315D L Hydraulic Excavators

CATERPILLAR®



Cat® C4.2 ACERT™ Engine		
Gross Power	91 kW	122 hp
Net Power (SAE J1349)	86 kW	115 hp
Weights		
Operating Weight – Long Undercarriage	17 450 ka	38,469 lb

315D L Features

Comfortable Operator Station

Spacious and quiet, this world class ROPS cab lets the operator focus on performance and production.

Industry Leading Performance

The Cat® C4.2 ACERT™ engine delivers more power for increased digging ability, lifting performance and overall productivity.

Maximum Versatility

Easily configure a large variety of work tools with the Cat Tool Control System.

Proven Reliability

Caterpillar® design and manufacturing techniques provide maximum uptime with outstanding durability and service life.

Low Emissions Engine

Move more material using less fuel with the Cat C4.2 ACERT engine. This meets Tier 3 and EU Stage IIIA emissions while providing additional power and performance.



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Increased horsepower, improved controllability and a comfortable, redesigned operator station help make the Cat® 315D L Hydraulic Excavator an industry-leading performer. Easy to operate with unmatched versatility, the 315D L will help increase productivity and lower operating costs.

Operator Station

New levels of comfort, visibility and operation.

Cab

Experience a spacious, quiet and comfortable operator station. The cab is pressurized to 50 Pa to reduce the amount of dust that enters the cab, keeping the operator comfortable the entire shift, while assuring high productivity during long work days.

- The comfortable seat adjusts to suit the operator's size and weight. Available as an option is the air suspension seat.
- Standard air conditioning with automatic climate control adjusts temperature and airflow.
- Low effort joystick controls are designed to match the operator's natural wrist and arm position. Joysticks can be operated with arms on the armrest. The horizontal and vertical strokes are designed to reduce fatigue.
- ROPS cab air filter accessible at ground level.

Prestart Check and Monitor Display

Prior to starting the machine, the system checks for low engine oil, hydraulic oil and engine coolant fluid levels and warns the operator through a color Liquid Crystal Display (LCD) monitor. The LCD monitor displays vital operating and performance information in 27 different languages, for operator convenience.

ROPS Certified Operator Station

The 315D L features a new ROPS (Roll Over Protective Structure) compliant cab structure as standard with 10% improved visibility and head room space over previous non-ROPS cab.

This design also allows for a Falling Object Guard System (FOGS) or front windshield guard to be bolted directly to the cab, either at the factory or in the field, enabling the machine to meet all job site requirements.

The ROPS cab is attached to the frame with viscous rubber cab mounts that dampen vibrations and sound levels to enhance operator comfort.

Machine Security System

An optional Machine Security System (MSS) utilizes a programmable key, deterring theft, vandalism and unauthorized usage. MSS uses electronically coded keys selected by the customer to limit usage by individuals or time parameters.









Engine

Clean, quiet operation with superior power.

The Cat C4.2 engine with ACERT technology optimizes performance and meets U.S. EPA Tier 3 and EU Stage IIIA regulations. In conjunction with integrated electronics, ACERT technology reduces emissions during the combustion process by using advanced technology in the air and fuel systems. The Cat C4.2 engine has five percent more power than the former engine, allowing for more hydraulic pressure and increased productivity.

Automatic Engine Control and Fuel Delivery

A three-stage control with one-touch command maximizes fuel efficiency and reduces sound levels. Fuel delivery is managed by the ADEMTM A4 Engine Controller for the best performance per liter (gallon) of fuel used. Flexible fuel mapping allows the engine to respond quickly to varying application needs.

Electronic controls govern the fuel injection system. Multiple injection fuel delivery involves a high level of precision and by precisely shaping the combustion cycle, lowers combustion chamber temperatures, generates fewer emissions and optimizes fuel combustion. This means more work output for your fuel cost.

Crankshaft and Pistons

A forged, one-piece, induction hardened crankshaft enhances balance, decreases vibration and improves abrasion resistance. Heat resistant, aluminum alloy pistons have a short compression height for greater efficiency and longer life.

Economy Mode

Available as a standard feature, economy mode allows you to balance the demands of performance and fuel economy while maintaining the breakout forces and lift capacity enjoyed at standard power.

Hydraulics

High efficiency and performance with low effort and precise control.



