 lb	13 720 kg	30,240 lb
	600 mm (24") triple grouser	w/Blade	16 890 kg	30,610 lb	13 930 kg	30,700 lb	13 950 kg	30,750 lb
	700 mm (28") triple grouser	w/Blade	14 150 kg	31,200 lb	14 190 kg	31,290 lb	14 220 kg	31,340 lb
	770 mm (30") triple grouser	w/Blade	14 290 kg	31,500 lb	14 330 kg	31,590 lb	14 350 kg	31,640 lb
312D L	500 mm (20") triple grouser	13 410 kg	28,960 lb	13 180 kg	29,050 lb	13 200 kg	29,100 lb	
	600 mm (24") triple grouser	13 390 kg	29,510 lb	13 430 kg	29,600 lb	13 450 kg	29,650 lb	
	700 mm (28") triple grouser	13 660 kg	30,110 lb	13 700 kg	30,200 lb	13 720 kg	30,250 lb	
	770 mm (30") triple grouser	13 800 kg	30,430 lb	13 840 kg	30,520 lb	13 870 kg	30,570 lb	
		Blade: add						
	500 mm (20") triple grouser	w/Blade	13 930 kg	30,720 lb	13 970 kg	30,800 lb	14 000 kg	30,860 lb
	600 mm (24") triple grouser	w/Blade	14 180 kg	31,270 lb	14 220 kg	31,360 lb	14 250 kg	31,410 lb
	700 mm (28") triple grouser	w/Blade	14 470 kg	31,890 lb	14 510 kg	31,980 lb	14 530 kg	32,040 lb
	770 mm (30") triple grouser	w/Blade	14 610 kg	32,210 lb	14 650 kg	32,300 lb	14 680 kg	32,360 lb

312D/312D L Hydraulic Excavator Specifications

Working Ranges

All dimensions are approximate.



Boom	Reach 5.68 m (18'7")	Reach 5.68 m (18'7")	Reach 5.68 m (18'7")
Stick	2.5 m (8'2")*	2.8 m (9'2")*	3.0 m (9'10")*
Bucket	0.52 m³ (0.68 yd³)	0.52 m³ (0.68 yd³)	0.52 m³ (0.68 yd³)
1 Maximum Digging Depth	5540 mm (18'2")	5840 mm (19'2")	6040 mm (19'10")
2 Maximum Reach at Ground Level	8170 mm (26'10")	8430 mm (27'8")	8620 mm (28'3")
3 Maximum Cutting Height	8480 mm (27'10")	8580 mm (28'2")	8700 mm (28'7")
4 Maximum Loading Height	6100 mm (20'0")	6210 mm (20'4")	6340 mm (20'10")
5 Minimum Loading Height	2020 mm (6'8")	1730 mm (5'8")	1530 mm (5'0")
6 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	5330 mm (17'6")	5640 mm (18'6")	5850 mm (19'2")
7 Maximum Vertical Wall Digging Depth	4980 mm (16'4")	5160 mm (16'11")	5360 mm (17'7")
Stick Digging Force (SAE)	66 kN (14,736 lbf)	62 kN (13,855 lbf)	59 kN (13,169 lbf)
Bucket Digging Force (SAE)	96 kN (21,586 lbf)	96 kN (21,589 lbf)	96 kN (21,634 lbf)

* Measurements shown are for machines equipped with the 0.52 m³ (0.68 yd³) buckets.

Buckets

Buckets have tapered sides, angled corner teeth, dual radius curvature, horizontal wear strips and holes for optional side cutters.

