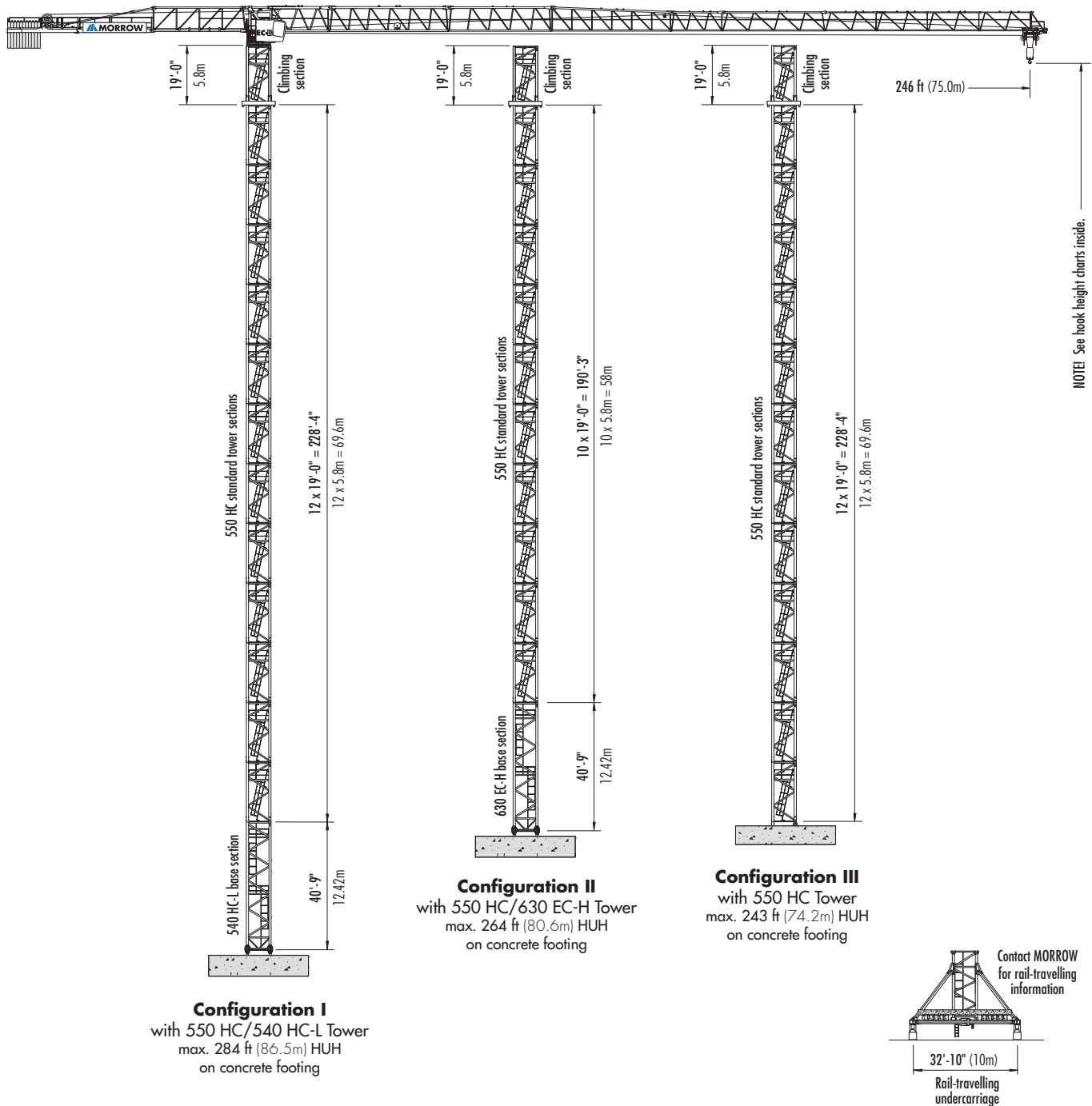
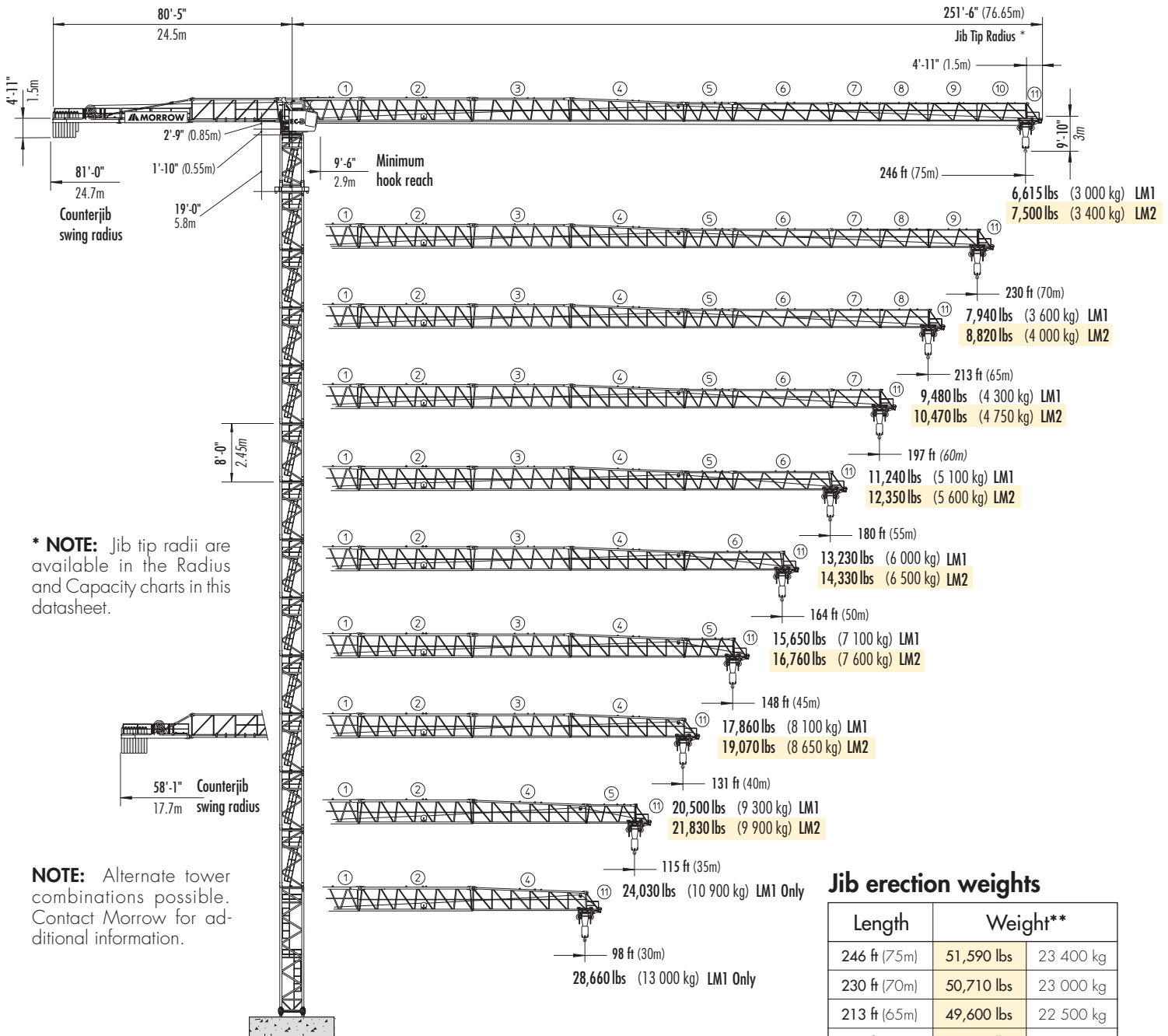


