



# 317

## Hydraulic Excavator

# Technical Specifications

Configurations and features may vary by region. Please consult your Cat® dealer for availability in your area.

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#### 317 Hydraulic Excavator – Forestry Configuration

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# 317 Hydraulic Excavator Specifications

## Engine

Engine Model	Cat® C4.4	
Net Power – ISO 9249	97 kW	130 hp
Engine Power – ISO 14396	98 kW	131 hp
Bore	105 mm	4 in
Stroke	127 mm	5 in
Displacement	4.4 L	269 in <sup>3</sup>
Biodiesel Capability	Up to B20 <sup>1</sup>	

- Meets Japan 2014 emission standards.
- No engine power derate required below 3000 m (9,840 ft) altitude.
- Net power is tested per ISO 9249. Standards in effect at the time of manufacture.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air intake system, exhaust system and alternator.
- Engine speed at 2,200 rpm.

<sup>1</sup> Cat engines are compatible with the following renewable, alternative, and bio-fuels\* with lower greenhouse gas emission impact:

- ✓ Up to B20 biodiesel (FAME)\*\*
- ✓ Up to 100% HVO and GTL renewable fuels

\*Refer to guidelines for successful application. Please consult your Cat dealer or “Caterpillar Machine Fluids Recommendations” (SEBU6250) for details.

\*\*For use of higher blends, consult your Cat dealer.

## Swing Mechanism

Swing Speed	8.7 rpm	
Maximum Swing Torque	64.6 kN·m	47,647 lbf·ft

## Weights

Operating Weight	17 100 kg	37,800 lb
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- Long undercarriage, Reach boom, R2.6 (8'6") stick, GD 0.65 m<sup>3</sup> (0.85 yd<sup>3</sup>) bucket, 500 mm (20") triple grouser shoes and 3.05 mt (6,720 lb) counterweight.

## Track

Standard Track Shoes Width	500 mm	20 in
Optional Track Shoes Width	600 mm	24 in
Optional Track Shoes Width	700 mm	28 in
Number of Shoes (each side)	44	
Number of Track Rollers (each side)	7	
Number of Carrier Rollers (each side)	2	

## Drive

Gradeability	35°/70%	
Maximum Travel Speed	5.3 km/h	3.3 mph
Maximum Drawbar Pull	157 kN	35,295 lbf

## Hydraulic System

Main System – Maximum Flow – Implement	296 L/min	78 gal/min
Maximum Pressure – Equipment	35 000 kPa	5,076 psi
Maximum Pressure – Travel	35 000 kPa	5,076 psi
Maximum Pressure – Swing	25 800 kPa	3,741 psi
Boom Cylinder – Bore	110 mm	4.3 in
Boom Cylinder – Stroke	1193 mm	47.0 in
Stick Cylinder – Bore	120 mm	5.5 in
Stick Cylinder – Stroke	1331 mm	52.4 in
Bucket Cylinder – Bore	105 mm	4.1 in
Bucket Cylinder – Stroke	1039 mm	40.9 in

## Service Refill Capacities

Fuel Tank Capacity	271 L	71.6 gal
Cooling System	28 L	7.4 gal
Engine Oil	15 L	4.0 gal
Final Drive (each)	6 L	1.6 gal
Hydraulic System (including tank)	94 L	24.8 gal
Hydraulic Tank	87 L	23.0 gal
DEF Tank	22 L	5.9 gal

## Standards

Brakes	ISO 10265:2008
Cab/ROPS	ISO 12117-2:2008
Cab/FOGS	ISO 10262:1998

## Sound Performance

ISO 6395 (external)	101 dB(A)
ISO 6396 (inside cab)	70 dB(A)

- When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166 OCT98, meets OSHA and MSHA requirements for operator sound exposure limits in effect at time of manufacture.
- 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 a noisy environment.

# 317 Hydraulic Excavator Specifications

## Operating Weights and Ground Pressures

Base Machine Configurations	500 mm (20") Triple Grouser Shoes		600 mm (24") Triple Grouser Shoes		600 mm (24") Rubber Shoe		700 mm (28") Triple Grouser Shoes	
	Weight	Ground Pressure	Weight	Ground Pressure	Weight	Ground Pressure	Weight	Ground Pressure
<b>Base machine with 3.05 mt (6,720 lb) Counterweight and Long Undercarriage</b>	<b>kg (lb)</b>	<b>kPa (psi)</b>	<b>kg (lb)</b>	<b>kPa (psi)</b>	<b>kg (lb)</b>	<b>kPa (psi)</b>	<b>kg (lb)</b>	<b>kPa (psi)</b>
Reach Boom + R2.6 (8'6") Stick + 0.65 m <sup>3</sup> (0.85 yd <sup>3</sup> ) GDX Bucket	17 100 (37,800)	48.7 (7.1)	17 400 (38,300)	41.1 (6.0)	17 700 (39,100)	42.0 (6.1)	17 600 (38,800)	35.7 (5.2)
<b>Base machine with 3.57 mt (7,870 lb) Counterweight and Long Undercarriage</b>								
Reach Boom + R2.6 (8'6") Stick + 0.65 m <sup>3</sup> (0.85 yd <sup>3</sup> ) GDX Bucket	17 600 (38,900)	50.1 (7.3)	17 900 (39,400)	42.3 (6.1)	18 200 (40,200)	43.2 (6.3)	18 100 (39,900)	36.7 (5.3)

All operating weights include a 90% fuel tank with 75 kg (165 lb) operator.

