

Engine

Engine Model (Standard)	Cat® C4.4 ACERT® DIT	
Gross Power – SAE J1995	75 kW	101 hp
Gross Power – ISO 14396	75 kW	101 hp
Net Power – SAE J1349	69 kW	93 hp
Net Power – ISO 9249	70 kW	94 hp
Net Power – EEC 80/1269	70 kW	94 hp
Net Peak Power @ 1,800 rpm – SAE J1349	71 kW	95 hp
Net Peak Power @ 1,800 rpm – ISO 9249	72 kW	97 hp
Net Peak Power @ 1,800 rpm – EEC 80/1269	72 kW	97 hp
Bore	105 mm	4.13 in
Stroke	127 mm	5 in
Displacement	4.4 L	268 in³
Net Torque Rise @ 1,400 rpm – Standard	36%	
Net Peak Torque @ 1,400 rpm – Standard – SAE J1349	408 N·m	301 lb ft

- Engine meets all U.S. EPA Tier 3/ EU Stage IIIa emissions requirements.
- The net power ratings apply at 2,200 rpm when tested under the specified conditions for the specified standard.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.
- Based on standard air conditions of 25° C (77° F) and 99 kPa (29.32 in) in dry barometer.
- Used 35° API gravity fuel having an LHV of 42 780 kJ/kg (18,390 BTU/lb) when used at 30° C (89° F) (reference a fuel density of 838.9 g/L [7.001 lb/gal]).
- No derating required up to 3000 m (9,843 ft).
- Net torque rise meets SAE J1349.
- Net peak power ratings apply at conditions specified above.

Weights

Operating Weight – Nominal	6895 kg	15,201 lb
Operating Weight – Maximum	11 000 kg	24,251 lb
Cab, ROPS/FOPS	260 kg	573 lb
Auto-Shift	27 kg	60 lb
Transmission		
Ride Control	25 kg	55 lb
Air Conditioning	39 kg	86 lb
Four Wheel Drive	155 kg	342 lb
Loader, IT w/QC	365 kg	805 lb
Extendible Stick (no weights)	299 kg	659 lb
Counterweights (Option 1)	116 kg	255 lb
Counterweights (Option 2)	231 kg	510 lb
Counterweights (Option 3)	488 kg	1,075 lb

- Total gross machine weight not to exceed 11 000 kg (24,251 lb).

Backhoe

Dig Depth – Standard	4360 mm	14 ft 4 in
E-Stick Retracted	4402 mm	14 ft 5 in
E-Stick Extended	5456 mm	17 ft 11 in
Reach from Swing Pivot – Standard	5618 mm	18 ft 5 in
E-Stick Retracted	5657 mm	18 ft 7 in
E-Stick Extended	6666 mm	21 ft 10 in
Bucket Rotation	205 Degrees	
Bucket Dig Force – Standard	61.7 kN	13,875 lb
E-Stick Retracted	60.9 kN	13,863 lb
E-Stick Extended	60.9 kN	13,863 lb
Stick Dig Force – Standard	43 kN	9,662 lb
E-Stick Retracted	42.8 kN	9,616 lb
E-Stick Extended	31.2 kN	7,023 lb
Stick Lift @ 2440 mm (8 ft) – Standard	2601 kg	5,722 lb
E-Stick Retracted	2408 kg	5,298 lb
E-Stick Extended	1620 kg	3,564 lb
Loading Height – Standard	3636 mm	11 ft 11 in
E-Stick Retracted	3577 mm	11 ft 9 in
E-Stick Extended	4145 mm	13 ft 7 in
Loading Reach – Standard	1768 mm	5 ft 10 in
E-Stick Retracted	1868 mm	6 ft 1 in
E-Stick Extended	2771 mm	9 ft 1 in