Width		Capacity		Recommended Maximum Material Density			
				2.8 m (9'2") Stick		3.0 m (9'10") Stick	
mm	in	m ³	yd ³	kg/m ³	lb/yd ³	kg/m ³	lb/yd ³
600	24	0.30	0.39	1800	3,000	1800	3,000
750	30	0.40	0.53	1800	3,000	1800	3,000
905	36	0.52	0.68	1800	3,000	1500	2,500
1055	42	0.63	0.82	1500	2,500	1200	2,000
1210	48	0.74	0.97	1500	2,500	1200	2,000

Material Densities

Material	kg/m ³ *	lb/yd ³ **	Material	kg/m ³ *	lb/yd ³ **
Clay, dry	1480	2,500	Gravel, pit run	1930	3,250
Clay, wet	1660	2,800	Rock/dirt, 50%	1720	2,900
Earth, dry	1510	2,550	Sand, dry	1420	2,400
Earth, wet	1600	2,700	Sand, wet	1840	3,100
Loam	1250	2,100	Sand & Clay	1600	2,700
Gravel, dry	1510	2,550	Stone, crushed	1600	2,700
Gravel, wet	2020	3,400	Top soil	950	1,600

* kilograms per loose cubic meter

** pounds per loose cubic yard

For densities of other materials see Caterpillar Performance Handbook.

Undercarriage

Caterpillar designed and built track-type undercarriage.

Track Width	Ground Pressure	
	312D	312D L
500 mm (20") triple grouser	41.8 kPa (6.08 psi)	39.4 kPa (5.71 psi)
600 mm (24") triple grouser	35.5 kPa (5.15 psi)	33.4 kPa (4.86 psi)
700 mm (28") triple grouser	31.0 kPa (4.50 psi)	29.2 kPa (4.25 psi)
770 mm (30") triple grouser	28.5 kPa (4.13 psi)	26.9 kPa (3.90 psi)

312D/312D L Hydraulic Excavator Specifications

Reach Boom Lift Capacities



Load Point Height



Load at Maximum Reach



Load Radius Over Front

















Load Radius Over Side

R3.0 STICK – 3.0 m (9'10")
BUCKET – 0.52 m³ (0.68 yd³)

UNDERCARRIAGE – Long
SHOES – 700 mm (28") triple grouser

BOOM – Reach 4.65 m (15.25 ft)
BLADE – Down















	1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)				m ft	
														
7.5 m 25.0 ft	kg lb											*1400 *3,100	*1400 *3,100	5.86 18.73
6.0 m 20.0 ft	kg lb						*2250 *4,450	*2250 *4,450				*1200 *2,650	*1200 *2,650	7.22 23.47
4.5 m 15.0 ft	kg lb						*2600 *5,750	*2600 *5,750				*1150 *2,500	*1150 *2,500	8.00 26.14
3.0 m 10.0 ft	kg lb				*3300 *7,150	*3300 *7,150	*2950 *6,450	2700 5,700	*1850 1800			*1150 *2,550	*1150 *2,550	8.38 27.47
1.5 m 5.0 ft	kg lb		*6750 *14,500	*6750 *14,500	*4400 *9,500	4050 8,650	*3500 *7,550	2550 5,450	*2550 *4,750	1750 3,700		*1250 *2,750	*1250 *2,750	8.43 27.67
Ground Line	kg lb		*8200 *18,550	7150 15,350	*5300 *11,500	3800 8,100	*3950 *8,500	2450 5,200	*2400 *4,050	1700 3,600		*1400 *3,100	*1400 *3,100	8.17 26.80
-1.5 m -5.0 ft	kg lb	*4000 *8,950	*4000 *8,950	*8350 *18,700	6950 14,900	*5750 *12,450	3650 7,800	*4150 *9,000	2350 5,050			*1700 *3,750	1700 3,700	7.55 24.74
-3.0 m -10.0 ft	kg lb	*6550 *14,700	*6550 *14,700	*8500 *18,350	7000 15,000	*5600 *12,000	3650 7,800	*3900 *8,300	2350 5,100			*2300 *5,050	2150 4,800	6.47 21.08
-4.5 m -15.0 ft	kg lb		*6750 *14,350	*6750 *14,350	*4350 *9,050	3750 8,100						*3700 *8,100	3250 7,400	4.95 15.93

* Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard SAE J1097 DEC2005. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface.

