323D2 L



Hydraulic Excavator 2017



Engine			weights
Engine Model	Cat® C7.1 A	ACERT™	Minimum Ope
Engine Power (ISO 14396)	118 kW	158 hp	Maximum Ope
Net Power (SAF 11349/ISO 9249)	116 k\/\/	156 hn	

110.g		
Minimum Operating Weight	22 280 kg	49,120 lb
Maximum Operating Weight	22 800 kg	50,270 lb

323D2 L Differentiating Features

Built to Last

Caterpillar design and manufacturing techniques assure you get outstanding durability and service life in the toughest applications.

Fuel Efficient

A powerful Cat C7.1 ACERT engine meets EU Stage II equivalent emission standards. Combined with a new highly efficient hydraulic system, the engine delivers excellent performance with lower fuel consumption compared to its predecessor 323D L.

Easy to Operate

The new cab provides you with a comfortable working environment for maximum production and efficiency. The new monitor features a 40% larger and four times increased resolution LCD display, compared to 323D L monitor.

Reduced Service and Maintenance Costs

Routine service and maintenance can be completed quickly and easily to help you reduce ownership costs. Convenient access points, extended service intervals, and advanced filtration help keep downtime to a minimum.

Complete Customer Support

Your Cat dealer offers a wide range of services that can be set up under a customer support agreement when you purchase your equipment.

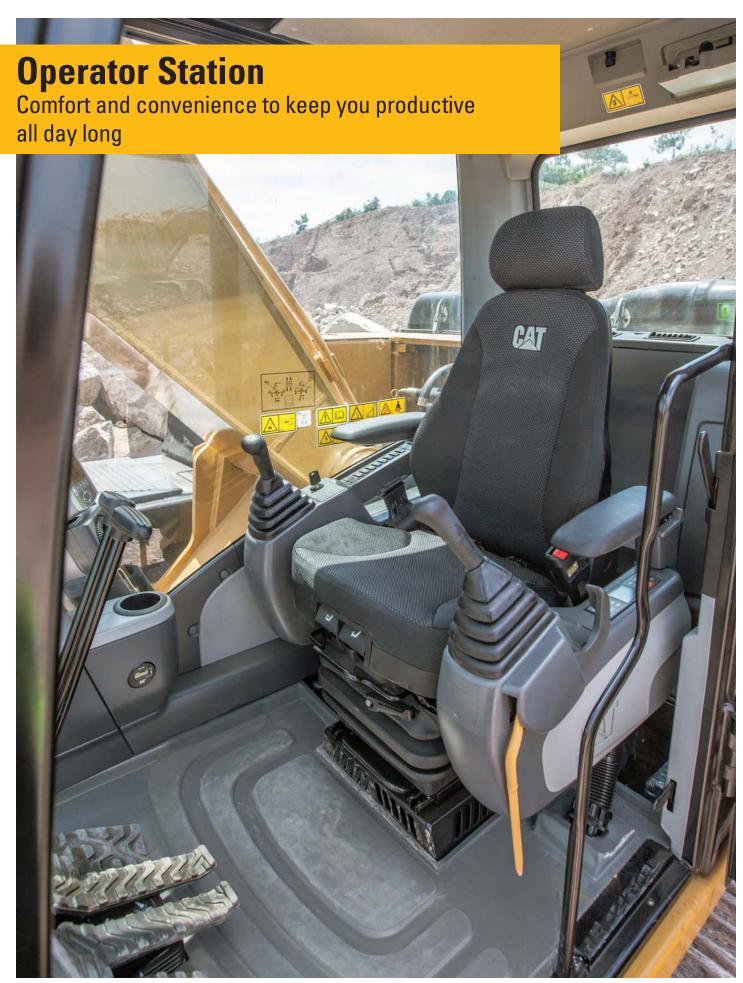
Contents

Uperator Station	4
Engine	6
Hydraulics	
Undercarriage and Structures	8
Front Linkage	9
Attachments	10
Cat Connect Technologies	12
Serviceability	13
Safety	14
Complete Customer Care	15
Specifications	16
Standard Equipment	31
Optional Equipment	32
Notes	33





The 323D L Series 2 incorporates innovations to improve your job site efficiency through low owning and operating costs, excellent performance, and high versatility.



Operator Station

The ergonomically designed operator station is spacious, quiet, and comfortable, assuring high productivity during a long work day. All control switches are located on the right-hand and left-hand side consoles for more convenient access.

Monitor

The LCD monitor is equipped with warning lamp and buzzer for critical engine oil pressure, coolant temperature and oil temperature. Filters and fluid change intervals are available in the main menu. It also projects the image from the optional rearview camera, further enhancing your job site safety and productivity.

Compared to 323D L D Series monitor, the monitor on 323D2 L has a high resolution display. Information language capability is 42 languages to support today's diverse workforce.

Seat

The air suspension seats provide a variety of adjustments to accommodate a wide range of operators. All seats include a reclining back, upper and lower seat slide adjustments, and height and tilt adjustments.

Controls

Your operators can adjust the right and left joysticks for individual preferences, helping the operator become more comfortable, more productive, and more alert. Low-effort pilot-operated joystick controls are designed to match your natural wrist and arm position for maximum comfort and minimum fatigue.

Climate Control

The 323D2 L offers positive filtered ventilation with a pressurized cab. Fresh air or re-circulated air can be selected, which makes working in the heat and cold much more pleasant.

Cab Structure and Mounts

The cab shell is attached to the frame with viscous rubber cab mounts, which dampen vibrations and sound levels while enhancing operator comfort. Thick steel tubing along the bottom perimeter of the cab, improves resistance to fatigue and vibration.

Windows

To maximize visibility, all glass is affixed directly to the cab, eliminating window frames. The upper front windshield opens, closes, and stores on the roof above the operator with a one-touch action release system.

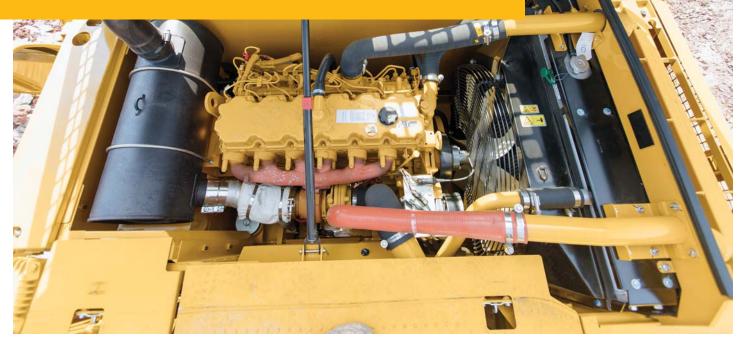






Engine

Count on reliable performance to meet your demanding needs all day long



Reliable Cat C7.1 ACERT Engine

The Cat C7.1 ACERT engine meets Stage II equivalent emission standards. The engine incorporates proven, robust components and precision manufacturing you can count on for reliable and efficient operation. It's less sensitive to low-quality fuel and also delivers better fuel consumption. An ECO-mode feature helps to reduce fuel consumption by up to 15 percent for fuel-conscious customers.

Automatic Engine Speed Control

Automatic engine speed control is activated during no-load or light-load conditions to minimize fuel consumption.