420E/420E IT Specifications

Loader		
Bucket Capacity – General Purpose	0.96 m ³	1.25 yd ³
Bucket Width – General Purpose	2262 mm	7 ft 5 in
Dump Height @ Max Angle – Single Tilt	2573 mm	8 ft 5 in
Dump Height @ Max Angle – IT with QC	2507 mm	8 ft 3 in
Dump Reach @ Max Angle – Single Tilt	853 mm	2 ft 10 in
Dump Reach @ Max Angle – IT with QC	831 mm	2 ft 9 in
Dig Depth – Single Tilt	106 mm	4 in
Dig Depth – IT with QC	147 mm	6 in
Lift Capacity @ Full Height – Single Tilt	2929 kg	6,457 lb
Lift Capacity @ Full Height – IT with QC	3164 kg	6,975 lb
Bucket Breakout Force – Single Tilt	45.6 kN	10,242 lb
Bucket Breakout Force – IT with QC	47.1 kN	10,593 lb

Hydraulic System		
Circuit Type	Closed center, load sensing	
Pump Capacity (@ 2,200 rpm)	163 L/min	43 gal/min
System Pressure – Backhoe	24 900 kPa	3,611 psi
System Pressure – Loader	22 800 kPa	3,307 psi
Pump Type	Variable-flow, axial piston	
Steering Type	Front wheel	
Power Steering	Hydrostatic, HMU	
2WD Cylinder – Bore	65 mm	2.6 in
Stroke	120 mm	4.7 in
Rod Diameter	36 mm	1.4 in
4WD Cylinder – Bore	65 mm	2.6 in
Stroke	120 mm	4.7 in
Rod Diameter	36 mm	1.4 in
Brake System	Inboard, oil-immersed, multiple disc	

Power Train		
Power-Shuttle, Forward 1st	6 km/h	3.7 mph
Forward 2nd	9.6 km/h	5.9 mph
Forward 3rd	20 km/h	12 mph
Forward 4th	40 km/h	25 mph
Power-Shuttle, Reverse 1st	6 km/h	3.7 mph
Reverse 2nd	9.6 km/h	5.9 mph
Reverse 3rd	20 km/h	12 mph
Reverse 4th	40 km/h	25 mph
Auto-Shift (opt), Forward 1st	5.9 km/h	3.7 mph
Forward 2nd	9.5 km/h	5.9 mph
Forward 3rd	20 km/h	12 mph
Forward 4th	27 km/h	17 mph
Forward 5th	41 km/h	25 mph
Auto-Shift (opt), Reverse 1st	5.9 km/h	3.7 mph
Reverse 2nd	13 km/h	7.8 mph
Reverse 3rd	27 km/h	17 mph

- Auto-Shift automatically shifts between second gear and highest selected gear.
- Forward/reverse electric power shuttle is controlled by a conveniently placed, hand operated lever that provides instant direction changes between forward and reverse through power hydraulic clutches.
- Torque converter free-wheel clutch allows the converter stator to free-wheel during high speed, low torque conditions such as roading.
- Single-stage, 2.63:1 stall ratio.
- Travel speeds of two wheel drive backhoe loader at full throttle when equipped with 19.5 × 24 rear tires.

