

Wind Conditions

TABLE OF CONTENTS

General	1
Operation Permitted/Operation Not Permitted:	
Boom No. 74	3
Boom No. 74 with Jib No. 134	4
Boom No. 74 with Luffing Jib No. 135	10

GENERAL



WARNING **TIPPING CRANE HAZARD!**

Judgment and experience of qualified operators, job planners, and supervisors must be used to compensate for affect of wind on lifted load and boom by reducing ratings, reducing operating speeds, or a combination of both.

Failing to observe this precaution can cause crane to tip or boom and/or jib to collapse. Death or serious injury to personnel can result.

Wind adversely affects lifting capacity and stability as shown in Figure 1. The result could be loss of control over the load and crane, even if the load is within the crane's capacity.

Wind speed (to include wind gusts) must be monitored by job planners and supervisors.

Beware that wind speed at boom point can be greater than wind speed at ground level. Also beware that the larger the sail area of the load, the greater the wind's affect on the load.

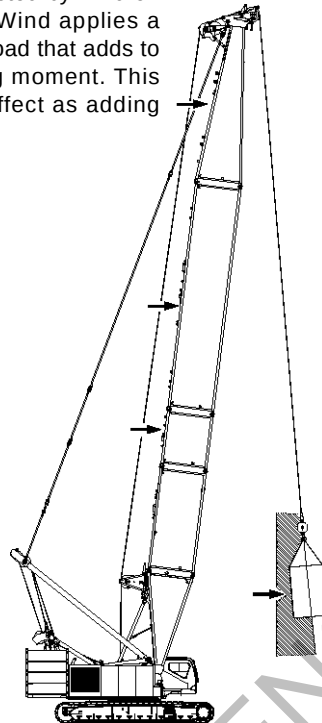
As a general rule, ratings and operating speeds must be reduced when:

Wind causes load to swing forward past allowable operating radius or sideways past either boom hinge pin.

REFERENCE ONLY

Wind Conditions

Forward stability is affected by wind on the rear of the boom. Wind applies a force to the boom and load that adds to the crane's overturning moment. This action has the same effect as adding load to the hook.



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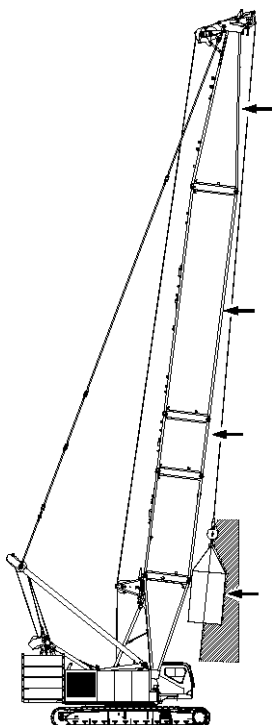
The wind's affect on the rear of the load increases load radius. This condition can result in an overload hazard, possibly causing the crane to tip or the boom to collapse.

To avoid this hazard, reduce operating speeds and load (see appropriate table for maximum wind speed).

Backward stability is affected by wind on the front of the boom. This condition is especially dangerous when the boom is at or near the maximum angle when operating without load.

Wind forces on the front of the boom reduce the normal forward tipping effect of the boom. The crane can tip or the boom can collapse if this condition is not avoided.

The boom can buckle and collapse if the load contacts the boom.



Boom strength is affected the most when the wind acts on the side of the boom.

The wind's affect on the side of the load can cause the load to swing out past the boom hinge pin. This condition can result in excessive side load forces on the boom, possibly causing the crane to tip or the boom to collapse.

To avoid this hazard, reduce operating speeds and load (see appropriate table for maximum wind speed).

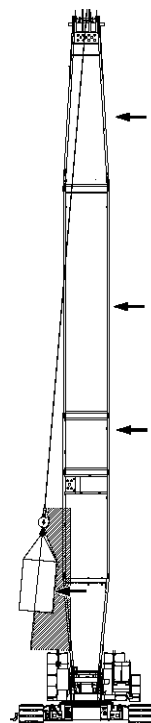


FIGURE 1

Wind Conditions

Boom No. 74

Operation Permitted

Operation is permitted in steady winds or gusts up to the maximum speed given in Table 1 provided the lifted load does not exceed capacity chart percentage.

Wind speed to be measured at boom point elevation.

