



Deck Designer Specification Kit For  
**AZEK**

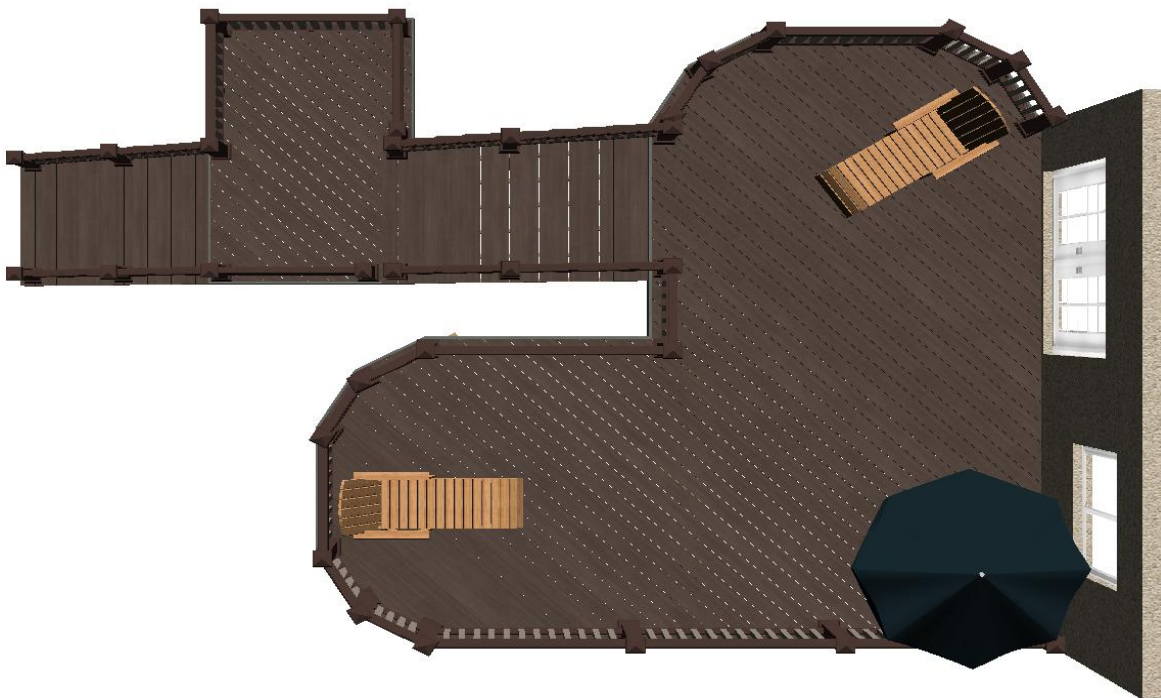
**Deck layout diagram**



Top view without planks

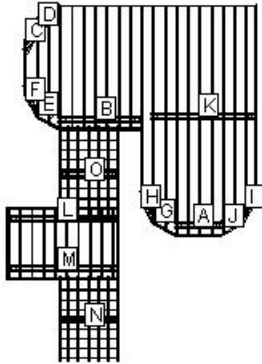


Bottom view with planks



Top view with planks

**Permit Page: Level 1**



**LOAD AND SUPPORT:**

Your deck will support a 89 PSF live load.  
 Posts have 36" below ground support.

**DECK AND POST HEIGHT:**

You selected a height of 144" from the top of the decking to the ground level. The top of the deck support posts will therefore be 135" above ground level.

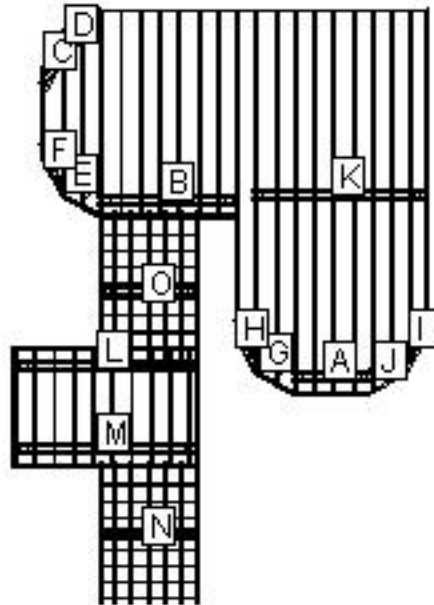
**Joists:**

Set joists on top of beams, 12"; center to center.

**Stress Analysis: Level 1**

Joist Deflection	4743
Joist Bending	478
Joist Shear	342
Joist Compression	342
Beam Deflection	416
Beam Bending	132
Beam Shear	100
Post Stability	168

Beam Layout Level 1



BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	4' 2 1/2"	2	3' 3"
B	7' 3 3/4"	2	6' 4 1/4"
C	2' 4 1/4"	2	10 1/2"
D	1' 8"	1	0
E	1' 8"	1	0
F	2' 4 1/4"	2	10 1/2"
G	1' 8"	1	0
H	2' 4 1/4"	2	10 1/2"
I	2' 4 1/4"	2	10 1/2"
J	1' 7"	1	0
K	9' 1 1/4"	3	4' 1"
L	9' 5 3/4"	2	8' 6 1/4"
M	9' 5 3/4"	2	8' 6 1/4"
N	5' 2"	2	4' 2 1/2"
O	5' 2"	2	4' 2 1/2"

