Span Tables

4" AIRFOIL MAXIMUM SPAN TABLE
TOTAL LOAD (PSF)

Span (in.)	20	25	30	35	40	45	50	60	70	80
36	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
42	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
48	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
54	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
60	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
66	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
72	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
78	OK	OK	OK	OK	OK	OK	OK	OK	OK	FAILS
84	OK	OK	OK	OK	OK	OK	OK	OK	FAILS	FAILS
90	OK	OK	OK	OK	OK	OK	OK	FAILS	FAILS	FAILS
96	OK	OK	OK	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS
102	OK	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
108	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
114	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
120	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
126	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
132	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
138	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
144	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS

NOTES:
- Calculated stress and deflections can be found in the following tables.
- Airfoil span tables are conservative and based on weak axis stress and deflection
- Deflections are based on L/120 per IBC 2003.
- Allowable stress is based on 6063-T5 aluminum.
- Airfoils are modeled as simple span beams from outrigger to outrigger.

5" AIRFOIL MAXIMUM SPAN TABLE
TOTAL LOAD (PSF)

Span (in.)	20	25	30	35	40	45	50	60	70	80
36	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
42	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
48	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
54	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
60	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
66	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
72	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
78	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
84	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
90	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
96	OK	OK	OK	OK	OK	OK	OK	OK	OK	FAILS
102	OK	OK	OK	OK	OK	OK	OK	OK	FAILS	FAILS
108	OK	OK	OK	OK	OK	OK	OK	FAILS	FAILS	FAILS
114	OK	OK	OK	OK	OK	OK	FAILS	FAILS	FAILS	FAILS
120	OK	OK	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
126	OK	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
132	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
138	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
144	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS

NOTES:
- Calculated stress and deflections can be found in the following tables.
- Airfoil span tables are conservative and based on weak axis stress and deflection
- Deflections are based on L/120 per IBC 2003.
- Allowable stress is based on 6063-T5 aluminum.
- Airfoils are modeled as simple span beams from outrigger to outrigger.

Span Tables

6" Airfoil Maximum Span Table
Total Load (PSF)

Span (in.)	20	25	30	35	40	45	50	60	70	80
36	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
42	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
48	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
54	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
60	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
66	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
72	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
78	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
84	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
90	OK	OK	OK	OK	OK	OK	OK	OK	OK	FAILS
96	OK	OK	OK	OK	OK	OK	OK	OK	FAILS	FAILS
102	OK	OK	OK	OK	OK	OK	OK	FAILS	FAILS	FAILS
108	OK	OK	OK	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS
114	OK	OK	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
120	OK	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
126	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
132	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
138	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
144	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS

NOTES:
- Calculated stress and deflections can be found in the following tables.
- Airfoil span tables are conservative and based on weak axis stress and deflection
- Deflections are based on L/120 per IBC 2003.
- Allowable stress is based on 6063-T5 aluminum.
- Airfoils are modeled as simple span beams from outrigger to outrigger.

8" Airfoil Maximum Span Table
Total Load (PSF)

Span (in.)	20	25	30	35	40	45	50	60	70	80
36	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
42	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
48	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
54	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
60	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
66	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
72	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
78	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
84	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
90	OK	OK	OK	OK	OK	OK	OK	OK	OK	FAILS
96	OK	OK	OK	OK	OK	OK	OK	FAILS	FAILS	FAILS
102	OK	OK	OK	OK	OK	OK	FAILS	FAILS	FAILS	FAILS
108	OK	OK	OK	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS
114	OK	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
120	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
126	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
132	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
138	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
144	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS

NOTES:
- Calculated stress and deflections can be found in the following tables.
- Airfoil span tables are conservative and based on weak axis stress and deflection
- Deflections are based on L/120 per IBC 2003.
- Allowable stress is based on 6063-T5 aluminum.
- Airfoils are modeled as simple span beams from outrigger to outrigger.