# 317 Hydraulic Excavator Specifications

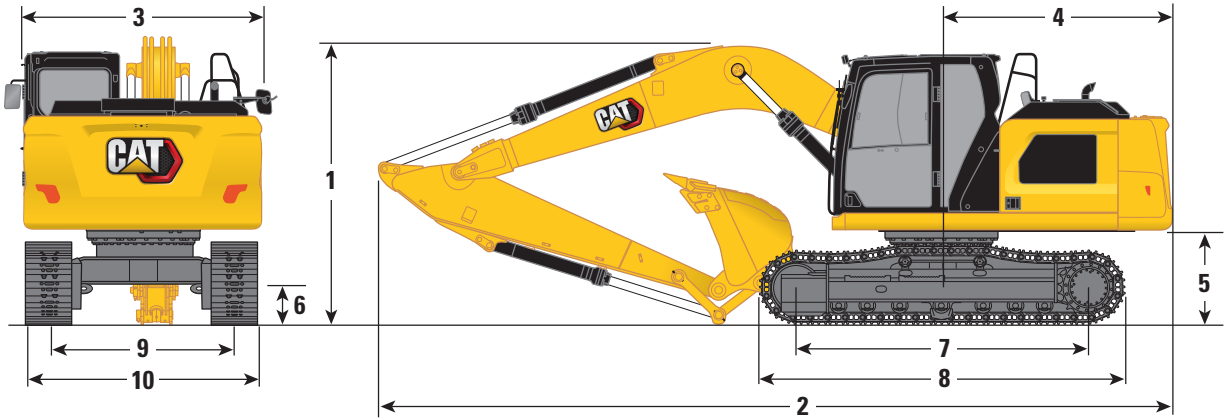
## Major Component Weights

	kg	lb
Base Machine (with counterweight, upper frame, long undercarriage – does not include boom, stick, bucket, boom cylinders, stick cylinder, bucket cylinders, tracks, 90% fuel tank and 75 kg [165 lb] operator).		
With 3.05 mt (6,720 lb) Counterweight	11 680	25,750
With 3.57 mt (7,870 lb) Counterweight	12 200	26,900
Track Shoes:		
500 mm (20") Triple Grouser Track Shoes	2110	4,660
600 mm (24") Triple Grouser Track Shoes	2340	5,160
600 mm (24") Rubber Track Shoe	2710	5,980
700 mm (28") Triple Grouser Track Shoes with Additional Steps	2580	5,680
Two Boom Cylinders	300	670
Weight of 90% Fuel Tank and 75 kg (165 lb) Operator	300	660
Counterweights:		
3.05 mt (6,720 lb) Counterweight	3050	6,720
3.57 mt (7,870 lb) Counterweight	3570	7,870
Swing Frame	1700	3,760
Undercarriage:		
Base Frame with Long Undercarriage	3900	8,600
Boom (including lines, pins, stick cylinder):		
Reach Boom 5.1 m (16'9")	1320	2,910
Stick (including lines, pins, bucket cylinder, bucket linkage):		
Reach Stick R2.6 (8'6")	810	1,780
Bucket (without linkage):		
0.65 m <sup>3</sup> (0.85 yd <sup>3</sup> ) GDX Bucket	600	1,330
Quick Coupler:		
Pin Grabber Quick Coupler	260	580

# 317 Hydraulic Excavator Specifications

## Dimensions

All dimensions are approximate and may vary depending on bucket selection.



<b>Boom Option</b>	<b>Reach Boom</b> 5.1 m (16'9")
<b>Stick Option</b>	<b>Reach Stick</b> R2.6 (8'6")

### 1 Machine Height:

Top of Cab Height	2930 mm	9'7"
Top of FOGS Height	3070 mm	10'1"
Handrails Height	2940 mm	9'8"
With Boom/Stick/Bucket Installed (with stick cylinder lines)	2980 mm	9'9"
With Boom/Stick Installed (with stick cylinder lines)	2870 mm	9'5"
With Boom Installed (with stick cylinder lines)	2460 mm	8'1"
Machine Height (with 600 mm [24"] Rubber Shoe):		
Top of Cab Height	2980 mm	9'9"
Top of FOGS Height	3120 mm	10'3"
Handrails Height	3000 mm	9'10"
With Boom/Stick/Bucket Installed (with stick cylinder lines)	3040 mm	10'0"
With Boom/Stick Installed (with stick cylinder lines)	2930 mm	9'7"
With Boom Installed (with stick cylinder lines)	2520 mm	8'3"

### 2 Machine Length:

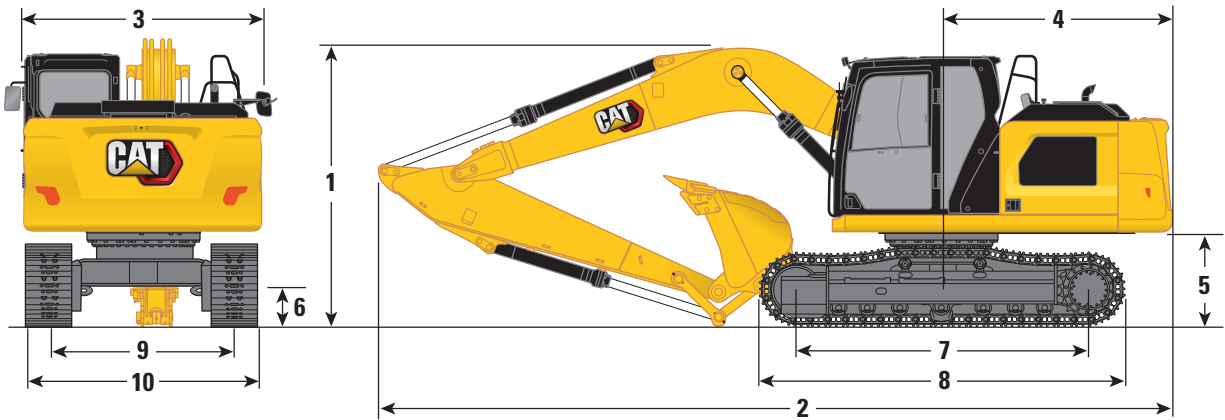
With Boom/Stick/Bucket Installed (with stick cylinder lines)	8550 mm	28'1"
With Boom/Stick Installed (with stick cylinder lines)	8520 mm	27'11"
With Boom Installed (with stick cylinder lines)	7560 mm	24'10"

Bucket Type	GD	
Bucket Capacity	0.65 m <sup>3</sup>	0.85 yd <sup>3</sup>
Bucket Tip Radius	900 mm	2'11"

# 317 Hydraulic Excavator Specifications

## Dimensions

All dimensions are approximate and may vary depending on bucket selection.