Air Cleaner and Air Precleaner

The radial seal air filter features a double-layered filter core for more efficient filtration and is located in a compartment behind the cab. A warning is displayed on the monitor when dust accumulates above a preset level. An air precleaner reduces the amount of dust and debris that enter the air intake system to help maximize engine performance by extending air filter life.

Filtration System

The C7.1 ACERT engine features an improved filtration system to ensure good reliability to fuel injection system components. Intervals have been extended and the number of filters reduced to maximize your profit potential.

Variable Speed Fan

Variable speed fan controlled by ECM reduces fuel consumption and noise.

Electric fuel priming pump speeds up starts and fuel system maintenance.

Hydraulics

Move dirt, rock and debris with speed, precision and efficiency







Hydraulic System

The hydraulic cross-sensing system utilizes each of two hydraulic pumps to 100 percent of engine power under all operating conditions. This improves productivity with faster implement speeds and quicker, stronger pivot turns. Snubbers are located at the rod-end of the boom cylinders and both ends of the stick cylinders to cushion shocks while reducing sound levels and extending component life. The hydraulic activation lever in the neutral position isolates all front linkage, swing, and travel functions for additional controllability and efficiency.

Optional auxiliary control circuits allow operation of high- and medium-pressure tools such as shears, grapples, hammers, pulverizers, multi-processors, and vibratory plate compactors.

Component Layout

The 323D2 L hydraulic system and component locations have been designed to provide a high level of system efficiency. The main pumps, control valves, and hydraulic tank are located close together to allow for shorter tubes and lines between components, which reduce friction loss and pressure drops.

Boom and Stick Regeneration Circuit

Stick regeneration circuits result in less pressure loss, higher controllability, reduced cycle times, more productivity, and lower operating costs for you. It works by reusing the flow of oil that travels from the head of cylinder to the rod end of cylinder during your boom-down and stick-in operations.

Hydraulic Return Capsule Filter

Capsule filter with a cartridge inside to avoid contamination when accessing the filter and enable changing cleanly without oil spillage. The capable filter with fine mesh size filtering out impurities has a sensor that indicates to the operator if the filter is clogged.



Undercarriage

The long wide undercarriage maximizes stability and lift capacity.

The X-shaped, box-section carbody provides excellent resistance to torsional bending. Robot-welded track roller frames are pressformed, pentagonal units to deliver exceptional strength and service life.

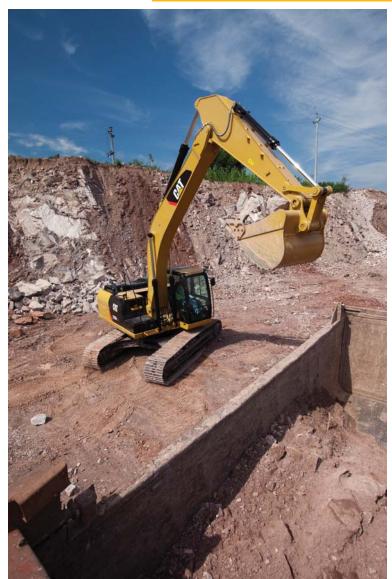
Sealed and lubricated heavy duty track rollers, carrier rollers, and idlers provide excellent service life to keep your machine in the field and working longer.

Frame

You can expect excellent quality, reliability, and durability with the 323D2 L lower and upper frames. Both are built to handle a hard day's work over and over again.

Front Linkage

Long service life even in the harshest of conditions



Cat front linkages are designed for maximum versatility, productivity, and high efficiency whatever the application.

Heavy-Duty Front Linkage

The 5.7 m (18'8") heavy-duty (HD) reach boom is reinforced to be used in the severest applications and provide maximum digging capability. Heavy-duty Reach boom is made of high-tensile-strength steel using a large box-section design with interior baffle plates and an additional bottom guard for long life and durability.

Standard and HD reach booms have two stick options available to meet all your application requirements. The 2.9 m (9'6") HD stick is the most versatile option and a very good fit for truck loading and trenching applications where you need additional working range. The 2.5 m (8'2") HD stick is ideally suited to applications requiring larger bucket sizes. It maximizes digging forces and enables you to get your jobs completed faster.

Mass Boom Front Linkage

The mass excavation (ME) front linkage is designed to maximize machine performance through superior digging forces and a larger bucket capacity.

The 5.2 m (17'1") mass excavation boom incorporates a large cross-section and internal baffle plates for long life and durability.

The 2.4 m (7'11") mass stick is designed mainly for large earthmoving and is made of high-tensile-strength steel in a box section to make it strong and durable.

Attachments

Dig, hammer, rip, and cut with confidence



Each Cat work tool attachment is designed to optimize the versatility and performance of your machine. An extensive range of buckets, compactors, grapples, multi-processors, rippers, crushers, pulverizers, hammers, and shears are available for your 323D2 L. Contact your local Cat dealer for more information on the attachments available in your region.

Buckets

Cat buckets and Cat Ground Engaging Tools (GET) are designed and matched to the machine to ensure optimal performance and fuel efficiency.

1 – Utility Buckets (UD)

These buckets are for digging in low-impact, low-abrasive material such as dirt, loam, and clay.

2 – General Duty Buckets (GD)

These buckets are designed for digging in low-impact, moderately abrasive materials such as dirt, loam, gravel, and clay.

3 – Heavy Duty Buckets (HD)

HD buckets are a good starting point when application conditions vary. Especially when conditions include mixed dirt, clay, sand, and gravel.

4 – Severe Duty Buckets (SD)

These buckets are best suited to highly abrasive applications such as shot rock, sand stone, and granite.

5 – Extreme Duty Buckets (XD)

These buckets are for very high abrasion conditions including high quartzite granite. Example: Digging conditions where tip life is less than or equal to 200 hours with Extra Duty tips.

Couplers

Quick couplers allow one person to change work tools in seconds for maximum performance and flexibility on a job site. One machine can move rapidly from task to task, and a fleet of similarly equipped machines can share a common work tool inventory.

Pin Grabber Coupler

Center-Lock™ is the pin grabber style coupler and features a patent-pending locking system. A highly visible secondary lock clearly shows the operator when the coupler is engaged or disengaged from the bucket or work tool.

B Series Hammers

Take on demolition work with low costs per hour, and still enjoy consistent, reliable power, easy maintenance and the backing of the Cat dealer network.

E Series Hammers

E Series hammers bring together customer expectations of performance, quality, and serviceability along with Caterpillar manufacturing and logistics experience.

E Series hammers are quiet, and noise suppression is valuable in urban and restricted work areas.

Grapples

Cat grapples replace the bucket on Cat excavators, converting them to the ideal machine for handling loose material, sorting trash, and demolition site cleanup. An array of styles and sizes are available to match excavators to the task at hand.

Multi-Processors

Multi-processors do the work of many types of demolition tools by use of interchangeable jaw sets. Changing jaws allows a single unit to crush, pulverize, and perform a variety of specialized cutting tasks such as cutting steel rebar and tanks.

Shear

Cat shears are designed for Cat machines – taking full advantage of the hydraulic flows and pressures to enhance productivity without compromising safety or causing premature wear of the shear and carrier.

Pulverizer

The excavator mounted mechanical pulverizer is a cost-effective tool for recycling demolished concrete debris. The bucket cylinder on the excavator powers the mechanical pulverizer. This eliminates the need for a dedicated cylinder and associated hydraulics and additional installation cost.

Vibratory Plate Compactor

Compactors enhance the versatility of your excavator and makes compacting faster, more efficient, and cost-effective. Cat compactors are the superior choice for any job site's compaction tasks.