R3.0 STICK – 3.0 m (9'10")
BUCKET – 0.52 m³ (0.68 yd³)

UNDERCARRIAGE – Long
SHOES – 600 mm (24") triple grouser

BOOM – Reach 4.65 m (15.25 ft)
BLADE – Down

	1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)				m ft	
														
7.5 m 25.0 ft	kg lb											*1400 *3,100	*1400 *3,100	5.86 18.73
6.0 m 20.0 ft	kg lb						*2250 *4,450	*2250 *4,450				*1200 *2,650	*1200 *2,650	7.22 23.47
4.5 m 15.0 ft	kg lb						*2600 *5,750	*2600 *5,650				*1150 *2,500	*1150 *2,500	8.00 26.14
3.0 m 10.0 ft	kg lb				*3300 *7,150	*3300 *7,150	*2950 *6,450	2700 5,800	*1850 1700			*1150 *2,550	*1150 *2,550	8.38 27.47
1.5 m 5.0 ft	kg lb		*6750 *14,500	*6750 *14,500	*4400 *9,500	6850 8,300	*3500 *7,550	2600 5,500	*2550 *4,750	1650 3,550		*1250 *2,750	*1250 *2,750	8.43 27.67
Ground Line	kg lb		*8200 *18,550	6850 14,650	*5300 *11,500	3600 7,750	*3950 *8,500	2450 5,250	*2400 *4,050	1600 3,450		*1400 *3,100	*1400 *3,100	8.17 26.80
-1.5 m -5.0 ft	kg lb	*4000 *8,950	*4000 *8,950	*8350 *18,700	6650 14,200	*5750 *12,450	3500 7,450	*4150 *9,000	2400 5,100			*1700 *3,750	*1700 3,500	7.55 24.74
-3.0 m -10.0 ft	kg lb	*6550 *14,700	*6550 *14,700	*8500 *18,350	6650 14,300	*5600 *12,000	3450 7,450	*3900 *8,300	2400 5,150			*2300 *5,050	2050 4,600	6.47 21.08
-4.5 m -15.0 ft	kg lb		*6750 *14,350	*6750 *14,350	*4350 *9,050	3600 7,750						*3700 *8,100	3150 7,100	4.95 15.93

* Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard SAE J1097 DEC2005. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

Reach Boom Lift Capacities



Load Point
Height



Load at
Maximum Reach



Load Radius
Over Front



Load Radius
Over Side

R3.0 STICK – 3.0 m (9'10")
BUCKET – 0.52 m³ (0.68 yd³)

UNDERCARRIAGE – Long
SHOES – 700 mm (28") triple grouser

BOOM – Reach 4.65 m (15.25 ft)
BLADE – Up

		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)				m ft
7.5 m 25.0 ft	kg lb											*1400 *3,100	*1400 *3,100	5.86 18.73
6.0 m 20.0 ft	kg lb							*2250 *4,450	*2250 *4,450			*1200 *2,650	*1200 *2,650	7.22 23.47
4.5 m 15.0 ft	kg lb							*2600 *5,750	2450 5,200			*1150 *2,500	*1150 *2,500	8.00 26.14
3.0 m 10.0 ft	kg lb					*3300 *7,150	*3300 *7,150	*2950 *6,450	2350 5,000	*1850 1500		*1150 *2,550	*1150 *2,550	8.38 27.47
1.5 m 5.0 ft	kg lb			*6750 *14,500	6550 14,350	*4400 *9,500	3550 7,550	3400 7,300	2250 4,750	*1850 *4,750	1500 3,200	*1250 *2,750	1250 2,700	8.43 27.67
Ground Line	kg lb			*8200 *18,550	6100 13,050	5200 11,500	3300 7,050	3300 7,050	2100 4,500	2300 *4,050	1450 3,100	*1400 *3,100	1300 2,800	8.17 26.80
-1.5 m -5.0 ft	kg lb	*4000 *8,950	*4000 *8,950	*8350 *18,700	5900 12,650	5050 10,850	3150 6,750	3200 6,850	2050 4,400			*1700 *3,750	1450 3,200	7.55 24.74
-3.0 m -10.0 ft	kg lb	*6550 *14,700	*6550 *14,700	*8500 *18,350	5950 12,700	5050 10,800	3150 6,700	3200 6,900	2050 4,400			*2300 *5,050	1900 4,150	6.47 21.08
-4.5 m -15.0 ft	kg lb			*6750 *14,350	6150 13,150	*4350 *9,050	3250 7,000					*3700 *8,100	2850 6,450	4.95 15.93

* Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard SAE J1097 DEC2005. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface.