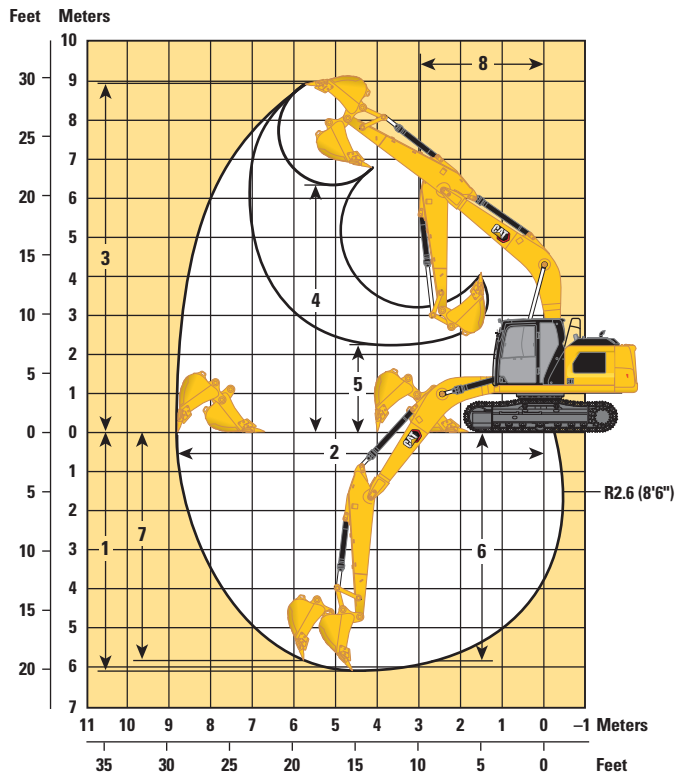


Boom Option	Reach Boom 5.1 m (16'9")	
Stick Option	Reach Stick R2.6 (8'6")	
<b>3</b> Upperframe Width	2540 mm	8'4"
<b>4</b> Tail Swing Radius:		
3.05 mt (6,720 lb) Counterweight	2500 mm	8'2"
3.57 mt (7,870 lb) Counterweight	2500 mm	8'2"
<b>5</b> Counterweight Clearance	1010 mm	3'4"
<b>6</b> Ground Clearance	430 mm	1'5"
<b>7</b> Length to Center of Rollers	3170 mm	10'5"
<b>8</b> Track Length	3970 mm	13'0"
<b>9</b> Track Gauge	1990 mm	6'6"
<b>10</b> Undercarriage Width:		
500 mm (20") Shoes	2490 mm	8'2"
600 mm (24") Shoes	2590 mm	8'6"
600 mm (24") Rubber Shoe	2590 mm	8'6"
700 mm (28") Shoes (with steps)	2690 mm	8'10"
Bucket Type	GD	
Bucket Capacity	0.65 m <sup>3</sup>	0.85 yd <sup>3</sup>
Bucket Tip Radius	900 mm	2'11"

# 317 Hydraulic Excavator Specifications

## Working Ranges and Forces

All dimensions are approximate and may vary depending on bucket selection.



### Boom Option

Reach Boom  
5.1 m (16'9")

### Stick Option

Reach Stick  
R2.6 (8'6")

1 Maximum Digging Depth	6070 mm	19'11"
2 Maximum Reach at Ground Line	8760 mm	28'9"
3 Maximum Cutting Height	8950 mm	29'4"
4 Maximum Loading Height	6310 mm	20'8"
5 Minimum Loading Height	2320 mm	7'7"
6 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	5880 mm	19'3"
7 Maximum Vertical Wall Digging Depth	5850 mm	19'2"
8 Minimum Working Equipment Radius	2980 mm	9'9"
Bucket Digging Force (ISO)	124 kN	27,880 lbf
Stick Digging Force (ISO)	80 kN	17,980 lbf
Bucket Type		GD
Bucket Capacity	0.65 m <sup>3</sup>	0.85 yd <sup>3</sup>
Bucket Tip Radius	900 mm	2'11"

# 317 Hydraulic Excavator Specifications

## Bucket Specifications and Compatibility

	Linkage	Width		Capacity		Weight		Fill	3.05 mt (6,720 lb) Counterweight	3.57 mt (7,870 lb) Counterweight	
		mm	in	m <sup>3</sup>	yd <sup>3</sup>	kg	lb		%	Reach Boom	Reach Boom
										R2.6 (8'6")	R2.6 (8'6")
<b>Pin-On (No Quick Coupler)</b>											
General Duty – Excavation	316	950	37	0.65	0.85	553	1,218	100	●	●	
	316	1100	43	0.80	1.04	612	1,349	100	●	●	
Maximum load with pin-on (payload + bucket)								kg	2280	2510	
								lb	5,035	5,523	
<b>With Cat Pin Grabber Coupler</b>											
General Duty – Excavation	316	950	37	0.65	0.85	553	1,218	100	●	●	
	316	1100	43	0.80	1.04	612	1,349	100	⊙	●	
Maximum load with coupler (payload + bucket)								kg	2084	2305	
								lb	4,595	5,082	

The above loads are in compliance with hydraulic excavator standard EN474-5:2006+A3:2013, 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 7451:2007.

**Maximum Material Density:**

- 2100 kg/m<sup>3</sup> (3,500 lb/yd<sup>3</sup>)
- ⊙ 1800 kg/m<sup>3</sup> (3,000 lb/yd<sup>3</sup>)

Caterpillar recommends using appropriate work tools to maximize the value customers receive from our products. Use of work tools, including buckets, which are outside of Caterpillar's recommendations or specifications for weight, dimensions, flows, pressures, etc. may result in less-than-optimal performance, including but not limited to reductions in production, stability, reliability, and component durability. Improper use of a work tool resulting in sweeping, prying, twisting and/or catching of heavy loads will reduce the life of the boom and stick.



