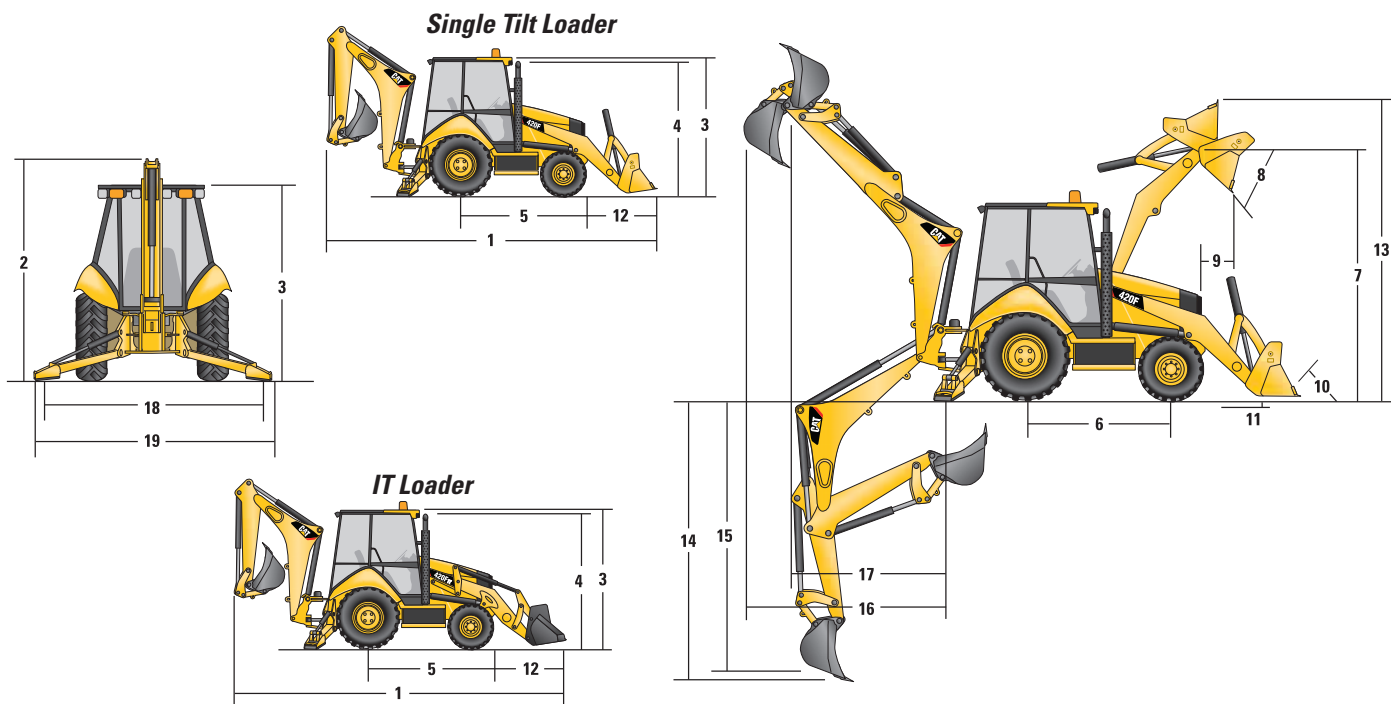


# 420F/420F IT Backhoe Loaders

## Machine Dimensions



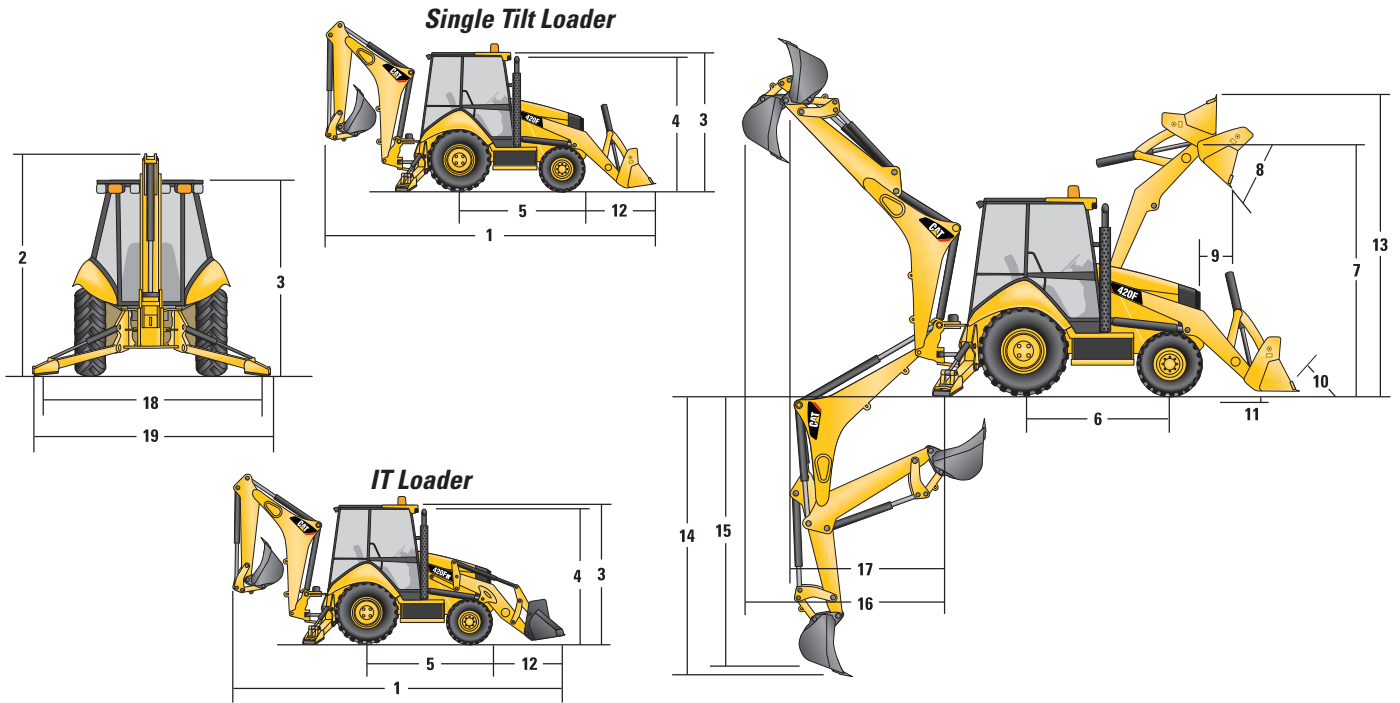
### Single Tilt Loader

	General Purpose (0.96 m <sup>3</sup> /1.25 yd <sup>3</sup> )		General Purpose (1.1 m <sup>3</sup> /1.4 yd <sup>3</sup> )		General Purpose (1.15 m <sup>3</sup> /1.5 yd <sup>3</sup> )		Multi Purpose (1.0 m <sup>3</sup> /1.3 yd <sup>3</sup> )		Multi Purpose (1.1 m <sup>3</sup> /1.4 yd <sup>3</sup> )	
	mm	ft/in	mm	ft/in	mm	ft/in	mm	ft/in	mm	ft/in
<b>1</b> Overall Transport Length	7169 mm	23'6"	7208 mm	23'8"	7208 mm	23'8"	7133 mm	23'5"	7133 mm	23'5"
Overall Length (loader on ground)	7141 mm	23'5"	7161 mm	23'6"	7161 mm	23'6"	7059 mm	23'2"	7059 mm	23'2"
<b>2</b> Overall Transport Height – Standard Stick	3577 mm	11'9"	3577 mm	11'9"	3577 mm	11'9"	3577 mm	11'9"	3577 mm	11'9"
Overall Transport Height – Extendible Stick	3631 mm	11'11"	3631 mm	11'11"	3631 mm	11'11"	3631 mm	11'11"	3631 mm	11'11"
Overall Width	2322 mm	7'7"	2322 mm	7'7"	2322 mm	7'7"	2322 mm	7'7"	2322 mm	7'7"