380 EC-B 16 Litronic[®] LIEBHERR Flat-Top Tower Crane



Jib Assemblies



* **NOTE:** Jib tip radii are available in the Radius and Capacity charts in this datasheet.

NOTE: Alternate tower combinations possible. Contact Morrow for additional information.

Configuration I

IMPORTANT: Please consult crane's instruction manual before erecting, operating and dismantling crane.

** **NOTE:** Weights are for complete jib assemblies including trolley and hook.

Weights are approximate. Scale components before installing.

Jib erection weights

Length	Weight**	
246 ft (75m)	51,590 lbs	23 400 kg
230 ft (70m)	50,710 lbs	23 000 kg
213 ft (65m)	49,600 lbs	22 500 kg
197 ft (60m)	48,500 lbs	22 000 kg
180 ft (55m)	47,400 lbs	21 500 kg
164 ft (50m)	45,190 lbs	20 500 kg
148 ft (45m)	44,090 lbs	20 000 kg
131 ft (40m)	36,380 lbs	16 500 kg
115 ft (35m)	31,530 lbs	14 300 kg
97 ft (30m)	29,430 lbs	13 350 kg

Hook heights

Configuration I					
550 HC tower sections on 540 HC-L base section					
		No. of Tower Elements	Tower Element Type	static concrete footing	
		feet	meters		
0	540HCL BTS	56	16.9		
1	550HC STS	74	22.7		
2	550HC STS	94	28.5		
3	550HC STS	113	34.3		
4	550HC STS	132	40.1		
5	550HC STS	151	45.9		
6	550HC STS	170	51.7		
7	550HC STS	189	57.5		
8	550HC SLTS	208	63.3		
9	550HC STS	227	69.1		
10	550HC STS	246	74.9		
11	550HC STS	264	80.7		
12	550HC STS	284*	86.5*		

Configuration II						
550 HC tower sections on 630 EC-H undercarriage or base section						
		No. of Tower Elements	Tower Element Type	static concrete footing		rail-travelling undercarriage
		feet	meters	feet	meters	
0	630 ECH BTS	56	16.9	82	25.1	
1	550HC STS	74	22.7	101	30.9	
2	550HC STS	94	28.5	120	36.7	
3	550HC STS	113	34.3	139	42.5	
4	550HC STS	132	40.1	158	48.3	
5	550HC STS	151	45.9	178	54.1	
6	550HC STS	170	51.7	197	59.9	
7	550HC STS	189	57.5	216	65.7	
8	550HC STS	208	63.3	235	71.5	
9	550HC STS	227	69.1	254	77.3	
10	550HC STS	246	74.9	273*	83.1*	
11	550HC STS	264*	80.7*	—	—	