Outstanding Performance

With two percent more hydraulic pressure for additional lift and breakout forces, the 315D L hydraulic system is designed for high efficiency and performance. Auxiliary hydraulic and electrical lines are routed to the boom foot making installation of hydraulic circuits much easier. The new compact design utilizes shorter tubes and lines, reducing friction and pressure drops, resulting in a more efficient use of power.

- Hydraulic snubbers at the rod end of the boom cylinders and both ends of the stick cylinders cushion shock, reduce sound and increase cylinder life.
- Flow is reduced to a minimum when controls are in neutral to reduce fuel consumption and extend component life.
- Hydraulic Cross-Sensing System uses two hydraulic pumps to 100 percent of engine power under all operating conditions, improving productivity with faster implement speeds and quicker, stronger pivot turns.
- Improved balance and lift capacity with six percent increase in additional counterweight.

Boom and Stick Regeneration Circuit

The boom and stick regeneration circuit saves energy during boom-down and stick-in operation, increasing efficiency and lowering operating cost.

Easy Operation

Work mode and power mode switches have been eliminated making full power available at all times. Operators do not need to learn different modes, an automatic boom and swing priority function automatically selects the best mode based on joystick movement.

Undercarriage and Structures

Excellent stability and maneuverability.



Caterpillar uses advanced engineering and software to analyze all structures, creating a durable, reliable machine for the toughest applications. More than 70 percent of the structural welds are robotic and achieve additional penetration over manual welds. These structural components and undercarriage are the backbone of the machine's durability.

Carbody Design

X-shaped, box section carbody provides excellent resistance to torsional bending. Robot-welded track roller frames are pressformed, pentagonal units that deliver exceptional strength and service life. Integral to the track roller frame are the standard idler and center guards, which help maintain track alignment when traveling or working on slopes.

Grease Lubricated Track

Grease lubricated track seals protect the track link and deliver long track link pin and bushing inner wear life.

Travel Motors

Travel motors with automatic speed selection let the $315D\ L$ automatically change up and down from high and low speeds in a smooth, controlled manner.

Front Linkage

Performance, reliability and durability.

Built for performance and long service life, Cat booms and sticks are welded, box-section structures with thick multiplate high strength steel fabrications. The 315D L offers one boom with four different stick options.

Intermediate Stick

A new 2.9 m (9'6") stick is available to provide long reach and increased digging and lifting capability. When equipped with a coupler or large bucket the new stick will increase overall performance and productivity.

Boom

The boom is designed for maximum digging capability and is robotic welded to ensure consistent quality. This allows excellent all-around versatility and a large working envelope.



Versatility

Do more with Cat Work Tools.

Work Tools

Caterpillar offers a variety of work tools, including Hammers, Thumbs, Grapples, Multi-processors, Shears, Pulverizers, Vibratory Compactors and Rippers to fit your application needs. Additionally a wide range of buckets are available to optimize machine performance.

Auxiliary hydraulic and electrical lines are routed to the boom foot for easier installation of auxiliary hydraulic circuits therefore reducing time, parts and cost required to add a work tool.

Hydraulic Pin Grabber Coupler

An optional hydraulic pin grabber is available to pick up a wide variety of work tools without having to leave the cab, thus maximizing productivity.

Cat K Series™ Tooth System

The Cat K SeriesTM Tooth System provides more wear material, a longer tip and adapter life, a one-piece vertical drive retainer, reliable tip retention and easy installation and removal, improving performance and penetration.

Enhanced Systems

Work Tool functionality has increased the versatility of the machine with the enhancement of the following:

- A Combined System enables one or two pump flow in one or two directions. With this system only one hydraulic circuit is required.
- The Tool Control system stores up to 10 different tool settings through the in-cab display monitor. Cat work tools are selectable with preset flows and pressures.
- Offered as an option, the Priority Flow system provides one-way hydraulic work tools, such as a mower, priority for hydraulic flow.









Serviceability

Simplified service and maintenance saves time and money.

Designed with the service technician in mind, many service locations are at ground level so critical maintenance can be done quickly and efficiently. Longer maintenance intervals reduce cost and increase machine availability.