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Span Tables

2"x4"x1/8" Tube Maximum Span Table
Total Load (PSF)

Span (in.)	20	25	30	35	40	45	50	60	70	80
36	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
42	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
48	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
54	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
60	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
66	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
72	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
78	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
84	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
90	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
96	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
102	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
108	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
114	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
120	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
126	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
132	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
138	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
144	OK	OK	OK	OK	OK	OK	OK	OK	OK	FAILS

NOTES:
- Calculated stress and deflections can be found in the following tables.
- Airfoil span tables are conservative and based on weak axis stress and deflection
- Deflections are based on L/120 per IBC 2003.
- Allowable stress is based on 6063-T5 aluminum.
- Tubes are modeled as simple span beams from outrigger to outrigger.

2"x6"x1/8" Tube Maximum Span Table
Total Load (PSF)

Span (in.)	20	25	30	35	40	45	50	60	70	80
36	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
42	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
48	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
54	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
60	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
66	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
72	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
78	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
84	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
90	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
96	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
102	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
108	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
114	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
120	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
126	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
132	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
138	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
144	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

NOTES:
- Calculated stress and deflections can be found in the following tables.
- Airfoil span tables are conservative and based on weak axis stress and deflection
- Deflections are based on L/120 per IBC 2003.
- Allowable stress is based on 6063-T5 aluminum.
- Tubes are modeled as simple span beams from outrigger to outrigger.

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Span Tables

2"x6"x1/8" TUBE MAXIMUM SPAN TABLE
TOTAL LOAD (PSF)

Span (in.)	20	25	30	35	40	45	50	60	70	80
36	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
42	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
48	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
54	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
60	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
66	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
72	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
78	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
84	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
90	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
96	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
102	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
108	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
114	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
120	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
126	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
132	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
138	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
144	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

NOTES:
- Calculated stress and deflections can be found in the following tables.
- Airfoil span tables are conservative and based on weak axis stress and deflection
- Deflections are based on L/120 per IBC 2003.
- Allowable stress is based on 6063-T5 aluminum.
- Tubes are modeled as simple span beams from outrigger to outrigger.

2"x8"x1/8" TUBE MAXIMUM SPAN TABLE
TOTAL LOAD (PSF)

Span (in.)	20	25	30	35	40	45	50	60	70	80
36	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
42	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
48	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
54	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
60	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
66	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
72	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
78	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
84	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
90	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
96	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
102	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
108	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
114	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
120	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
126	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
132	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
138	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
144	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

NOTES:
- Calculated stress and deflections can be found in the following tables.
- Airfoil span tables are conservative and based on weak axis stress and deflection
- Deflections are based on L/120 per IBC 2003.
- Allowable stress is based on 6063-T5 aluminum.
- Tubes are modeled as simple span beams from outrigger to outrigger.

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Span Tables

2" ROUND MAXIMUM SPAN TABLE
TOTAL LOAD (PSF)

Span (in.)	20	25	30	35	40	45	50	60	70	80
36	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
42	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
48	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
54	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
60	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
66	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
72	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
78	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
84	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
90	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
96	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
102	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
108	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
114	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
120	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
126	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
132	OK	OK	OK	OK	OK	OK	OK	OK	OK	FAILS
138	OK	OK	OK	OK	OK	OK	OK	OK	FAILS	FAILS
144	OK	OK	OK	OK	OK	OK	OK	OK	FAILS	FAILS

NOTES:
- Calculated stress and deflections can be found in the following tables.
- Airfoil span tables are conservative and based on weak axis stress and deflection
- Deflections are based on L/120 per IBC 2003.
- Allowable stress is based on 6063-T5 aluminum.
- Round blades are modeled as simple span beams from outrigger to outrigger.
- Round blades are particularly suseptable to vortex shedding and vibration.
- These tables DO NOT take vibration into account which may limit spans.

2 1/2" ROUND MAXIMUM SPAN TABLE
TOTAL LOAD (PSF)

Span (in.)	20	25	30	35	40	45	50	60	70	80
36	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
42	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
48	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
54	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
60	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
66	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
72	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
78	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
84	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
90	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
96	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
102	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
108	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
114	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
120	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
126	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
132	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
138	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
144	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

NOTES:
- Calculated stress and deflections can be found in the following tables.
- Airfoil span tables are conservative and based on weak axis stress and deflection
- Deflections are based on L/120 per IBC 2003.
- Round blades are modeled as simple span beams from outrigger to outrigger.
- Round blades are particularly suseptable to vortex shedding and vibration.