Configuration III						
550 HC tower sections on 550 HC undercarriage						
		No. of Tower Elements	Tower Element Type	static concrete footing		rail-travelling undercarriage
		feet	meters	feet	meters	
0	550HC STS	15	4.6	42	12.7	
1	550HC STS	34	10.4	61	18.5	
2	550HC STS	53	16.2	80	24.3	
3	550HC STS	72	22	99	30.1	
4	550HC STS	91	27.8	118	35.9	
5	550HC STS	110	33.6	137	41.7	
6	550HC STS	129	39.4	156	47.5	
7	550HC STS	148	45.2	175	53.3	
8	550HC STS	167	51	194	59.1	
9	550HC STS	186	56.8	213	64.9	
10	550HC STS	205	62.6	232	70.7	
11	550HC STS	224	68.4	251	76.5	
12	550HC STS	243*	74.2*	270*	82.3*	

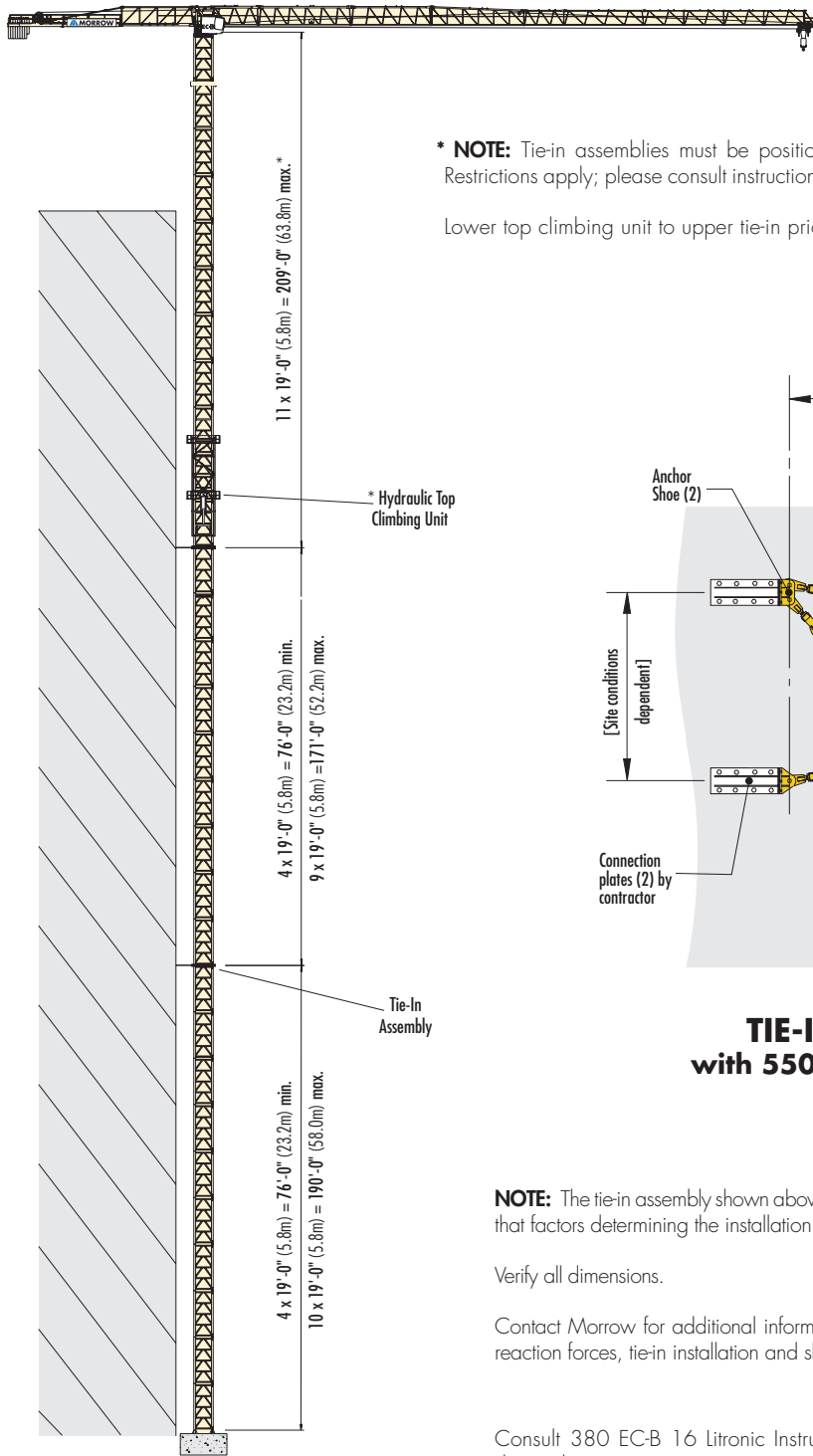
* Lower top climbing unit to base of crane prior to operating crane at maximum hook height.