<b>3</b> Height to Top of Cab/Canopy	2819 mm	9'3"	2819 mm	9'3"	2819 mm	9'3"	2819 mm	9'3"	2819 mm	9'3"
<b>4</b> Height to Top of Exhaust Stack	2744 mm	9'0"	2744 mm	9'0"	2744 mm	9'0"	2744 mm	9'0"	2744 mm	9'0"
Height to Loader Hinge Pin (transport)	381 mm	1'3"	428 mm	1'5"	428 mm	1'5"	432 mm	1'5"	432 mm	1'5"
Ground Clearance (minimum)	320 mm	1'1"	320 mm	1'1"	320 mm	1'1"	320 mm	1'1"	320 mm	1'1"
<b>5</b> Rear Axle Centerline to Front Grill	2705 mm	8'10"	2705 mm	8'10"	2705 mm	8'10"	2705 mm	8'10"	2705 mm	8'10"
Front Wheel Tread Gauge	1895 mm	6'3"	1895 mm	6'3"	1895 mm	6'3"	1895 mm	6'3"	1895 mm	6'3"
Rear Wheel Tread Gauge	1714 mm	5'7"	1714 mm	5'7"	1714 mm	5'7"	1714 mm	5'7"	1714 mm	5'7"
<b>6</b> Wheelbase 2WD/AWD	2200 mm	7'3"	2200 mm	7'3"	2200 mm	7'3"	2200 mm	7'3"	2200 mm	7'3"

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 in) standard duty bucket, 0.96 m<sup>3</sup> (1.25 yd<sup>3</sup>) loader bucket and standard equipment unless otherwise specified.

