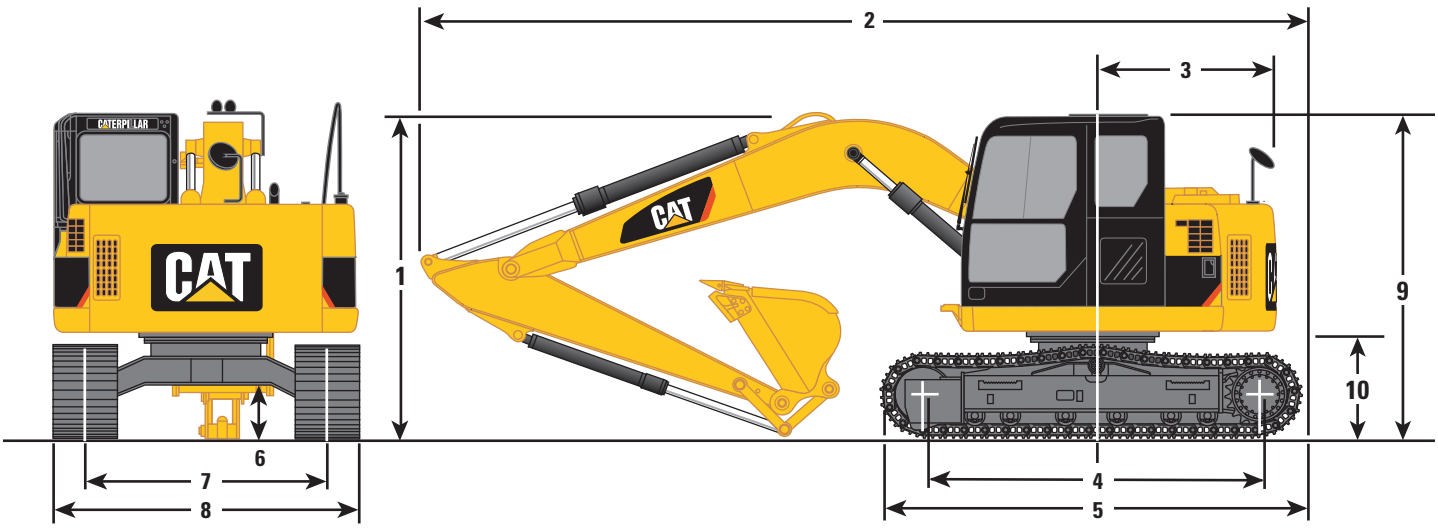
314D LCR Hydraulic Excavator

Dimensions

All dimensions are approximate.



	Boom Options	Power Offset	VA Boom	Reach	Reach	Reach
	Stick Options	**2.1 m**	**2.25 m**	**2.5 m**	**2.8 m**	**3.0 m**
1	Shipping Height	2800 mm	2693 mm	2910 mm	3030 mm	2910 mm
2	Shipping Length	7560 mm	7492 mm	7270 mm	7390 mm	7410 mm
3	Tail Swing Radius (with standard counterweight)	1480 mm	1480 mm	1480 mm	1480 mm	1480 mm
4	Length to Center of Rollers					
	314D LCR	3040 mm	3040 mm	3040 mm	3040 mm	3040 mm
5	Track Length					
	314D LCR	3750 mm	3750 mm	3750 mm	3750 mm	3750 mm
6	Ground Clearance	430 mm	430 mm	430 mm	430 mm	430 mm
7	Track Gauge					
	314D LCR	1990 mm	1990 mm	1990 mm	1990 mm	1990 mm
8	Transport Width	500 mm shoes	500 mm shoes	500 mm Shoes	600 mm Shoes	700 mm Shoes
	314D LCR	2490 mm	2490 mm	2490 mm	2590 mm	2690 mm
9	Cab Height	2730 mm	2730 mm	2730 mm	2730 mm	2730 mm
10	Counterweight Clearance	895 mm	895 mm	895 mm	895 mm	895 mm

Operating Weights (with standard counterweight)