Machine Dimensions

Single Tilt Loader

	Multi Purpose (0.96 m ³ /1.25 yd ³)		Multi Purpose (1.03 m ³ /1.35 yd ³)		Multi Purpose with Forks (1.00 m ³ /1.31 yd ³)		Multi Purpose with Forks (1.07 m ³ /1.40 yd ³)	
	mm	ft/in	mm	ft/in	mm	ft/in	mm	ft/in
(1) Overall length (loader on ground)	7130	23 ft 5 in	7130	23 ft 5 in	7130	23 ft 5 in	7130	23 ft 5 in
Overall transport length	7155	23 ft 6 in	7155	23 ft 6 in	7155	23 ft 6 in	7155	23 ft 6 in
(2) Overall transport height (standard stick)	3577	11 ft 9 in	3577	11 ft 9 in	3577	11 ft 9 in	3577	11 ft 9 in
Overall transport height (extendible stick)	3631	11 ft 11 in	3631	11 ft 11 in	3631	11 ft 11 in	3631	11 ft 11 in
Overall Width	2322	7 ft 7 in	2322	7 ft 7 in	2322	7 ft 7 in	2322	7 ft 7 in
(3) Height to top of cab/canopy	2819	9 ft 3 in	2819	9 ft 3 in	2819	9 ft 3 in	2819	9 ft 3 in
(4) Height to top of exhaust stack	2754	9 ft 0 in	2754	9 ft 0 in	2754	9 ft 0 in	2754	9 ft 0 in
Height to loader hinge pin (transport)	412	1 ft 4 in	412	1 ft 4 in	412	1 ft 4 in	412	1 ft 4 in
Ground clearance (minimum)	320	1 ft 1 in	320	1 ft 1 in	320	1 ft 1 in	320	1 ft 1 in
(5) Rear axle centerline to front grill	2705	8 ft 10 in	2705	8 ft 10 in	2705	8 ft 10 in	2705	8 ft 10 in
Front wheel tread gauge	1826	6 ft 0 in	1826	6 ft 0 in	1826	6 ft 0 in	1826	6 ft 0 in
Rear wheel tread gauge	1707	5 ft 7 in	1707	5 ft 7 in	1707	5 ft 7 in	1707	5 ft 7 in
(6) Wheelbase 2WD/4WD	2200	7 ft 3 in	2200	7 ft 3 in	2200	7 ft 3 in	2200	7 ft 3 in

IT Loader with Quick Coupler

	General Purpose (0.96 m ³ /1.25 yd ³)		General Purpose (1.00 m ³ /1.31 yd ³)		General Purpose (1.15 m ³ /1.50 yd ³)	
	mm	ft/in	mm	ft/in	mm	ft/in
(1) Overall length (loader on ground)	7399	24 ft 3 in	7354	24 ft 2 in	7321	24 ft 0 in
Overall transport length	7434	25 ft 5 in	7402	24 ft 3 in	7275	23 ft 10 in
(2) Overall transport height (standard stick)	3577	11 ft 9 in	3577	11 ft 9 in	3577	11 ft 9 in
Overall transport height (extendible stick)	3631	11 ft 11 in	3631	11 ft 11 in	3631	11 ft 11 in
Overall Width	2438	8 ft 0 in	2438	8 ft 0 in	2322	7 ft 7 in
(3) Height to top of cab/canopy	2819	9 ft 3 in	2819	9 ft 3 in	2819	9 ft 3 in
(4) Height to top of exhaust stack	2754	9 ft 0 in	2754	9 ft 0 in	2754	9 ft 0 in
Height to loader hinge pin (transport)	382	1 ft 3 in	382	1 ft 3 in	364	1 ft 2 in
Ground clearance (minimum)	320	1 ft 1 in	320	1 ft 1 in	320	1 ft 1 in
(5) Rear axle centerline to front grill	2704	8 ft 10 in	2704	8 ft 10 in	2705	8 ft 10 in
Front wheel tread gauge	1880	6 ft 2 in	1880	6 ft 2 in	1826	6 ft 0 in
Rear wheel tread gauge	1727	5 ft 8 in	1727	5 ft 8 in	1707	5 ft 7 in
(6) Wheelbase 2WD/4WD	2200	7 ft 3 in	2200	7 ft 3 in	2200	7 ft 3 in