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Span Tables

3" ROUND MAXIMUM SPAN TABLE
TOTAL LOAD (PSF)

Span (in.)	20	25	30	35	40	45	50	60	70	80
36	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
42	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
48	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
54	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
60	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
66	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
72	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
78	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
84	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
90	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
96	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
102	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
108	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
114	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
120	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
126	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
132	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
138	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
144	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

NOTES:
- Calculated stress and deflections can be found in the following tables.
- Airfoil span tables are conservative and based on weak axis stress and deflection
- Deflections are based on L/120 per IBC 2003.
- Allowable stress is based on 6063-T5 aluminum.

- Round blades are modeled as simple span beams from outrigger to outrigger.
- Round blades are particularly suseptable to vortex shedding and vibration.
- These tables DO NOT take vibration into account which may limit spans.

4" ROUND MAXIMUM SPAN TABLE
TOTAL LOAD (PSF)

Span (in.)	20	25	30	35	40	45	50	60	70	80
36	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
42	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
48	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
54	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
60	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
66	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
72	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
78	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
84	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
90	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
96	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
102	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
108	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
114	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
120	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
126	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
132	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
138	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
144	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

NOTES:
- Calculated stress and deflections can be found in the following tables.
- Airfoil span tables are conservative and based on weak axis stress and deflection
- Deflections are based on L/120 per IBC 2003.
- Allowable stress is based on 6063-T5 aluminum.

- Round blades are modeled as simple span beams from outrigger to outrigger.
- Round blades are particularly suseptable to vortex shedding and vibration.
- These tables DO NOT take vibration into account which may limit spans.

Span Tables

4" Z Blade Maximum Span Table
Total Load (PSF)

Span (in.)	20	25	30	35	40	45	50	60	70	80
36	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
42	OK	OK	OK	OK	OK	OK	OK	OK	OK	FAILS
48	OK	OK	OK	OK	OK	OK	OK	FAILS	FAILS	FAILS
54	OK	OK	OK	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS
60	OK	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
66	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
72	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
78	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
84	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
90	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
96	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
102	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
108	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
114	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
120	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
126	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
132	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
138	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
144	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS

NOTES:
- Calculated stress and deflections can be found in the following tables.
- Airfoil span tables are conservative and based on weak axis stress and deflection
- Deflections are based on L/120 per IBC 2003.
- Allowable stress is based on 6063-T5 aluminum.
- Round blades are modeled as simple span beams from outrigger to outrigger.
- Round blades are particularly suseptable to vortex shedding and vibration.
- These tables DO NOT take vibration into account which may limit spans.
- This table assumes a maximum blades spacing of 10" o.c.

4" Z Blade Braced Maximum Span Table
Total Load (PSF)

Span (in.)	20	25	30	35	40	45	50	60	70	80
36	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
42	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
48	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
54	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
60	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
66	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
72	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
78	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
84	OK	OK	OK	OK	OK	OK	OK	OK	OK	FAILS
90	OK	OK	OK	OK	OK	OK	OK	OK	FAILS	FAILS
96	OK	OK	OK	OK	OK	OK	OK	FAILS	FAILS	FAILS
102	OK	OK	OK	OK	OK	OK	OK	FAILS	FAILS	FAILS
108	OK	OK	OK	OK	OK	OK	FAILS	FAILS	FAILS	FAILS
114	OK	OK	OK	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS
120	OK	OK	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
126	OK	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
132	OK	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
138	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
144	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS

NOTES:
- These tables are based on the blades being braced at mid-span.
- Calculated stress and deflections can be found in the following tables.
- Airfoil span tables are conservative and based on weak axis stress and deflection
- Round blades are modeled as simple span beams from outrigger to outrigger.
- Round blades are particularly suseptable to vortex shedding and vibration.