# 317 Hydraulic Excavator Specifications

## Attachments Offering Guide

Not all Attachments are available in all regions. Consult your Cat dealer for configurations available in your region.

Match

### PIN-ON ATTACHMENTS

Counterweight		3.05 mt (6,720 lb)	3.57 mt (7,870 lb)
Boom Type		Reach Boom	Reach Boom
Stick Length		R2.6 (8'6")	R2.6 (8'6")
Hydraulic Hammers	H110 S	✓	✓
	H115 S	✓	✓
	H120 S	✓	✓

### CAT PIN GRABBER COUPLER ATTACHMENTS

Counterweight		3.05 mt (6,720 lb)	3.57 mt (7,870 lb)
Boom Type		Reach Boom	Reach Boom
Stick Length		R2.6 (8'6")	R2.6 (8'6")
Hydraulic Hammers	H110 S	✓	✓
	H115 S	✓	✓
	H120 S	✓	✓

# 317 Standard and Optional Equipment

## Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
<b>BOOMS, STICKS AND LINKAGES</b>			<b>ENGINE</b>		
5.1 m (16'9") Reach boom	✓		Cat C4.4 U.S. EPA Tier 4 Final, EU Stage V diesel engine	✓	
2.6 m (8'6") Reach stick	✓		Three selectable modes: Power, Smart, Eco	✓	
Bucket linkage, without lifting eye, Cat Grade	✓		One-touch low idle with automatic engine speed control	✓	
<b>CAT TECHNOLOGY</b>			Auto engine idle shutdown	✓	
Cat Product Link™	✓		-18° C (0° F) cold start capability		✓
Remote Flash and Troubleshoot	✓		-25° C (-13° F) cold start capability		✓
Work tool recognition	✓		Two-stage fuel filtration system with water separator and indicator	✓	
Work tool tracking*	✓		Sealed double element air filter with integrated precleaner	✓	
Cat Grade Connectivity:		✓	Electric fuel priming pump	✓	
– Compatibility with radios and base stations from Trimble, Topcon, and Leica	✓		Electric cooling fans	✓	
– Capability to install 3D grade systems from Trimble, Topcon, and Leica	✓		<b>HYDRAULIC SYSTEM</b>		
Cat Grade with 2D and offset memory	✓		Electronic main control valve	✓	
Cat Grade with Advanced 2D		✓	Single type electronic main pump	✓	
Cat Grade with 3D connectivity		✓	Boom and stick regeneration circuits	✓	
Cat Assist:	✓		Boom and stick drift reduction valve	✓	
– Grade Assist			Automatic hydraulic oil warm up	✓	
– Boom Assist			Automatic two-speed travel	✓	
– Bucket Assist			Element type main hydraulic filter	✓	
– Swing Assist					
Cat Payload:	✓				
– Static weigh					
– Semiautomatic calibration					
– Payload/cycle information					
– USB reporting capability					
2D E-Fence:	✓				
– E-ceiling					
– E-floor					
– E-swing					
– E-wall					
– E-cab avoidance					
Auto hammer stop	✓				
<b>ELECTRICAL SYSTEM</b>					
Maintenance free battery	✓				
Centralized electrical disconnect switch	✓				
Programmable time-delay LED working lights	✓				
LED chassis and left-side boom light – 1,800 lumens	✓				
LED right-side boom light and cab lights – 1,800 lumens		✓			
360° lighting		✓			

\*Paired with PL161 attachment locator.

(continued on next page)

# 317 Standard and Optional Equipment

## Standard and Optional Equipment *(continued)*

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

	Standard	Optional		Standard	Optional
<b>SAFETY AND SECURITY</b>			<b>UNDERCARRIAGE AND STRUCTURES</b>		
Rear and right-side-view cameras	✓		500 mm (20") triple grouser track shoes		✓
360° visibility		✓	600 mm (24") triple grouser track shoes		✓
Ground level accessible secondary engine shutoff switch in cab	✓		600 mm (24") rubber track shoe		✓
Service platform with anti-skid plate and countersunk bolts	✓		700 mm (28") triple grouser track shoes with additional steps		✓
Signaling/warning horn	✓		Grease lubricated track link	✓	
Hydraulic lock out lever	✓		Center track guiding guard		✓
<b>SERVICE AND MAINTENANCE</b>			Two-piece segmented track guiding guard		✓
Side entry to service platform	✓		Bottom without swivel guard	✓	
Grouped engine oil and fuel filters	✓		Travel motor guards	✓	
Ground level engine oil dipstick	✓		3.05 mt (6,720 lb) counterweight	✓	
S·O·S <sup>SM</sup> sampling ports	✓		3.57 mt (7,870 lb) counterweight		✓
			Tie-down points (ISO 15818 compliant)	✓	

## Dealer Installed Kits and Attachments

Attachments may vary. Consult your Cat dealer for details.

### CAB

- Radial lower wiper
- Left-hand and right-hand electrical pedal (two-way) for tool control
- Dual exit rear window kit
- Rain protector plus cab light cover
- Front windshield laminated glass (P5A glass, EU demolition regulation)
- Key fob (for use with Bluetooth® receiver)

### SAFETY AND SECURITY

- 76 mm (3") retractable seat belt

### GUARDS

- FOGS (not compatible with cab light cover, rain protector)
- Mesh guard full front (not compatible with cab light cover, rain protector)
- Mesh guard lower front half
- Full protecting vandalism guard