- Oil level gauge, oil filter, fuel filter and priming pump are on the right side of the upper structure for easy maintenance.
- An optional electronic fuel water sensor is available to alert the operator when the water level is high.
- Product Link assists with fleet management by tracking hours, location and product health.
- New anti-skid plates over the top of the storage box and upper structure help prevent slipping and mud from falling into the upper structure.

Sampling Ports

Equipped with S•O•SSM sampling ports and test ports for hydraulics, engine oil and coolant for quick diagnostics. A test connection for the Cat Electronic Technician (Cat ET) service tool is now located in the cab.

Air Cleaner

A double-layered filter core in the radial seal air filter gives more efficient filtration. A warning is displayed on the monitor when dust accumulates above a preset level. This filter is conveniently located in the compartment behind the cab. An optional pre-cleaner is also available to extend filter life and reduce maintenance costs.

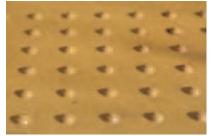
Capsule Filter

Capsule-type, hydraulic return filter is accessible from outside the tank and prevents contaminants from entering the system when changing the hydraulic oil.

Radiator Compartment

Horizontal air conditioner condenser swings out for easy cleaning. Removable screens are located in front of the radiator and hydraulic cooler, reducing cleaning time and effort.







Technology Products

Advanced technologies improve productivity and simplify serviceability.



AccuGrade™ Systems

AccuGradeTM Grade Control Systems are easy to use and deliver a wide range of benefits to customers, including:

- Increased productivity
- Increased job-site safety
- Assistance with labor shortages
- Improved employee satisfaction and retention
- Increased equipment versatility
- Integration into Cat machines

AccuGrade Site Reference System

Advanced slope and elevation guidance simplifies excavation, improves accuracy, increases efficiency and lowers production costs.

AccuGrade Laser Reference System

This system builds on the Site Reference System by using laser receivers to carry benchmark information across a large job site.

AccuGrade GPS System

GPS satellites allow for precise digging and slope control in real-time for increased accuracy and productivity.



Customer Support

Unmatched support makes the difference.

Your Cat dealer is ready to assist you with your purchase decision and everything after.

- Make detailed comparisons of the machines you are considering before you buy with estimates of component life, preventive maintenance and the true cost of production.
- Customize the machine that is right for you using the Build and Quote applications on your dealer's website or www.cat.com.
- Get the latest training literature and trained staff.
- Repair option programs guarantee the cost of repairs up front.
- Nearly all parts are available at dealer parts counters.
- Financing packages are flexible to meet your needs.
- Your Cat dealer can evaluate the cost involved in repairing, rebuilding and replacing your machine, so you can make the right choice.

Engine		
Engine Model	Cat® C4.2 A	ACERT TM
Gross Power	91 kW	122 hp
Net Power	86 kW	115 hp
ISO 9249	86 kW	115 hp
Bore	102 mm	4.02 in
Stroke	130 mm	5.12 in
Displacement	4.25 L	259.3 in ³

- Net power advertised 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 315D L meets U.S. EPA Tier 3 and EU Stage IIIA Directive/97/68/EC emissions requirements.

Weights

Operating Weight – 17 450 kg 38,469 lb Long Undercarriage

• 3100 mm (10'2") stick and 600 mm (24") shoes.

Swing Mechanism

Swing Torque	43 400 N·m 32,010 lb ft
Swing Speed	10.2 rpm

Drive		
Maximum Drawbar Pull	157 kN	35,295 lb
Travel Speed	5.6 km/h	3.5 mph

Hydraulic Syst	em	
Main Implement System – Maximum Flow (2x)	150 L/min	39.6 gal/min
Maximum Pressure - Implements	35 000 kPa	5,076 psi
Maximum Pressure – Travel	35 000 kPa	5,076 psi
Maximum Pressure – Swing	22 550 kPa	3,271 psi
Pilot System – Maximum Flow	26.2 L/min	6.9 gal/min
Pilot System – Maximum Pressure	4120 kPa	598 psi
Boom Cylinder – Bore	110 mm	4.3 in
Boom Cylinder – Stroke	1193 mm	47 in
Stick Cylinder – Bore	120 mm	4.7 in
Stick Cylinder – Stroke	1331 mm	52.4 in
Bucket Cylinder – Bore	100 mm	3.9 in
Bucket Cylinder – Stroke	1048 mm	41 in