Crusher

The hydraulic concrete crusher has taken modern demolition technology a step further. It is well suited for concrete demolition in residential areas. The hydraulic concrete crusher combines several concrete demolition operations in one piece of equipment:

- breaking out concrete from fixed structures
- · pulverizing concrete
- cutting reinforcement rods and small steel profiles







Cat Connect Technologies

Monitor, manage, and enhance your job site operations





Cat Connect makes smart use of technology and services to improve your job site efficiency. Using the data from technology-equipped machines, you'll get more information and insight into your equipment and operations than ever before.

Cat Connect technologies offers improvements in these key areas:



Equipment Management – increase uptime and reduce operating costs.



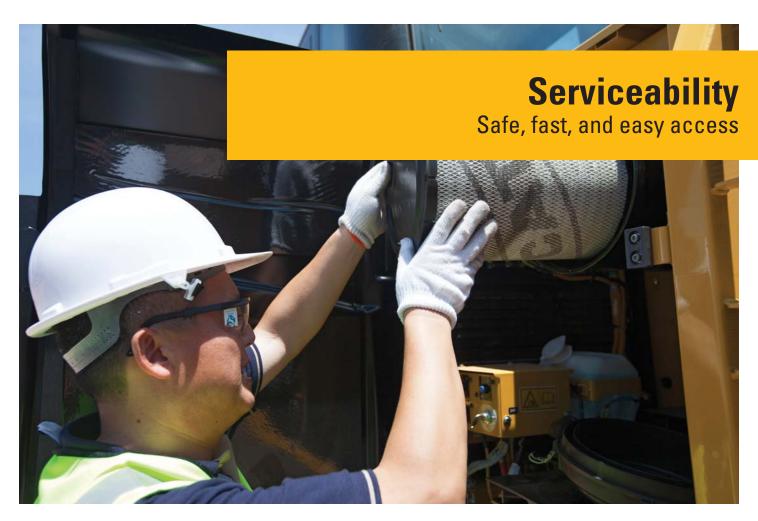
Productivity – monitor production and manage job site efficiency.



Safety – enhance job site awareness to keep your people and equipment safe.

LINK Technologies

LINK technologies like Product Link™ wirelessly connect you to your equipment, giving you valuable insight into how your machine or fleet is performing. Track location, hours, fuel usage, idle time, and event codes through the online VisionLink® interface so you can make timely, fact-based decisions that can boost job site efficiency and productivity, and lower operating costs.



Ground-Level Service

The design and layout of the 323D2 L was made with the service technician in mind. Most service locations are easily accessible at ground level to allow service and maintenance to get completed quickly and efficiently.

Air Filter Compartment

The air filter features a double-element construction for superior cleaning efficiency. When the air filter plugs, a warning is displayed on the cab monitor. Maintenance-free batteries are standard along with a battery disconnect switch.

Pump Compartment

A service door on the right side of the upper structure allows ground-level access to the hydraulic pumps, hydraulic filters, engine oil filter, and fuel filters.

Radiator Compartment

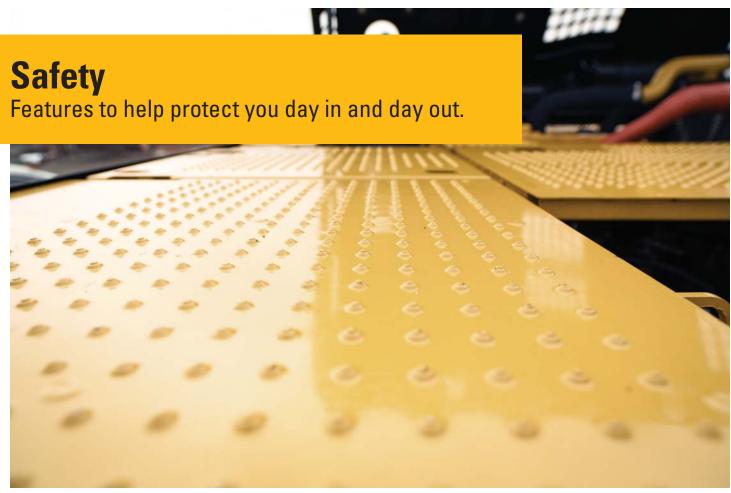
The left rear service door allows easy access to the engine radiator, hydraulic oil cooler, air-to-air aftercooler, and AC condenser. A reserve tank and drain cock are attached to the radiator for ground-level maintenance.

Greasing Points

A concentrated remote greasing block on the boom allows the greasing of hard-to-reach locations on the boom and stick.

Diagnostics and Monitoring

The 323D2 L is equipped with Scheduled Oil Sampling $(S \cdot O \cdot S^{SM})$ ports for the hydraulic system, engine oil, and coolant. Standard hydraulic test ports enable a service technician to quickly and easily fault find in the event of service issue.



Anti-skid plating with countersunk bolts reduces the potential for slippage and trip hazards, providing a **safe platform** for all routine service and maintenance needs.

The standard **hydraulic lockout lever** isolates all hydraulic and travel functions in the lowered position. It is specifically designed to not allow the operator to leave the cab without first lowering it.

Three circuit breakers protect critical electrical components to increase machine uptime.

A **battery disconnect switch** helps to deter theft by isolating the battery and enhances safety when servicing the machine.

A full length **firewall** separates the engine from the hydraulic pump and offers protection in the event of an incident.

Ground level **shut-off switch** stops all fuel to the engine when activated and shuts down the machine.







Complete Customer Care

Your Cat dealer will support you like no other



Product Support

You can maximize your machines' uptime with the Cat worldwide dealer network. You can also decrease your repair costs by utilizing Cat remanufactured components while contributing to sustainable development.

Machine Selection

What are the job requirements and machine attachments? What production do you need? Your Cat dealer can provide recommendations to help you make the right machine configuration.

Purchase

You can ensure lower owning and operating costs by utilizing unique Cat dealer services and financing options.

Customer Support Agreements

Cat dealers offer a variety of customer support agreements and work with you to develop a plan to meet your specific needs. These plans can cover the entire machine, including attachments, to help protect your investment.

Operation

You can boost your profits by improving your operators' techniques. Your Cat dealer has videos, literature, and other ideas to help increase productivity. Caterpillar also offers simulators and certified operator training to help maximize the return on your investment.

Replacement

Repair, rebuild, or replace? Your Cat dealer can help you evaluate the cost involved so you can make the best choice for your business.

Cat C7.1 A	ACERT
118 kW	158 hp
116 kW	156 hp
1,700 rpm	
1,800 rpm	
105 mm	4.13 in
135 mm	5.31 in
7.01 L	428 in ³
	1,700 rpm 1,800 rpm 105 mm 135 mm

- The Cat C7.1 ACERT meets Stage II equivalent emission standards.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.
- The field-proven C7.1 ACERT engine can work efficiently at altitudes up to 5000 m (16,405 ft).
- Power rating at 1,800 rpm.

Weights		
Minimum Operating Weight*	22 280 kg	49,120 lb
Maximum Operating Weight**	22 800 kg	50,270 lb

- *5.7 m (18'8") HD Reach boom, R2.5 (8'2") HD stick, 600 mm (24") triple grouser shoes, 1.19 m³ (1.56 yd³) bucket.
- **5.2 m (17'1") Mass boom, M2.4 (7'10") HD stick,790 mm (31") triple grouser shoes, 1.76 m³ (2.3 yd³) bucket.