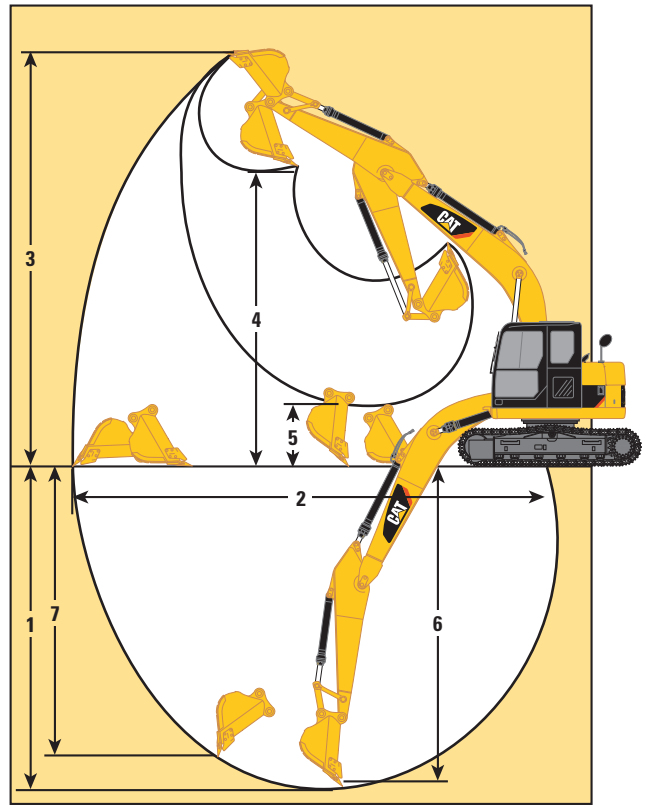
Caterpillar designed and built track-type undercarriage.

	Operating Weight				
Track Width	**2.1 m Stick**	**2.25 m Stick**	**2.5 m Stick**	**2.8 m Stick**	**3.0 m Stick**
314D LCR					
500 mm triple grouser	–	–	14 240 kg	14 240 kg	14 240 kg
600 mm triple grouser	–	–	14 440 kg	14 540 kg	14 540 kg
700 mm triple grouser	–	–	14 740 kg	14 740 kg	14 740 kg
500 mm triple grouser with blade	15 380 kg	15 380 kg	15 040 kg	15 040 kg	15 040 kg
600 mm triple grouser with blade	15 680 kg	15 600 kg	15 340 kg	15 340 kg	15 340 kg
700 mm triple grouser with blade	15 880 kg	15 800 kg	15 540 kg	15 540 kg	15 540 kg
	0.40 m^3 bucket	0.40 m^3 bucket	0.52 m^3 bucket	0.40 m^3 bucket	0.40 m^3 bucket

314D LCR Hydraulic Excavator

Working Ranges

All dimensions are approximate.



	Boom	Reach 4.65 m	Reach 4.65 m	Reach 4.65 m
	Stick	**2.5 m***	**2.8 m***	**3.0 m***
	Bucket	**0.52 m^3**	**0.40 m^3**	**0.40 m^3**
1	Maximum Digging Depth	5440 mm	5740 mm	5940 mm
2	Maximum Reach at Ground Level	8180 mm	8440 mm	8630 mm
3	Maximum Cutting Height	9300 mm	9470 mm	9630 mm
4	Maximum Loading Height	6870 mm	7040 mm	7200 mm
5	Minimum Loading Height	2510 mm	2250 mm	2060 mm
6	Maximum Depth Cut for 2440 m Level Bottom	5240 mm	5550 mm	5760 mm
7	Maximum Vertical Wall Digging Depth	4910 mm	5080 mm	5280 mm
	Minimum Front Swing Radius	1980 mm	2160 mm	2230 mm
	Stick Digging Force (SAE)	64 kN	60 kN	57 kN
	Bucket Digging Force (SAE)	85 kN	85 kN	85 kN

* Measurements shown are for machines equipped with the 0.52 m^3 buckets.