NOTE: Alternate tower combinations possible. Contact Morrow for information.

NOTE: Contact MORROW for specific information regarding climbing inside the structure details such as dimensions, reaction forces and slab opening requirements.

Specifications subject to change without notice. For additional information, contact MORROW.

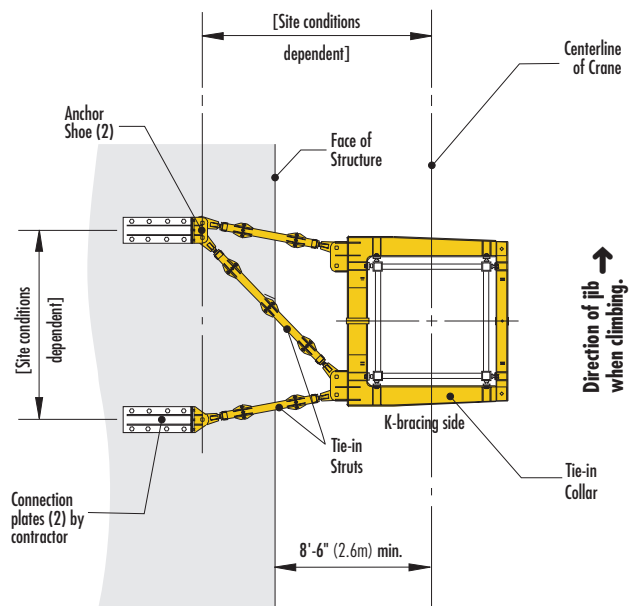
Tie-in details



with 550 HC Tower Sections
Tied to Structure

*** NOTE:** Tie-in assemblies must be positioned and installed according to manufacturer requirements. Restrictions apply; please consult instruction manual or contact MORROW for specific recommendations.

Lower top climbing unit to upper tie-in prior to operating crane.



TIE-IN ASSEMBLY
with 550 HC Tower Sections
plan view

NOTE: The tie-in assembly shown above is an example of a typical installation. Please note, however, that factors determining the installation of tie-in assemblies may vary due to project specific criteria.

Verify all dimensions.

Contact Morrow for additional information regarding dimensions, alternate tower configurations, reaction forces, tie-in installation and slab opening requirements.

Consult 380 EC-B 16 Litronic Instruction Manual before erecting, operating, servicing or dismantling crane.

Radius and capacities

Hook Radius	Tip Radius	2-Part Line Max Capacity – Radius	ft m	49 15	66 20	82 25	98 30	115 35	131 40	148 45	164 50	180 55	197 60	213 65	230 70	246 75
246 ft 75m	252 76.8	35,270 lbs – 64 ft 16 000 kg – 19.6m	lbs kg	35,270 16 000	34,520 15 660	26,790 12 150	21,670 9 830	18,060 8 190	15,340 6 960	13,270 6 020	11,600 5 260	10,230 4 640	9,110 4 130	8,140 3 690	7,320 3 320	6,610 3 000
230 ft 70m	236 71.8	35,270 lbs – 68 ft 16 000 kg – 20.7m	lbs kg	35,270 16 000	35,270 16 000	27,540 12 490	23,130 10 490	19,290 8 750	16,450 7 460	14,220 6 450	12,460 5 650	11,020 5 000	9,810 4 450	8,800 3 990	7,940 3 600	
213 ft 65m	219 66.8	35,270 lbs – 72 ft 16 000 kg – 21.8m	lbs kg	35,270 16 000	35,270 16 000	30,310 13 750	24,600 11 160	20,570 9 330	17,550 7 960	15,210 6 900	13,340 6 050	11,820 5 360	10,560 4 790	9,480 4 300		
197 ft 60m	203 61.8	35,270 lbs – 75 ft 16 000 kg – 22.9m	lbs kg	35,270 16 000	35,270 16 000	32,010 14 520	26,010 11 800	21,760 9 870	18,580 8 430	16,140 7 320	14,180 6 430	12,570 5 700	11,240 5 100			
180 ft 55m	187 56.8	35,270 lbs – 78 ft 16 000 kg – 23.8m	lbs kg	35,270 16 000	35,270 16 000	33,470 15 180	27,230 12 350	22,800 10 340	19,490 8 840	16,930 7 680	14,900 6 760	13,230 6 000				
164 ft 50m	170 51.8	35,270 lbs – 81 ft 16 000 kg – 24.8m	lbs kg	35,270 16 000	35,270 16 000	35,010 15 880	28,510 12 930	23,900 10 840	20,440 9 270	17,770 8 060	15,650 7 100					
148 ft 45m	154 46.8	35,270 lbs – 82 ft 16 000 kg – 24.9m	lbs kg	35,270 16 000	35,270 16 000	35,140 15 940	28,620 12 980	23,990 10 880	20,530 9 310	17,860 8 100						
131 ft 40m	137 41.8	35,270 lbs – 81 ft 16 000 kg – 24.8m	lbs kg	35,270 16 000	35,270 16 000	35,080 15 910	28,570 12 960	23,940 10 860	20,500 9 300							
115 ft 35m	121 36.8	35,270 lbs – 82 ft 16 000 kg – 24.9m	lbs kg	35,270 16 000	33,060 16 000	35,190 15 960	28,660 13 000	24,030 10 900								
98 ft 30m	104 31.8	35,270 lbs – 82 ft 16 000 kg – 24.9m	lbs kg	35,270 16 000	35,270 16 000	35,190 15 960	28,660 13 000									