Service Refill Capacities				
Fuel Tank	300 L	79.3 gal		
Cooling System	22 L	5.8 gal		
Engine Oil	17.5 L	4.6 gal		
Swing Drive	3 L	0.8 gal		
Final Drive (Each)	5 L	1.3 gal		
Hydraulic System (Including Tank)	190 L	50.2 gal		
Hydraulic Tank	106 L	28 gal		

Standards	
Cab/ROPS	ISO 12117-2:2008
Cab/FOGS	SAE J1356 FEB88 ISO 10262
	130 10202

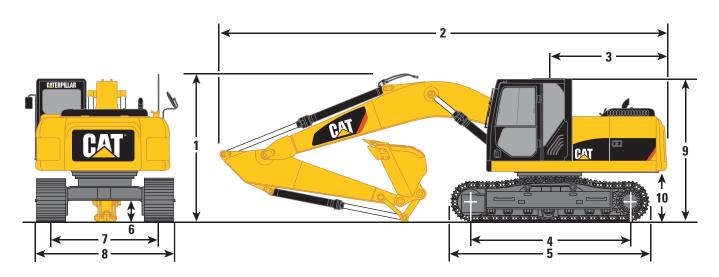
Sound Performance

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), 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.

Dimensions

All dimensions are approximate.



Boom Options	Reach 5.1 m (16'9")	Reach 5.1 m (16'9")	Reach 5.1 m (16'9")	Reach 5.1 m (16'9")
Stick Options	R2.25 m (7'5")	R2.6 m (8'6")	R2.9 m (9'6")	R3.1 m (10'2")
1 Shipping Height	2930 mm (9'6")	3030 mm (9'9")	3070 mm (10'1")	3360 mm (11'0")
2 Shipping Length	8520 mm (28'0")	8540 mm (28'0")	8560 mm (28'1")	8540 mm (28'0")
3 Tail Swing Radius	2500 mm (8'2")	2500 mm (8'2")	2500 mm (8'2")	2500 mm (8'2")
4 Length to Center of Idler and Sprocket	3170 mm (10'5")	3170 mm (10'5")	3170 mm (10'5")	3170 mm (10'5")
5 Track Length	3970 mm (13'0")	3970 mm (13'0")	3970 mm (13'0")	3970 mm (13'0")
6 Ground Clearance	460 mm (1'6")	460 mm (1'6")	460 mm (1'6")	460 mm (1'6")
7 Track Gauge	1990 mm (6'6")	1990 mm (6'6")	1990 mm (6'6")	1990 mm (6'6")
8 Transport Width				
500 mm (20") shoes (optional)	2490 mm (8'2")	2490 mm (8'2")	2490 mm (8'2")	2490 mm (8'2")
600 mm (24") shoes (standard)	2590 mm (8'6")	2590 mm (8'6")	2590 mm (8'6")	2590 mm (8'6")
700 mm (28") shoes (optional)	2690 mm (8'10")	2690 mm (8'10")	2690 mm (8'10")	2690 mm (8'10")
9 Cab Height	2870 mm (9'5")	2870 mm (9'5")	2870 mm (9'5")	2870 mm (9'5")
10 Counterweight Clearance	1030 mm (3'5")	1030 mm (3'5")	1030 mm (3'5")	1030 mm (3'5")

Undercarriage

Caterpillar designed and built track-type undercarriage.

Track Width	Ground Pressure			
	2.25 m (7'5") stick, STD CTWT	2.6 m (8'6") stick, STD CTWT	2.9 m (9'6") stick, STD CTWT	3.1 m (10'2") stick, STD CTWT
500 mm (20") triple grouser	48.5 kPa (7.0 psi)	48.4 kPa (7.0 psi)	48.2 kPa (7.0 psi)	48.2 kPa (7.0 psi)
600 mm (24") triple grouser	41.0 kPa (5.9 psi)	40.9 kPa (5.9 psi)	40.7 kPa (5.9 psi)	40.7 kPa (5.9 psi)
700 mm (28") triple grouser	35.6 kPa (5.2 psi)	35.5 kPa (5.1 psi)	35.4 kPa (5.1 psi)	35.4 kPa (5.1 psi)

Operating Weights

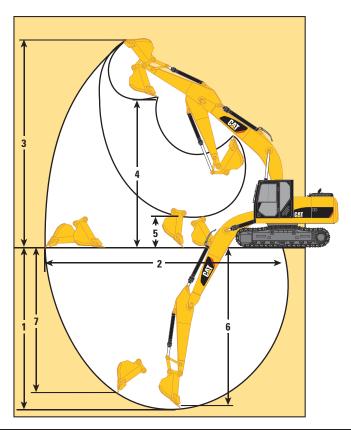
Caterpillar designed and built track-type undercarriage.