## Cab Options

	Comfort	Deluxe
Sound suppressed ROPS cab with viscous mounts	●	●
High-resolution 254 mm (10") LCD touchscreen monitor	●	●
Additional high-resolution LCD touchscreen monitor for Cat Grade Advanced 2D and 3D	○	○
Automatic bi-level air conditioner	●	●
Jog dial and shortcut keys for monitor control	●	●
Keyless push-to-start engine control	●	●
Height-adjustable console, three steps with tool	●	X
Height-adjustable console, infinite with no tool	X	●
Fixed left-side console	●	X
Tilt-up left-side console	X	●
Cat Stick Steer	○	○
Mechanically adjustable seat suspension	●	X
Heated seat with air-adjustable suspension	X	●
51 mm (2") orange seat belt	●	●
Bluetooth integrated radio with USB ports	●	●
2 × 12V DC outlets	●	●
Cup holder and document storage	●	●
Openable two-piece front window	●	●
Upper radial wiper with washer	●	●
Openable steel hatch	●	X
Openable polycarbonate skylight hatch	X	●
LED dome light	●	●
Floor welcome light	●	●
Roller front sunscreen	●	●
Roller rear sunscreen	○	○
Rear window emergency exit	●	●
Washable floor mat	●	●
Beacon ready	●	●

● Standard

○ Optional

X Not available



# 317

## Forestry Hydraulic Excavator

***The Cat® 317 Forest excavator is specially modified for the tough terrain of forest applications. The machine features a tool control system to maximize the forestry work tools, as well as a specially designed boom and stick for forest. Count on the versatility of the 317 to perform the tasks you need for forest operations.***

### **Machine Modifications to meet Tough Terrain**

- Reach boom and 2.6 m (8'6") stick designed for forest applications.
- Additional mesh screen and covers prevent entry of dry, dead debris.
- Optional single grouser 600 mm (24") shoe for improved traction on slopes.
- Special tool tray located in front of the cab structure.
- Mounting points for fire extinguisher are offered from factory.
- Safety features such as rear and right-hand side cameras.
- Heavy duty bottom guard with openable gate under engine portion for cleaning.
- Tool control system for maximum harvester and grapple performance.

# 317 Hydraulic Excavator – Forestry Specifications

## Engine

Engine Model	Cat® C4.4	
Net Power – ISO 9249	97 kW	130 hp
Engine Power – ISO 14396	98 kW	131 hp
Bore	105 mm	4 in
Stroke	127 mm	5 in
Displacement	4.4 L	269 in <sup>3</sup>
Biodiesel Capability	Up to B20 <sup>1</sup>	

- Net Power is tested per ISO 9249. Standards in effect at the time of manufacture.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air intake system, exhaust system and alternator.
- Engine speed at 2,200 rpm

<sup>1</sup> Cat engines are compatible with the following renewable, alternative, and bio-fuels\* with lower greenhouse gas emission impact:

- ✓ Up to B20 biodiesel (FAME)\*\*
- ✓ Up to 100% HVO and GTL renewable fuels

\*Refer to guidelines for successful application. Please consult your Cat dealer or “Caterpillar Machine Fluids Recommendations” (SEBU6250) for details.

\*\*For use of higher blends, consult your Cat dealer.

## Swing Mechanism

Swing Speed	8.70 rpm	
Maximum Swing Torque	65 kN·m	47,647 lbf·ft

## Weights

Operating Weight – Forest Harvester 17 300 kg 38,100 lb

- Reach boom, R2.6 (8'6") stick, GD 0.65 m<sup>3</sup> (0.85 yd<sup>3</sup>) bucket, and 500 mm (20") triple grouser shoes and 3.05 mt (6,720 lb) counterweight.

Operating Weight – Forest Grapple 17 300 kg 38,100 lb

- Reach boom, R2.6 (8'6") stick, GD 0.65 m<sup>3</sup> (0.85 yd<sup>3</sup>) bucket, and 500 mm (20") triple grouser shoes and 3.05 mt (6,720 lb) counterweight.

## Track

Track Shoes Width	500 mm	20 in
Track Shoes Width	600 mm	24 in
Track Shoes Width	700 mm	28 in
Number of Shoes (each side)	44	
Number of Track Rollers (each side)	7	
Number of Carrier Rollers (each side)	2	

## Drive

Gradeability	35°/70%	
Maximum Travel Speed	5.3 km/h	3.3 mph
Maximum Drawbar Pull	157 kN	35,295 lbf

## Hydraulic System

Main System – Maximum Flow – Implement	296 L/min	78 gal/min
Maximum Pressure – Equipment – Implement	35 000 kPa	5,076 psi
Maximum Pressure – Travel	35 000 kPa	5,076 psi
Maximum Pressure – Swing	25 800 kPa	3,741 psi
Boom Cylinder – Bore	110 mm	4.3 in
Boom Cylinder – Stroke	1193 mm	47.0 in
Stick Cylinder – Bore	120 mm	5.5 in
Stick Cylinder – Stroke	1331 mm	52.4 in
Bucket Cylinder – Bore	105 mm	4.1 in
Bucket Cylinder – Stroke	1039 mm	40.9 in

## Service Refill Capacities

Fuel Tank Capacity	271 L	71.6 gal
Cooling System	28 L	7.4 gal
Engine Oil (with filter)	15 L	4.0 gal
Final Drive (each)	6 L	1.6 gal
Hydraulic System (including tank)	94 L	24.8 gal
Hydraulic Tank (including suction pipe)	87 L	23.0 gal
DEF Tank	22 L	5.8 gal

## Standards

Brakes	ISO 10265:2008
Cab/FOGS	ISO 10262:1998
Cab/ROPS	ISO 12117-2:2008

## Sound Performance

ISO 6395 (external)	101 dB(A)
ISO 6396 (inside cab)	70 dB(A)

- When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166 OCT98, meets OSHA and MSHA requirements for operator sound exposure limits in effect at time of manufacture.
- 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 a noisy environment.

