



Deck Designer Specification Kit For  
**AZEK**

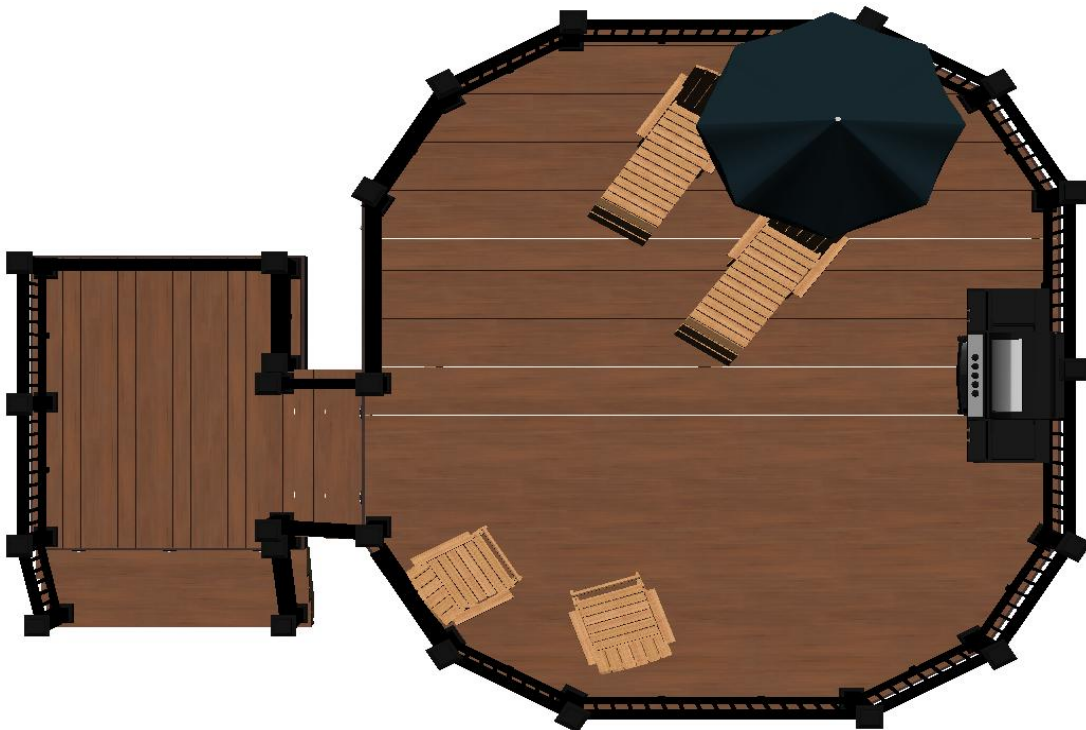
**Deck layout diagram**



Top view without planks

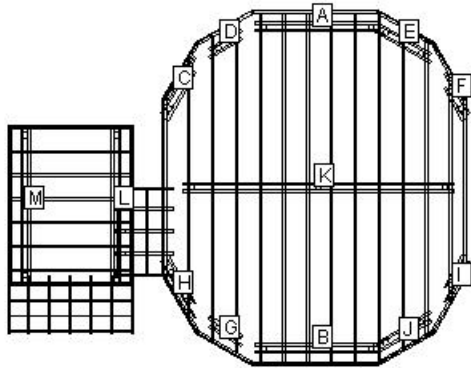


Bottom view with planks



Top view with planks

Permit Page: Level 1



**LOAD AND SUPPORT:**

Your deck will support a 43 PSF live load.  
Posts have 36" below ground support.

**DECK AND POST HEIGHT:**

You selected a height of 60" from the top of the decking to the ground level. The top of the deck support posts will therefore be 51" above ground level.

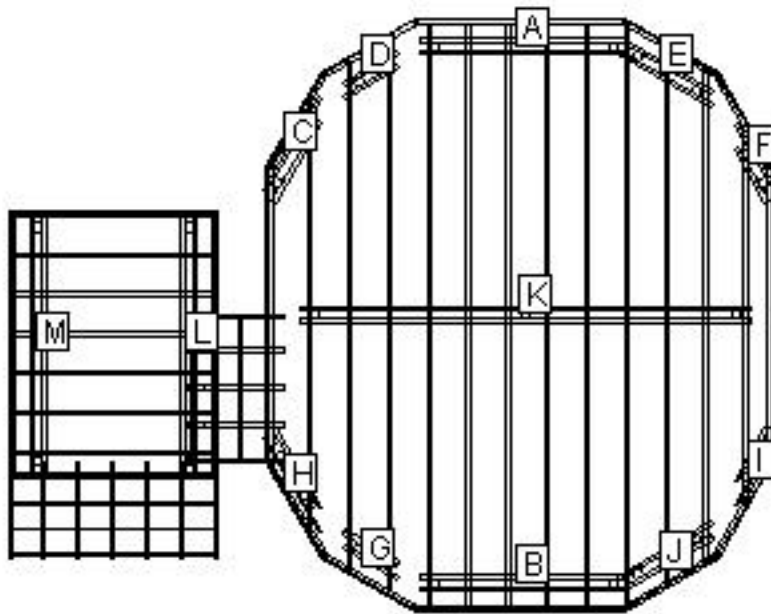
**Joists:**

Set joists on top of beams, 16"; center to center.