# 420F/420F IT Backhoe Loaders

## Machine Dimensions



### IT Loader with Quick Coupler

	General Purpose (1.0 m <sup>3</sup> /1.3 yd <sup>3</sup> )		General Purpose (1.15 m <sup>3</sup> /1.5 yd <sup>3</sup> )		Multi Purpose (1.1 m <sup>3</sup> /1.4 yd <sup>3</sup> )	
<b>1</b> Overall Transport Length	7250 mm	23'9"	7279 mm	23'11"	7211 mm	23'8"
Overall Length (loader on ground)	7244 mm	23'9"	7287 mm	23'11"	7197 mm	23'7"
<b>2</b> Overall Transport Height – Standard Stick	3577 mm	11'9"	3577 mm	11'9"	3577 mm	11'9"
Overall Transport Height – Extendible Stick	3631 mm	11'11"	3631 mm	11'11"	3631 mm	11'11"
Overall Width	2322 mm	7'7"	2322 mm	7'7"	2322 mm	7'7"
<b>3</b> Height to Top of Cab/Canopy	2819 mm	9'3"	2819 mm	9'3"	2819 mm	9'3"
<b>4</b> Height to Top of Exhaust Stack	2744 mm	9'0"	2744 mm	9'0"	2744 mm	9'0"
Height to Loader Hinge Pin (transport)	396 mm	1'4"	391 mm	1'3"	386 mm	1'3"
Ground Clearance (minimum)	320 mm	1'1"	320 mm	1'1"	320 mm	1'1"
<b>5</b> Rear Axle Centerline to Front Grill	2705 mm	8'10"	2705 mm	8'10"	2705 mm	8'10"
Front Wheel Tread Gauge	1895 mm	6'3"	1895 mm	6'3"	1895 mm	6'3"
Rear Wheel Tread Gauge	1714 mm	5'7"	1714 mm	5'7"	1714 mm	5'7"
<b>6</b> Wheelbase 2WD/4WD	2200 mm	7'3"	2200 mm	7'3"	2200 mm	7'3"

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 in) standard duty bucket, 0.96 m<sup>3</sup> (1.25 yd<sup>3</sup>) loader bucket and standard equipment unless otherwise specified.