Track Width		Operatin	g Weight	
	2.25 m (7'5") stick*	2.6 m (8'6") stick*	2.9 m (9'6") stick	3.1 m (10'2") stick
500 mm (20")	17 100 kg	17 130 kg	17 200 kg	17 220 kg
triple grouser	(37,705 lb)	(37,771 lb)	(37,925 lb)	(37,969 lb)
600 mm (24")	17 330 kg	17 360 kg	17 420 kg	17 450 kg
triple grouser	(38,212 lb)	(38,278 lb)	(38,410 lb)	(38,476 lb)
700 mm (28") triple grouser	17 570 kg (38,741 lb)	17 610 kg (38,829 lb)	17 670 kg (38,962 lb)	17 700 kg (38,817 lb)

^{*} with SAE 0.61 m³ (0.80 yd³) and standard counterweight

Reach Excavator Working Ranges

Reach (R) boom configuration



tick Options	R2.25 m (7'5")	R2.6 m (8'6")	R2.9 m (9'6")	R3.1 m (10'2")
ucket – Long Fixed Undercarriage	0.61 m³ (0.8 yd³)	0.61 m³ (0.8 yd³)	0.61 m³ (0.8 yd³)	0.61 m³ (0.8 yd³)
Maximum Digging Depth	5720 mm (18'9")	6070 mm (19'11")	6370 mm (20'11")	6570 mm (21'7")
Maximum Reach at Ground Level	8430 mm (27'8")	8750 mm (28'8")	8960 mm (29'5")	9240 mm (30'3")
Maximum Cutting Height	8740 mm (28'8")	8920 mm (29'3")	8870 mm (29'1")	8970 mm (29'5")
Maximum Loading Height	6140 mm (20'2")	6310 mm (20'8")	6310 mm (20'8")	6600 mm (21'7")
Minimum Loading Height	2680 mm (8'10")	2330 mm (7'8")	2030 mm (6'8")	1840 mm (6'0")
Maximum Depth Cut for 2440 mm (8'0") Level Bottom	5470 mm (17'11")	5840 mm (19'2")	6130 mm (21'0")	6370 mm (20'9")
Maximum Vertical Wall Digging Depth	4920 mm (16'2")	5350 mm (17'7")	5360 mm (17'7")	5830 mm (19'1")
Bucket Digging Force (SAE)	100.2 kN (22,526 lb)	100.2 kN (22,526 lb)	100.2 kN (22,526 lb)	100.2 kN (22,526 lb)
(ISO)	114.5 kN (25,741 lb)	114.5 kN (25,741 lb)	114.5 kN (25,741 lb)	114.5 kN (25,741 lb)
Stick Digging Force (SAE) (ISO)	85.4 kN (19,199 lb) 88.7 kN (19,941 lb)	77.7 kN (17,468 lb) 80.4 kN (18,075 lb)	73 kN (16,411 lb) 75.4 kN (16,951 lb)	69.7 kN (15,669 lb) 71.9 kN (16,164 lb)

All measurements are approximate

Buckets

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

cavation Bud	ket								
Width		Capa	acity	Number	Weight v	with Teeth	Tip Radius		
mm	in	m³ .	yd³	of Teeth	kg	lb	mm .	in	
617	24	0.35	0.45	3	431	933	1350	53	
770	30	0.47	0.62	4	489	1,058	1350	53	
922	36	0.61	0.80	5	548	1,186	1350	53	
1074	42	0.74	1.02	5	593	1,286	1350	53	
1226	48	0.88	1.15	6	651	1.413	1350	53	