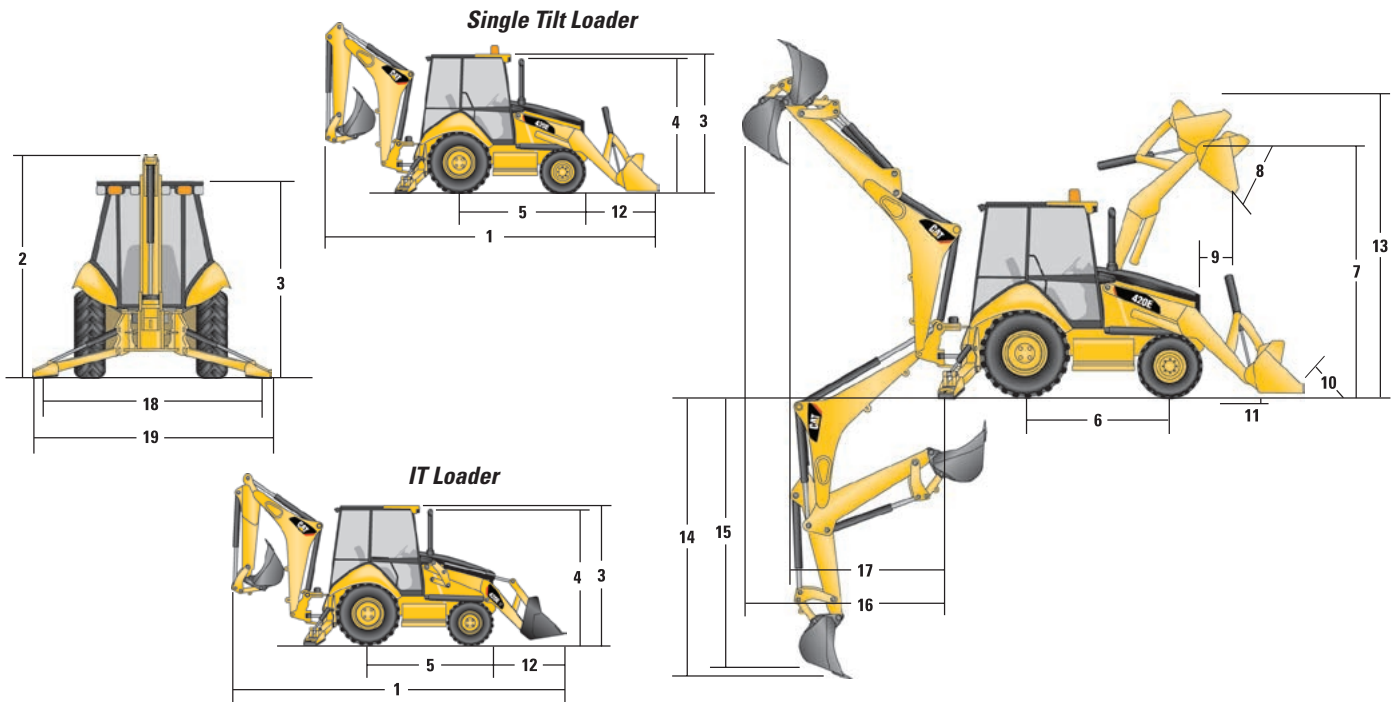
Dimensions and performance specifications shown are for machines equipped with 12.5/80-18 SGL front tires, 19.5L-24 IT525 rear tires, ROPS canopy, standard stick with 610 mm (24 inch) standard duty bucket, and 0.96 m³ (1.25 yd³) loader bucket and standard equipment unless otherwise specified.

420E/420E IT Specifications

Machine Dimensions

	IT Loader with Quick Coupler			
	Multi Purpose (0.96 m ³ /1.25 yd ³)		Multi Purpose (1.03 m ³ /1.35 yd ³)	
	mm	ft/in	mm	ft/in
(1) Overall length (loader on ground)	7231	23 ft 9 in	7231	23 ft 9 in
Overall transport length	7208	23 ft 8 in	7208	23 ft 8 in
(2) Overall transport height (standard stick)	3577	11 ft 9 in	3577	11 ft 9 in
Overall transport height (extendible stick)	3631	11 ft 11 in	3631	11 ft 11 in
Overall Width	2322	7 ft 7 in	2322	7 ft 7 in
(3) Height to top of cab/canopy	2819	9 ft 3 in	2819	9 ft 3 in
(4) Height to top of exhaust stack	2754	9 ft 0 in	2754	9 ft 0 in
Height to loader hinge pin (transport)	359	1 ft 2 in	359	1 ft 2 in
Ground clearance (minimum)	320	1 ft 1 in	320	1 ft 1 in
(5) Rear axle centerline to front grill	2705	8 ft 10 in	2705	8 ft 10 in
Front wheel tread gauge	1826	6 ft 0 in	1826	6 ft 0 in
Rear wheel tread gauge	1707	5 ft 7 in	1707	5 ft 7 in
(6) Wheelbase 2WD/4WD	2200	7 ft 3 in	2200	7 ft 3 in

Dimensions and performance specifications shown are for machines equipped with 12.5/80-18 SGL front tires, 19.5L-24 IT525 rear tires, ROPS canopy, standard stick with 610 mm (24 inch) standard duty bucket, and 0.96 m³ (1.25 yd³) loader bucket and standard equipment unless otherwise specified.