# 420F/420F IT Backhoe Loaders

## Loader Bucket Dimensions and Performance

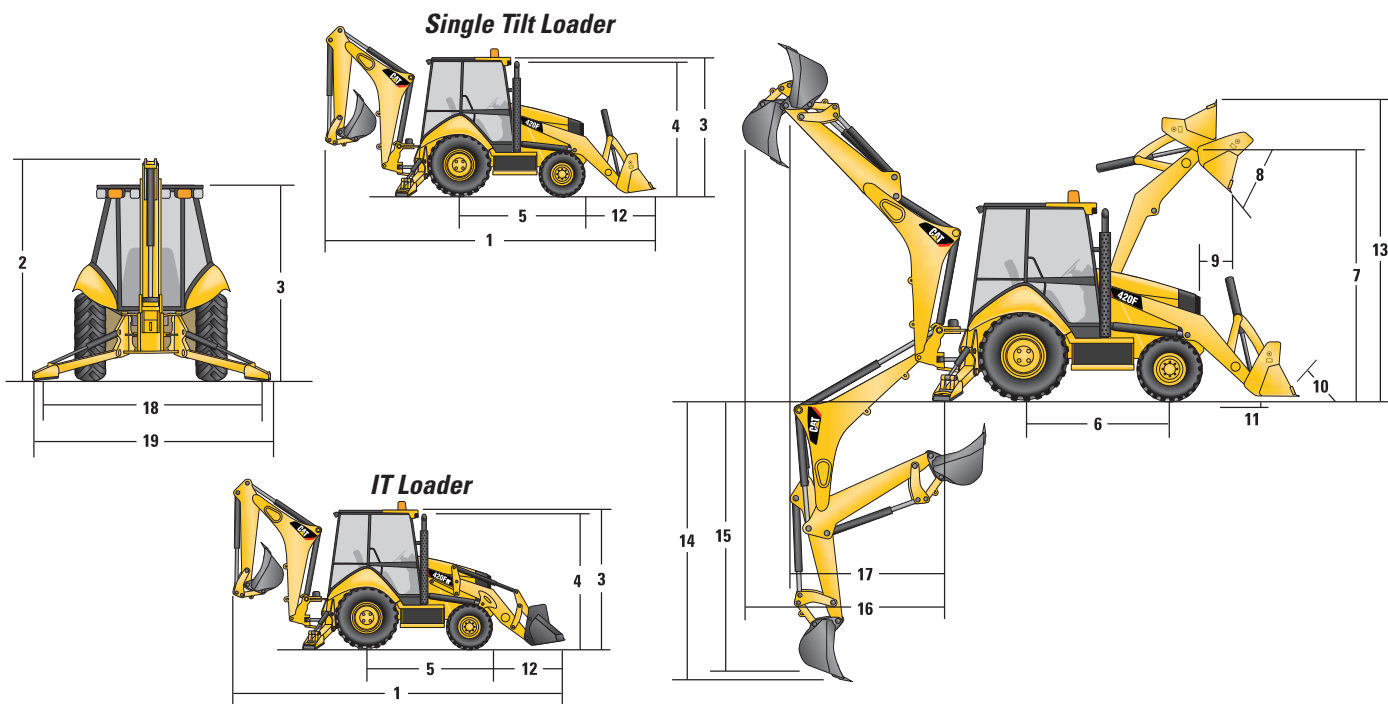
	Single Tilt Loader									
	General Purpose (0.96 m <sup>3</sup> /1.25 yd <sup>3</sup> )		General Purpose (1.1 m <sup>3</sup> /1.4 yd <sup>3</sup> )		General Purpose (1.15 m <sup>3</sup> /1.5 yd <sup>3</sup> )		Multi Purpose (1.0 m <sup>3</sup> /1.3 yd <sup>3</sup> )		Multi Purpose (1.1 m <sup>3</sup> /1.4 yd <sup>3</sup> )	
Capacity (SAE rated)	0.96 m <sup>3</sup>	1.25 yd <sup>3</sup>	1.1 m <sup>3</sup>	1.4 yd <sup>3</sup>	1.15 m <sup>3</sup>	1.5 yd <sup>3</sup>	1.0 m <sup>3</sup>	1.3 yd <sup>3</sup>	1.1 m <sup>3</sup>	1.4 yd <sup>3</sup>
Overall Bucket Width	2262 mm	89"	2262 mm	89"	2406 mm	95"	2279 mm	90"	2425 mm	95"
Lift Capacity at Maximum Height	3283 kg	7,237 lb	3216 kg	7,090 lb	3196 kg	7,046 lb	3097 kg	6,828 lb	3068 kg	6,764 lb
Lift Breakout Force	49 809 N	11,197 lb	49 275 N	11,077 lb	49 099 N	11,037 lb	49 019 N	11,020 lb	48 771 N	10,964 lb
Tilt Breakout Force	50 190 N	11,283 lb	51 236 N	11,518 lb	51 128 N	11,494 lb	57 555 N	12,938 lb	57 408 N	12,905 lb
<b>7</b> Maximum Hinge Pin Height	3474 mm	11'5"	3474 mm	11'5"	3474 mm	11'5"	3474 mm	11'5"	3474 mm	11'5"
<b>8</b> Dump Angle at Full Height	44°		44°		44°		44°		44°	
Dump Height at Maximum Angle	2746 mm	9'0"	2723 mm	8'11"	2723 mm	8'11"	2798 mm	9'2"	2798 mm	9'2"
<b>9</b> Dump Reach at Maximum Angle	808 mm	2'8"	773 mm	2'6"	773 mm	2'6"	716 mm	2'4"	716 mm	2'4"
<b>10</b> Maximum Bucket Rollback at Ground Level	37°		38°		38°		38°		38°	
<b>11</b> Digging Depth	83 mm	3"	123 mm	5"	123 mm	5"	110 mm	4"	110 mm	4"
Maximum Grading Angle	112°		113°		113°		116°		116°	
Width of Dozer Cutting Edge	N/A		N/A		N/A		2262 mm	7'5"	2406 mm	7'11"
<b>12</b> Grill to Bucket Cutting Edge, Carry Position	1487 mm	4'11"	1525 mm	5'1"	1525 mm	5'1"	1451 mm	4'9"	1451 mm	4'9"
<b>13</b> Maximum Operating Height	4355 mm	14'3"	4395 mm	14'5"	4395 mm	14'5"	4404 mm	14'5"	4404 mm	14'5"
Jaw Opening Maximum	N/A		N/A		N/A		790 mm	2'7"	790 mm	2'7"
Bucket Jaw Clamping Force	N/A		N/A		N/A		55 700 N	12,521 lb	55 700 N	12,521 lb
Weight (does not include teeth or forks)	451 kg	994 lb	473 kg	1,043 lb	493 kg	1,087 lb	745 kg	1,642 lb	774 kg	1,706 lb

	IT Loader with Quick Coupler					
	General Purpose (1.0 m <sup>3</sup> /1.3 yd <sup>3</sup> )		General Purpose (1.15 m <sup>3</sup> /1.5 yd <sup>3</sup> )		Multi Purpose (1.1 m <sup>3</sup> /1.4 yd <sup>3</sup> )	
Capacity (SAE rated)	1.0 m <sup>3</sup>	1.3 yd <sup>3</sup>	1.15 m <sup>3</sup>	1.5 yd <sup>3</sup>	1.1 m <sup>3</sup>	1.4 yd <sup>3</sup>
Overall Bucket Width	2406 mm	95"	2406 mm	95"	2425 mm	95"
Lift Capacity at Maximum Height	3707 kg	8,173 lb	3682 kg	8,117 lb	3419 kg	7,537 lb
Lift Breakout Force	51 492 N	11,575 lb	50 778 N	11,415 lb	49 413 N	11,108 lb
Tilt Breakout Force	48 927 N	10,999 lb	46 134 N	10,371 lb	50 214 N	11,288 lb
<b>7</b> Maximum Hinge Pin Height	3490 mm	11'5"	3490 mm	11'5"	3490 mm	11'5"
<b>8</b> Dump Angle at Full Height	44°		44°		44°	
Dump Height at Maximum Angle	2710 mm	8'11"	2680 mm	8'10"	2745 mm	9'0"
<b>9</b> Dump Reach at Maximum Angle	836 mm	2'9"	868 mm	2'10"	814 mm	2'8"
<b>10</b> Maximum Bucket Rollback at Ground Level	40°		40°		40°	
<b>11</b> Digging Depth	105 mm	4"	105 mm	4"	95 mm	4"
Maximum Grading Angle	111°		110°		112°	
Width of Dozer Cutting Edge	N/A		N/A		2406 mm	7'11"
<b>12</b> Grill to Bucket Cutting Edge, Carry Position	1568 mm	5'2"	1597 mm	5'3"	1529 mm	5'0"
<b>13</b> Maximum Operating Height	4407 mm	14'6"	4477 mm	14'8"	4480 mm	14'8"
Jaw Opening Maximum	N/A		N/A		790 mm	2'7"
Bucket Jaw Clamping Force	N/A		N/A		55 700 N	12,521 lb
Weight (does not include teeth or forks)	457 kg	1,008 lb	481 kg	1,060 lb	753 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 in) standard duty bucket, 0.96 m<sup>3</sup> (1.25 yd<sup>3</sup>) loader bucket and standard equipment unless otherwise specified.