For operation in steady winds or wind gusts above 11 m/s (25 mph) *at front of boom*, do not operate boom lengths less than 54,0 m (177.2 ft) higher than 69° with loads less than 7 710 kg (17,000 lb). **Boom could be blown over backwards if this precaution is not observed.**

Operation Not Permitted

Operation is not permitted when the wind speed exceeds the values listed in Table 1 for a given capacity chart percentage. Observe the following options:

Boom

- **Up to 22 m/s (50 mph) -**
Park crane with load blocks and weight balls on ground or secured and position boom at 68°.
- **22 m/s (50 mph) and Above -**
Lower boom onto blocking at ground level.

Table 1: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	15,0 (49.2)	18,0 (59.1)	21,0 (68.9)	24,0 (78.7)	27,0 (88.6)	30,0 (98.4)	33,0 (108.3)	36,0 (118.1)	39,0 (128.0)	42,0 (137.8)	45,0 (147.6)	48,0 (157.5)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)											
100	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	7 (15)
90	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
80	16 (35)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)
70	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)
60	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)
Operation Not Permitted above 16 m/s (35 mph)												

Table 1: (continued)

Boom Length m (ft)	51,0 (167.3)	54,0 (177.2)	57,0 (187.0)	60,0 (196.9)	63,0 (206.7)	66,0 (216.5)	69,0 (226.4)	72,0 (236.2)	75,0 (246.1)	78,0 (255.9)	81,0 (265.7)	84,0 (275.6)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)											
100	7 (15)	7 (15)	7 (15)	7 (15)	7 (15)	7 (15)	7 (15)	7 (15)	7 (15)	7 (15)	7 (15)	7 (15)
90	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)
80	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)
70	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	14 (30)	14 (30)	14 (30)	14 (30)
60	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)
Operation Not Permitted above 16 m/s (35 mph)												

Wind Conditions

Boom No. 74 with Jib No. 134

Operation Permitted

Operation is permitted in steady winds or gusts up to the maximum speed given in Tables 2a thru 2q provided the lifted load does not exceed capacity chart percentage.

Wind speed to be measured at jib point elevation.

Operation Not Permitted

Operation is not permitted when the wind speed exceeds the values listed in Tables 2a thru 2q for a given capacity chart percentage. Observe the following options:

Boom with Jib

- **Up to 22 m/s (50 mph) -**
Park crane with load blocks and weight balls on ground or secured and position boom at 70°.
- **22 m/s (50 mph) and Above -**
Lower boom and jib onto blocking at ground level.

Table 2a: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	27,0 (88.6)					
Jib Length m (ft)	9,1 (30.0)	12,2 (40.0)	15,2 (50.0)	18,3 (60.0)	21,3 (70.0)	24,4 (80.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)					
100	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)
90	16 (35)	16 (35)	14 (30)	14 (30)	14 (30)	14 (30)
80	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)
Operation Not Permitted above 16 m/s (35 mph)						

Table 2b: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	30,0 (98.4)					
Jib Length m (ft)	9,1 (30.0)	12,2 (40.0)	15,2 (50.0)	18,3 (60.0)	21,3 (70.0)	24,4 (80.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)					
100	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)
90	16 (35)	16 (35)	14 (30)	14 (30)	14 (30)	14 (30)
80	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)
Operation Not Permitted above 16 m/s (35 mph)						

Wind Conditions

Table 2c: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	33,0 (108.3)					
Jib Length m (ft)	9,1 (30.0)	12,2 (40.0)	15,2 (50.0)	18,3 (60.0)	21,3 (70.0)	24,4 (80.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)					
100	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)
90	16 (35)	16 (35)	14 (30)	14 (30)	14 (30)	14 (30)
80	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)
Operation Not Permitted above 16 m/s (35 mph)						

Table 2d: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	36,0 (118.1)					
Jib Length m (ft)	9,1 (30.0)	12,2 (40.0)	15,2 (50.0)	18,3 (60.0)	21,3 (70.0)	24,4 (80.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)					
100	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)
90	16 (35)	16 (35)	14 (30)	14 (30)	14 (30)	14 (30)
80	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)
Operation Not Permitted above 16 m/s (35 mph)						

Table 2e: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	39,0 (128.0)					
Jib Length m (ft)	9,1 (30.0)	12,2 (40.0)	15,2 (50.0)	18,3 (60.0)	21,3 (70.0)	24,4 (80.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)					
100	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)
90	16 (35)	16 (35)	14 (30)	14 (30)	14 (30)	14 (30)
80	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)
Operation Not Permitted above 16 m/s (35 mph)						