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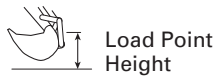
		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)				m ft
7.5 m 25.0 ft	kg lb											*1400 *3,100	*1400 *3,100	5.86 18.73
6.0 m 20.0 ft	kg lb							*2250 *4,450	*2250 *4,450			*1200 *2,650	*1200 *2,650	7.22 23.47
4.5 m 15.0 ft	kg lb							*2600 *5,750	2400 5,100			*1150 *2,500	*1150 *2,500	8.00 26.14
3.0 m 10.0 ft	kg lb					*3300 *7,150	*3300 *7,150	*2950 *6,450	2300 4,950	*1850 1500		*1150 *2,550	*1150 *2,550	8.38 27.47
1.5 m 5.0 ft	kg lb			*6750 *14,500	6550 14,100	*4400 *9,500	3450 7,400	3350 7,150	2200 4,650	2300 *4,750	1500 3,150	*1250 *2,750	1200 2,600	8.43 27.67
Ground Line	kg lb			*8200 *18,550	5950 12,800	5100 10,950	3200 6,900	3200 6,900	2050 4,400	2250 *4,050	1450 3,050	*1400 *3,100	1250 2,700	8.17 26.80
-1.5 m -5.0 ft	kg lb	*4000 *8,950	*4000 *8,950	*8350 *18,700	5800 12,400	4950 10,600	3100 6,600	3150 6,700	2000 4,300			*1700 *3,750	1400 3,100	7.55 24.74
-3.0 m -10.0 ft	kg lb	*6550 *14,700	*6550 *14,700	*8500 *18,350	5800 12,450	4950 10,600	3050 6,600	3150 6,750	2000 4,300			*2300 *5,050	1850 4,100	6.47 21.08
-4.5 m -15.0 ft	kg lb			*6750 *14,350	6000 12,900	*4350 *9,050	3200 6,850					*3700 *8,100	2800 6,300	4.95 15.93

* Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard SAE J1097 DEC2005. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

312D/312D L Hydraulic Excavator Specifications

Reach Boom Lift Capacities



Load Point Height



Load at Maximum Reach



Load Radius Over Front

















Load Radius Over Side

R2.8 STICK – 2.8 m (9'2")
BUCKET – 0.52 m³ (0.68 yd³)

UNDERCARRIAGE – Long
SHOES – 700 mm (28") triple grouser

BOOM – Reach 4.65 m (15.25 ft)
BLADE – Down















	1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)				m ft
													
7.5 m 25.0 ft	kg lb											*1500 *1500	5.55
6.0 m 20.0 ft	kg lb						*2050 *2050					*1300 *2,900	6.99 22.71
4.5 m 15.0 ft	kg lb						*2750 *6,050	2650 5,850				*1250 *2,750	7.79 25.48
3.0 m 10.0 ft	kg lb				*3500 *7,550	*3500 *7,550	*3100 *6,750	2650 5,700				*1300 *2,800	8.19 26.84
1.5 m 5.0 ft	kg lb		*7100 *15,300	*7100 *15,300	*4550 *9,850	4000 8,600	*3600 *7,750	2550 5,450	*2100	1750		*1350 *3,000	8.24 27.05
Ground Line	kg lb		*7750 *18,000	7150 15,300	*5450 *11,750	3800 8,100	*4000 *8,700	2450 5,200				*1550 *3,350	7.97 26.16
-1.5 m -5.0 ft	kg lb	*4150 *9,300	*4150 *9,300	*8250 *18,500	7000 14,950	*5800 *12,550	3650 7,850	*4200 *9,050	2400 5,100			*1850 *4,100	7.34 24.02
-3.0 m -10.0 ft	kg lb	*6750 *14,900	*6750 *14,900	*8350 *18,050	7050 15,100	*5500 *11,850	3650 7,850	*3800	2400			*2550 *5,600	6.21 20.21
-4.5 m -15.0 ft	kg lb		*6400 *13,500	*6400 *13,500	*4000	3800						*3750 *8,300	4.64 14.90

* Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard SAE J1097 DEC2005. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface.