# 420F/420F IT Backhoe Loaders

## Backhoe Dimensions and Performance

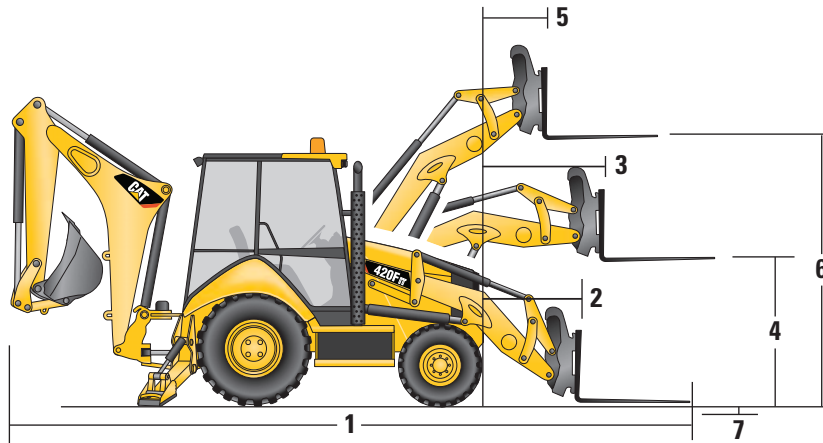


	Standard Stick		E-Stick Retracted		E-Stick Extended	
<b>14</b> Digging Depth, SAE (maximum)	4360 mm	14'4"	4390 mm	14'5"	5442 mm	17'11"
<b>15</b> Digging Depth, 610 mm (2 ft) Flat Bottom	4311 mm	14'2"	4351 mm	14'4"	5405 mm	17'9"
Reach from Rear Axle Centerline at Ground Line	6702 mm	22'1"	6737 mm	22'2"	7742 mm	25'6"
<b>16</b> Reach from Swing Pivot at Ground Line	5612 mm	18'5"	5647 mm	18'7"	6652 mm	21'10"
Maximum Operating Height	5522 mm	18'1"	5546 mm	18'3"	6282 mm	20'8"
Loading Height	3642 mm	11'11"	3599 mm	11'10"	4169 mm	13'8"
<b>17</b> Loading Reach	1842 mm	6'1"	1929 mm	6'4"	2844 mm	9'4"
Swing Arc	180°		180°		180°	
Bucket Rotation	205°		205°		205°	
<b>18</b> Stabilizer Spread, Operating Position (center)	3310 mm	10'10"	3310 mm	10'10"	3310 mm	10'10"
Stabilizer Spread, Operating Position (outside)	3770 mm	12'4"	3770 mm	12'4"	3770 mm	12'4"
Stabilizer Spread, Transport Position	2322 mm	7'7"	2322 mm	7'7"	2322 mm	7'7"
Bucket Dig Force	62 659 N	14,086 lb	61 780 N	13,889 lb	61 780 N	13,889 lb
Stick Dig Force	43 510 N	9,781 lb	43 402 N	9,757 lb	31 682 N	7,122 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 in) standard duty bucket, 0.96 m<sup>3</sup> (1.25 yd<sup>3</sup>) loader bucket and standard equipment unless otherwise specified.