Wind Conditions



Table 2f: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	42,0 (137.8)					
Jib Length m (ft)	9,1 (30.0)	12,2 (40.0)	15,2 (50.0)	18,3 (60.0)	21,3 (70.0)	24,4 (80.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)					
100	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)
90	16 (35)	16 (35)	14 (30)	14 (30)	14 (30)	14 (30)
80	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)
Operation Not Permitted above 16 m/s (35 mph)						

Table 2g: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	45,0 (147.6)					
Jib Length m (ft)	9,1 (30.0)	12,2 (40.0)	15,2 (50.0)	18,3 (60.0)	21,3 (70.0)	24,4 (80.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)					
100	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
90	16 (35)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)
80	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)
Operation Not Permitted above 16 m/s (35 mph)						

Table 2h: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	48,0 (157.5)					
Jib Length m (ft)	9,1 (30.0)	12,2 (40.0)	15,2 (50.0)	18,3 (60.0)	21,3 (70.0)	24,4 (80.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)					
100	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
90	16 (35)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)
80	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)
Operation Not Permitted above 16 m/s (35 mph)						

Wind Conditions

Table 2i: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	51,0 (167.3)					
Jib Length m (ft)	9,1 (30.0)	12,2 (40.0)	15,2 (50.0)	18,3 (60.0)	21,3 (70.0)	24,4 (80.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)					
100	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
90	16 (35)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)
80	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)
Operation Not Permitted above 16 m/s (35 mph)						

Table 2j: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	54,0 (177.2)					
Jib Length m (ft)	9,1 (30.0)	12,2 (40.0)	15,2 (50.0)	18,3 (60.0)	21,3 (70.0)	24,4 (80.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)					
100	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
90	16 (35)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)
80	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)
Operation Not Permitted above 16 m/s (35 mph)						

Table 2k: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	57,0 (187.0)					
Jib Length m (ft)	9,1 (30.0)	12,2 (40.0)	15,2 (50.0)	18,3 (60.0)	21,3 (70.0)	24,4 (80.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)					
100	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
90	16 (35)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)
80	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)
Operation Not Permitted above 16 m/s (35 mph)						

Wind Conditions



Table 2l: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	60,0 (196.9)					
Jib Length m (ft)	9,1 (30.0)	12,2 (40.0)	15,2 (50.0)	18,3 (60.0)	21,3 (70.0)	24,4 (80.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)					
100	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
90	16 (35)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)
80	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)
Operation Not Permitted above 16 m/s (35 mph)						

Table 2m: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	63,0 (206.7)					
Jib Length m (ft)	9,1 (30.0)	12,2 (40.0)	15,2 (50.0)	18,3 (60.0)	21,3 (70.0)	24,4 (80.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)					
100	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
90	16 (35)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)
80	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)
Operation Not Permitted above 16 m/s (35 mph)						

Table 2n: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	66,0 (216.5)					
Jib Length m (ft)	9,1 (30.0)	12,2 (40.0)	15,2 (50.0)	18,3 (60.0)	21,3 (70.0)	24,4 (80.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)					
100	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
90	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)
80	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)
Operation Not Permitted above 16 m/s (35 mph)						

Wind Conditions

Table 2o: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	69,0 (226.4)					
Jib Length m (ft)	9,1 (30.0)	12,2 (40.0)	15,2 (50.0)	18,3 (60.0)	21,3 (70.0)	24,4 (80.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)					
100	9 (20)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
90	11 (25)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)
80	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)
Operation Not Permitted above 16 m/s (35 mph)						

Table 2p: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	72,0 (236.2)			
Jib Length m (ft)	9,1 (30.0)	12,2 (40.0)	15,2 (50.0)	18,3 (60.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)			
100	9 (20)	11 (25)	11 (25)	11 (25)
90	11 (25)	14 (30)	14 (30)	14 (30)
80	14 (30)	16 (35)	16 (35)	16 (35)
70	16 (35)	16 (35)	16 (35)	16 (35)
Operation Not Permitted above 16 m/s (35 mph)				

Table 2q: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	75,0 (246.1)	
Jib Length m (ft)	9,1 (30.0)	12,2 (40.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)	
100	9 (20)	9 (20)
90	11 (25)	11 (25)
80	14 (30)	14 (30)
70	16 (35)	16 (35)
Operation Not Permitted above 16 m/s (35 mph)		

Wind Conditions



Boom No. 74 with Luffing Jib No. 135

Operation Permitted

Operation is permitted in steady winds or gusts up to the maximum speed given in Tables 3a thru 3k provided the lifted load does not exceed capacity chart percentage.