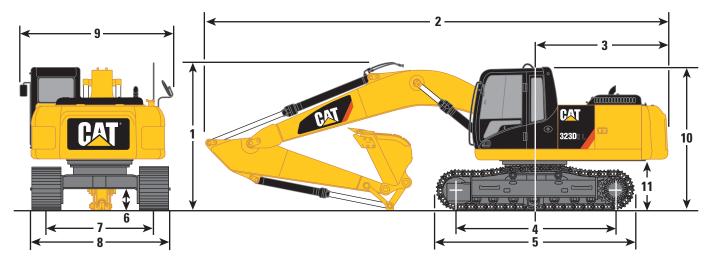
Swing Mechanism		
Swing Speed	10.5 rpm	
Maximum Swing Torque	74 kN·m	54,440 lbf-ft
Drive		
Maximum Gradeability	35°/70%	
Maximum Travel Speed	5.6 km/h	3.5 mph
Drawbar Pull	205 kN	46,086 lbf

Hydraulic System		
Main System – Maximum Flow	214×2	56.5×2
at Travel	L/min	gal/min
Main System – Maximum Flow	202×2	53.4×2
at Operation	L/min	gal/min
Swing System – Maximum Flow	202 L/min	53.4
Maximum Pressure – Equipment	35,000 kPa	gal/min 5,076 psi
	<u> </u>	
Maximum Pressure – Travel	35,000 kPa	5,076 psi
Maximum Pressure – Swing	25,000 kPa	3,626 psi
Pilot System – Maximum Flow	23.1 L/min	6.1 gal/min
Pilot System – Maximum Pressure	3920 kPa	569 psi
Boom Cylinder – Bore	120 mm	4.7 in
Boom Cylinder – Stroke	1260 mm	49.6 in
Stick Cylinder – Bore	140 mm	5.5 in
Stick Cylinder – Stroke	1504 mm	59.2 in
B1 Bucket Cylinder – Bore	120 mm	4.7 in
B1 Bucket Cylinder – Stroke	1104 mm	43.5 in
CB2 Bucket Cylinder – Bore	135 mm	5.3 in
CB2 Bucket Cylinder – Stroke	1156 mm	45.5 in
Service Refill Capacities		
Fuel Tank Capacity	410 L	108 gal
Cooling System	25 L	6.6 gal
Engine Oil	22 L	5.8 gal
Swing Drive	8 L	2.1 gal
Final Drive (each)	10 L	2.6 gal
Hydraulic System Oil Capacity	260 L	68.7 gal
(including tank)		
Hydraulic Oil	120 L	31.7 gal
Sound Performance		
Operator Sound (ISO 6396)	71 dB(A)	
Spectator Sound (ISO 6395)	103 dB(A)	
Standards		
Brakes	ISO 10265:2	2008
Cab/FOGS	SAE J1356:MAR2013/	

ISO 10262:1998

Dimensions

All dimensions are approximate.



			HD Reach Boom 5.7 m (18'8")	
		HD R2.9B1 (9'6")	HD R2.5B1 (8'2")***	M2.4CB2 (7'10")
1 Overall H	Height*	3030 mm (9'11")	3050 mm (10'0")	3280 mm (10'9")
2 Overall I	ength	9460 mm (31'0")	9460 mm (31'0")	9050 mm (29'8")
3 Tail Swin	ng Radius	2750 mm (9'0")	2750 mm (9'0")	2750 mm (9'0")
4 Length to	Center of Rollers	3650 mm (12'0")	3650 mm (12'0")	3650 mm (12'0")
5 Track Le	ngth	4455 mm (14'7")	4455 mm (14'7")	4455 mm (14'7")
6 Ground	Clearance**	450 mm (1'6")	450 mm (1'6")	450 mm (1'6")
7 Track Ga	iuge	2380 mm (7'10")	2380 mm (7'10")	2380 mm (7'10")
8 Transpor	t Width			
600 mi	m (24") Shoes	2980 mm (9'9")	2980 mm (9'9")	2980 mm (9'9")
790 mi	m (31") Shoes	3170 mm (10'5")	3170 mm (10'5")	3170 mm (10'5")
9 Width of	Upper Structure	2740 mm (9'0")	2740 mm (9'0")	2740 mm (9'0")
10 Cab Heig	ght*	2950 mm (9'8")	2950 mm (9'8")	2950 mm (9'8")
11 Countery	veight Clearance**	1020 mm (3'4")	1020 mm (3'4")	1020 mm (3'4")
Bucket	Type	HD	HD	HD
	Tip Radius	1570 mm (5'2")	1570 mm (5'2")	1650 mm (5'5")

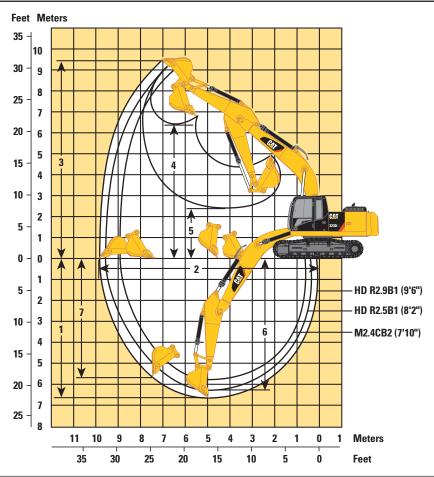
^{*}Including shoe lug height.

^{**}Without shoe lug height.

^{***}Standard and Heavy Duty Reach booms.

Working Ranges

All dimensions are approximate.



		HD Reach Boom 5.7 m (18'8")		Mass Boom 5.2 m (17'1")
	_	HD R2.9B1 (9'6")	HD R2.5B1 (8'2")*	M2.4CB2 (7'10")
1 Maximum	Digging Depth	6720 mm (22'1")	6300 mm (20'8")	5850 mm (19'2")
2 Maximum	Reach at Ground Level	9860 mm (32'4")	9630 mm (31'7")	8920 mm (29'3")
3 Maximum	Cutting Height	9490 mm (31'0")	9290 mm (30'6")	8830 mm (27'6")
4 Maximum	Loading Height	6490 mm (21'4")	6290 mm (20'8")	5760 mm (18'11")
5 Minimum	Loading Height	2170 mm (7'1")	2590 mm (8'6")	2270 mm (7'5")
6 Maximum	Depth Cut for 2440 mm (8'0") Level Bottom	6380 mm (20'11")	5960 mm (19'7")	5500 mm (18'1")
7 Maximum	Vertical Wall Digging Depth	5690 mm (18'8")	5650 mm (18'6")	4580 mm (15'0")
Bucket	Type	HD	HD	HD
	Tip Radius	1570 mm (5'2")	1570 mm (5'2")	1650 mm (5'5")

^{*}Standard and Heavy Duty Reach booms.

Operating Weight* and Ground Pressure

The standard and optional equipment availability vary by region. Please contact your local Cat dealer for more information about the work tools available in your region.