# 420F/420F IT Backhoe Loaders

## Dimensions with Forks

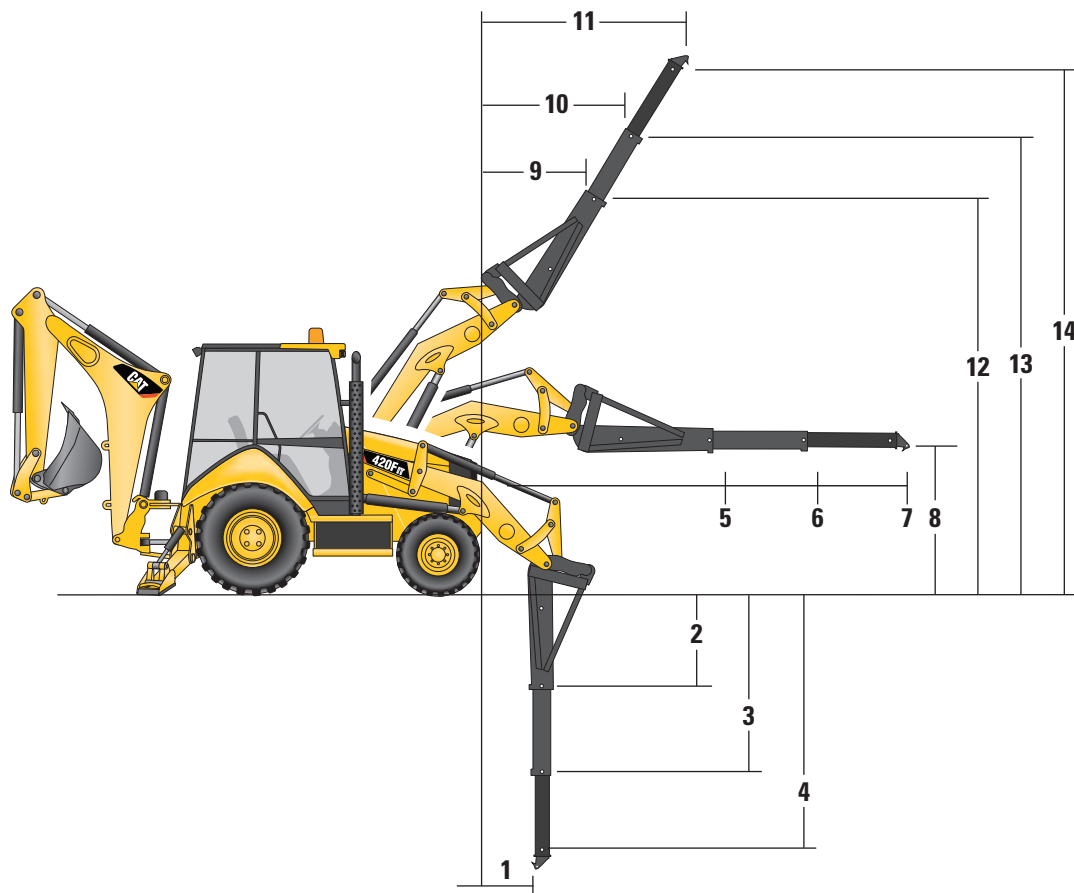


Fork Tine Length	1070 mm/3'6"		1220 mm/4'0"		1370 mm/4'10"	
Operating Load (SAE J1197)	2642 kg	5,824 lb	2556 kg	5,635 lb	2392 kg	5,273 lb
SAE Load Center	535 mm	1'9"	610 mm	2'0"	685 mm	2'3"
Operating Load (CEN 474-4)	2774 kg	6,116 lb	2752 kg	6,067 lb	2728 kg	6,014 lb
CEN Load Center	500 mm	1'8"	500 mm	1'8"	500 mm	1'8"
<b>1</b> Overall Length (forks on ground)	7681 mm	25'2"	7832 mm	25'8"	7980 mm	26'2"
<b>2</b> Reach at Ground (from grill to heel of fork)†	938 mm	3'1"	939 mm	3'1"	937 mm	3'1"
<b>3</b> Maximum Reach (from grill to heel of fork)†	1475 mm	4'10"	1475 mm	4'10"	1475 mm	4'10"
<b>4</b> Fork Height at Maximum Reach	1588 mm	5'3"	1588 mm	5'3"	1587 mm	5'2"
<b>5</b> Reach at Maximum Height (from grill to heel of fork)†	696 mm	2'3"	696 mm	2'3"	696 mm	2'3"
<b>6</b> Maximum Fork Height	3410 mm	11'2"	3409 mm	11'2"	3408 mm	11'2"
<b>7</b> Maximum Fork Depth (below ground level)	-6 mm	-0.24"	-5 mm	-0.20"	-8 mm	-0.31"

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 m<sup>3</sup> (1.25 yd<sup>3</sup>) loader bucket and standard equipment unless otherwise specified.

# 420F/420F IT Backhoe Loaders

## Dimensions with Material Handling Arm



Material Handling Arm Position	Retracted		Mid-Position		Extended	
Operating Load (SAE J1197 and CEN 474-4)*	1058 kg	2,333 lb	674 kg	1,487 lb	495 kg	1,092 lb
Overall Length, Maximum	8867 mm	29'1"	9864 mm	32'4"	10 864 mm	35'8"
<b>1</b> Reach at Maximum Depth (from machine nose)	589 mm	1'11"	592 mm	1'11"	595 mm	1'11"
<b>2, 3, 4</b> Maximum Depth	2532 mm	8'4"	3530 mm	11'7"	4530 mm	14'10"
<b>5, 6, 7</b> Maximum Reach (from machine nose)	3184 mm	10'5"	4182 mm	13'9"	5182 mm	17'0"
<b>8</b> Height at Maximum Reach	1101 mm	3'7"	1103 mm	3'7"	1106 mm	3'8"
<b>9, 10, 11</b> Reach at Maximum Height (from machine nose)	1577 mm	5'2"	2164 mm	7'1"	2755 mm	9'0"
<b>12, 13, 14</b> Maximum Height	4570 mm	15'0"	5377 mm	17'8"	6183 mm	20'3"

\*Hydraulically limited.

