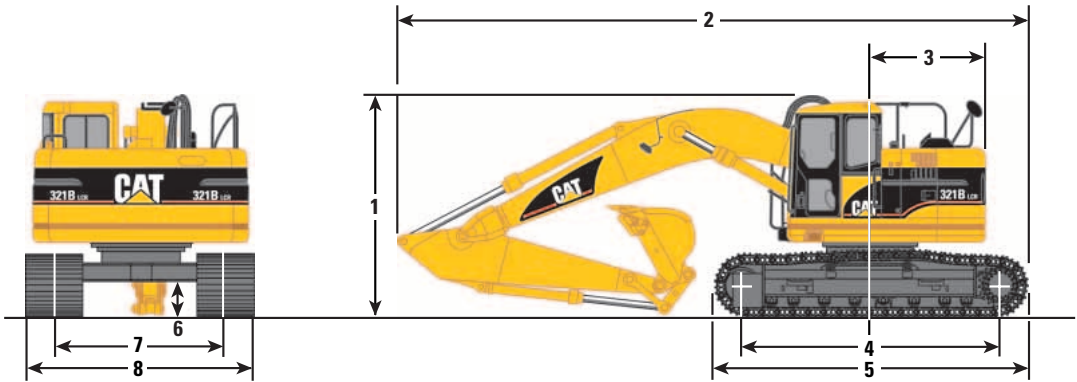


321B LCR Hydraulic Excavator

Dimensions

All dimensions are approximate.



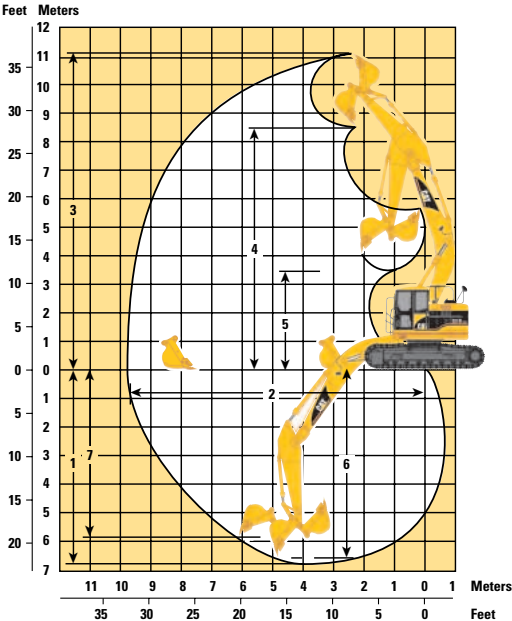
Boom Options

Reach —
2.9 m (9'6")
R2.9B

Stick Options

1	Shipping height	3100 mm (10'2")
2	Shipping length	8800 mm (28'10")
3	Tail swing radius	1600 mm (5'3")
	Minimum front swing radius	1850 mm (6'1")
4	Length to centers of rollers	
	Long undercarriage	3650 mm (12'0")
5	Track length	
	Long undercarriage	4455 mm (14'7")
6	Ground clearance (including lug)	475 mm (1'7")
7	Track gauge	
	Long undercarriage	2380 mm (7'10")
8	Transport width — Shoe: 800 mm (32")	
	Long undercarriage	3180 mm (10'5")

Working Ranges



Reach Boom R2.9B	
Stick Length	2900 mm (9'6")
Bucket (General Excavation)	0.9 m³ (1.2 yd³)
1 Maximum Digging Depth	6800 mm (22'4")
2 Maximum Reach on Ground	9600 mm (31'6")
3 Maximum Cutting Height	11 300 mm (37'1")
4 Maximum Loading Height	8510 mm (27'11")
5 Minimum Loading Height	3390 mm (11'1")
6 Max. Depth Cut for 8'	6580 mm (21'7")
7 Maximum Vertical Wall Digging Depth	5830 mm (19'2")