Operating Weight				
	Bucket Capacity	600 mm (24") Triple Grouser Shoes	600 mm (24") HD Triple Grouser Shoes	790 mm (31") Triple Grouser Shoes
Reach Boom - I	HD – 5.7 m (18'8")			
R2.9 HD (9'6")	1.19 m ³ (1.56 yd ³)	22 350 kg (49,270 lb)	22 700 kg (50,000 lb)	22 990 kg (50,680 lb)
R2.5 HD (8'2")	1.19 m ³ (1.56 yd ³)	22 280 kg (49,120 lb)	22 600 kg (49,800 lb)	22 920 kg (50,530 lb)
Mass Boom – 5.	2 m (17'1")			
M2.4CB2 (7'10")	1.76 m ³ (2.30 yd ³)	22 160 kg (48,850 lb)	22 500 kg (49,600 lb)	22 800 kg (50,270 lb)
		Cround Dro	COLLEG	

	Ground Pressure				
	Bucket Capacity	600 mm (24") Triple Grouser Shoes	600 mm (24") HD Triple Grouser Shoes	790 mm (31") Triple Grouser Shoes	
Reach Boom - H	HD – 5.7 m (18'8")				
R2.9 HD (9'6")	1.19 m ³ (1.56 yd ³)	46.5 kPa (6.7 psi)	47.2 kPa (6.8 psi)	36.3 kPa (5.3 psi)	
R2.5 HD (8'2")	1.19 m ³ (1.56 yd ³)	46.3 kPa (6.7 psi)	47.0 kPa (6.8 psi)	36.2 kPa (5.3 psi)	
$\overline{Mass\ Boom-5.}$	2 m (17'1")				
M2.4CB2 (7'10")	1.76 m ³ (2.30 vd ³)	46.1 kPa (6.7 psi)	46.8 kPa (6.8 psi)	36.0 kPa (5.2 psi)	

^{*}Based on ISO 6016. Operating weight includes Base machines with fronts, bucket, full fuel tank and fluids, and 75 kg (165 lb) operator, excluding optional attachments.

Major Component Weights

ase Machine (with counterweight 4.26 mt/9,390 lb, with boom cylinders, without front linkage, without tracks)	15 410 kg (33,970 lb)
ounterweight	4260 kg (9,390 lb)
pper Frame	6320 kg (13,930 lb)
Indercarriage	4490 kg (9,900 lb)
ull Fuel	340 kg (750 lb)
oom (includes lines, pins, and stick cylinder)	
Heavy Duty Reach Boom – 5.7 m (18'8")	2010 kg (4,430 lb)
Mass Boom – 5.2 m (17'1")	1680 kg (3,700 lb)
tick (includes lines, pins, linkage and bucket cylinder)	
R2.9 HD (9'6")	1120 kg (2,470 lb)
R2.5 HD (8'2")	1050 kg (2,310 lb)
M2.4CB2 (7'10")	1060 kg (2,340 lb)
ong Tracks Shoes	
600 mm (24") Triple Grouser	2840 kg (6,260 lb)
600 mm (24") HD Triple Grouser	3100 kg (6,830 lb)
790 mm (31") Triple Grouser	3350 kg (7,390 lb)
uckets	
1200 mm (47")/1.19 m³ (1.56 yd³)	1030 kg (2,270 lb)
1350 mm (53")/1.38 m³ (1.80 yd³)	1090 kg (2,400 lb)
1350 mm (53")/1.40 m³ (1.83 yd³)	1060 kg (2,340 lb)
1500 mm (59")/1.76 m³ (2.30 yd³)	1230 kg (2,710 lb)

Bucket and Stick Forces

	HD Read 5.7 m	Mass Boom 5.2 m (17'1")		
	HD R2.9B1 (9'6")	HD R2.5B1 (8'2")	M2.4CB2 (7'10")	
Bucket	1.19 m³ (1.56 yd³)	1.19 m³ (1.56 yd³)	1.76 m³ (2.30 yd³)	
Bucket Digging Force (ISO)	140 kN (31,472 lbf)	140 kN (31,506 lbf)	179 kN (40,293 lbf)	
Stick Digging Force (ISO)	107 kN (24,054 lbf)	118 kN (26,549 lbf)	128 kN (28,817 lbf)	
Bucket Digging Force (SAE)	125 kN (28,100 lbf)	125 kN (28,024 lbf)	158 kN (35,575 lbf)	
Stick Digging Force (SAE)	104 kN (23,379 lbf)	114 kN (25,717 lbf)	124 kN (27,810 lbf)	

Bucket Specifications and Compatibility

										Reach	Mass Boom			
								HD R5.7 (18'8")				M5.2 (17'1")		
		Wi	idth	Cap	acity	We	Weight		HD R2.5B1 (8'2")		HD R2.9B1 (9'6")		M2.4CB2 (7'10")	
	Linkage	mm	in	m³	yd³	kg	lb	%	600 mm (24") Tracks	790 mm (31") Tracks	600 mm (24") Tracks	790 mm (31") Tracks	600 mm (24") Tracks	790 mm (31") Tracks
Without Quick Couple	er													
General Duty (GD)	В	600	24	0.46	0.61	551	1,213	100			•			
	В	750	30	0.64	0.84	622	1,370	100	•	•	•	•		
	В	900	36	0.81	1.06	668	1,473	100	•	•	•	•		
	В	1200	48	1.19	1.56	803	1,770	100	•	•	Θ	•		
	В	1300	51	1.30	1.71	835	1,840	100	Θ	•	Θ	Θ		
	В	1400	55	1.43	1.87	870	1,918	100	Θ	Θ	0	0		
General Duty (GDC)	В	600	24	0.55	0.72	619	1,363	100	•	•	•	•		
	В	750	30	0.75	0.98	710	1,566	100	•	•	•	•		
	В	900	36	0.95	1.24	787	1,735	100	•	•	•	•		
	В	1050	42	1.16	1.52	848	1,870	100	•	•	Θ	•		
	В	1200	48	1.38	1.80	926	2,041	100	Θ	Θ	0	0		
	В	1350	54	1.59	2.08	1004	2,213	100	0	0	\Diamond	0		
General Duty – CCL	В	1150	46	0.90	1.18	719	1,585	100	•	•	•	•		
	В	1250	50	1.00	1.31	751	1,656	100	•	•	•	•		
	В	1150	46	0.90	1.18	762	1,680	100	•	•	•	•		
	В	1250	50	1.00	1.31	797	1,756	100	•	•	•	•		
	В	1400	56	1.14	1.49	863	1,902	100	•	•	Θ	•		
Heavy Duty (HD)	В	600	24	0.46	0.61	649	1,431	100	•	•	•	•		
	В	750	30	0.64	0.84	748	1,649	100			•			
	В	900	36	0.81	1.06	826	1,821	100			•			
	В	1050	42	1.00	1.31	880	1,940	100			•	•		
	В	1200	48	1.19	1.56	907	1,999	100	•	•	Θ	Θ		
	В	1200	48	1.19	1.56	918	2,024	100	•	•	Θ	Θ		
	В	1200	48	1.19	1.56	972	2,141	100	Θ	•	Θ	Θ		
	В	1300	52	1.30	1.71	962	2,120	100	Θ	Θ	0	Θ		
	В	1350	54	1.38	1.81	1054	2,322	100	0	Θ	0	0		
	В	1350	54	1.40	1.83	1012	2,230	100	0	Θ	0	0		
	СВ	1350	54	1.54	2.02	1134	2,500	100					Θ	Θ
Severe Duty (SD)	ty (SD) B 600 24	0.46	0.61	694	1,530	90	•	•	•	•				
	В	750	30	0.64	0.84	802	1,768	90	•	•	•	•		
	В	900	36	0.81	1.06	889	1,959	90	•	•	•	•		
	В	1050	42	1.00	1.31	964	2,125	90	•	•	•	•		
	В	1200	48	1.19	1.56	1053	2,320	90	•	•	Θ	Θ		
	В	1200	48	1.19	1.56	1001	2,207	90	•	•	Θ	•		
	СВ	1350	54	1.56	2.04	1249	2,753	90					Θ	Θ
			Maxin	num load	pin-on (p	ayload +	bucket)	kg	2990	3090	2755	2850	3515	3630
								lb	6,590	6,810	6,072	6,281	7,747	8,001

The above loads are in compliance with hydraulic excavator standard EN474, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity with front linkage fully extended at ground line with bucket curled.