Wind speed to be measured at jib point elevation. *Refer to luffing jib capacity chart for specific backward stability conditions.*

Operation Not Permitted

Operation is not permitted when the wind speed exceeds the values listed in Tables 3a thru 3k for a given capacity chart percentage. Observe the following options:

Boom with 21,3 - 36,6 m (70.0 - 120.0 ft) Luffing Jib

- **Up to 22 m/s (50 mph) -**
Park crane with load blocks and weight balls on ground or secured and position boom at 80° and luffing jib at 45°.
- **22 m/s (50 mph) and Above -**
Lower boom and luffing jib onto blocking at ground level.

Boom with 39,6 - 45,7 m (130.0 - 150.0 ft) Luffing Jib

- **Up to 18 m/s (40 mph) -**
Park crane with load blocks and weight balls on ground or secured and position boom at 80° and luffing jib at 45°.
- **18 m/s (40 mph) and Above -**
Lower boom and luffing jib onto blocking at ground level.

Boom with 48,8 - 51,8 m (160.0 - 170.0 ft) Luffing Jib

- **Up to 16 m/s (35 mph) -**
Park crane with load blocks and weight balls on ground or secured and position boom at 80° and luffing jib at 45°.
- **16 m/s (35 mph) and Above -**
Lower boom and luffing jib onto blocking at ground level.

Wind Conditions

Table 3a: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	21,0 (68.9)										
Luffing Jib Length m (ft)	21,3 (70.0)	24,4 (80.0)	27,4 (90.0)	30,5 (100.0)	33,5 (110.0)	36,6 (120.0)	39,6 (130.0)	42,7 (140.0)	45,7 (150.0)	48,8 (160.0)	51,8 (170.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)										
100	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
90	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
80	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
70	14 (30)	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
60	16 (35)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)
50	16 (35)	16 (35)	16 (35)	16 (35)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	11 (25)
40	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)
Operation Not Permitted above 16 m/s (35 mph)											

Table 3b: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	24,0 (78.7)										
Luffing Jib Length m (ft)	21,3 (70.0)	24,4 (80.0)	27,4 (90.0)	30,5 (100.0)	33,5 (110.0)	36,6 (120.0)	39,6 (130.0)	42,7 (140.0)	45,7 (150.0)	48,8 (160.0)	51,8 (170.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)										
100	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
90	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
80	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
70	14 (30)	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
60	16 (35)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)
50	16 (35)	16 (35)	16 (35)	16 (35)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)
40	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)
Operation Not Permitted above 16 m/s (35 mph)											

Wind Conditions

Table 3c: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	27,0 (88.6)										
Luffing Jib Length m (ft)	21,3 (70.0)	24,4 (80.0)	27,4 (90.0)	30,5 (100.0)	33,5 (110.0)	36,6 (120.0)	39,6 (130.0)	42,7 (140.0)	45,7 (150.0)	48,8 (160.0)	51,8 (170.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)										
100	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)
90	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
80	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
70	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
60	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
50	16 (35)	16 (35)	16 (35)	16 (35)	14 (30)	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)
40	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	14 (30)	14 (30)	14 (30)	14 (30)	11 (25)
Operation Not Permitted above 16 m/s (35 mph)											

Table 3d: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	30,0 (98.4)										
Luffing Jib Length m (ft)	21,3 (70.0)	24,4 (80.0)	27,4 (90.0)	30,5 (100.0)	33,5 (110.0)	36,6 (120.0)	39,6 (130.0)	42,7 (140.0)	45,7 (150.0)	48,8 (160.0)	51,8 (170.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)										
100	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)
90	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	9 (20)	9 (20)	9 (20)
80	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
70	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
60	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
50	16 (35)	16 (35)	16 (35)	16 (35)	14 (30)	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)
40	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)
Operation Not Permitted above 16 m/s (35 mph)											

Wind Conditions

Table 3e: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	33,0 (108.3)										
Luffing Jib Length m (ft)	21,3 (70.0)	24,4 (80.0)	27,4 (90.0)	30,5 (100.0)	33,5 (110.0)	36,6 (120.0)	39,6 (130.0)	42,7 (140.0)	45,7 (150.0)	48,8 (160.0)	51,8 (170.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)										
100	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)
90	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	9 (20)	9 (20)	9 (20)
80	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
70	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
60	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
50	16 (35)	16 (35)	16 (35)	16 (35)	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)
40	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)
Operation Not Permitted above 16 m/s (35 mph)											

