



Deck Designer Specification Kit For  
**AZEK**

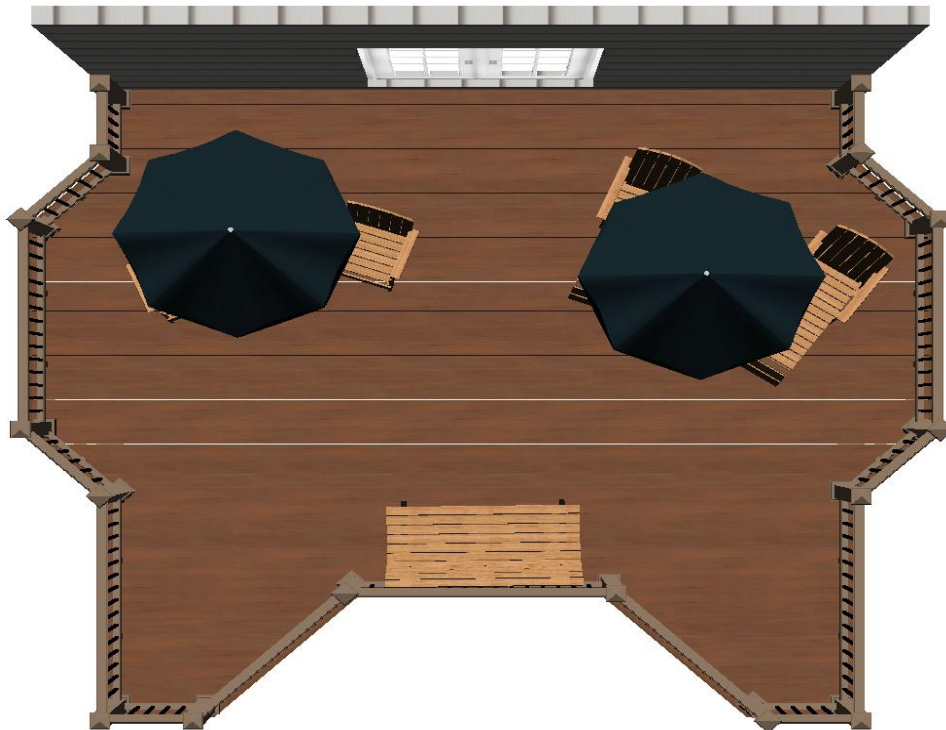
**Deck layout diagram**



Top view without planks

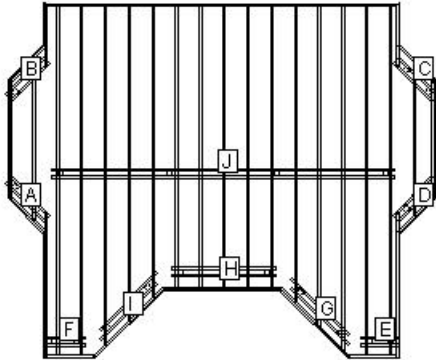


Bottom view with planks



Top view with planks

Permit Page: Level 1



**LOAD AND SUPPORT:**

Your deck will support a 45 PSF live load.  
Posts have 36" below ground support.

**DECK AND POST HEIGHT:**

You selected a height of 54" from the top of the decking to the ground level. The top of the deck support posts will therefore be 45" above ground level.