Capacity based on ISO 7451.

 $\label{eq:Bucket weight with General Duty tips.} Bucket weight with General Duty tips.$

Maximum Material Density:

- 2100 kg/m³ (3,500 lb/yd³)
- 1800 kg/m³ (3,000 lb/yd³)
- → 1500 kg/m³ (2,500 lb/yd³)
- O 1200 kg/m³ (2,000 lb/yd³)
- 900 kg/m³ (1,500 lb/yd³)

Bucket Specifications and Compatibility

										Reach		Mass	Boom	
							HD R5.7 (18'8")				M5.2 (17'1")			
		Wi	dth	Capacity		We	ight	Fill	HD R2.5	HD R2.5B1 (8'2") HD R2.9B1 (9'6")			M2.4CB2 (7'10")	
	Linkage	mm	in	m³	yd³	kg	lb	%	600 mm (24") Tracks	790 mm (31") Tracks	600 mm (24") Tracks	790 mm (31") Tracks	600 mm (24") Tracks	790 mm (31" Tracks
With Pin Grabber Co	upler													
General Duty (GD)	В	600	24	0.46	0.61	551	1,213	100	•	•	•	•		
	В	750	30	0.64	0.84	622	1,370	100	•	•	•	•		
	В	900	36	0.81	1.06	668	1,473	100	•	•	•	•		
	В	1200	48	1.19	1.56	803	1,770	100	Θ	Θ	0	0		
	В	1300	51	1.30	1.71	835	1,840	100	0	0	0	0		
	В	1400	55	1.43	1.87	870	1,918	100	0	0	\Diamond	\Diamond		
General Duty (GDC)	В	600	24	0.55	0.72	619	1,363	100	•	•	•	•		
	В	750	30	0.75	0.98	710	1,566	100	•	•	•	•		
	В	900	36	0.95	1.24	787	1,735	100	•	•	Θ	•		
В	В	1050	42	1.16	1.52	848	1,870	100	Θ	Θ	0	0		
	В	1200	48	1.38	1.80	926	2,041	100	0	0	\Diamond	\Diamond		
	В	1350	54	1.59	2.08	1004	2,213	100	\Diamond	\Diamond	Х	\Diamond		
Heavy Duty (HD)	В	600	24	0.46	0.61	649	1,431	100	•	•	•	•		
	В	750	30	0.64	0.84	748	1,649	100	•	•	•	•		
	В	900	36	0.81	1.06	826	1,821	100	•	•	•	•		
	В	1050	42	1.00	1.31	880	1,940	100	Θ	•	Θ	Θ		
	В	1200	48	1.19	1.56	907	1,999	100	0	Θ	0	0		
	В	1200	48	1.19	1.56	918	2,024	100	0	Θ	0	0		
	В	1200	48	1.19	1.56	972	2,141	100	0	Θ	0	0		
	В	1300	52	1.30	1.71	962	2,120	100	0	0	\Diamond	\Diamond		
	В	1350	54	1.38	1.81	1054	2,322	100	\Diamond	0	\Diamond	\Diamond		
	В	1350	54	1.40	1.83	1012	2,230	100	\Diamond	0	\Diamond	\Diamond		
	СВ	1350	54	1.54	2.02	1134	2,500	100					0	0
Severe Duty (SD)	В	600	24	0.46	0.61	694	1,530	90	•	•	•	•		
	В	750	30	0.64	0.84	802	1,768	90	•	•	•	•		
	В	900	36	0.81	1.06	889	1,959	90	•	•	•	•		
	В	1050	42	1.00	1.31	964	2,125	90	•	•	Θ	Θ		
	В	1200	48	1.19	1.56	1053	2,320	90	0	Θ	0	0		
	В	1200	48	1.19	1.56	1001	2,207	90	Θ	Θ	0	0		
	СВ	1350	54	1.56	2.04	1249	2,753	90					0	0
		Ma	ximum lo	ad with c	oupler (p	ayload +	bucket)	kg	2580	2680	2345	2440	3105	3220
								lb	5,687	5,907	5,169	5,378	6,844	7,098

The above loads are in compliance with hydraulic excavator standard EN474, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity with front linkage fully extended at ground line with bucket curled.

Capacity based on ISO 7451.

Bucket weight with General Duty tips.

Maximum Material Density:

- 2100 kg/m³ (3,500 lb/yd³)
- 1800 kg/m³ (3,000 lb/yd³)
- 1500 kg/m³ (2,500 lb/yd³)
- 1200 kg/m³ (2,000 lb/yd³)
- 900 kg/m³ (1,500 lb/yd³)
- X Not recommended

Bucket Specifications and Compatibility

										Reach		Mass Boom		
					Weight		Fill	HD R5.7 (18'8")				M5.2 (17'1")		
		Width		Capacity				HD R2.5B1 (8'2")		HD R2.9B1 (9'6")		M2.4CB2 (7'10")		
	Linkage	mm	in	m³	yd³	kg	lb	%	600 mm (24") Tracks	790 mm (31") Tracks	600 mm (24") Tracks	790 mm (31") Tracks	600 mm (24") Tracks	790 mm (31") Tracks
With Quick Coupler (CV	/40, CW40	s)												
General Duty (GD)	В	600	24	0.46	0.61	503	1,109	100	•	•	•	•		
	В	750	30	0.64	0.84	588	1,297	100	•	•	•	•		
	В	900	36	0.81	1.06	655	1,444	100	•	•	•	•		
	В	1200	48	1.19	1.56	770	1,697	100	Θ	•	Θ	Θ		
	В	1300	51	1.30	1.71	801	1,765	100	Θ	Θ	0	0		
	В	1400	55	1.43	1.87	837	1,845	100	0	0	0	0		
Heavy Duty (HD)	В	600	24	0.46	0.61	584	1,288	100	•	•	•	•		
	В	1200	48	1.19	1.56	874	1,927	100	Θ	Θ	0	Θ		
	В	1300	52	1.30	1.71	929	2,048	100	0	Θ	0	0		
		Max	ximum lo	ad with c	oupler (p	ayload +	bucket)	kg	2738	2838	2503	2598	3263	3378
								lb	6,035	6,255	5,517	5,726	7,192	7,445
	·						·		·	·		·	·	
With Quick Coupler (CV	/45)													
Severe Duty (SD)	СВ	1350	54	1.56	2.04	1250	2,755	90					0	0
		Max	ximum lo	ad with c	oupler (p	ayload +	bucket)	kg	2526	2626	2291	2386	3051	3166
								lb	5,567	5,788	5,049	5,259	6,724	6,978

The above loads are in compliance with hydraulic excavator standard EN474, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity with front linkage fully extended at ground line with bucket curled.