Loader Bucket Dimensions and Performance

	IT Loader with Quick Coupler					
	General Purpose (0.96 m ³ /1.25 yd ³)		General Purpose (1.00 m ³ /1.31 yd ³)		General Purpose (1.15 m ³ /1.50 yd ³)	
Capacity (SAE rated)	0.96 m ³	1.25 yd ³	1.00 m ³	1.31 yd ³	1.15 m ³	1.50 yd ³
Overall bucket width	2262 mm	7 ft 5 in	2406 mm	7 ft 11 in	2406 mm	7 ft 11 in
Lift capacity at maximum height	3164 kg	6,975 lb	3162 kg	6,971 lb	3023 kg	6,664 lb
Breakout force	47.1 kN	10,593 lb	47.5 kN	10,672 lb	45.5 kN	10,235 lb
(7) Maximum hinge pin height	3329 mm	10 ft 11 in	3329 mm	10 ft 11 in	3316 mm	10 ft 11 in
(8) Dump angle at full height	45°		45°		45°	
Dump height at maximum angle	2507 mm	8 ft 2 in	2539 mm	8 ft 4 in	2493 mm	8 ft 2 in
(9) Dump reach at maximum angle	831 mm	2 ft 9 in	799 mm	2 ft 7 in	801 mm	2 ft 8 in
(10) Maximum bucket rollback at ground level	40°		40°		40°	
(11) Digging depth	147 mm	6 in	147 mm	6 in	153 mm	6 in
Maximum grading angle	108°		110°		108°	
Width of dozer cutting edge	N/A	N/A	N/A	N/A	N/A	N/A
(12) Grill to bucket cutting edge, carry position	1607 mm	5 ft 3 in	1575 mm	5 ft 2 in	1593 mm	5 ft 3 in
(13) Maximum operating height	4260 mm	14 ft 0 in	4256 mm	14 ft 0 in	4303 mm	14 ft 1 in
Jaw opening maximum	N/A	N/A	N/A	N/A	N/A	N/A
Bucket jaw clamping force	N/A	N/A	N/A	N/A	N/A	N/A
Weight (does not include teeth or forks)	434 kg	957 lb	444 kg	978 lb	481.01 kg	1,060 lb