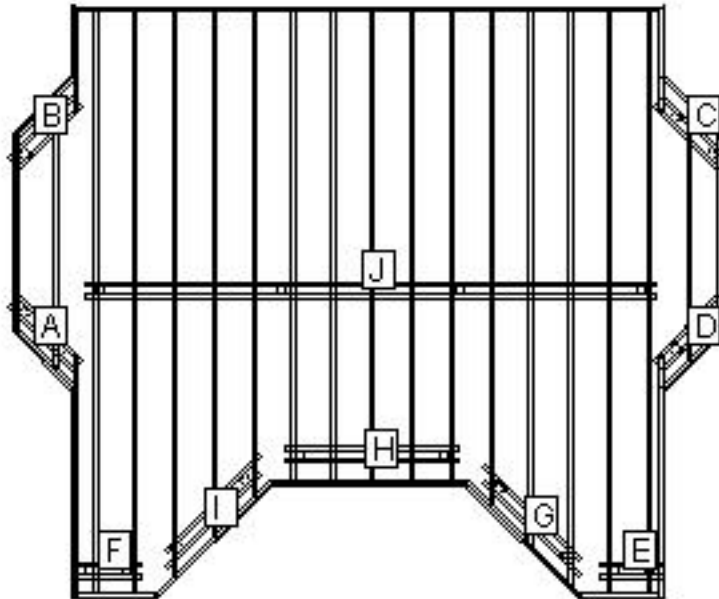
**Joists:**

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

**Stress Analysis: Level 1**

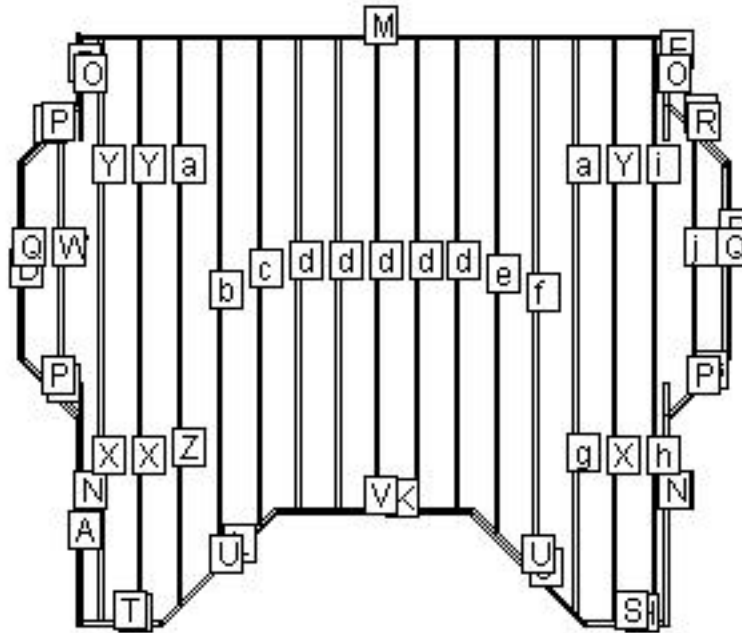
Joist Deflection	154
Joist Bending	55
Joist Shear	96
Joist Compression	96
Beam Deflection	522
Beam Bending	85
Beam Shear	63
Post Stability	113

### Beam Layout Level 1



BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	3'	2	1' 9"
B	3'	2	1' 9"
C	3'	2	1' 9"
D	3'	2	1' 9"
E	2' 1 1/4"	2	1' 1 3/4"
F	2' 3"	2	1' 3 1/2"
G	4' 5 3/4"	2	3' 2 3/4"
H	5' 10"	2	4' 10 1/2"
I	4' 5 3/4"	2	3' 2 3/4"
J	19' 2"	4	6' 1"

Materials Cut List: Level 1



LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
A	Cladding	1	7' 1/4"	23, 45	S	Header	1	2' 8 1/4"	0, 0
B	Cladding	1	2' 4 1/4"	45, 23	T	Header	1	2' 8 1/4"	0, 0
C	Cladding	3	2' 10 1/4"	23, 23	U	Header	2	5' 5"	0, 0
D	Cladding	2	6' 8"	23, 23	V	Header	1	6' 6 3/4"	0, 0
E	Cladding	1	2' 4 1/4"	23, 45	W	Internal Joist	1	9' 2"	45, 45
F	Cladding	1	7' 1/4"	45, 23	X	Internal Joist	3	10' 2 1/2"	0, 0
G	Cladding	1	2' 10 1/4"	23, 23	Y	Internal Joist	3	9' 4 3/4"	0, 0
H	Cladding	1	2' 11"	23, 45	Z	Internal Joist	1	9' 8"	0, 45
I	Cladding	1	2' 11"	45, 23	a	Internal Joist	2	9' 4 1/2"	0, 45
J	Cladding	1	5' 5 1/2"	23, 23	b	Internal Joist	1	17' 8 1/2"	0, 45
K	Cladding	1	6' 6 3/4"	23, 23	c	Internal Joist	1	16' 4 1/2"	0, 45
L	Cladding	1	5' 5 1/2"	23, 23	d	Internal Joist	5	15' 9 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	Header	1	19' 7 1/4"	0, 0	e	Internal Joist	1	16' 7 3/4"	0, 45
N	Rim Joist	2	8' 2 1/4"	0, 0	f	Internal Joist	1	17' 11 3/4"	0, 45
O	Rim Joist	2	3' 6 1/4"	0, 0	g	Internal Joist	1	9' 11"	0, 45
P	Header	3	2' 10"	0, 0	h	Internal Joist	1	10' 2 1/2"	0, 0
Q	Rim Joist	2	6' 7 1/4"	0, 0	i	Internal Joist	1	9' 4 3/4"	0, 0
R	Header	1	2' 10"	0, 0	j	Internal Joist	1	8' 7 1/2"	45, 45