LM1

Standard mode

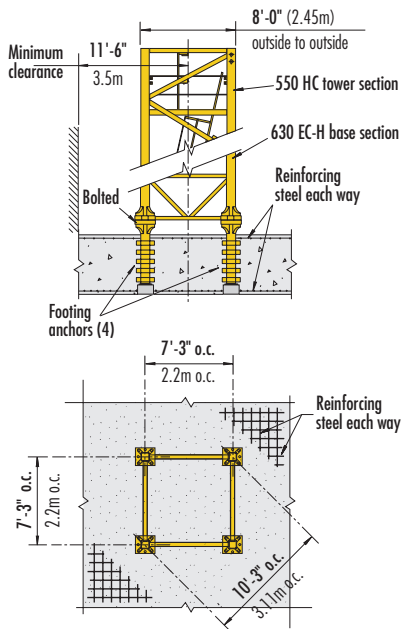
Hook Radius	Tip Radius	2-Part Line Max Capacity – Radius	ft m	49 15	66 20	82 25	98 30	115 35	131 40	148 45	164 50	180 55	197 60	213 65	230 70	246 75
246 ft 75m	252 76.8	35,270 lbs – 70 ft 16 000 kg – 21.3m	lbs kg	35,270 16 000	34,520 16 000	29,480 13 370	23,900 10 840	19,950 9 050	17,020 7 720	14,750 6 690	12,920 5 860	11,440 5 190	10,210 4 630	9,170 4 160	8,270 3 750	7,500 3 400
230 ft 70m	236 71.8	35,270 lbs – 73 ft 16 000 kg – 22.3m	lbs kg	35,270 16 000	35,270 16 000	31,040 14 080	25,200 11 430	21,080 9 560	17,990 8 160	15,610 7 080	13,690 6 210	12,150 5 510	10,850 4 920	9,740 4 420	8,820 4 000	
213 ft 65m	219 66.8	35,270 lbs – 77 ft 16 000 kg – 23.5m	lbs kg	35,270 16 000	35,270 16 000	32,940 14 940	26,790 12 150	22,420 10 170	19,160 8 690	16,640 7 550	14,640 6 640	12,980 5 890	11,620 5 270	10,470 4 750		
197 ft 60m	203 61.8	35,270 lbs – 81 ft 16 000 kg – 24.6m	lbs kg	35,270 16 000	35,270 16 000	34,700 15 740	28,240 12 810	23,660 10 730	20,260 9 190	17,610 7 990	15,500 7 030	13,780 6 250	12,350 5 600			
180 ft 55m	186 56.8	35,270 lbs – 83 ft 16 000 kg – 25.4m	lbs kg	35,270 16 000	35,270 16 000	35,270 16 000	29,260 13 270	24,540 11 130	21,010 9 530	18,280 8 290	16,120 7 310	14,330 6 500				
164 ft 50m	170 51.8	35,270 lbs – 86 ft 16 000 kg – 26.2m	lbs kg	35,270 16 000	35,270 16 000	35,270 16 000	30,360 13 770	25,460 11 550	21,830 9 900	19,000 8 620	16,760 7 600					
148 ft 45m	154 46.8	35,270 lbs – 86 ft 16 000 kg – 26.3m	lbs kg	35,270 16 000	35,270 16 000	35,270 16 000	30,450 13 810	25,550 11 590	21,890 9 930	19,070 8 650						
131 ft 40m	137 41.8	35,270 lbs – 86 ft 16 000 kg – 26.2m	lbs kg	35,270 16 000	35,270 16 000	35,270 16 000	30,340 13 760	25,460 11 550	21,830 9 900							

LM2

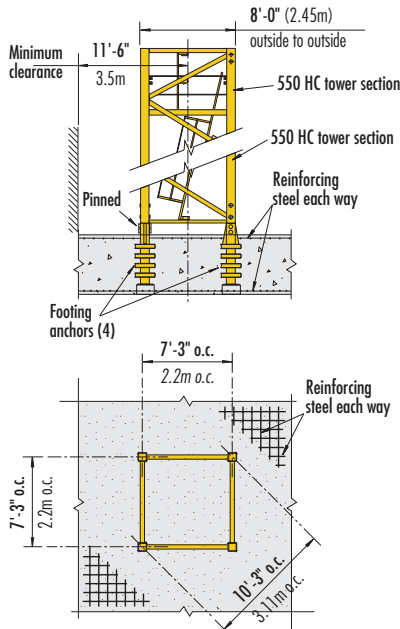
Heavy lift mode

IMPORTANT: Litronic® cranes are equipped with Liebherr's state of the art PLC system that provides precise monitoring, control and coordination of all cranes functions. This feature also permits a load increase in the heavy lift mode (LM2). Contact Morrow for more information regarding the many features of the 380 EC-B 16 Litronic tower crane.