**Stress Analysis: Level 1**

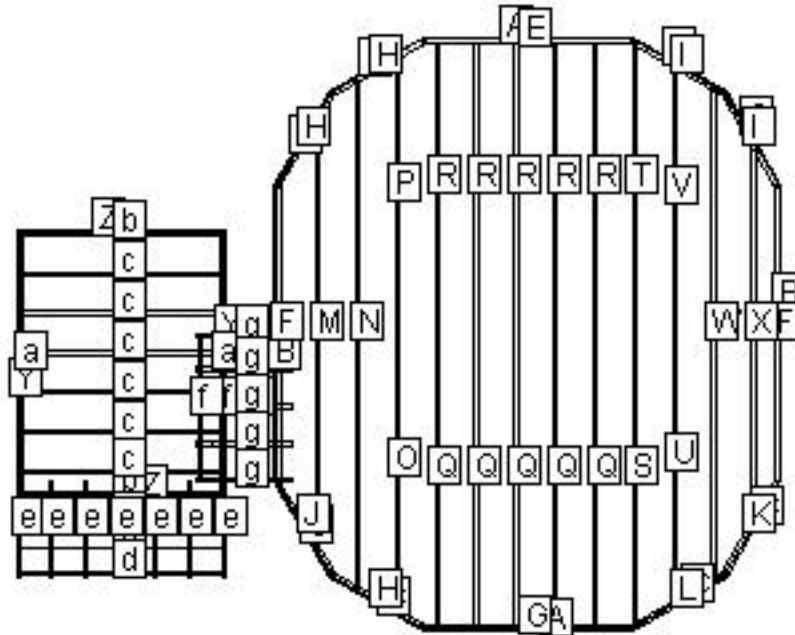
Joist Deflection	1873
Joist Bending	254
Joist Shear	206
Joist Compression	206
Beam Deflection	289
Beam Bending	65
Beam Shear	53
Post Stability	100

### Beam Layout Level 1



BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	7' 1/2"	2	6' 1"
B	7' 1/2"	2	6' 1"
C	3' 8"	2	2' 2 1/4"
D	2' 1 1/2"	2	1'
E	3' 5 1/4"	2	2' 3 1/2"
F	2' 7 1/2"	2	1' 2"
G	2' 1 1/2"	2	1'
H	3' 8"	2	2' 2 1/4"
I	2' 7 1/2"	2	1' 2"
J	3' 5 1/4"	2	2' 3 1/2"
K	15' 2"	3	7' 1 1/4"
L	8' 10 1/4"	2	7' 10 3/4"
M	8' 10 1/4"	2	7' 10 3/4"

Materials Cut List: Level 1



LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
A	Cladding	2	7' 1"	15, 15	R	Internal Joist	5	9' 8 3/4"	0, 0
B	Cladding	2	10'	15, 15	S	Internal Joist	1	9' 10 1/4"	30, 30
C	Cladding	7	3' 8"	15, 15	T	Internal Joist	1	9' 8 1/4"	30, 30
D	Cladding	1	3' 8"	15, 15	U	Internal Joist	1	9' 1"	30, 30
E	Header	1	7' 1/2"	0, 0	V	Internal Joist	1	8' 11"	30, 30
F	Rim Joist	2	9' 11 1/2"	0, 0	W	Internal Joist	1	16' 5 1/2"	30, 30
G	Header	1	7' 1/2"	0, 0	X	Internal Joist	1	12' 8 1/2"	60, 60
H	Header	3	3' 7 1/2"	0, 0	Y	Cladding	2	9'	45, 45
I	Header	2	3' 7 1/2"	0, 0	Z	Cladding	2	7'	45, 45
J	Header	1	3' 7 1/2"	0, 0	a	Header	2	8' 7 1/4"	0, 0
K	Header	1	3' 7 1/2"	0, 0	b	Rim Joist	2	6' 10 1/4"	0, 0
L	Header	1	3' 7 1/2"	0, 0	c	Internal Joist	6	6' 7 1/4"	0, 0

Cut Angles: L=Left, R=Right, F=Front, S=Side

LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
M	Internal Joist	1	14' 6"	60, 60	d	Riser	3	7'	0, 0
N	Internal Joist	1	17' 1"	30, 30	e	Pre Cut Stringer	7	3' 4"	0, 0
O	Internal Joist	1	9' 4 3/4"	30, 30	f	Riser	3	5'	0, 0
P	Internal Joist	1	9' 2 3/4"	30, 30	g	Pre Cut Stringer	5	3' 4"	0, 0
Q	Internal Joist	5	9' 10 1/2"	0, 0					

Cut Angles: L=Left, R=Right, F=Front, S=Side

## Component Descriptions

These recommendations are for railing with a 4" gap from deck surface to the bottom of the bottom rail. Always refer to your local building codes to determine if other requirements must be met. Canadian requirements may vary.

TimberTech RadianceRail and AZEK Black and White rail sections are available in 10 ft. sections. See your local TimberTech or AZEK Dealer for more information.