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321B LCR Bucket Options

	Capacity*		Width		Tip Radius		Weight (w/o tips)		Teeth	Tip Weight	Total Weight	Reach
	m³	yd³	mm	in	mm	in	kg	lb	Qty	lb	lb	R2.9B
B Buckets												
General Purpose Buckets (GP)	0.70	0.88	775	30	1626	64.0	665	1463	4	16	1527	●
	0.90	1.12	932	36	1626	64.0	741	1630	5	16	1710	●
	1.10	1.50	1082	42	1626	64.0	777	1710	5	16	1790	◐
	1.30	1.75	1230	48	1626	64.0	907	1995	6	16	2091	○
Heavy Duty Buckets (HD)	0.45	0.62	625	24	1563	61.5	639	1405	3	16	1453	●
	0.60	0.75	775	30	1563	61.5	691	1520	4	16	1584	●
	0.80	1.00	932	36	1563	61.5	765	1683	5	16	1763	●
	1.00	1.25	1082	42	1563	61.5	814	1790	5	16	1870	●
	1.10	1.50	1230	48	1563	61.5	942	2072	6	16	2168	◐
Heavy Duty Rock Buckets (HDR)	0.45	0.62	625	24	1563	61.5	727	1600	3	16	1648	●
	0.60	0.75	775	30	1563	61.5	845	1860	4	16	1924	●
	0.80	1.00	932	36	1563	61.5	864	1900	5	16	1980	●
	1.00	1.25	1082	42	1563	61.5	912	2006	5	16	2086	◐
Ditch Cleaning Buckets (DC)	0.90	1.12	1422	56	1143	45.0	707	1555	0		1555	●
	1.1	1.50	1727	68	1143	45.0	786	1730	0		1730	◐

Assumptions for maximum material density rating:

- 1. Front linkage fully extended at ground line
- 2. Bucket curled
- 3. 100% bucket fill factor

* Capacities based on SAE J296. Some calculations of capacity fall on borderlines.

Rounding may allow two buckets to have the same English rating, but different metric ratings.

- 2100 kg/m³ (3500 lbs/yd³)
- ◐ 1800 kg/m³ (3000 lbs/yd³)
- 1500 kg/m³ (2500 lbs/yd³)
- 1200 kg/m³ (2000 lbs/yd³)

Bucket and Stick Forces

Bucket and Stick force are calculated with different bucket than those calculated for working range.

General Excavation Bucket

Bucket Digging Force (ISO)	148 kN (33,300 lb)
Stick Digging Force (ISO)	103 kN (23,200 lb)
Bucket Digging Force (SAE)	131 kN (29,400 lb)
Stick Digging Force (SAE)	100 kN (22,500 lb)

HD Bucket

Bucket Digging Force (ISO)	145 kN (32,600 lb)
Stick Digging Force (ISO)	100 kN (22,500 lb)
Bucket Digging Force (SAE)	128 kN (28,800 lb)
Stick Digging Force (SAE)	97 kN (21,800 lb)

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Reach Boom Lift Capacities



Load Point
Height



Load Radius
Over Front



Load Radius
Over Side



Load at
Maximum Reach

R2.9B STICK – 2900 mm (9'6")