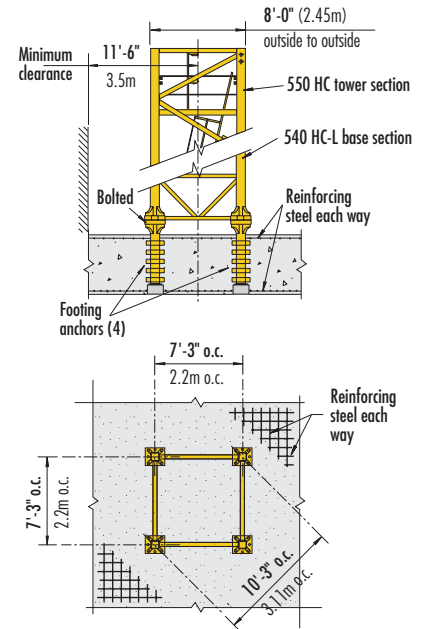
Foundation details on concrete footing



with 630 EC-H Base section

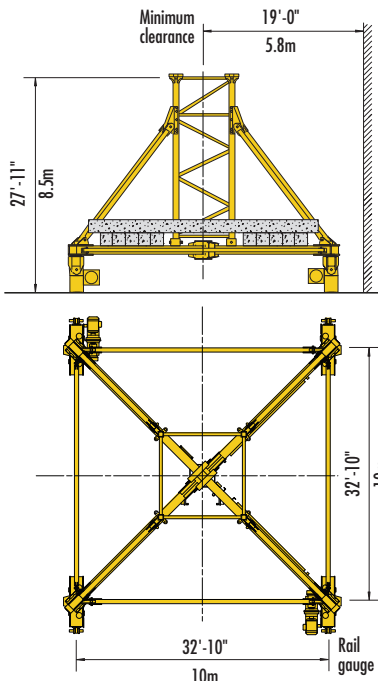


with 550 HC Tower

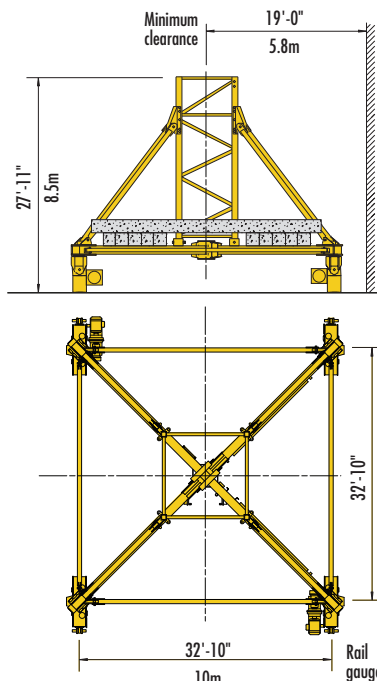


with 540 HC-L Base section

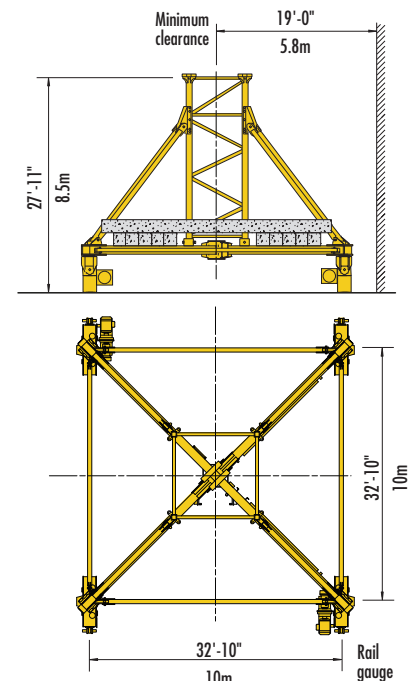
Undercarriage details on rail-travelling undercarriage



630 EC-H



550 HC



540 HC-L

NOTE: For information regarding rail-travelling, static undercarriages and central ballast configurations, see 380 EC-B 16 Instruction Manual.

Hoist speed and capacity

LM1

Hoist Unit	WiW 300 VZ 430		2-Part Line			
	Gear	Capacity	Line Speed	Capacity	Line Speed	
147 hp (110 kW) AC hoist unit Variable frequency drive 3-speed Electromagnetic gear shifting Lebus™ drum 5L-187 max. 7L-276	1	35,270 lbs @	118 fpm	16 000 kg @	36 m/min	
		16,530 lbs @	233 fpm	7 500 kg @	71 m/min	
	2	19,400 lbs @	200 fpm	8 800 kg @	61 m/min	
		8,820 lbs @	404 fpm	4 000 kg @	123 m/min	
3	10,800 lbs @	335 fpm	4 900 kg @	102 m/min		
	4,190 lbs @	673 fpm	1 900 kg @	205 m/min		

NOTE: Capacities and line speeds indicated will vary depending on the amount of hoist rope installed. This crane model may be equipped with a hoist unit other than that specified in the data above. To verify, check the serial number of the crane and refer to the 380 EC-B 16 Instruction Manual for additional information.