Buckets

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

		Recommended Maximum Material Density		
Width mm	Capacity m^3	2.5 m Stick kg/m^3	2.8 m Stick kg/m^3	3.0 m Stick kg/m^3
598	0.30	1800	1800	1800
748	0.40	1800	1800	1800
903	0.52	1800	1800	1500
1055	0.63	1500	1200	1200
1206	0.74	1200	1200	900

Material Densities

Material	kg/m^3*	Material	kg/m^3*
Clay, dry	1480	Gravel, pit run	1930
Clay, wet	1660	Rock/dirt, 50%	1720
Earth, dry	1510	Sand, dry	1420
Earth, wet	1600	Sand, wet	1840
Loam	1250	Sand and Clay	1600
Gravel, dry	1510	Stone, crushed	1600
Gravel, wet	2020	Top soil	950

* kilograms per loose cubic meter

For densities of other materials see Caterpillar Performance Handbook.

Undercarriage

Caterpillar designed and built track-type undercarriage.

Track Width	Ground Pressure
500 mm triple grouser	0.42 bar
600 mm triple grouser	0.36 bar
700 mm triple grouser	0.31 bar

With standard counterweight, 0.4 m^3 bucket.

Track Width	Ground Pressure
500 mm triple grouser	0.44 bar
600 mm triple grouser	0.37 bar
700 mm triple grouser	0.32 bar

With optional counterweight, 0.4 m^3 bucket.

314D LCR Hydraulic Excavator

314D LCR Reach Boom Lift Capacities

 Load Point Height

 Load at Maximum Reach

 Load Radius Over Front

 Load Radius Over Side

STICK – 3.0 m
BUCKET – 0.40 m³

UNDERCARRIAGE – Long
SHOES – 600 mm triple grouser

BOOM – 4.65 m
BLADE – None

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
														m
7.5 m	kg					*1500	*1500					*1300	*1300	5.24
6.0 m	kg					*2400	*2400	*2050	*2050			*1500	*1500	6.51
4.5 m	kg					*3100	*3100	*2900	2200			*1450	*1450	7.30
3.0 m	kg			*4700	*4700	*3900	3400	*3200	2100	*2300	1400	*1450	1300	7.77
1.5 m	kg					*4800	3100	3300	1950	2300	1350	*1550	1200	7.95
0 m	kg			*5300	*5300	5050	2850	3200	1850	2250	1300	*1700	1200	7.80
–1.5 m	kg	*3850	*3850	*7150	5300	4950	2800	3100	1800			*2000	1300	7.32
–3.0 m	kg	*5850	*5850	*5600	5400	*4100	2800	*2800	1800			*2350	1650	6.42
–4.5 m	kg					*1950	*1950					*1600	*1600	4.86

STICK – 2.8 m
BUCKET – 0.40 m³

UNDERCARRIAGE – Long
SHOES – 600 mm triple grouser

BOOM – 4.65 m
BLADE – None

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
														m
7.5 m	kg					*1450	*1450					*1300	*1300	4.94
6.0 m	kg					*2450	*2450	*2050	*2050			*1650	*1650	6.28
4.5 m	kg					*3300	*3300	*3000	2200			*1600	1550	7.10
3.0 m	kg			*5850	*5850	*4050	3350	*3300	2100			*1600	1350	7.58
1.5 m	kg					*4950	3100	3300	1950	2300	1350	*1700	1250	7.76
0 m	kg			*5000	*5000	5050	2850	3200	1850			*1850	1250	7.61
–1.5 m	kg	*3900	*3900	*6350	5350	4950	2800	3150	1800			*2200	1400	7.12
–3.0 m	kg			*5250	*5250	*3950	2800	*2600	1850			*2400	1750	6.18
–4.5 m	kg													

STICK – 2.5 m
BUCKET – 0.52 m³

UNDERCARRIAGE – Long
SHOES – 600 mm triple grouser

BOOM – 4.65 m
BLADE – None

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
														m
7.5 m	kg											*1200	*1200	4.53
6.0 m	kg					*2400	*2400					*1700	*1700	5.97
4.5 m	kg					*3500	*3500	*3150	2150			*1600	*1600	6.82
3.0 m	kg			*6450	6350	*4250	3300	*3400	2050			*1650	1400	7.32
1.5 m	kg					*5050	3050	3300	1950			*1700	1300	7.51
0 m	kg					5000	2850	3200	1850			*1900	1300	7.35
–1.5 m	kg	*3800	*3800	*5500	5400	*4850	2800	3150	1800			*2250	1500	6.84
–3.0 m	kg			*4650	*4650	*3600	2850					*2300	1950	5.85
–4.5 m	kg													

*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 ISO 10567:2007. 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.