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	8	2X8X10 Treated	TREATED
Internal Joist	4	2X8X12 Treated	TREATED
Internal Joist	10	2X8X18 Treated	TREATED
Internal Joist	5	2X8X16 Treated	TREATED
Beam	2	2X10X8 Treated	TREATED
Beam	3	2X10X14 Treated	TREATED
Railing Post	1	4X4X8 Treated	TREATED
Railing Post	3	4X4X18 Treated	TREATED
Railing Section	3	AZEK 6' Premier Custom Rail Pack - Brownstone - 6'	AZEK
Railing Section	6	AZEK 8' Premier Custom Rail Pack - Brownstone - 8'	AZEK
Railing Section	9	TT/AZEK 31" Square Aluminum Baluster - Black - 31"	AZEK
Cladding	7	AZEK Arbor Collection® Rim Joist Covers/Fasica - Morado® - 12'	AZEK
Decking	1	AZEK Vintage Collection® Deck Plank, Grooved - Mahogany® - 12'	AZEK
Decking	38	AZEK Vintage Collection® Deck Plank, Grooved - Mahogany® - 16'	AZEK
Decking	12	AZEK Vintage Collection® Deck Plank, Grooved - Mahogany® - 20'	AZEK
Header	3	2X8X8 Treated	TREATED
Beam	3	2X10X18 Treated	TREATED
Post	11	4X4X8 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
1	5 LB. 10D Hot-Dip Galvanized Nail
1	1LB. 16D Galvanized Common Nail
5	2x6-8" Triple Zinc Right Skewed Joist Hanger SKH26R-TZ
5	2x6-8" Triple Zinc Left Skewed Joist Hanger SKH26L-TZ
1	1 LB. 10D X1 1/2" Nail
24	2x8-10" Triple Zinc Joist Hanger JUS28-TZ
8	5" Triple Zinc Angle Clip MP5-TZ
4	7" Triple Zinc Angle Clip AC7-TZ
2	THR128-HDG Threaded Rod
4	DTB-TZ Deck Tie Bracket
3	1LB. 8D Galvanized Common Nail
2	1 LB. 1-1/2" Joist Hanger Nail
40	Triple Zinc Rafter Tie RT7-TZ
22	Anchor Bolt AB128
22	4X4 Triple Zinc Deck Post Anchor PA44E-TZ
35	80 L.B. Basic Concrete Mix
1	40 LB. Basic Concrete Mix
1	10 LB. Basic Concrete Mix
17	8" X 48" Concrete Form Tube
352	1/2 Galvanized Flat Washer
8	1/2 Galvanized Hex Nut
176	1/2 X 8" Galvanized Carriage Bolt
32	4X4 Triple Zinc Deck Post Tie SDPT7-TZ
1	1 LB. 8X3" Philips Head Stainless Deck Screws
16	AZEK 5 1/2" Post Skirt - Brownstone
64	3/8 Galvanized Hex Nut
128	3/8 Galvanized Flat Washer
64	3/8 X 8" Galvanized Carriage Bolt
16	AZEK 5 1/2" Pyramid Cap - Brownstone
16	AZEK 5.5" x 5.5" Post Sleeve - Brownstone - 39"
6	2 Pieces of Joist Material Nailed to Each Joist Splice
4	TimberTech CONCEALoc Hidden Fastener - Unit = 8 retail cartons @ 100 sq.ft. coverage each (175 CONCEALoc fasteners, 184 Screws and drive bit) - Brown
40	1/2 X 6" Galvanized Lag Screw
1	AZEK Cortex - 100 LF Vintage Collection® - Mahogany



**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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