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Span Tables

5" Z BLADE MAXIMUM SPAN TABLE
TOTAL LOAD (PSF)

Span (in.)	20	25	30	35	40	45	50	60	70	80
36	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
42	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
48	OK	OK	OK	OK	OK	OK	OK	OK	FAILS	FAILS
54	OK	OK	OK	OK	OK	OK	OK	FAILS	FAILS	FAILS
60	OK	OK	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
66	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
72	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
78	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
84	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
90	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
96	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
102	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
108	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
114	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
120	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
126	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
132	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
138	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
144	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS

NOTES:
- Calculated stress and deflections can be found in the following tables.
- Airfoil span tables are conservative and based on weak axis stress and deflection
- Deflections are based on L/120 per IBC 2003.
- Allowable stress is based on 6063-T5 aluminum.
- Round blades are modeled as simple span beams from outrigger to outrigger.
- Round blades are particularly suseptable to vortex shedding and vibration.
- These tables DO NOT take vibration into account which may limit spans.
- This table assumes a maximum blades spacing of 10" o.c.

5" Z BLADE BRACED MAXIMUM SPAN TABLE
TOTAL LOAD (PSF)

Span (in.)	20	25	30	35	40	45	50	60	70	80
36	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
42	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
48	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
54	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
60	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
66	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
72	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
78	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
84	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
90	OK	OK	OK	OK	OK	OK	OK	OK	OK	FAILS
96	OK	OK	OK	OK	OK	OK	OK	OK	FAILS	FAILS
102	OK	OK	OK	OK	OK	OK	OK	FAILS	FAILS	FAILS
108	OK	OK	OK	OK	OK	OK	OK	FAILS	FAILS	FAILS
114	OK	OK	OK	OK	OK	OK	FAILS	FAILS	FAILS	FAILS
120	OK	OK	OK	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS
126	OK	OK	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
132	OK	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
138	OK	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
144	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS

NOTES:
- These tables are based on the blades being braced at mid-span.
- Calculated stress and deflections can be found in the following tables.
- Airfoil span tables are conservative and based on weak axis stress and deflection
- Round blades are modeled as simple span beams from outrigger to outrigger.
- Round blades are particularly suseptable to vortex shedding and vibration.

Span Tables

6" Z Blade Maximum Span Table
Total Load (PSF)

Span (in.)	20	25	30	35	40	45	50	60	70	80
36	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
42	OK	OK	OK	OK	OK	OK	OK	OK	OK	FAILS
48	OK	OK	OK	OK	OK	OK	OK	FAILS	FAILS	FAILS
54	OK	OK	OK	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS
60	OK	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
66	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
72	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
78	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
84	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
90	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
96	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
102	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
108	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
114	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
120	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
126	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
132	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
138	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
144	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS

NOTES:
- Calculated stress and deflections can be found in the following tables.
- Span tables are conservative and based on weak axis stress and deflection
- Deflections are based on L/120 per IBC 2003.
- Allowable stress is based on 6063-T5 aluminum.
- Round blades are modeled as simple span beams from outrigger to outrigger.
- Round blades are particularly suseptable to vortex shedding and vibration.
- These tables DO NOT take vibration into account which may limit spans.
- This table assumes a maximum blades spacing of 10" o.c.

6" Z Blade Braced Maximum Span Table
Total Load (PSF)

Span (in.)	20	25	30	35	40	45	50	60	70	80
36	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
42	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
48	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
54	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
60	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
66	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
72	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
78	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
84	OK	OK	OK	OK	OK	OK	OK	OK	OK	FAILS
90	OK	OK	OK	OK	OK	OK	OK	OK	FAILS	FAILS
96	OK	OK	OK	OK	OK	OK	OK	FAILS	FAILS	FAILS
102	OK	OK	OK	OK	OK	OK	OK	FAILS	FAILS	FAILS
108	OK	OK	OK	OK	OK	OK	FAILS	FAILS	FAILS	FAILS
114	OK	OK	OK	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS
120	OK	OK	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
126	OK	OK	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
132	OK	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
138	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS
144	OK	OK	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS	FAILS

NOTES:
- These tables are based on the blades being braced at mid-span.
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- Round blades are particularly suseptable to vortex shedding and vibration.