314D LCR Hydraulic Excavator

314D LCR Reach Boom Lift Capacities

 Load Point Height

 Load at Maximum Reach

 Load Radius Over Front

 Load Radius Over Side

STICK – 3.0 m
BUCKET – 0.40 m³

UNDERCARRIAGE – Long
SHOES – 600 mm triple grouser

BOOM – 4.65 m
BLADE – Blade up

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
														m
7.5 m	kg					*1500	*1500					*1300	*1300	5.24
6.0 m	kg					*2400	*2400	*2050	*2050			*1500	*1500	6.51
4.5 m	kg					*3100	*3100	*2900	2350			*1450	*1450	7.30
3.0 m	kg			*4700	*4700	*3900	3600	*3200	2250	*2300	1500	*1450	1400	7.77
1.5 m	kg					*4800	3300	3300	2100	2300	1450	*1550	1300	7.95
0 m	kg			*5300	*5300	5050	3050	3200	2000	2250	1400	*1700	1300	7.80
–1.5 m	kg	*3850	*3850	*7150	5650	4950	2950	3100	1900			*2000	1400	7.32
–3.0 m	kg	*5850	*5850	*5600	*5600	*4100	3000	*2800	1950			*2350	1750	6.42
–4.5 m	kg					*1950	*1950					*1600	*1600	4.86

STICK – 3.0 m
BUCKET – 0.40 m³

UNDERCARRIAGE – Long
SHOES – 600 mm triple grouser

BOOM – 4.65 m
BLADE – Blade down

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
														m
7.5 m	kg					*1500	*1500					*1300	*1300	5.24
6.0 m	kg					*2400	*2400	*2050	*2050			*1500	*1500	6.51
4.5 m	kg					*3100	*3100	*2900	2600			*1450	*1450	7.30
3.0 m	kg			*4700	*4700	*3900	*3900	*3200	2500	*2300	1700	*1450	*1450	7.77
1.5 m	kg					*4800	3700	*3550	2350	*2900	1650	*1550	1450	7.95
0 m	kg			*5300	*5300	*5250	3500	*3800	2250	*2850	1600	*1700	1500	7.80
–1.5 m	kg	*3850	*3850	*7150	6550	*5050	3400	*3600	2200			*2000	1600	7.32
–3.0 m	kg	*5850	*5850	*5600	*5600	*4100	3400	*2800	2200			*2350	2000	6.42
–4.5 m	kg					*1950	*1950					*1600	*1600	4.86

STICK – 2.8 m
BUCKET – 0.40 m³

UNDERCARRIAGE – Long
SHOES – 600 mm triple grouser

BOOM – 4.65 m
BLADE – Blade up

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
														m
7.5 m	kg					*1450	*1450					*1300	*1300	4.94
6.0 m	kg					*2450	*2450	*2050	*2050			*1650	*1650	6.28
4.5 m	kg					*3300	*3300	*3000	2300			*1600	*1600	7.10
3.0 m	kg			*5850	*5850	*4050	3550	*3300	2200			*1600	1450	7.58
1.5 m	kg					*4950	3250	3300	2100	2300	1450	*1700	1350	7.76
0 m	kg			*5000	*5000	5050	3050	3200	2000			*1850	1350	7.61
–1.5 m	kg	*3900	*3900	*6350	5700	4950	3000	3150	1950			*2200	1500	7.12
–3.0 m	kg			*5250	*5250	*3950	3000	*2600	1950			*2400	1900	6.18
–4.5 m	kg													

*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 ISO 10567:2007. 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.