Wid	dth	Capa	acity	Short	Stick	Mediu	m Stick	Long Stick		
mm	in	m³ ·	yd³	kg/m³	lb/yd³	kg/m³	lb/yd³	kg/m³	lb/yd³	
610	24	0.33	0.43	1800	3,000	1800	3,000	1800	3,000	
760	30	0.46	0.60	1800	3,000	1800	3,000	1800	3,000	
910	36	0.59	0.78	1800	3,000	1800	3,000	1800	3,000	
1070	42	0.73	0.95	1800	3,000	1700	2,850	1400	2,350	
1220	48	0.86	1.13	1500	2,500	1300	2,150	1100	1,850	

Heavy Duty Roo	k Bucket							
Wie	Width		Capacity		Weight v	with Teeth	Tip Ra	adius
mm	in	m³	yd³	of Teeth	kg	lb	mm	in
619	24	0.35	0.45	3	518	1,080	1361	53
770	30	0.47	0.62	4	592	1,239	1361	53
924	36	0.61	0.80	5	666	1,402	1361	53
1076	42	0.74	1.02	5	722	1,528	1361	53
1228	48	0.88	1.15	6	796	1,689	1361	53

Wid	dth	Capacity		Short	Short Stick		m Stick	Long Stick		
mm	in	\mathbf{m}^3	yd³	kg/m³	lb/yd³	kg/m³	lb/yd³	kg/m³	lb/yd³	
620	24	0.33	0.43	1800	3,000	1800	3,000	1800	3,000	
770	30	0.46	0.60	1800	3,000	1800	3,000	1800	3,000	
930	36	0.59	0.78	1800	3,000	1800	3,000	1700	2,850	
1080	42	0.73	0.95	1700	2,850	1500	2,500	1200	2,000	
1230	48	0.86	1.13	1400	2,350	1200	2,000	1000	1,650	

laterial Densities					
Material	kg/m³	lb/yd³	Material	kg/m³	lb/yd³
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 and Clay	1600	2,700
Gravel, dry	1510	2,550	Stone, crushed	1600	2,700
Gravel, wet	2020	3,400	Top soil	950	1,600

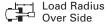
For densities of other materials see Caterpillar Performance Handbook.

Reach Boom Lift Capacities



Load Point Height







Load at Maximum Reach

STICK – 3.1 m (10'2") **BUCKET** – 0.61 m³ (0.80 yd³) UNDERCARRIAGE – Long SHOES – 600 mm (24") triple grouser

BOOM – 5.1 m (16'9") r COUNTERWEIGHT – 3.2 mt (7,055 lb)

			(= 0 f:)											
(数/		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (4.5 m (15.0 ft)		20.0 ft)	7.5 m (25.0 ft)			
														m ft
7.5 m 25.0 ft	kg Ib											*1550 *3,350	*1550 *3,350	5.94 19.12
6.0 m 20.0 ft	kg Ib							*3000 *6,150	*3000 *6,150			*1800 *3,900	*1800 *3,900	7.03 22.88
4.5 m 15.0 ft	kg Ib							*3350 *7,250	3150 6,700	*2400	2050	*1800 *3,950	*1800 *3,950	7.70 25.18
3.0 m 10.0 ft	kg Ib					*4950 *10,650	4750 10,150	*4000 *8,650	2950 6,350	3300 *7,050	2000 4,250	*1850 *4,050	1700 3,700	8.13 26.63
1.5 m 5.0 ft	kg Ib					*6600 *14,150	4300 9,250	4650 9,950	2750 5,900	3200 6,900	1900 4,050	*2000 *4,400	1600 3,500	8.24 27.02
Ground Line	kg Ib					7100 15,200	4050 8,650	4500 9,600	2600 5,600	3150 6,750	1800 3,900	*2300 *5,000	1600 3,550	8.05 26.40
–1.5 m –5.0 ft	kg Ib	*4350 *9,750	*4350 *9,750	*6850 *14,950	*6850 *14,950	7000 15,000	3950 8,500	4400 9,400	2550 5,450			*2800 *6,150	1800 3,900	7.54 24.69
−3.0 m −10.0 ft	kg Ib	*7550 *16,350	*7550 *16,350	*9350 *21,150	7800 16,650	7050 15,100	4000 8,550	4400 9,450	2550 5,500			3800 8,400	2200 4,900	6.64 21.65
−4.5 m −15.0 ft	kg Ib			*7450 *15,850	*7450 *15,850	*5350 *11,200	4150 8,950					*4500 *9,850	3450 7,800	5.11 16.45

^{*} 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.