R2.8 STICK – 2.8 m (9'2")
BUCKET – 0.52 m³ (0.68 yd³)

UNDERCARRIAGE – Long
SHOES – 600 mm (24") triple grouser

BOOM – Reach 4.65 m (15.25 ft)
BLADE – Down

	1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)				m ft
													
7.5 m 25.0 ft	kg lb											*1500 *1500	5.55
6.0 m 20.0 ft	kg lb						*2050 *2050					*1300 *2,900	6.99 22.71
4.5 m 15.0 ft	kg lb						*2750 *6,050	2650 5,600				*1250 *2,750	7.79 25.48
3.0 m 10.0 ft	kg lb				*3500 *7,550	*3500 *7,550	*3100 *6,750	2550 5,450				*1300 *2,800	8.19 26.84
1.5 m 5.0 ft	kg lb		*7100 *15,300	*7100 *15,300	*4550 *9,850	3850 8,250	*3600 *7,750	2450 5,200	*2100	1650		*1350 *3,000	8.24 27.05
Ground Line	kg lb		*7750 *18,000	6800 14,600	*5450 *11,750	3600 7,750	*4000 *8,700	2350 5,000				*1550 *3,350	7.97 26.16
-1.5 m -5.0 ft	kg lb	*4150 *9,300	*4150 *9,300	*8250 *18,500	6650 14,250	*5800 *12,550	3500 7,500	*4200 *9,050	2250 4,850			*1850 *4,100	7.34 24.02
-3.0 m -10.0 ft	kg lb	*6750 *14,900	*6750 *14,900	*8350 *18,050	6700 14,400	*5500 *11,850	3500 7,500	*3800	2300			*2550 *5,600	6.21 20.21
-4.5 m -15.0 ft	kg lb		*6400 *13,500	*6400 *13,500	*4000	3650						*3750 *8,300	4.64 14.90

* Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard SAE J1097 DEC2005. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

Reach Boom Lift Capacities



Load Point Height



Load at Maximum Reach



Load Radius Over Front














Load Radius Over Side

R2.8 STICK – 2.8 m (9'2")
BUCKET – 0.52 m³ (0.68 yd³)

UNDERCARRIAGE – Long
SHOES – 700 mm (28") triple grouser

BOOM – Reach 4.65 m (15.25 ft)
BLADE – Up












		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)				m ft
														
7.5 m 25.0 ft	kg lb											*1500	*1500	5.55
6.0 m 20.0 ft	kg lb							*2050	*2050			*1300	*1300	6.99 22.71
4.5 m 15.0 ft	kg lb							*2750	2400			*1250	*1250	7.79 25.48
3.0 m 10.0 ft	kg lb					*3500	*3500	*3100	2350			*1300	*1300	8.19 26.84
1.5 m 5.0 ft	kg lb			*7100	6600	*4550	3500	3400	2250	*2100	1500	*1350	1300	8.24 27.05
Ground Line	kg lb			*7750	6050	5200	3300	3300	2100			*1550	1350	7.97 26.16
-1.5 m -5.0 ft	kg lb	*4150	*4150	*8250	5900	5050	3150	3200	2050			*1850	1550	7.34 24.02
-3.0 m -10.0 ft	kg lb	*6750	*6750	*8350	5950	5050	6150	3250	2100			*2550	2050	6.21 20.21
-4.5 m -15.0 ft	kg lb			*6400	6200	*4000	3300					*3750	3150	4.64 14.90

* Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard SAE J1097 DEC2005. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface.