314D LCR Hydraulic Excavator

314D LCR Reach Boom Lift Capacities

 Load Point Height

 Load at Maximum Reach

 Load Radius Over Front

 Load Radius Over Side

STICK – 2.8 m
BUCKET – 0.40 m³

UNDERCARRIAGE – Long
SHOES – 600 mm triple grouser

BOOM – 4.65 m
BLADE – Blade down

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
														m
7.5 m	kg					*1450	*1450					*1300	*1300	4.94
6.0 m	kg					*2450	*2450	*2050	*2050			*1650	*1650	6.28
4.5 m	kg					*3300	*3300	*3000	2600			*1600	*1600	7.10
3.0 m	kg			*5850	*5850	*4050	4000	*3300	2500			*1600	*1600	7.58
1.5 m	kg					*4950	3700	*3650	2350	*2750	1650	*1700	1550	7.76
0 m	kg			*5000	*5000	*5300	3500	*3800	2250			*1850	1550	7.61
–1.5 m	kg	*3900	*3900	*6350	*6350	*4950	3400	*3550	2200			*2200	1700	7.12
–3.0 m	kg			*5250	*5250	*3950	3450	*2600	2250			*2400	2150	6.18
–4.5 m	kg													

STICK – 2.5 m
BUCKET – 0.52 m³

UNDERCARRIAGE – Long
SHOES – 600 mm triple grouser

BOOM – 4.65 m
BLADE – Blade up

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
														m
7.5 m	kg											*1200	*1200	4.53
6.0 m	kg					*2400	*2400					*1700	*1700	5.97
4.5 m	kg					*3500	*3500	*3150	2250			*1600	*1600	6.82
3.0 m	kg			*6450	*6450	*4250	3500	*3400	2200			*1650	1500	7.32
1.5 m	kg					*5050	3200	3300	2050			*1700	1400	7.51
0 m	kg					5000	3050	3200	1950			*1900	1450	7.35
–1.5 m	kg	*3800	*3800	*5500	*5500	*4850	3000	3150	1950			*2250	1600	6.84
–3.0 m	kg			*4650	*4650	*3600	3050					*2300	2050	5.85
–4.5 m	kg													

STICK – 2.5 m
BUCKET – 0.52 m³

UNDERCARRIAGE – Long
SHOES – 600 mm triple grouser

BOOM – 4.65 m
BLADE – Blade down

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
														m
7.5 m	kg											*1200	*1200	4.53
6.0 m	kg					*2400	*2400					*1700	*1700	5.97
4.5 m	kg					*3500	*3500	*3150	2550			*1600	*1600	6.82
3.0 m	kg			*6450	*6450	*4250	3950	*3400	2450			*1650	*1650	7.32
1.5 m	kg					*5050	3650	*3700	2350			*1700	1600	7.51
0 m	kg					*5300	3450	*3800	2250			*1900	1650	7.35
–1.5 m	kg	*3800	*3800	*5500	*5500	*4850	3400	*3450	2200			*2250	1800	6.84
–3.0 m	kg			*4650	*4650	*3600	3450					*2300	*2300	5.85
–4.5 m	kg													

*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 ISO 10567:2007. 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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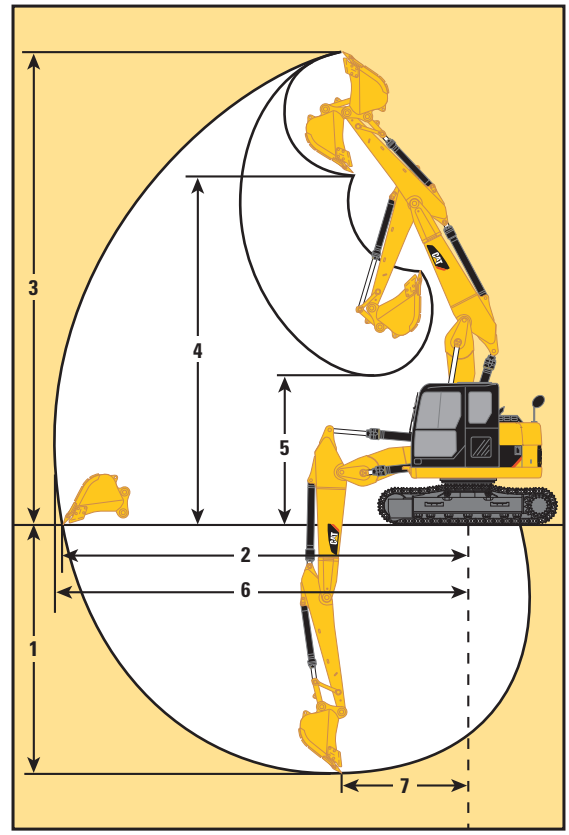
314D LCR Hydraulic Excavator