### Lumber Materials

COMPONENT	QTY	DESCRIPTION	WOOD TYPE
Internal Joist	1	2X8X16 Treated	TREATED
Internal Joist	5	2X8X18 Treated	TREATED
Internal Joist	18	2X8X10 Treated	TREATED
Internal Joist	5	2X8X14 Treated	TREATED
Beam	4	2X10X8 Treated	TREATED
Beam	2	2X10X16 Treated	TREATED
Beam	4	2X10X10 Treated	TREATED
Pre Cut Stringer	12	3-Step Treated Stair Stringer	TREATED
Railing Post	1	4X4X8 Treated	TREATED
Railing Post	5	4X4X18 Treated	TREATED
Railing Section	4	AZEK 6' Premier Custom Rail Pack - Black - 6'	AZEK
Railing Section	8	AZEK 8' Premier Custom Rail Pack - Black - 8'	AZEK
Railing Section	10	TT/AZEK 31" Round Aluminum Baluster - Black - 31"	AZEK
Cladding	10	AZEK Harvest Collection® Rim Joist Covers/Fasica - Kona® - 12'	AZEK
Decking	21	AZEK Vintage Collection® Deck Plank, Grooved - Mahogany® - 12'	AZEK
Decking	16	AZEK Vintage Collection® Deck Plank, Grooved - Mahogany® - 16'	AZEK
Decking	26	AZEK Vintage Collection® Deck Plank, Grooved - Mahogany® - 20'	AZEK
Header	2	2X8X8 Treated	TREATED
Post	23	4X4X8 Treated	TREATED
Beam	1	2X10X14 Treated	TREATED
Beam	2	2X10X18 Treated	TREATED
Riser	3	AZEK Harvest Collection® Rim Joist Covers/Fasica - Kona® - 12'	AZEK
Railing Section	2	TT/AZEK 31" Round Aluminum Stair Baluster - Black - 31"	AZEK

To find an AZEK and/or TimberTech Dealer or Contractor in your area, please go to [www.azek.com](http://www.azek.com)

### Other Materials

Qty	Description
24	5" Triple Zinc Angle Clip MP5-TZ
1	5 LB. 10D Hot-Dip Galvanized Nail
2	1 LB. 10D Hot-Dip Galvanized Nail
2	1 LB. 10D X1 1/2" Nail
24	2x8-10" Triple Zinc Joist Hanger JUS28-TZ
4	5" Triple Zinc Angle Clip MP5-TZ
3	1LB. 8D Galvanized Common Nail
3	1 LB. 1-1/2" Joist Hanger Nail
56	Triple Zinc Rafter Tie RT7-TZ
27	Anchor Bolt AB128
27	4X4 Triple Zinc Deck Post Anchor PA44E-TZ
43	80 L.B. Basic Concrete Mix
1	40 LB. Basic Concrete Mix
1	10 LB. Basic Concrete Mix
21	8" X 48" Concrete Form Tube
432	1/2 Galvanized Flat Washer
9	1/2 Galvanized Hex Nut
216	1/2 X 8" Galvanized Carriage Bolt
4	7" Triple Zinc Angle Clip AC7-TZ
12	7" Triple Zinc Angle Clip AC7-TZ
52	4X4 Triple Zinc Deck Post Tie SDPT7-TZ
1	1 LB. 8X3" Philips Head Stainless Deck Screws
26	AZEK 5 1/2" Post Skirt - Black
104	3/8 Galvanized Hex Nut
208	3/8 Galvanized Flat Washer
104	3/8 X 8" Galvanized Carriage Bolt
26	AZEK 5 1/2" LED Lighted Island Cap - Black
26	AZEK 5.5" x 5.5" Post Sleeve - Black - 39"
8	2 Pieces of Joist Material Nailed to Each Joist Splice
1	TT/AZEK Transformer - 12 Volt 150 W
1	TT/AZEK Decklites Dimmer
1	TT/AZEK 100' wire 16/2
20	TT/AZEK LED Riser Light - Architectural Bronze
1	AZEK Cortex - 100 LF Vintage Collection® - Mahogany
4	TimberTech CONCEALoc Hidden Fastener - Unit = 8 retail cartons @ 100 sq.ft. coverage each (175 CONCEALoc fasteners, 184 Screws and drive bit) - Brown



**LEGAL DISCLAIMER:** The suggested design is a construction guide and is **NOT** a finished building plan. It is your responsibility to verify its accuracy, completeness, suitability for your particular site conditions, and compliance with local building codes and practices. Please consult your local building codes for requirements for deck lighting, railing, and stairs.

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**You are responsible for ensuring that all measurements are correct. Due to the size, shape, location or other considerations, your design may require supporting structures, such as knee braces and bridging between joists and posts and are not included on the materials list and other information provided. YOU ARE RESPONSIBLE FOR ENSURING THAT YOUR DESIGN IS SAFE AND STRUCTURALLY SOUND FOR ITS SIZE, LOCATION AND ANTICIPATED USE. You are also responsible for verifying that the design and any substitutions or modifications you make meet all local building codes and regulations.**

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