STICK – 2.9 m (9'6") **BUCKET** – 0.61 m³ (0.80 yd³) **UNDERCARRIAGE** – Long **SHOES** – 600 mm (24") triple grouser

BOOM – 5.1 m (16'9") **COUNTERWEIGHT** – 3.2 mt (7,055 lb)

124		1.5 m	(5.0 ft)	3.0 m (10.0 ft)		4.5 m (4.5 m (15.0 ft)		20.0 ft)	7.5 m (25.0 ft)			
														m ft
7.5 m 25.0 ft	kg Ib											*1550 *3,250	*1550 *3,250	5.72 18.37
6.0 m 20.0 ft	kg lb							*2800 *5,700	*2800 *5,700			*1900 *4,150	*1900 *4,150	6.85 22.29
4.5 m 15.0 ft	kg lb							*3600 *7,800	3100 6,650			*1950 *4,250	*1950 *4,250	7.48 24.46
3.0 m 10.0 ft	kg lb					*5350 *11,500	4650 10,050	*4200 *9,150	2950 6,300	3300 *6,750	2000 4,250	*2000 *4,350	1800 3,950	7.91 25.94
1.5 m 5.0 ft	kg lb					*6950 *14,900	4250 9,200	4650 9,950	2750 5,950	3250 6,900	1900 4,050	*2100 *4,650	1700 3,700	8.03 26.34
Ground Line	kg lb					7100 15,250	4050 8,750	4500 9,650	2650 5,650	3150 6,800	1850 3,950	*2400 *5,250	1700 3,750	7.83 25.70
−1.5 m −5.0 ft	kg lb			*6850 *14,850	*6850 *14,850	7050 15,100	4000 8,600	4450 9,500	2600 5,550			*2900 *6,400	1900 4,200	7.31 23.94
−3.0 m −10.0 ft	kg Ib			*8800 *20,100	7900 16,950	*6900 *14,900	4050 8,700	4450 9,600	2600 5,600			*3950 *8,750	2400 5,350	6.37 20.77
−4.5 m −15.0 ft	kg Ib	•				*4700 *9,700	4250 9,200					*4350 *9,450	3950 9,000	4.75 15.22

^{*} 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.

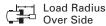
Always refer to the appropriate Operation and Maintenance Manual for specific product information.

Reach Boom Lift Capacities



Load Point Height







Load at Maximum Reach

STICK – 2.6 m (8'6") **BUCKET** – 0.61 m³ (0.80 yd³) UNDERCARRIAGE – Long SHOES – 600 mm (24") triple grouser **BOOM** – 5.1 m (16'9") **COUNTERWEIGHT** – 3.2 mt (7,055 lb)

18		1.5 m	(5.0 ft)	3.0 m (10.0 ft)	4.5 m (15.0 ft)	6.0 m (20.0 ft)			
		H										m ft
7.5 m 25.0 ft	kg Ib									*1450 *3,100	*1450 *3,100	5.22 16.66
6.0 m 20.0 ft	kg lb							*2500	*2500	*2050 *4,400	*2050 *4,400	6.44 20.94
4.5 m 15.0 ft	kg lb					*4200 *9,050	*4200 *9,050	*3800 *8,250	3000 6,450	*2250 *4,900	2150 4,800	7.14 23.31
3.0 m 10.0 ft	kg lb					*5700 *12,200	4550 9,750	*4400 *9,450	2850 6,100	*2300 *5,000	1850 4,100	7.59 24.89
1.5 m 5.0 ft	kg lb					*7150 *15,400	4150 8,950	4550 9,750	2700 5,750	*2450 *5,350	1750 3,800	7.71 25.30
Ground Line	kg lb					7050 15,100	4000 8,550	4450 9,500	2600 5,500	*2800 *6,100	1800 3,900	7.51 24.64
−1.5 m −5.0 ft	kg lb			*7900 *16,900	7850 16,800	7000 15,050	4000 8,500	4400 9,400	2550 5,450	*3400 *7,500	2000 4,450	6.96 22.79
−3.0 m −10.0 ft	kg lb			*8100 *18,650	7950 17,050	*6500 *14,000	4050 8,700			4500 10,000	2650 5,850	5.97 19.45
−4.5 m −15.0 ft	kg lb											

^{*} 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.