Working Ranges

All dimensions are approximate.



	Boom	Variable Angle
	Stick	**R2.3.312 (2250 mm)***
	Bucket	**0.40 m³**
1	Maximum Digging Depth	4840 mm
2	Maximum Radius at Ground Line	8030 mm
3	Maximum Bucket Teeth Height	9150 mm
4	Minimum Clearance of Bucket Teeth, with Bucket Pivot at Maximum Height	6750 mm
5	Minimum Clearance of Bucket Teeth at Maximum Boom Height	2890 mm
6	Maximum Radius of Working Equipment	8170 mm
7	Radius of Maximum Digging Depth	2490 mm
	Radius of Bucket Teeth at Maximum Height	2530 mm
	Minimum Working Equipment Radius with Boom at Maximum Height and Stick Fully Retracted	2210 mm
	Boom Cylinder Pivot to Axis of Rotation	599 mm
	Boom Pivot to Axis of Rotation	145 mm
	Boom Pivot to Ground Line	1516.2 mm
	Boom Cylinder Pivot to Ground Line	1181.2 mm
	2250 mm Stick Digging Force (SAE)	58.5 kN
	Bucket Digging Force (SAE)	79.8 kN

* Measurements shown are for machines equipped with the 0.4 m³ buckets.

314D LCR Hydraulic Excavator

314D LCR VA Boom Lift Capacities

 Load Point Height

 Load at Maximum Reach

 Load Radius Over Front

 Load Radius Over Side

STICK – VAB 2.25 m
BUCKET – 0.40 m³

UNDERCARRIAGE – Long
SHOES – 600 mm triple grouser

BOOM – Variable Angle
BLADE – Blade up

		1.5 m		3.0 m		4.5 m		6.0 m				
												m
7.5 m	kg									*1150	*1150	3.88
6.0 m	kg					*2650	*2650			*1800	*1800	5.51
4.5 m	kg			*4150	*4150	*3800	3600	*3350	2200	*1950	1900	6.48
3.0 m	kg					*4500	3350	3300	2100	*1950	1600	7.02
1.5 m	kg					5050	3100	3200	2000	*2050	1450	7.17
0 m	kg					4850	2950	3100	1900	*2300	1500	6.98
–1.5 m	kg			*5750	5650	*4550	2900	3050	1900	*2750	1700	6.42
–3.0 m	kg			*3750	*3750	*3050	3000			*2200	*2200	5.34

STICK – VAB 2.25 m
BUCKET – 0.40 m³

UNDERCARRIAGE – Long
SHOES – 600 mm triple grouser

BOOM – Variable Angle
BLADE – Blade down

		1.5 m		3.0 m		4.5 m		6.0 m				
												m
7.5 m	kg									*1150	*1150	3.88
6.0 m	kg					*2650	*2650			*1800	*1800	5.51
4.5 m	kg			*4150	*4150	*3800	3650	*3350	2250	*1950	1900	6.48
3.0 m	kg					*4500	3400	3350	2150	*1950	1600	7.02
1.5 m	kg					5150	3150	3250	2050	*2050	1500	7.17
0 m	kg					4950	3000	3150	1950	*2300	1550	6.98
–1.5 m	kg			*5750	*5750	*4550	3000	3150	1950	*2750	1750	6.42
–3.0 m	kg			*3750	*3750	*3050	3050			*2200	*2200	5.34