R2.8 STICK – 2.8 m (9'2")
BUCKET – 0.52 m³ (0.68 yd³)

UNDERCARRIAGE – Long
SHOES – 600 mm (24") triple grouser

BOOM – Reach 4.65 m (15.25 ft)
BLADE – Up

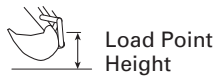
		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)				m ft
														
7.5 m 25.0 ft	kg lb											*1500	*1500	5.55
6.0 m 20.0 ft	kg lb							*2050	*2050			*1300	*1300	6.99 22.71
4.5 m 15.0 ft	kg lb							*2750	2350			*1250	*1250	7.79 25.48
3.0 m 10.0 ft	kg lb					*3500	*3500	*3100	2300			*1300	*1300	8.19 26.84
1.5 m 5.0 ft	kg lb			*7100	6450	*4550	3450	3350	2200	*2100	1500	*1350	1250	8.24 27.05
Ground Line	kg lb			*7750	5950	5100	3200	3200	2100			*1550	1300	7.97 26.16
-1.5 m -5.0 ft	kg lb	*4150	*4150	*8250	5800	4950	3100	3150	2000			*1850	1500	7.34 24.02
-3.0 m -10.0 ft	kg lb	*6750	*6750	*8350	5850	4950	3100	3150	2050			*2550	2000	6.21 20.21
-4.5 m -15.0 ft	kg lb			*6400	6100	*4000	3250					*3750	3100	4.64 14.90

* Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard SAE J1097 DEC2005. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

312D/312D L Hydraulic Excavator Specifications

Reach Boom Lift Capacities



Load Point Height



Load at Maximum Reach



Load Radius Over Front
















Load Radius Over Side

R3.0 STICK – 3.0 m (9'10")
BUCKET – 0.52 m³ (0.68 yd³)

UNDERCARRIAGE – Long
SHOES – 700 mm (28") triple grouser

BOOM – Reach
BLADE – None














		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)				m ft
														
7.5 m 25.0 ft	kg lb											*1400 *3,100	*1400 *3,100	5.86 18.73
6.0 m 20.0 ft	kg lb							*2250 *4,450	*2250 *4,450			*1200 *2,650	*1200 *2,650	7.22 23.47
4.5 m 15.0 ft	kg lb							*2600 *5,750	2400 5,100			*1150 *2,500	*1150 *2,500	8.00 26.14
3.0 m 10.0 ft	kg lb					*3300 *7,150	*3300 *7,150	*2950 *6,450	2300 4,950	*1850 1500		*1150 *2,550	*1150 *2,550	8.38 27.47
1.5 m 5.0 ft	kg lb			*6750 *14,500	6550 14,100	*4400 *9,500	3450 7,450	*3500 *7,550	2200 4,700	2450 *4,750	1500 3,150	*1250 *2,750	1200 2,650	8.43 27.67
Ground Line	kg lb			*8200 *18,550	6000 12,800	*5300 *11,500	3200 6,900	3400 7,300	2050 4,450	2400 *4,050	1450 3,050	*1400 *3,100	1250 2,700	8.17 26.80
-1.5 m -5.0 ft	kg lb	*4000 *8,950	*4000 *8,950	*8350 *18,700	5800 12,400	5250 11,250	3100 6,600	3350 7,150	2000 4,300			*1700 *3,750	1400 3,100	7.55 24.74
-3.0 m -10.0 ft	kg lb	*6550 *14,700	*6550 *14,700	*8500 *18,350	5800 12,450	5200 11,200	3050 6,600	3350 7,150	2000 4,300			*2300 *5,050	1850 4,100	6.47 21.08
-4.5 m -15.0 ft	kg lb			*6750 *14,350	6000 12,950	*4350 *9,050	3200 6,850					*3700 *8,100	2800 6,300	4.95 15.93

* Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard SAE J1097 DEC2005. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface.