STICK – 2.25 m (7'5") **BUCKET** – 0.61 m³ (0.80 yd³) **UNDERCARRIAGE** – Long **SHOES** – 600 mm (24") triple grouser

BOOM – 5.1 m (16'9") **COUNTERWEIGHT** – 3.2 mt (7,055 lb)

18		1.5 m (5.0 ft)		3.0 m (3.0 m (10.0 ft)		4.5 m (15.0 ft)		20.0 ft)			
												m ft
7.5 m 25.0 ft	kg Ib									*1600 *7,700	*1600 *7,700	4.71 13.90
6.0 m 20.0 ft	kg Ib									*2200 *4,700	*2200 *4,700	6.06 19.69
4.5 m 15.0 ft	kg Ib					*4650 *10,050	*4650 *10,050	*4050 *8,900	2950 6,300	*2800 *6,150	2350 5,200	6.76 22.10
3.0 m 10.0 ft	kg Ib					*6200 *13,300	4350 9,400	*4600 *10,000	2800 6,000	*2850 *6,300	2000 4,400	7.23 23.68
1.5 m 5.0 ft	kg Ib					*7000 15,250	4050 8,700	4500 9,650	2650 5,650	*3100 *6,750	1900 4,150	7.34 24.09
Ground Line	kg Ib					*6050 14,950	3950 8,450	4400 9,400	2550 5,450	3350 7,400	1950 4,250	7.12 23.34
–1.5 m –5.0 ft	kg Ib		·	*18,400	16,950	7000 15,000	3950 8,500	4400 9,400	2550 5,450	3850 8,550	2250 4,950	6.52 21.33
−3.0 m −10.0 ft	kg Ib			*5450 *13,300	*5450 *13,300	*5900 *12,700	4100 8,750			*4650 *10,250	3050 6,850	5.44 17.69

^{*} 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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315D L Standard Equipment

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

Alternator, 50 amp

Automatic engine speed control

Automatic swing brake

Bolt-on Falling Object Guard System (FOGS) capability

Cab

- AM/FM radio, 24-volt
- Ashtray with cigar lighter
- Coat hook
- Drink holder
- Economy mode
- Horn
- ROPS Cab

Language display monitor (full graphic/full color display)

- Clock
- Filter/fluid change information
- Level check for hydraulic oil, engine oil and coolant
- Warning messages

Light, interior

Literature holder

Openable front windshield

Openable skylight with sunshade

Positive filtered ventilation

Storage compartment

Travel control pedals with removable

hand levers

Door locks and caps lock with one-key

security system

Light, storage box mounted (1)

Mirrors (frame and cab)

Power Train

- Cat® C4.2 engine with ACERT™ Technology
- 24-volt electric starter
- Air intake heater
- Water separator

Radial seal air filter, double element

Reverse swing damping valve

Undercarriage

- Hydraulic track adjusters
- Idler and center section track guiding guards
- Track-type undercarriage with grease lubricated seals

Water level indicator with water separator

315D L Optional Equipment

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

AccuGradeTM Basic, Laser and GPS ready

Air prefilter

Auxiliary hydraulics

Auxiliary hydraulic lines from booms

and sticks

Boom lowering and overload warning

control device.

Bucket linkage

Cab mounted working lights

Cab mounted working lights with time

delay function

Cold weather start

Electric refueling pump with automatic shutoff

Fine swing control

Front windshield guard

Hand control pattern changer

Heavy-duty bottom guard

High ambient cooling system

Power supply 12V-7A

Pull down sunscreen

Rain protector

Right-side boom lights

Secondary exit, rear window

Steel bumper

Stick and boom combinations

- 3.1 m (10 ft 2 in) stick
- 2.9 m (9 ft 6 in) stick
- 2.6 m (8 ft 6 in) stick

• 2.25 m (7 ft 5 in) stick

Straight travel pedal

Sun visor

Swivel guard

Vandalism protection

315D L Hydraulic Excavator

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

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Materials and specifications are subject to change without notice. Featured machines may include additional equipment. See your Caterpillar dealer for available options.

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