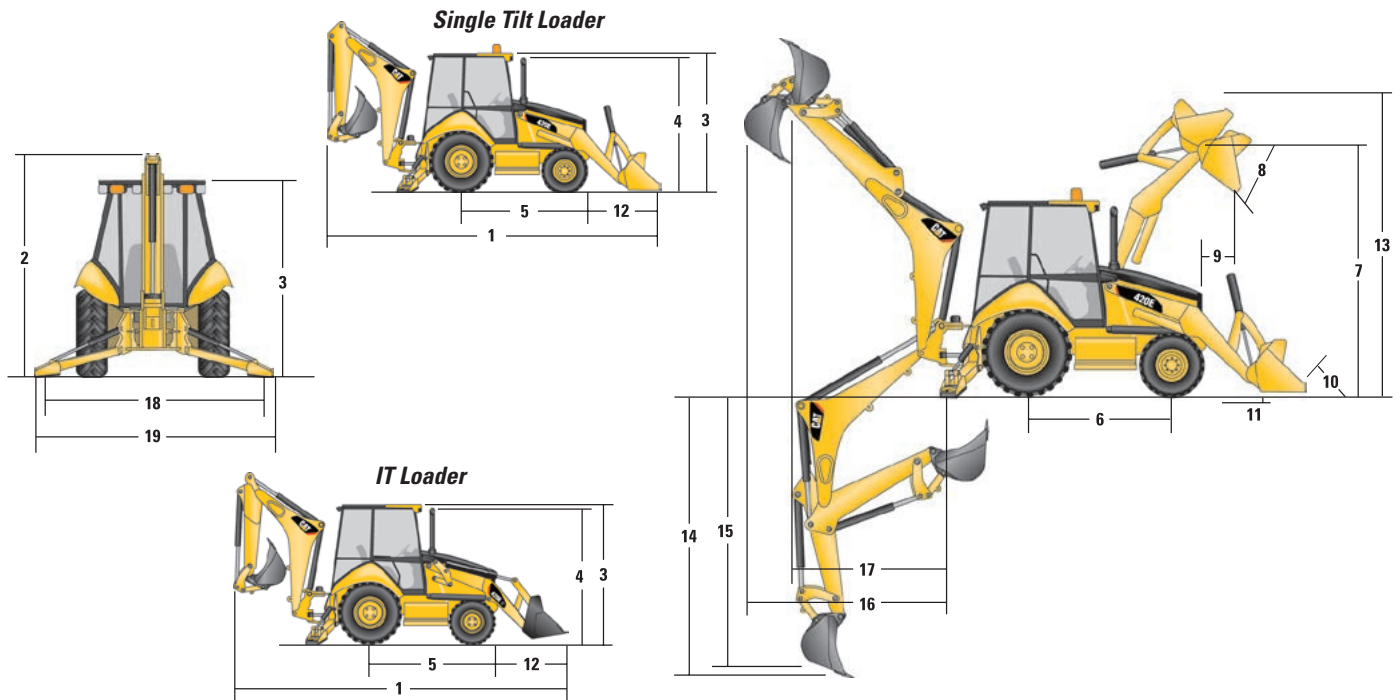
	IT Loader with Quick Coupler			
	Multi Purpose (0.96 m ³ /1.25 yd ³)		Multi Purpose (1.03 m ³ /1.35 yd ³)	
Capacity (SAE rated)	0.96 m ³	1.26 yd ³	1.03 m ³	1.35 yd ³
Overall bucket width	2279 mm	7 ft 6 in	2425 mm	7 ft 11 in
Lift capacity at maximum height	2800 kg	6,174 lb	2771 kg	6,110 lb
Breakout force	44.5 kN	10,020 lb	44.4 kN	9,983 lb
(7) Maximum hinge pin height	3316 mm	10 ft 11 in	4306 mm	14 ft 2 in
(8) Dump angle at full height	45°		45°	
Dump height at maximum angle	2559 mm	8 ft 5 in	2559 mm	8 ft 5 in
(9) Dump reach at maximum angle	748 mm	2 ft 5 in	748 mm	2 ft 5 in
(10) Maximum bucket rollback at ground level	40°		40°	
(11) Digging depth	144 mm	6 in	144 mm	6 in
Maximum grading angle	111°		111°	
Width of dozer cutting edge	2262 mm	7 ft 5 in	2406 mm	7 ft 11 in
(12) Grill to bucket cutting edge, carry position	1526 mm	5 ft 0 in	1526 mm	5 ft 0 in
(13) Maximum operating height	4306 mm	14 ft 2 in	4306 mm	14 ft 2 in
Jaw opening maximum	790 mm	2 ft 7 in	790 mm	2 ft 7 in
Bucket jaw clamping force	55 700 N	12,521 lb	55 700 N	12,521 lb
Weight (does not include teeth or forks)	724.09 kg	1,596 lb	752.93 kg	1,660 lb

Dimensions and performance specifications shown are for machines equipped with 12.5/80-18 SGL front tires, 19.5L-24 IT525 rear tires, ROPS canopy, standard stick with 610 mm (24 inch) standard duty bucket, and 0.96 m³ (1.25 yd³) loader bucket and standard equipment unless otherwise specified.