Table 3f: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	36,0 (118.1)										
Luffing Jib Length m (ft)	21,3 (70.0)	24,4 (80.0)	27,4 (90.0)	30,5 (100.0)	33,5 (110.0)	36,6 (120.0)	39,6 (130.0)	42,7 (140.0)	45,7 (150.0)	48,8 (160.0)	51,8 (170.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)										
100	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)
90	11 (25)	11 (25)	11 (25)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)
80	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	9 (20)	9 (20)	9 (20)
70	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
60	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
50	16 (35)	16 (35)	16 (35)	16 (35)	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)
40	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)
Operation Not Permitted above 16 m/s (35 mph)											

Wind Conditions

Table 3g: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	39,0 (128.0)										
Luffing Jib Length m (ft)	21,3 (70.0)	24,4 (80.0)	27,4 (90.0)	30,5 (100.0)	33,5 (110.0)	36,6 (120.0)	39,6 (130.0)	42,7 (140.0)	45,7 (150.0)	48,8 (160.0)	51,8 (170.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)										
100	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)
90	11 (25)	11 (25)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)
80	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	9 (20)	9 (20)	9 (20)
70	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	9 (20)	9 (20)
60	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
50	16 (35)	16 (35)	16 (35)	16 (35)	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)
40	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)
Operation Not Permitted above 16 m/s (35 mph)											

Table 3h: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	42,0 (137.8)										
Luffing Jib Length m (ft)	21,3 (70.0)	24,4 (80.0)	27,4 (90.0)	30,5 (100.0)	33,5 (110.0)	36,6 (120.0)	39,6 (130.0)	42,7 (140.0)	45,7 (150.0)	48,8 (160.0)	51,8 (170.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)										
100	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)
90	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)
80	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	9 (20)	9 (20)	9 (20)	9 (20)
70	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	9 (20)	9 (20)
60	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
50	16 (35)	16 (35)	16 (35)	16 (35)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
40	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)
Operation Not Permitted above 16 m/s (35 mph)											

Wind Conditions

Table 3i: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	45,0 (147.6)										
Luffing Jib Length m (ft)	21,3 (70.0)	24,4 (80.0)	27,4 (90.0)	30,5 (100.0)	33,5 (110.0)	36,6 (120.0)	39,6 (130.0)	42,7 (140.0)	45,7 (150.0)	48,8 (160.0)	51,8 (170.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)										
100	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)
90	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)
80	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	9 (20)	9 (20)	9 (20)	9 (20)
70	14 (30)	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	9 (20)	9 (20)	9 (20)
60	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	9 (20)	9 (20)
50	16 (35)	16 (35)	16 (35)	16 (35)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
40	16 (35)	16 (35)	16 (35)	16 (35)	16 (35)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)
Operation Not Permitted above 16 m/s (35 mph)											

Table 3j: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	48,0 (157.5)										
Luffing Jib Length m (ft)	21,3 (70.0)	24,4 (80.0)	27,4 (90.0)	30,5 (100.0)	33,5 (110.0)	36,6 (120.0)	39,6 (130.0)	42,7 (140.0)	45,7 (150.0)	48,8 (160.0)	51,8 (170.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)										
100	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)
90	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)
80	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	9 (20)	9 (20)	9 (20)	9 (20)
70	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	9 (20)	9 (20)	9 (20)
60	14 (30)	14 (30)	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	9 (20)	9 (20)
50	16 (35)	16 (35)	16 (35)	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	9 (20)	9 (20)
40	16 (35)	16 (35)	16 (35)	16 (35)	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)
Operation Not Permitted above 16 m/s (35 mph)											

Wind Conditions



Table 3k: Allowable Wind Speeds and Gusts for Various Capacity Chart Percentages

Boom Length m (ft)	51,0 (167.3)										
Luffing Jib Length m (ft)	21,3 (70.0)	24,4 (80.0)	27,4 (90.0)	30,5 (100.0)	33,5 (110.0)	36,6 (120.0)	39,6 (130.0)	42,7 (140.0)	45,7 (150.0)	48,8 (160.0)	51,8 (170.0)
Percent of Capacity Chart	Maximum Wind Speed m/s (mph)										
100	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	7 (15)	7 (15)
90	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)
80	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)	9 (20)	9 (20)	9 (20)	9 (20)	9 (20)
70	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	9 (20)	9 (20)	9 (20)	9 (20)
60	16 (35)	14 (30)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	9 (20)	9 (20)	9 (20)
50	16 (35)	16 (35)	16 (35)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	9 (20)	9 (20)
40	16 (35)	16 (35)	16 (35)	16 (35)	14 (30)	14 (30)	11 (25)	11 (25)	11 (25)	11 (25)	11 (25)
Operation Not Permitted above 16 m/s (35 mph)											