BUCKET – No bucket

UNDERCARRIAGE – Long

SHOES – 800 mm (32") triple grouser

BOOM – Reach

		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
9.0 m 30.0 ft	kg lb											*4400 *9950	*4400 *9950	4.47 13.88
7.5 m 25.0 ft	kg lb					*5600 *12,400	*5600 *12,400	*4600 *8650	*4600 *8650			*3700 *8150	*3700 *8150	6.26 20.17
6.0 m 20.0 ft	kg lb					*6000 *13,050	*6000 *13,050	*5650 *12,350	4850 10,350			*3450 *7550	*3450 *7550	7.33 23.87
4.5 m 15.0 ft	kg lb			*9550 *20,300	*9550 *20,300	*7200 *15,600	*7200 *15,600	*6150 *13,400	4650 10,000	5350 *10,850	3250 7000	*3400 *7450	2950 6450	7.98 26.12
3.0 m 10.0 ft	kg lb					*8900 *19,200	6700 14,450	*6900 *15,000	4400 9450	5200 11,200	3150 6750	*3500 *7600	2700 5900	8.32 27.27
1.5 m 5.0 ft	kg lb					*10 300 *22,200	6200 13,350	7100 15,250	4150 8950	5100 10,950	3050 6500	*3700 *8100	2600 5650	8.37 27.48
Ground Line	kg lb			*6450 *14,800	*6450 *14,800	*10 800 23,350	5950 12,750	6900 14,850	4000 8600	5000 10,750	2950 6350	*4100 *9050	2650 5800	8.15 26.75
-1.5 m -5.0 ft	kg lb	*6700 *14,950	*6700 *14,950	*10 850 *24,600	*10 850 24,100	*10 400 *22,550	5850 12,600	6800 14,650	3900 8450	4950 10,700	2950 6300	4850 10,700	2850 6300	7.64 25.01
-3.0 m -10.0 ft	kg lb	*11 300 *25,350	*11 300 *25,350	*12 500 *27,050	11 450 24,500	*9200 *19,800	5900 12,700	*6850 *14,600	3950 8500			*5700 *12,500	3400 7550	6.75 22.03
-4.5 m -15.0 ft	kg lb			*8950 *19,000	*8950 *19,000	*6600 *13,900	6150 13,250					*5200 *11,350	4900 11,050	5.31 17.14

* Limited by hydraulic capacity rather than tipping load. The above loads are in compliance with SAE hydraulic excavator lift capacity rating standard J1097. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. Weight of all lifting accessories must be deducted from the above lifting capacities.

Note – For lifting capacity including the bucket, subtract the total weight of the bucket (including tips, sidecutters) from the respective values above.

321B LCR Hydraulic Excavator

Standard Equipment

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

Electrical

- Alternator, 50A
- CAT Batteries
- Horn, Signaling/Warning

Operator Environment

- Cab with sliding door
 - Laminated upper front windshield
 - Tempered other windows
- Retractable Front Windshield
- Static seat with two way adjustable (front-rear) and seat belt
- Stationary skylight, polycarbonate, with removable sunshade
- Joystick Type Controls
- Windshield Wiper with Washer, Upper
- Air Conditioner
- Monitor with Gauges
- Light, Interior
- Coat Hook
- Ashtray
- Literature Holder
- Hydraulic Neutralizer Lever for All Controls
- Travel Control Levers
- Floor Mat
- AM/FM Radio

Power Train

- Cat 3066 T Diesel engine
- 24-volt Electric Starting
- Muffler
- Two-speed Travel with Manual shift
 - One Touch Low Idle
- Water Separator in Fuel Line
- Power Mode Selector
- Work Mode Selector
- Straight Line Travel

Undercarriage

- Hydraulic Track Adjusters
- Idler Track Guiding Guards
- Track-type Undercarriage with Grease Lubricated Seals
- 800 mm (32") Triple Grouser Shoes

Other Standard Equipment

- Automatic Swing Brake
- Auxiliary Hydraulic Valve
- Bucket Linkage, B-Family
- Door Locks and Cap Locks with One-key Security System
- Mirrors

Optional Equipment

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

Mandatory in Certain Countries

- Alarm, Travel

Electrical

- Lights, Right Side Boom

Power Train

- Cold Weather Starting Aid
 - Two 900 cca batteries instead of STD two 750 cca batteries
 - For Ambient Temperatures above -25° C.

Undercarriage

- Track, 600 mm (24") Triple Grouser Shoes —
 - Replaces 800 mm (32") T.G. shoes
- Track, 700 mm (28") Triple Grouser Shoes —
 - Replaces 800 mm (32") T.G. shoes

Other Optional Equipment

Auxiliary Hydraulic Arrangement Options

Single Function

- Uni-directional/one way action for single speed hammers and/or other single function attachments
- Includes overload relief valve and 3rd pedal for control

Double Function

- Bi-directional/two way action for double acting attachments such as tilt buckets or thumbs.
- Includes two overload relief valves and 3rd pedal for control.

Combined Function

- Includes three overload relief valves, two-way control pedal, manual valves to allow changing the circuit between single and double function, and manual valve to select one or two pump flow. (2 pump flow capability).

For Single and Double Function Attachments