Backhoe Dimensions and Performance

	Standard Stick		E-Stick Retracted		E-Stick Extended	
(14) Digging depth, SAE (max.)	4360 mm	14 ft 4 in	4402 mm	14 ft 5 in	5456 mm	17 ft 11 in
(15) Digging depth, 610 mm (2 ft) flat bottom	4321 mm	14 ft 2 in	4363 mm	14 ft 4 in	5420 mm	17 ft 9 in
Reach from rear axle centerline at ground line	6721 mm	22 ft 1 in	6760 mm	22 ft 2 in	7769 mm	25 ft 6 in
(16) Reach from swing pivot at ground line	5618 mm	18 ft 5 in	5657 mm	18 ft 7 in	6666 mm	21 ft 10 in
Maximum operating height	5523 mm	18 ft 1 in	5555 mm	18 ft 3 in	6302 mm	20 ft 8 in
Loading height	3636 mm	11 ft 11 in	3577 mm	11 ft 9 in	4145 mm	13 ft 7 in
(17) Loading reach	1768 mm	5 ft 10 in	1868 mm	6 ft 2 in	2771 mm	9 ft 1 in
Swing arc	180°		180°		180°	
Bucket rotation	205°		204°		204°	
(18) Stabilizer spread, operating position (center)	3310 mm	10 ft 10 in	3310 mm	10 ft 10 in	3310 mm	10 ft 10 in
(19) Stabilizer spread, operating position (outside)	3770 mm	12 ft 4 in	3770 mm	12 ft 4 in	3770 mm	12 ft 4 in
Stabilizer spread, transport position	2322 mm	7 ft 7 in	2322 mm	7 ft 7 in	2322 mm	7 ft 7 in
Bucket dig force	61.7 kN	13,875 lb	60.9 kN	13,863 lb	60.9 kN	13,863 lb
Stick dig force	43.0 kN	9,662 lb	42.8 kN	9,616 lb	31.2 kN	7,023 lb

Dimensions and performance specifications shown are for machines equipped with 12.5/80-18 SGL front tires, 19.5L-24 IT525 rear tires, ROPS canopy, standard stick with 610 mm (24 inch) standard duty bucket, and 0.96 m³ (1.25 yd³) loader bucket and standard equipment unless otherwise specified.



420E/420E IT Specifications

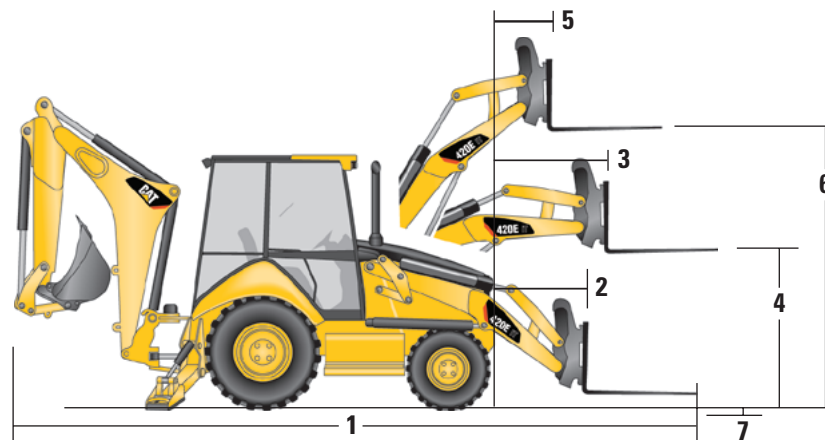
Dimensions with Forks/Material Handling Arm