Materials Cut List: Level 1



LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
A	Cladding	1	17'	15, 45	V	Internal Joist	1	1' 1/2"	0, 61
B	Cladding	1	4'	15, 15	W	Internal Joist	1	17' 5 1/2"	0, 61
C	Cladding	1	6' 3"	45, 15	X	Internal Joist	1	9' 10"	0, 29
D	Cladding	1	7' 1"	15, 45	Y	Internal Joist	1	9' 3 3/4"	0, 29
E	Cladding	1	4' 10"	15, 15	Z	Internal Joist	4	10' 3 1/2"	0, 0
F	Cladding	4	2' 2 1/2"	16, 15	a	Internal Joist	4	9' 3 3/4"	0, 0
G	Cladding	1	2' 2 1/2"	15, 16	b	Internal Joist	1	10' 3"	0, 29
H	Cladding	3	2' 2 1/2"	15, 16	c	Internal Joist	1	9' 3 1/2"	0, 29
I	Header	1	16' 9 1/2"	0, 0	d	Internal Joist	1	9' 7"	0, 29
J	Rim Joist	1	16' 11"	0, 0	e	Internal Joist	1	9' 4 3/4"	0, 29
K	Header	1	3' 11 1/2"	0, 0	f	Internal Joist	1	8' 8"	0, 61
L	Rim Joist	1	7' 6 1/2"	0, 0	g	Internal Joist	1	9' 4 1/2"	0, 61

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

LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
M	Header	1	7' 2 1/4"	0, 0	h	Cladding	2	9' 7 1/2"	45, 45
N	Rim Joist	1	4' 9 1/2"	0, 0	i	Cladding	2	6' 3"	45, 45
O	Header	2	2' 2"	0, 0	j	Header	2	9' 2 3/4"	0, 0
P	Header	1	2' 2"	0, 0	k	Rim Joist	2	6' 1 1/4"	0, 0
Q	Header	2	2' 2"	0, 0	l	Internal Joist	9	5' 10 1/4"	0, 0
R	Header	3	2' 2"	0, 0	m	Riser	17	5' 2"	0, 0
S	Internal Joist	1	8' 3 1/4"	61, 61	n	Stringer	7	8' 9"	0, 0
T	Internal Joist	1	9' 5 3/4"	29, 29	o	Stringer	7	9' 7"	0, 0
U	Internal Joist	8	10' 5 1/4"	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	13	2X8X10 Treated	TREATED
Internal Joist	8	2X8X12 Treated	TREATED
Internal Joist	3	2X8X8 Treated	TREATED
Internal Joist	15	2X8X18 Treated	TREATED
Beam	4	2X10X8 Treated	TREATED
Beam	6	2X10X10 Treated	TREATED
Railing Post	1	4X4X8 Treated	TREATED
Railing Post	6	4X4X18 Treated	TREATED
Railing Section	13	AZEK 8' Premier Rail Pack - Kona® - 8'	AZEK
Railing Section	13	TT/AZEK 31" Square Composite Baluster - Slate Gray - 31"	AZEK
Cladding	8	AZEK Terra Collection Rim Joist Covers/Fasica - Tahoe® - 12'	AZEK
Decking	64	AZEK Vintage Collection® Deck Plank, Square Shouldered - Dark Hickory® - 16'	AZEK
Rim Joist	2	2X8X14 Treated	TREATED
Internal Joist	5	2X8X16 Treated	TREATED
Beam	2	2X10X18 Treated	TREATED
Post	23	4X4X12 Treated	TREATED
Riser	9	AZEK Terra Collection Rim Joist Covers/Fasica - Tahoe® - 12'	AZEK
Beam	1	2X10X16 Treated	TREATED

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

### Other Materials

Qty	Description
16	5" Triple Zinc Angle Clip MP5-TZ
1	5 LB. 10D Hot-Dip Galvanized Nail
4	1 LB. 10D Hot-Dip Galvanized Nail
3	1 LB. 10D X1 1/2" Nail
48	2x8-10" Triple Zinc Joist Hanger JUS28-TZ
5	7" Triple Zinc Angle Clip AC7-TZ
4	5" Triple Zinc Angle Clip MP5-TZ
2	THR128-HDG Threaded Rod
4	DTB-TZ Deck Tie Bracket
3	1LB. 8D Galvanized Common Nail
3	1 LB. 1-1/2" Joist Hanger Nail
57	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
14	7" Triple Zinc Angle Clip AC7-TZ
64	4X4 Triple Zinc Deck Post Tie SDPT7-TZ
1	1 LB. 8X3" Philips Head Stainless Deck Screws
32	AZEK 5 1/2" Post Skirt - Kona®
128	3/8 Galvanized Hex Nut
256	3/8 Galvanized Flat Washer
128	3/8 X 8" Galvanized Carriage Bolt
32	AZEK 5 1/2" Pyramid Cap - Kona®
32	AZEK 5.5" x 5.5" Post Sleeve - Kona® - 39"
9	2 Pieces of Joist Material Nailed to Each Joist Splice
6	AZEK Cortex - 100 LF Vintage Collection® - Dark Hickory
34	1/2 X 6" Galvanized Lag Screw



**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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