Motor information

Drive Unit	Horsepower	Kilowatts	Speed	
Trolley (VFD)	14 hp	10.5 kW	0 - 312 fpm	0 - 95 m/min
Swing (VFD)	2 x 10 hp	2 x 7.5 kW	0.8 rpm	
Traveling (550 HC)	4 x 10 hp	4 x 7.5 kW	82 fpm	25 m/min

Counterweight

Jib	Counterjib	No. of Blocks	Block Arrangement									Weight		
246 ft (75m)	3-part	8 x A + 1 x B	A	A	A	A	A	A	A	A	A	B	42,880 lbs	19 450 kg
230 ft (70m)	3-part	7 x A + 2 x B	A	A	A	A	A	A	A	B	B	41,120 lbs	18 650 kg	
213 ft (65m)	3-part	7 x A + 1 x B	A	A	A	A	A	A	A	B		37,920 lbs	17 200 kg	
197 ft (60m)	3-part	6 x A + 2 x B	A	A	A	A	A	A	B	B		36,160 lbs	16 400 kg	
180 ft (55m)	3-part	6 x A + 1 x B	A	A	A	A	A	A	B			32,960 lbs	14 950 kg	
164 ft (50m)	3-part	5 x A + 1 x B	A	A	A	A	A	B				28,000 lbs	12 700 kg	
148 ft (45m)	3-part	5 x A	A	A	A	A	A					24,800 lbs	11 250 kg	
131 ft (40m)	2-part	9 x A	A	A	A	A	A	A	A	A	A	44,640 lbs	20 250 kg	
115 ft (35m)	2-part	6 x A + 2 x B	A	A	A	A	A	A	B	B		36,160 lbs	16 400 kg	
98 ft (30m)	2-part	5 x A + 2 x B	A	A	A	A	A	B	B			31,200 lbs	14 150 kg	

NOTE: A block = 4,960 lbs (2 250 kg); B block = 3,195 lbs (1 450 kg).

Power requirements

Power supply: 3-phase 480 V, 60 Hz; 3-wire plus ground; no Neutral.

480 V phase-phase, 277 V each phase to ground with 120° phase shift between phases.

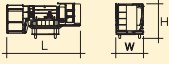

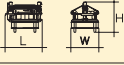
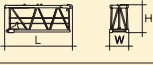
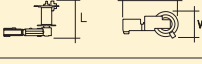
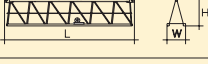

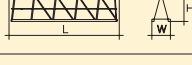
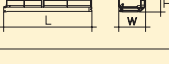
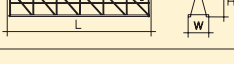

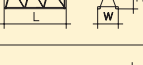
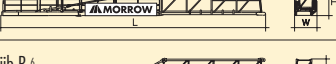
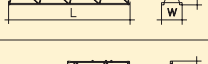
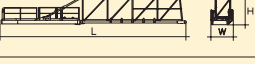
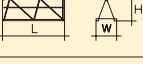

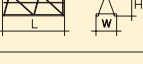
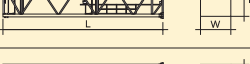
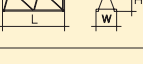
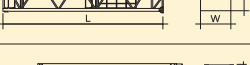
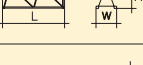
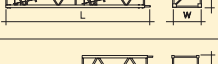
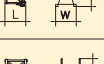


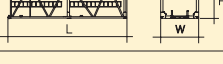


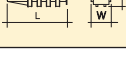
Service size: 200 Amperes

NOTES:

- For electric power provided by an electric utility, do not use open Delta transformers.
- For electric power provided by a generator, the minimum generator size required is 200 kW. Verify the generator provided is suitable for use with variable frequency drives (VFDs). A properly sized generator is critical to the safe operation of the crane.

Specifications subject to change without prior notice. Contact Morrow Equipment for additional information.