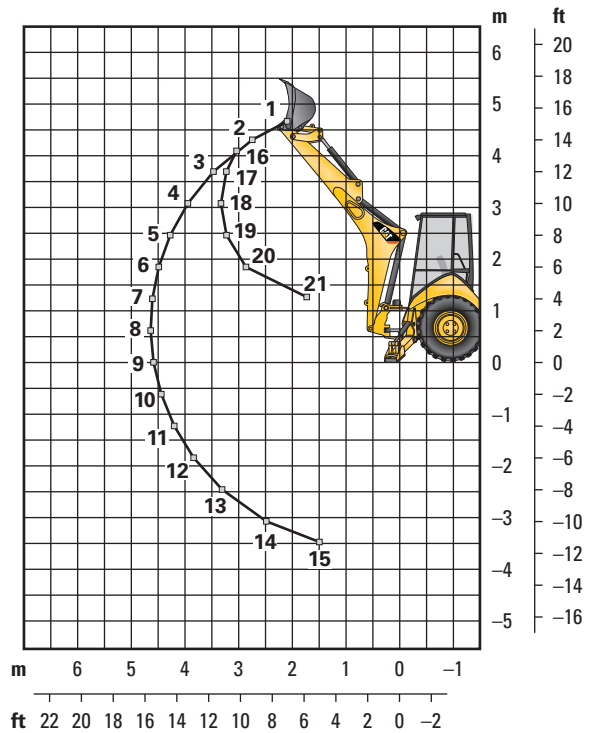
Dimensions and performance specifications shown are for machines equipped with 12.5/80-18 SGL front tires, 19.5L-24 IT525 rear tires, ROPS canopy, standard stick with 610 mm (24 inch) standard duty bucket, and 0.96 m<sup>3</sup> (1.25 yd<sup>3</sup>) loader bucket and standard equipment unless otherwise specified.

# 420F/420F IT Backhoe Loaders

## Backhoe Lift Capacity

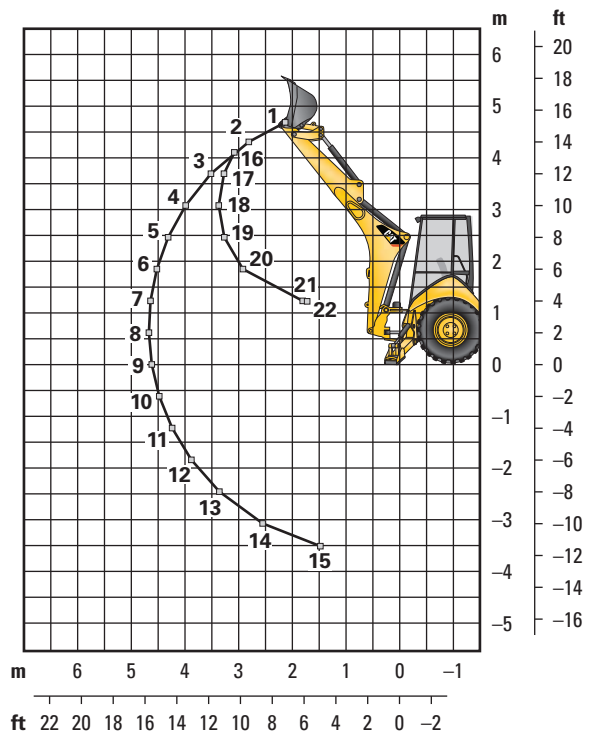
### Cat 420F/420F IT Standard Stick

Boom Lifting	kg	lb
1	1619	3,570
2	1764	3,890
3	1783	3,931
4	1737	3,829
5	1675	3,694
6	1611	3,552
7	1548	3,413
8	1489	3,282
9	1434	3,161
10	1384	3,050
11	1339	2,951
12	1300	2,867
13	1274	2,808
14	1280	2,821
15	1420	3,131
Stick Lifting	kg	lb
16	1830	4,035
17	2556	5,636
18	2605	5,744
19	2701	5,956
20	3136	6,915
21	6227	13,728



### Cat 420F/420F IT Extendible Stick – Retracted

Boom Lifting	kg	lb
1	1439	3,172
2	1573	3,469
3	1583	3,490
4	1535	3,384
5	1472	3,246
6	1407	3,103
7	1344	2,963
8	1284	2,830
9	1227	2,706
10	1175	2,591
11	1128	2,487
12	1087	2,396
13	1054	2,324
14	1046	2,306
15	1159	2,555
Stick Lifting	kg	lb
16	1676	3,695
17	2386	5,259
18	2405	5,302
19	2492	5,493
20	2886	6,362
21	5630	12,412
22	6026	13,284



Lift Capacities are over-end values. Machine equipped with 4WD, OROPS, 0.96 m<sup>3</sup> (1.25 yd<sup>3</sup>) general purpose bucket, and no counterweight. Extendible stick includes 460 kg (1,015 lb) counterweight.