Fork Tine Length	1070 mm/3 ft 6 in		1220 mm/4 ft 0 in		1370 mm/4 ft 10 in	
Operating load (SAE J1197)	2291 kg*	5,051 lb*	2215 kg*	4,883 lb*	2019 kg	4,451 lb
SAE load center	535 mm	1 ft 9 in	610 mm	2 ft 0 in	685 mm	2 ft 3 in
Operating load (CEN 474-4)	2428 kg	5,353 lb	2406 kg	5,304 lb	2382 kg	5,251 lb
CEN load center	500 mm	1 ft 8 in	500 mm	1 ft 8 in	500 mm	1 ft 8 in
(1) Overall length (forks on ground)	7717 mm	25 ft 4 in	7867 mm	25 ft 10 in	8017 mm	26 ft 4 in
(2) Reach at ground (from grill to heel of fork)†	985 mm	3 ft 3 in	985 mm	3 ft 3 in	985 mm	3 ft 2 in
(3) Maximum reach (from grill to heel of fork)†	1427 mm	4 ft 8 in	1427 mm	4 ft 8 in	1427 mm	4 ft 8 in
(4) Fork height at maximum reach	1458 mm	4 ft 9 in	1458 mm	4 ft 9 in	1458 mm	4 ft 9 in
(5) Reach at maximum height (from grill to heel of fork)†	665 mm	2 ft 2 in	665 mm	2 ft 2 in	665 mm	2 ft 2 in
(6) Maximum fork height	3238 mm	10 ft 7 in	3238 mm	10 ft 7 in	3238 mm	10 ft 7 in
(7) Maximum fork depth (below ground level)	20 mm	1 in	20 mm	1 in	20 mm	1 in

*Tip limited.

†Measured from nose of machine.

Dimensions and performance specifications shown are for machines equipped with 12.5/80-18 SGL front tires, 19.5L-24 IT525 rear tires, ROPS canopy, standard stick with 610 mm (24 inch) standard duty bucket, and 0.96 m³ (1.25 yd³) loader bucket and standard equipment unless otherwise specified.



420E/420E IT Specifications

Counterweights

Minimum Counterweight Recommendations

Standard Stick

Loader Bucket	Power Train	Single-Tilt		IT Loader w/QC	
		kg	lb	kg	lb
GP	2WD/4WD	231	510	no counterweight	
MP	2WD/4WD	no counterweight		no counterweight	
Forks	2WD/4WD	N/A	N/A	no counterweight	
Material Handling Arm	2WD/4WD	N/A	N/A	no counterweight	

Extendible Stick

Loader Bucket	Power Train	Single-Tilt		IT Loader w/QC	
		kg	lb	kg	lb
GP	2WD/4WD	488	1,075	231	510
MP	2WD/4WD	231	510	no counterweight	
Forks	2WD/4WD	N/A	N/A	no counterweight	
Material Handling Arm	2WD	N/A	N/A	116	255
Material Handling Arm	4WD	N/A	N/A	no counterweight	

Backhoe Buckets

With weld on adapters and pin-on teeth

Standard Duty

Width		Rated Capacity		Weight		No. of Teeth
mm	in	L	ft ³	kg	lb	
305	12	78	2.8	97	213	3
457	18	118	4.2	115	253	4
610	24	175	6.2	132	290	5
762	30	233	8.2	147	323	5
914	36	292	10.3	165	363	6

Heavy Duty

Width		Rated Capacity		Weight		No. of Teeth
mm	in	L	ft ³	kg	lb	
305	12	78	2.8	105	231	3
406	16	105	3.7	128	282	3
457	18	118	4.2	129	284	4
610	24	175	6.2	151	332	5
762	30	233	8.2	167	367	5
914	36	292	10.3	189	416	6

Soil Excavation

Width		Rated Capacity		Weight		No. of Teeth
mm	in	L	ft ³	kg	lb	
457	18	181	6.4	153	336	4
610	24	241	8.5	179	395	5
762	30	320	11.3	197	434	5
914	36	380	13.4	223	491	6

Heavy Duty Rock

Width		Rated Capacity		Weight		No. of Teeth
mm	in	L	ft ³	kg	lb	
305	12	70	2.5	120	265	3
457	18	127	4.5	150	331	4
610	24	198	7.0	175	386	5
762	30	255	9.5	195	430	5
914	36	311	11.5	210	463	6

Coral

Width		Rated Capacity		Weight		No. of Teeth
mm	in	L	ft ³	kg	lb	
305	12	60	2.1	134	295	4
457	18	100	3.5	155	341	6
610	24	140	4.9	182	402	8
762	30	190	6.7	210	463	10