Component List

Description	Dimensions L x W x H	Wt.	Description	Dimensions L x W x H	Wt.
Slewing Assembly (Complete) ¹	 20'-1" x 7'-7" x 9'-6" 6.13m x 2.30m x 2.90m	27,560 lbs 12 500 kg	Tower Head	 7'-11" x 6'-2" x 8'-5" 2.42m x 1.87m x 2.57m	5,510 lbs 2 500 kg
Slewing Assembly Upper Part only ²	 10'-0" x 7'-7" x 8'-2" 3.05m x 2.30m x 2.49m	16,310 lbs 7 400 kg	Jib Butt Section ① 611	 20'-6" x 5'-10" x 8'-4" 6.26m x 1.79m x 2.54m	10,360 lbs 4 700 kg
AC Hoist Unit (VFD) ³ 147 hp (110 kW)	 10'-6" x 8'-0" x 5'-9" 3.20m x 2.45m x 1.74m	8,820 lbs 4 000 kg	Jib Intermediate Section ② 621	 39'-5" x 5'-7" x 8'-4" 12.01m x 1.70m x 2.55m	10,800 lbs 4 900 kg
Counterjib Section #1 (Inner)	 31'-2" x 6'-4" x 8'-4" 9.50m x 1.92m x 2.55m	11,020 lbs 5 000 kg	Jib Intermediate Section ③ 622	 34'-1" x 5'-7" x 8'-1" 10.38m x 1.70m x 2.47m	6,170 lbs 2 800 kg
Counterjib Section #2 (Intermediate)	 24'-0" x 7'-4" x 5'-0" 7.32m x 2.23m x 1.53m	7,720 lbs 3 500 kg	Jib Intern. Section ④ 623	 39'-3" x 5'-7" x 8'-0" 11.97m x 1.70m x 2.45m	5,950 lbs 2 700 kg
Counterjib Section #3 ⁴ (Outer) with hoist unit	 23'-7" x 7'-8" x 6'-2" 7.20m x 2.34m x 1.89m	17,640 lbs 8 000 kg	Jib Intermediate Section ⑤ 631	 17'-4" x 5'-7" x 6'-7" 5.29m x 1.70m x 2.00m	2,090 lbs 950 kg
Counterjib A ⁵	 78'-3" x 7'-8" x 9'-10" 23.85m x 2.34m x 3.00m	36,820 lbs 16 700 kg	Jib Intermediate Section ⑥ 632	 33'-9" x 5'-7" x 6'-6" 10.29m x 1.70m x 1.98m	3,310 lbs 1 500 kg
Counterjib B ⁶	 55'-3" x 7'-8" x 9'-10" 16.85m x 2.34m x 3.00m	29,100 lbs 13 200 kg	Jib Intermediate Section ⑦ 633	 17'-2" x 5'-7" x 6'-6" 5.24m x 1.70m x 1.97m	1,210 lbs 550 kg
Climbing Section ⁷	 20'-7" x 9'-8" x 9'-8" 6.28m x 2.95m x 2.95m	19,950 lbs 9 900 kg	Jib Intermediate Section ⑧ 634	 17'-0" x 5'-7" x 6'-6" 5.17m x 1.70m x 1.97m	1,040 lbs 470 kg
Base Tower Section 630 ECH (Bolt/Pin)	 40'-9" x 8'-10" x 8'-10" 12.42m x 2.68m x 2.68m	31,970 lbs 14 100 kg	Jib Intermediate Section ⑨ 635	 16'-11" x 5'-7" x 6'-5" 5.15m x 1.70m x 1.96m	990 lbs 450 kg
Base Tower Section 540 HCL (B/P)	 40'-9" x 8'-10" x 8'-10" 12.42m x 2.68m x 2.68m	31,880 lbs 14 460 kg	Jib Intermediate Section ⑩ 636	 16'-10" x 5'-7" x 6'-5" 5.14m x 1.70m x 1.95m	880 lbs 400 kg
Long Tower Section 550 HC (Pin/Pin)	 39'-8" x 8'-0" x 8'-0" 12.10m x 2.45m x 2.45m	23,480 lbs 10 650 kg	Jib Tip Section ⑪ 641	 5'-9" x 6'-2" x 6'-11" 1.74m x 1.89m x 2.12m	620 lbs 280 kg
Standard Tower Section 550 HC (P/P)	 20'-7" x 8'-0" x 8'-0" 6.28m x 2.45m x 2.45m	14,290 lbs 6 480 kg	Hook and Trolley (combined)	 6'-1" x 6'-6" x 6'-1" 1.85m x 1.99m x 1.86m	2,450 lbs 1 110 kg
Top Climbing Unit ⁸ 550 HC	 41'-4" x 9'-8" x 9'-8" 12.60m x 2.95m x 2.95m	18,300 lbs 8 300 kg	Hook Block	 2'-4" x 11" x 5'-8" 0.70m x 0.28m x 1.72m	1,770 lbs 803 kg
Top Climbing Unit Hydraulic unit/Cross members	 8'-6" x 4'-11" x 2'-0" 2.60m x 1.50m x 0.60m	4,190 lbs 1 900 kg	Foundation Anchor (each) 550 HC (4 per set)	 6'-8" x 1'-8" x 1'-8" 2.03m x 0.50m x 0.50m	4,150 lbs 1 880 kg

NOTE: Weights and dimensions are approximate. Scale components before lifting.

¹ Slewing Assembly Complete includes tower head, switch gear panels, operator's cab, swing motors, slewing ring, slewing ring support and platforms.

² Slewing Assembly Upper Part includes slewing ring, slewing ring support and swing motors.

³ 147 hp (110 kW) hoist unit with variable frequency control. Does not include wire rope.

⁴ Counterjib end section #3 includes hoist unit. Subtract 8,820 lbs (4 000 kg) if hoist is removed.

⁵ Counterjib A includes one each counterjib sections #1, #2 and #3, plus platforms, handrails and pendant bars. Counterjib A is required for jibs of 148 ft (45m) to 246 ft (75m).

⁶ Counterjib B includes one each counterjib sections #1 and #3, plus platforms, handrails and pendant bars. Counterjib B is required for jibs of 98 ft (30m) to 131 ft (40m).

⁷ Climbing section with both girders attached. Installed to 550 HC slewing ring support permitting use of 550 HC climbing equipment.

⁸ Top climbing can be broken down into two pieces.

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