R3.0 STICK – 3.0 m (9'10")
BUCKET – 0.52 m³ (0.68 yd³)

UNDERCARRIAGE – Long
SHOES – 600 mm (24") triple grouser

BOOM – Reach
BLADE – None

		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)				m ft
														
7.5 m 25.0 ft	kg lb											*1400 *3,100	*1400 *3,100	5.86 18.73
6.0 m 20.0 ft	kg lb							*2250 *4,450	*2250 *4,450			*1200 *2,650	*1200 *2,650	7.22 23.47
4.5 m 15.0 ft	kg lb							*2600 *5,750	2250 4,800			*1150 *2,500	*1150 *2,500	8.00 26.14
3.0 m 10.0 ft	kg lb					*3300 *7,150	*3300 *7,150	*2950 *6,450	2200 4,650			*1150 *2,550	1150 2,550	8.38 27.47
1.5 m 5.0 ft	kg lb			*6750 *14,500	6200 13,350	*4400 *9,500	3300 7,050	3350 7,150	2050 4,400	*1850 1400		*1250 *2,750	1100 2,450	8.43 27.67
Ground Line	kg lb			*8200 *18,550	5650 12,100	5100 10,950	3050 6,500	3200 6,900	1950 4,150	2300 *4,750	1400 2,900	*1400 *3,100	1150 2,500	8.17 26.80
-1.5 m -5.0 ft	kg lb	*4000 *8,950	*4000 *8,950	*8350 *18,700	5450 11,700	4950 10,650	2900 6,200	3150 6,750	1850 4,000	2250 *4,050	1350 2,850	*1700 *3,750	1300 2,900	7.55 24.74
-3.0 m -10.0 ft	kg lb	*6550 *14,700	*6550 *14,700	*8500 *18,350	5500 11,750	4950 10,600	2900 6,200	3150 6,750	1900 4,000			*2300 *5,050	1700 3,800	6.47 21.08
-4.5 m -15.0 ft	kg lb			*6750 *14,350	5700 12,200	*4350 *9,050	3000 6,450					*3700 *8,100	2600 5,950	4.95 15.93

* Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard SAE J1097 DEC2005. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

312D/312D L Standard Equipment

Standard equipment may vary. Consult your Caterpillar dealer for details.

Alternator, 50 amp	• Filter/fluid change information	Mirrors (frame and cab)
Automatic engine speed control	• Level check for hydraulic oil, engine oil and coolant	Power Train
Bolt-on Falling Object Guard System (FOGS) capability	• Warning messages	• Cat® C4.2 engine with ACERT™ Technology
Cab	Light, interior	• 24-volt electric starter
• AM/FM radio, 24-volt	Literature holder	• Air intake heater
• Ashtray with cigar lighter	Openable front windshield	• Water separator
• Coat hook	Openable skylight with sun shade	Radial seal air filter
• Beverage holder	Storage compartment	Undercarriage
• Economy mode	Travel control pedals with removable hand levers	• Idler section track guiding guards
• Horn	Door locks and cap locks with one-key security system	• Center section track guiding guards (for 312D L)
Language display monitor (full graphic/full color display)	Light, storage box mounted (1)	• Track-type undercarriage with grease lubricated seals
• Clock		

312D/312D L Optional Equipment

Optional equipment may vary. Consult your Caterpillar dealer for details.

AccuGrade™ Basic, Laser and GPS ready	E-Ceiling and cab avoidance	Secondary exit, rear window
Air prefilter	Fine swing control	Stick and boom configurations
Auxiliary hydraulics	Front windshield guard	• 3.0 m (9'10") stick
Auxiliary hydraulic lines from booms and sticks	Hand control pattern changer	• 2.8 m (9'2") stick
Boom lowering and overload warning control device	Heavy-duty bottom guard	• 2.5 m (8'2") stick
Bucket linkage	High ambient cooling system	Sun visor
Cab mounted working lights	Power supply 7A-12V	Swivel guard
Cab mounted working lights with time delay function	Pull down sunscreen	Vandalism protection
Cold weather start	Rain protector	Water level indicator for water separator
	Right side boom lights	
	Side steel bumper	

312D/312D L Hydraulic Excavator

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AEHQ5949 (02-2008)

Replaces AEHQ5551

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