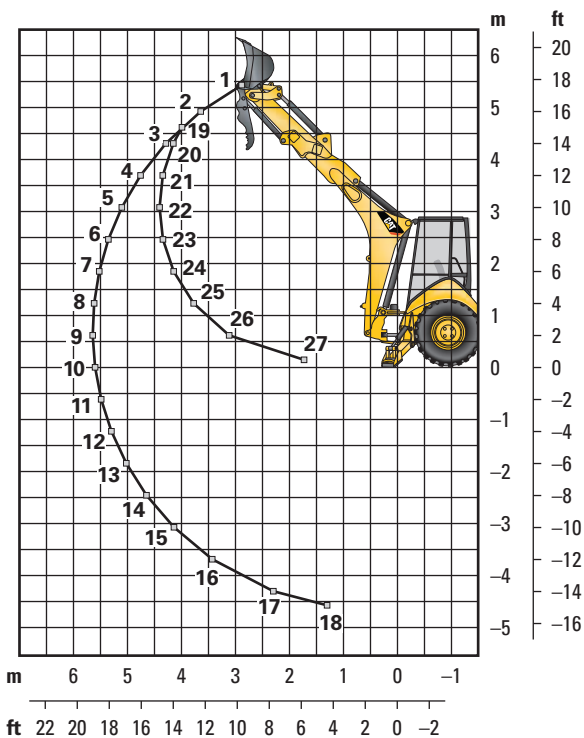
# 420F/420F IT Backhoe Loaders

## Backhoe Lift Capacity

### Cat 420F/420F IT Extendible Stick – Extended

Boom Lifting	kg	lb
1	837	1,844
2	1009	2,224
3	1073	2,366
4	1085	2,392
5	1067	2,353
6	1039	2,290
7	1031	2,273
8	1005	2,215
9	978	2,156
10	952	2,099
11	928	2,046
12	907	1,999
13	889	1,960
14	877	1,934
15	876	1,931
16	899	1,981
17	1029	2,269
18	1514	3,338

Stick Lifting	kg	lb
19	866	1,909
20	1114	2,456
21	1455	3,207
22	1643	3,622
23	1670	3,682
24	1776	3,916
25	2014	4,441
26	2613	5,761
27	5993	13,213



Lift Capacities are over-end values. Machine equipped with 4WD, OROPS, 0.96 m<sup>3</sup> (1.25 yd<sup>3</sup>) general purpose bucket, and no counterweight. Extendible stick includes 460 kg (1,015 lb) counterweight.



# 420F/420F IT Backhoe Loaders

## Counterweights

Minimum Counterweight Recommendations

### Standard Stick

Loader Bucket	Power Train	Single-Tilt		IT Loader w/QC	
		kg	lb	kg	lb
GP	2WD/4WD	240	530	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	460	1,015	240	530
MP	2WD/4WD	240	530	no counterweight	
Forks	2WD/4WD	N/A	N/A	240	530
Material Handling Arm	2WD/4WD	N/A	N/A	240	530

## Backhoe Buckets

With weld on adapters and pin-on teeth

### Standard Duty

Width		Rated Capacity		Weight		No. of Teeth
mm	in	L	ft <sup>3</sup>	kg	lb	
305	12	80	2.8	111	245	3
457	18	120	4.2	122	268	4
610	24	180	6.4	141	311	5
762	30	230	8.1	157	345	5
914	36	290	10.2	176	388	6

### Heavy Duty

Width		Rated Capacity		Weight		No. of Teeth
mm	in	L	ft <sup>3</sup>	kg	lb	
305	12	80	2.8	121	266	3
406	16	110	3.9	128	282	3
457	18	120	4.2	135	299	4
610	24	180	6.4	160	353	5
762	30	230	8.1	177	391	5
914	36	290	10.2	201	443	6

### Soil Excavation

Width		Rated Capacity		Weight		No. of Teeth
mm	in	L	ft <sup>3</sup>	kg	lb	
457	18	180	6.4	155	341	4
610	24	240	8.5	182	402	5
762	30	320	11.3	206	454	5
914	36	380	13.4	233	513	6

### Heavy Duty Rock

Width		Rated Capacity		Weight		No. of Teeth
mm	in	L	ft <sup>3</sup>	kg	lb	
305	12	70	2.5	127	279	3
457	18	130	4.6	146	322	4
610	24	200	7.1	174	384	5
762	30	270	9.5	197	434	5
914	36	330	11.7	224	493	6

### Coral

Width		Rated Capacity		Weight		No. of Teeth
mm	in	L	ft <sup>3</sup>	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

### Heavy Duty – Pin Lock

Width		Rated Capacity		Weight		No. of Teeth
mm	in	L	ft <sup>3</sup>	kg	lb	
305	12	96	3.4	113	249	3
406	16	123	4.3	131	288	3
457	18	139	4.9	139	307	4
610	24	207	7.3	168	370	5
762	30	275	9.7	194	428	5
914	36	345	12.2	224	494	6

### High Capacity – Pin Lock

Width		Rated Capacity		Weight		No. of Teeth
mm	in	L	ft <sup>3</sup>	kg	lb	
305	12	96	4.6	113	287	3
406	16	123	5.6	131	327	3
457	18	139	6.5	139	346	4
610	24	207	9.6	168	414	5
762	30	275	12.9	194	475	5
914	36	345	16.2	224	543	6