Capacity based on ISO 7451.

Bucket weight with General Duty tips.

Maximum Material Density:

- 2100 kg/m³ (3,500 lb/yd³)
- 1800 kg/m³ (3,000 lb/yd³)
- 1500 kg/m³ (2,500 lb/yd³)
- 1200 kg/m³ (2,000 lb/yd³)

Work Tool Offering Guide*

Boom Type		Reach and	Mass		
Stick Size		HD R2.9 (9'6")	HD R2.5 (8'2")*	M2.4 (7'10")	
Hydraulic Hammer		H120Es H130Es	H120Es H130Es	H120Es H130Es H140Es^^	
Multi-Processor		B20 MP318 CC Jaw** MP318 D Jaw** MP318 P Jaw** MP318 U Jaw** MP318 S Jaw**	B20 MP318 CC Jaw MP318 D Jaw MP318 P Jaw MP318 U Jaw MP318 S Jaw	MP318 CC Jaw MP318 D Jaw MP318 P Jaw MP318 U Jaw MP318 S Jaw MP324 CC Jaw^ MP324 D Jaw^ MP324 P Jaw^ MP324 U Jaw^ MP324 S Jaw** MP324 TS Jaw**	
Crusher		P315**	P315	P315 P325**	
Pulverizer		P215	P215	P215 P225**	
Demolition and Sorting Grapple		G315B D/R**	G315B D/R G320B D/R***,#	G320B D/R**	
Scrap and Demolition Shear		S320B*** S325B##	S320B S325B##	S320B S325B## S340B##,#	
Compactor (Vibratory Plate)		CVP110	CVP110	CVP110	
Contractors' Grapple		G120B-G130B	G120B-G130B	G120B-G130B	
Trash Grapple					
Thumbs					
Orange Peel Grapples		These we	ork tools are available for the	323D2 I	
Rakes			alt your Cat dealer for proper		
Pin Grabber Coupler	Cat PG		, r r		
Dedicated Quick Coupler	CW-40				
	CW-40s				

^{*} Offerings not available in all areas. Matches are dependent on excavator configurations. Consult your Cat dealer to determine what is offered in your area and for proper work tool match.

 $Note: Demolition\ and\ Sorting\ Grapple:\ D-Demolition\ shells,\ R-Recycling\ shells$

^{**} Pin-on or CW

^{***} Pin-on only

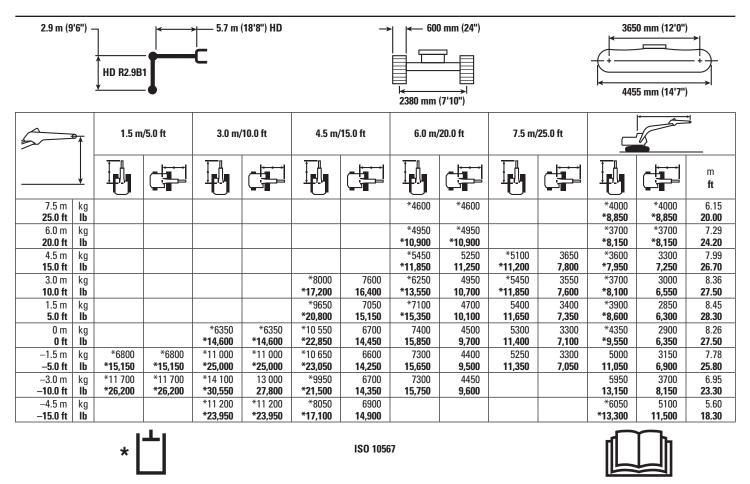
 $^{\#\,\}mbox{Work}$ over the front only

^{##} Boom mount

[^] Work over the front only with CW (Pin-on and CW)

^{^^} Work over the front only with Cat PG (Pin-on, CW and Cat PG)

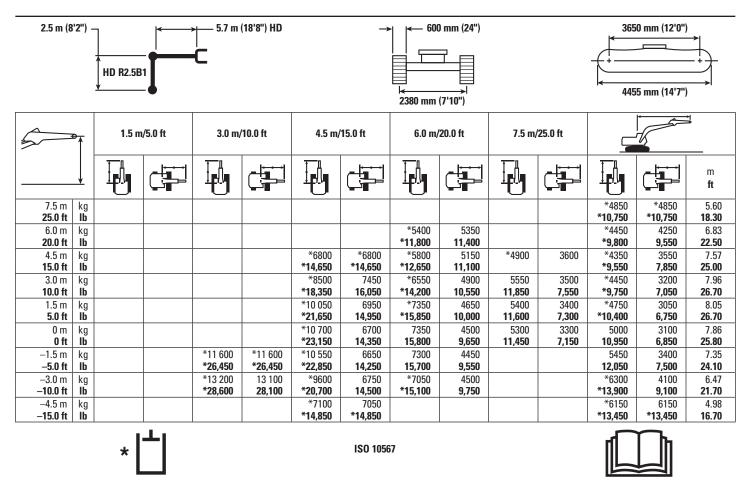
Heavy Duty Reach Boom Lift Capacities – Long Undercarriage



^{*}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. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Lift capacity is for "Heavy Lift" mode, without bucket. Lift capacity stays with ±5% for all available track shoes.

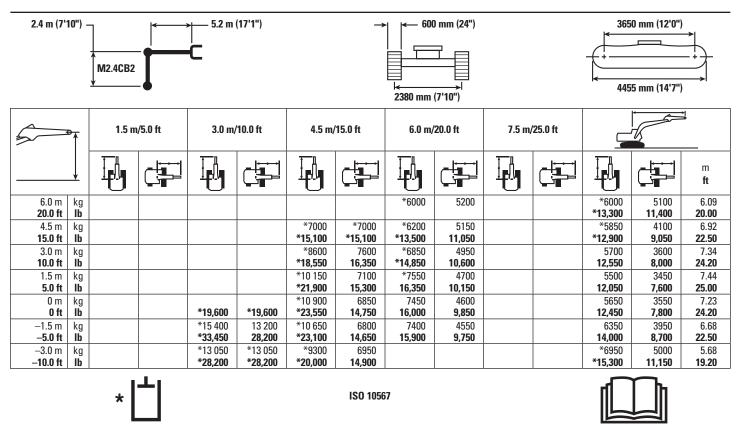
Heavy Duty Reach Boom Lift Capacities – Long Undercarriage



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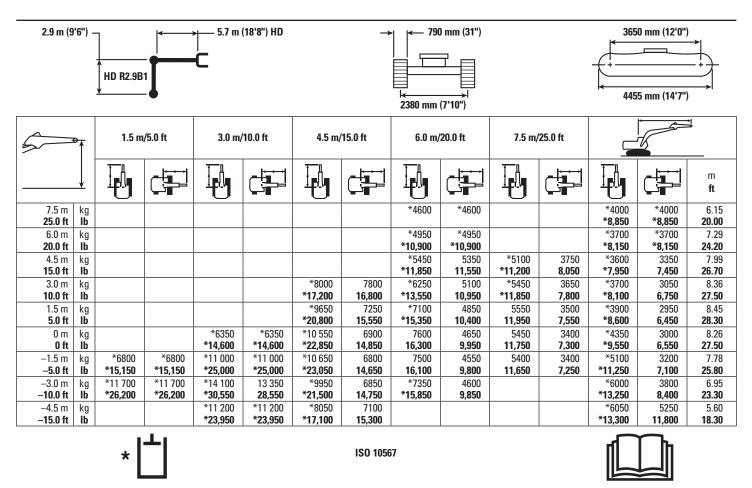
Mass Excavation Boom Lift Capacities – Long Undercarriage