# 317 Hydraulic Excavator – Forestry Specifications

## Operating Weights and Ground Pressures

Base Machine Configurations	500 mm (20") Triple Grouser Shoes		600 mm (24") Single Grouser Shoes	600 mm (24") Triple Grouser Shoes		700 mm (28") Triple Grouser Shoes	
	Weight	Ground Pressure	Weight	Weight	Ground Pressure	Weight	Ground Pressure
Base Frame with Track Rollers and Carrier Rollers	kg (lb)	kPa (psi)	kg (lb)	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)
<b>3.05 mt (6,720 lb) Counterweight + Long Undercarriage Base Machine for Harvester</b>							
Reach Boom + R2.6 (8'6") Stick + 0.65 m <sup>3</sup> (0.85 yd <sup>3</sup> ) GDX Bucket	17 300 (38,100)	48.8 (7.1)	17 800 (39,200)	17 500 (38,600)	41.2 (6.0)	17 700 (39,100)	35.8 (5.2)
<b>3.05 mt (6,720 lb) Counterweight + Long Undercarriage Base Machine for Grapple</b>							
Reach Boom + R2.6 (8'6") Stick + 0.65 m <sup>3</sup> (0.85 yd <sup>3</sup> ) GDX Bucket	17 300 (38,100)	48.8 (7.1)	17 800 (39,300)	17 500 (38,600)	41.2 (6.0)	17 800 (39,100)	35.8 (5.2)
<b>3.57 mt (7,870 lb) Counterweight + Long Undercarriage Base Machine for Harvester</b>							
Reach Boom + R2.6 (8'6") Stick + 0.65 m <sup>3</sup> (0.85 yd <sup>3</sup> ) GDX Bucket	17 800 (39,200)	50.3 (7.3)	18 300 (40,400)	18 000 (39,700)	42.4 (6.1)	18 300 (40,300)	36.9 (5.4)
<b>3.57 mt (7,870 lb) Counterweight + Long Undercarriage Base Machine for Grapple</b>							
Reach Boom + R2.6 (8'6") Stick + 0.65 m <sup>3</sup> (0.85 yd <sup>3</sup> ) GDX Bucket	17 800 (39,300)	50.3 (7.3)	18 300 (40,400)	18 000 (39,800)	42.5 (6.2)	18 300 (40,300)	36.9 (5.4)

All operating weights include a 90% fuel tank with 75 kg (165 lb) operator.



# 317 Hydraulic Excavator – Forestry Specifications

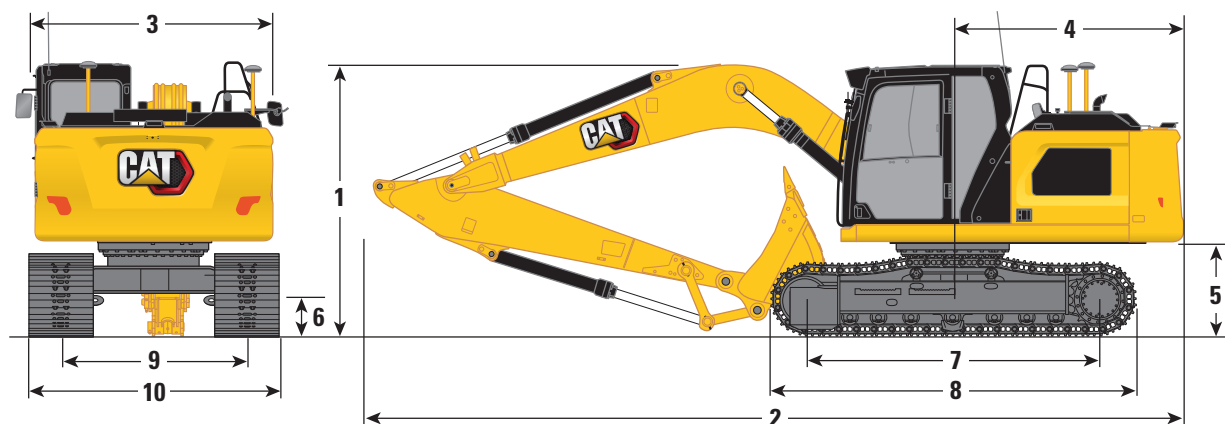
## Major Component Weights

	kg	lb
Base Machine Weight (with upper frame, undercarriage, counterweight – does not include boom, stick, bucket, boom cylinders, stick cylinder, bucket cylinders, tracks, fuel tank and operator).		
With 3.05 mt (6,720 lb) Counterweight for Grapple	11 730	25,860
With 3.05 mt (6,720 lb) Counterweight for Harvester	11 720	25,840
With 3.57 mt (7,870 lb) Counterweight for Grapple	12 250	27,010
With 3.57 mt (7,870 lb) Counterweight for Harvester	12 240	26,990
Track Shoes:		
500 mm (20") Triple Grouser Track Shoes	2020	4,660
600 mm (24") Single Grouser Track Shoes	2640	5,810
600 mm (24") Triple Grouser Track Shoes	2340	5,160
700 mm (28") Triple Grouser Track Shoes with Additional Steps	2580	5,680
Two Boom Cylinders	300	670
Weight of 90% Fuel Tank and 75 kg (165 lb) Operator	300	660
Counterweights:		
3.05 mt (6,720 lb) Counterweight	3050	6,720
3.57 mt (7,870 lb) Counterweight	3570	7,870
Swing Frame	1700	3,760
Undercarriage:		
Long Undercarriage	3900	8,600
Booms (including lines, pins, stick cylinder):		
Reach 5.1 m (16'9") Boom for Harvester	1320	2,910
Reach 5.1 m (16'9") Boom for Grapple	1360	2,990
Sticks (including lines, pins, bucket cylinder, bucket linkage):		
Reach Stick 2.6 m (8'6") for Harvester	820	1,820
Reach Stick 2.6 m (8'6") for Grapple	840	1,860
Buckets (without linkage, with tips and side cutters):		
0.65 m <sup>3</sup> (0.85 yd <sup>3</sup> ) GDX Bucket	600	1,320
Quick Coupler:		
Pin Grabber QC	260	580
Guard:		
FOGS	130	280

# 317 Hydraulic Excavator – Forestry Specifications

## Dimensions

All dimensions are approximate and may vary depending on bucket selection.