*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 ISO 10567:2007. 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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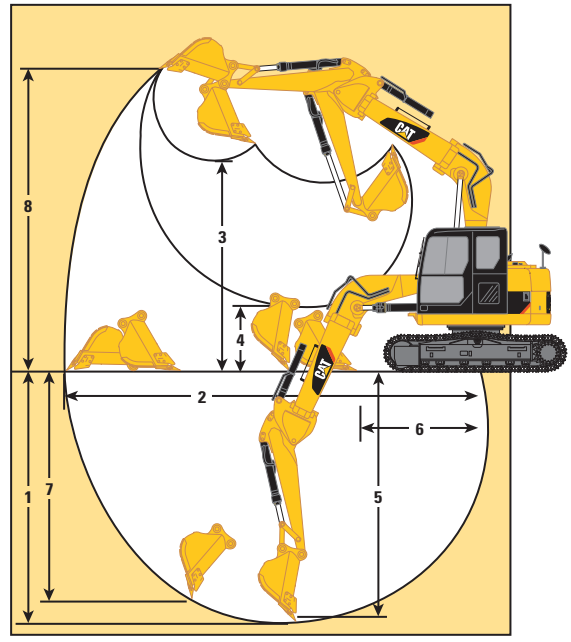
314D LCR Hydraulic Excavator

Working Ranges

All dimensions are approximate.



	Boom	Power Offset 4.37 m
	Stick	**2.1 m***
	Bucket	**0.40 m³**
1	Maximum Digging Depth	4840 mm
2	Maximum Reach at Ground Level	7230 mm
3	Maximum Loading Height	5340 mm
4	Minimum Loading Height	2330 mm
5	Maximum Depth Cut for 2440 m Level Bottom	4470 mm
6	Minimum Front Swing Radius	2060 mm
7	Maximum Vertical Wall Digging Depth	3560 mm
8	Maximum Cutting Height	7640 mm
	Left Hand Offset (from boom center)	1100 mm
	Right Hand Offset (from boom center)	1150 mm
	Stick Digging Force (SAE)	61 kN
	Bucket Digging Force (SAE)	78 kN

* Measurements shown are for machines equipped with the 0.40 m³ buckets.

314D LCR Hydraulic Excavator

314D LCR Power Offset Boom Lift Capacities

 Load Point Height

 Load at Maximum Reach

 Load Radius Over Front

 Load Radius Over Side

STICK – POB 2.1 m
BUCKET – 0.40 m³

UNDERCARRIAGE – Long
SHOES – 600 mm triple grouser

BOOM – Offset-Boom (Center)
BLADE – Blade up

		1.5 m		3.0 m		4.5 m		6.0 m				
												m
6.0 m	kg					*2000	*2000			*1900	*1900	4.64
4.5 m	kg					*3600	*3600			*1900	*1900	5.85
3.0 m	kg			*6300	*6300	*4200	3450	*3350	2100	*2000	1850	6.44
1.5 m	kg					*4800	3100	3200	1950	*2250	1650	6.61
0 m	kg			*5100	*5100	4850	2850	3050	1850	*2700	1650	6.41
–1.5 m	kg			*5650	5350	*4250	2800			*3050	1900	5.78
–3.0 m	kg			*3450	*3450					*2550	*2550	4.56

STICK – POB 2.1 m
BUCKET – 0.40 m³

UNDERCARRIAGE – Long
SHOES – 600 mm triple grouser

BOOM – Offset-Boom (Center)
BLADE – Blade down

		1.5 m		3.0 m		4.5 m		6.0 m				
												m
6.0 m	kg					*2000	*2000			*1900	*1900	4.64
4.5 m	kg					*3600	*3600			*1900	*1900	5.85
3.0 m	kg			*6300	*6300	*4200	3900	*3350	2400	*2000	*2000	6.44
1.5 m	kg					*4800	3500	*3500	2250	*2250	1900	6.61
0 m	kg			*5100	*5100	*4850	3250	*3450	2100	*2700	1900	6.41
–1.5 m	kg			*5650	*5650	*4250	3200			*3050	2200	5.78
–3.0 m	kg			*3450	*3450					*2550	*2550	4.56

*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 ISO 10567:2007. 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.