^{*}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. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

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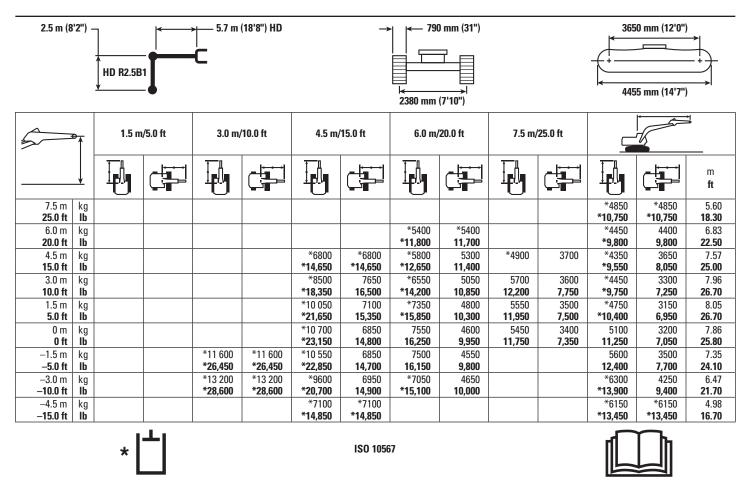
Heavy Duty Reach Boom Lift Capacities – Long Undercarriage



^{*}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. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Lift capacity is for "Heavy Lift" mode, without bucket. Lift capacity stays with ±5% for all available track shoes.

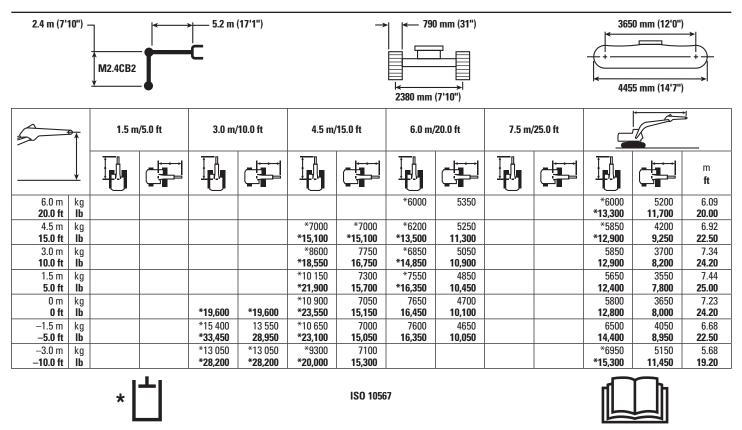
Heavy Duty Reach Boom Lift Capacities – Long Undercarriage



^{*}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. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Lift capacity is for "Heavy Lift" mode, without bucket. Lift capacity stays with ±5% for all available track shoes.

Mass Excavation Boom Lift Capacities – Long Undercarriage



^{*}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. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Lift capacity is for "Heavy Lift" mode, without bucket. Lift capacity stays with ±5% for all available track shoes.

Standard Equipment

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

ENGINE

- C7.1 ACERT electronic control engine
- Meets Stage II equivalent emission standards
- 5000 m (16,405 ft) altitude capability
- Radial seal air filters (primary and secondary filter)
- Automatic engine speed control with one touch low idle
- High ambient cooling package 52° C (125° F)
- Water separator with water level indicator sensor
- Waved fin radiator with space for cleaning
- Two speed travel
- Electric priming pump
- Power modes (Eco and High Power)
- Fuel tank refueling pump (ISO 5006)
- · Air prefilter

HYDRAULIC SYSTEM

- Regeneration circuits for boom and stick
- Auxiliary hydraulic valve
- Reverse swing damping valve
- Automatic swing parking brake
- Boom drift reducing valve
- Boom lowering device for back-up
- Stick drift reducing valve
- High performance hydraulic return filters
- Fine swing control
- Capability of installing additional valves, pumps, circuits
- Cat Bio-oil capability B20

CAB

- · Pressurized cab
- Positive filtered ventilation
- Adjustable armrest
- Flexible seat belt, retractable (51 mm [2 in] width)
- 70/30 split front windshield
- Laminated upper front windshield and tempered other windows
- Sliding upper door window
- Openable front windshield with assist device
- Openable roof hatch
- Removable lower windshield, within cab storage bracket
- Pillar mounted upper windshield wiper and washer
- Bi-level air conditioner (automatic) with defroster (pressurized function)
- Full color and full graphic LCD display with warning, filter/fluid change, and working hour information
- · Control lever joysticks, seat integrated
- Neutral lever (lock out) for all controls
- Travel control pedals with removable hand levers
- Radio mounting (DIN size)
- 12V-10A power supply with two lighter sockets
- · Two stereo speakers
- · Beverage holder
- · Coat hook
- Interior lighting
- · Ashtray and lighter
- Storage compartment for lunch box
- Capability to install two additional pedals
- Fully adjustable air suspension seat, with heater
- Sun screen

UNDERCARRIAGE

- Idler and center section track guiding guards
- Towing eye on base frame
- Grease lubricated track GLT2, resin
- · Heavy duty rollers
- Center track guiding guard
- Swing frame with bumper capability
- Guard package includes (HD) bottom, (HD) travel motor, swivel guard

FRONT LINKAGE

• Bucket linkage with lifting eye

ELECTRICAL

- Batteries $(2 \times 900 \text{ CCA})$
- 115 amp alternator
- 8 kW starter motor
- Capability to connect a beacon*

LIGHTS

- Working lights, boom and cab
- Right working light, storage box mounted
- Interior lighting
- Cab mounted working lights
- Right mounted boom light for Reach and Mass boom

SAFETY AND SECURITY

- Cat one key security system
- Door and compartment locks
- Signaling/warning horn
- Fire wall between engine and pump compartment
- Emergency engine shutoff switch
- Rear window, emergency exit
- · Battery disconnect switch
- Bolt-on FOGS capability with metal roof hatch
- Cap locks on fuel and hydraulic tanks
- · Lockable tool box

COUNTERWEIGHT

• 4.26 mt (9,390 lb) counterweight

TECHNOLOGY

- Cat data link receptacle
- Product Link
- *Requires additional hardware (relay, switch, beacon, and electric harness)

323D2 L Optional Equipment

Optional Equipment

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

ENGINE

• Jump start receptacle

HYDRAULIC SYSTEM

- Boom and stick high pressure lines
- Boom and stick medium pressure lines
- · Tool control system
- Hammer circuit, foot pedal operated
- · Quick couplers

CAB

· Rain protector

UNDERCARRIAGE AND GUARDS

- 600 mm (24") triple grouser shoes
- 600 mm (24") heavy duty triple grouser shoes
- 790 mm (31") triple grouser shoes
- Segmented track guiding guard (two pieces)
- Full length track guiding guard

FRONT LINKAGE

- Heavy Duty 5.7 m (18'8") reach boom with left side light
 - -R2.9B1 (9'6") HD stick
 - -R2.5B1 (8'2") HD stick
- Mass boom 5.2 m (17'1") with left side light
- -M2.4CB2 (7'11") stick

Notes

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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