### Boom Option

**Reach Boom**  
5.1 m (16'9")

### Stick Option

**Reach Stick**  
R2.6 (8'6") for Forest

#### 1 Machine Height:\*

Top of Cab Height	2930 mm	9'7"
Top of FOGS Height	3070 mm	10'1"
Handrails Height	2940 mm	9'8"
With Boom/Stick/Bucket Installed (with stick cylinder lines)	2980 mm	9'9"
With Boom/Stick Installed (with stick cylinder lines)	2870 mm	9'5"
With Boom Installed (with stick cylinder lines)	2460 mm	8'1"

#### 2 Machine Length:

With Boom/Stick/Bucket Installed (with stick cylinder lines)	8550 mm	28'1"
With Boom/Stick Installed (with stick cylinder lines)	8520 mm	27'11"
With Boom Installed (with stick cylinder lines)	7560 mm	24'10"

#### Bucket Type

GD

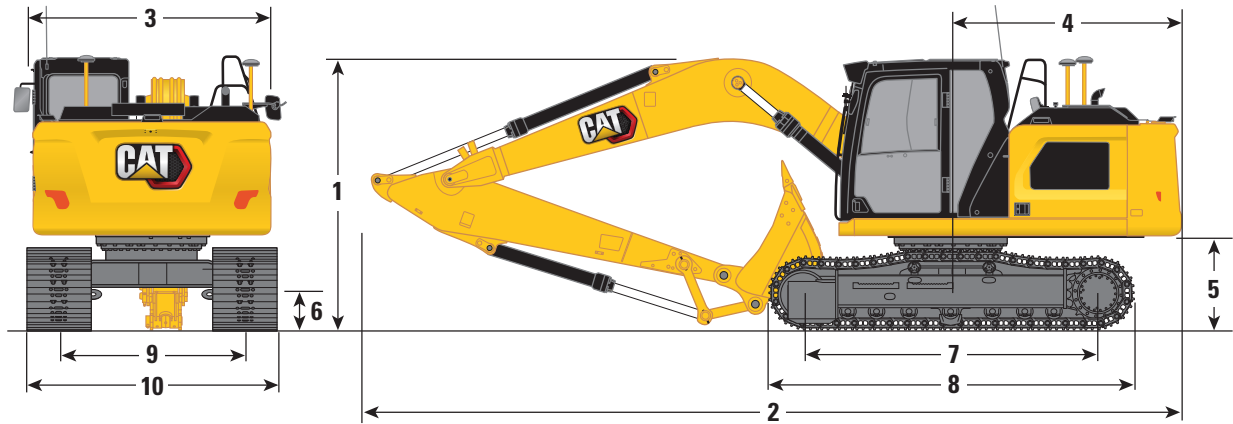
Bucket Capacity	0.65 m <sup>3</sup>	0.85 yd <sup>3</sup>
Bucket Tip Radius	900 mm	2'11"

\*For models with single grouser track shoes add 30 mm (1.2") to machine height dimensions.

# 317 Hydraulic Excavator – Forestry Specifications

## Dimensions

All dimensions are approximate and may vary depending on bucket selection.

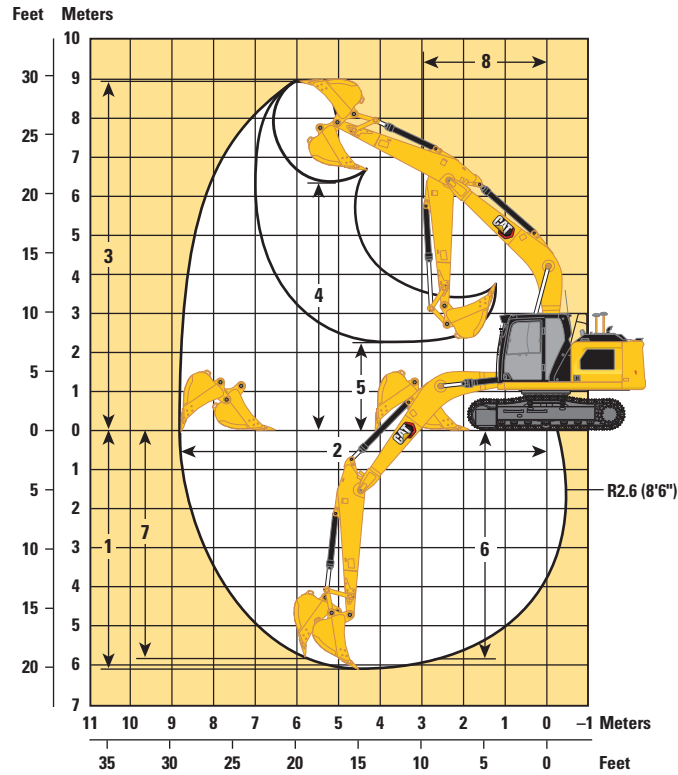


Boom Option	Reach Boom 5.1 m (16'9")	
Stick Option	Reach Stick R2.6 (8'6") for Forest	
<b>3</b> Upperframe Width	2540 mm	8'4"
<b>4</b> Tail Swing Radius:		
3.05 mt (6,720 lb) Counterweight	2500 mm	8'2"
3.57 mt (7,870 lb) Counterweight	2500 mm	8'2"
<b>5</b> Counterweight Clearance	1010 mm	3'4"
<b>6</b> Ground Clearance	430 mm	1'5"
<b>7</b> Length to Center of Rollers	3170 mm	10'5"
<b>8</b> Track Length	3970 mm	13'0"
<b>9</b> Track Gauge	1990 mm	6'6"
<b>10</b> Undercarriage Width:		
500 mm (20") Shoes	2490 mm	8'2"
600 mm (24") Shoes	2590 mm	8'6"
700 mm (28") Shoes	2690 mm	8'10"
Bucket Type	GD	
Bucket Capacity	0.65 m <sup>3</sup>	0.85 yd <sup>3</sup>
Bucket Tip Radius	900 mm	2'11"

# 317 Hydraulic Excavator – Forestry Specifications

## Working Ranges and Forces

All dimensions are approximate and may vary depending on bucket selection.



Boom Option	Reach Boom 5.1 m (16'9")	
Stick Option	Reach Stick R2.6 (8'6") for Forest	
1 Maximum Digging Depth	6070 mm	19'11"
2 Maximum Reach at Ground Line	8760 mm	28'9"
3 Maximum Cutting Height	8950 mm	29'4"
4 Maximum Loading Height	6310 mm	20'8"
5 Minimum Loading Height	2320 mm	7'7"
6 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	5880 mm	19'3"
7 Maximum Vertical Wall Digging Depth	5850 mm	19'2"
8 Minimum Working Equipment Radius	2980 mm	9'9"
Bucket Digging Force (ISO)	124 kN	27,880 lbf
Stick Digging Force (ISO)	80 kN	17,980 lbf
Bucket Type	GD	
Bucket Capacity	0.65 m <sup>3</sup>	0.85 yd <sup>3</sup>
Bucket Tip Radius	900 mm	2'11"

## Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
<b>BOOMS, STICKS AND LINKAGES</b>			<b>ELECTRICAL SYSTEM</b>		
5.1 m (16'9") Reach boom	✓		Maintenance free battery	✓	
2.6 m (8'6") Reach stick	✓		Centralized electrical disconnect switch	✓	
Bucket linkage, without lifting eye <sup>1</sup>	✓		Programmable time-delay LED working lights	✓	
<b>CAB</b>			LED chassis and left-side/right-side boom light – 1,800 lumens	✓	
Sound suppressed ROPS cab with viscous mounts	✓		LED cab lights – 1,800 lumens		✓
High-resolution 254 mm (10") LCD touch screen monitor	✓		<b>ENGINE</b>		
Automatic bi-level air conditioner	✓		Three selectable modes: Power, Smart, Eco	✓	
Jog dial and shortcut keys for monitor control	✓		One-touch low idle with automatic engine speed control	✓	
Keyless push-to-start engine control	✓		Automatic engine shutdown	✓	
Height-adjustable console, infinite with no tool	✓		–18° C (–0° F) cold start capability		✓
Tilt-up left-side console	✓		–25° C (–13° F) cold start capability		✓
Cat Stick Steer		✓	Two-stage fuel filtration system with water separator and indicator	✓	
Heated seat with air-adjustable suspension	✓		Sealed double element air filter with integrated precleaner	✓	
51 mm (2") orange seat belt	✓		Electric fuel priming pump	✓	
Bluetooth® integrated radio with USB ports	✓		Electric cooling fans	✓	
2 × 12V DC outlets	✓		<b>HYDRAULIC SYSTEM</b>		
Cup holder and document storage	✓		Electronic main control valve	✓	
Openable two-piece front window	✓		Single type electronic main pump	✓	
Upper radial wiper with washer	✓		Boom and stick regeneration circuits	✓	
Openable polycarbonate skylight hatch	✓		Boom and stick drift reduction valve	✓	
LED dome light	✓		Automatic hydraulic oil warm up	✓	
Floor welcome light	✓		Automatic two-speed travel	✓	
Roller front sunscreen	✓		Element type main hydraulic filter	✓	
Roller rear sunscreen		✓	*Paired with PL161 attachment locator.		
Rear window emergency exit	✓		<sup>1</sup> Optional for Harvester.		
Washable floor mat	✓		<i>(continued on next page)</i>		
Beacon ready	✓				
<b>CAT TECHNOLOGY</b>					
Remote Flash and Troubleshoot	✓				
Cat Product Link™	✓				
Work tool recognition	✓				
Work tool tracking*	✓				
Auto hammer stop	✓				

# 317 Forestry Standard and Optional Equipment

## Standard and Optional Equipment *(continued)*

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

	Standard	Optional		Standard	Optional
<b>SAFETY AND SECURITY</b>			<b>UNDERCARRIAGE AND STRUCTURES</b>		
Guard, Falling Object (FOGS)	✓		500 mm (20") triple grouser track shoes		✓
Rear and right-side-view cameras	✓		600 mm (24") single grouser track shoes		✓
Ground level accessible secondary engine shutoff switch in cab	✓		600 mm (24") triple grouser track shoes		✓
Service platform with anti-skid plate and countersunk bolts	✓		700 mm (28") triple grouser track shoes with additional steps		✓
Signaling/warning horn	✓		Grease lubricated track link	✓	
Hydraulic lock out lever	✓		Center track guiding guard	✓	
<b>SERVICE AND MAINTENANCE</b>			Two-piece segmented track guiding guard	✓	
Side entry to service platform	✓		Bottom without swivel guard	✓	
Grouped engine oil and fuel filters	✓		Travel motor guards	✓	
Ground level engine oil dipstick	✓		3.05 mt (6,720 lb) counterweight	✓	
S·O·S <sup>SM</sup> sampling ports	✓		3.57 mt (7,870 lb) counterweight		✓
			Tie-down points (ISO 15818 compliant)	✓	

## Dealer Installed Kits and Attachments

Attachments may vary. Consult your Cat dealer for details.

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### CAB

- Radial lower wiper
- Left-hand and right-hand electrical pedal (two-way) for tool control
- Dual exit rear window kit
- Rain protector plus cab light cover
- Front windshield laminated glass (P5A glass, EU demolition regulation)
- Key fob (for use with Bluetooth receiver)

### SAFETY AND SECURITY

- 76 mm (3") retractable seat belt

### GUARDS

- Mesh guard full front (not compatible with cab light cover, rain protector)
- Mesh guard lower front half
- Full protecting vandalism guard



国土交通省  
超低騒音型建設機械



オフロード法2014年  
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Based on the Labor, Safety and Health Laws in Japan, employer of small construction equipment are required to provide specific training for all operators on machines with ship weight less than 3 metric ton. For machines greater than 3 metric ton, operator needs to obtain operator license certification from a Government approved registered training school.

AEXQ3027-01 (11-2021)  
Replaces AEXQ3027-00  
Build Number: 07B  
(Japan)

