



Deck Designer Specification Kit For  
**AZEK**

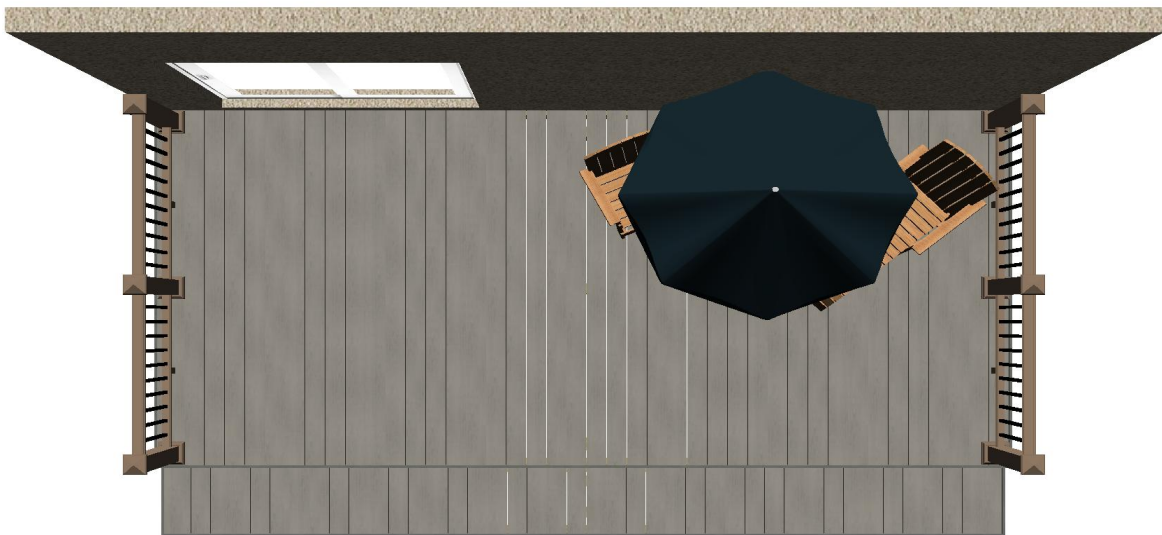
**Deck layout diagram**



Top view without planks

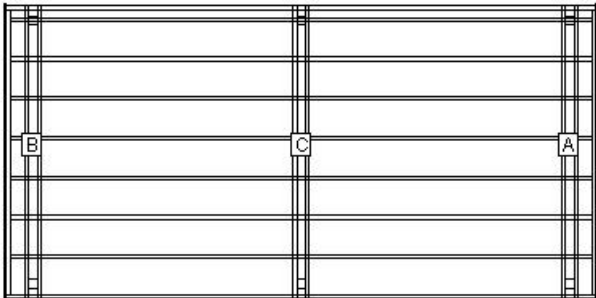


Bottom view with planks



Top view with planks

**Permit Page: Level 1**



**LOAD AND SUPPORT:**

Your deck will support a 52 PSF live load.  
Posts have 36" below ground support.

**DECK AND POST HEIGHT:**

You selected a height of 18" from the top of the decking to the ground level. The top of the deck support posts will therefore be 9" above ground level.

**Joists:**

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

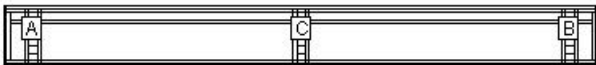
**Stress Analysis: Level 1**

Joist Deflection	184
Joist Bending	62
Joist Shear	101
Joist Compression	101
Beam Deflection	196
Beam Bending	68
Beam Shear	67
Post Stability	160

**Permit Page: Level 2**

**LOAD AND SUPPORT:**

Your deck will support a 52 PSF live load.  
Posts have 36" below ground support.



**DECK AND POST HEIGHT:**

You selected a height of 11" from the top of the decking to the ground level. The top of the deck support posts will therefore be 2" above ground level.

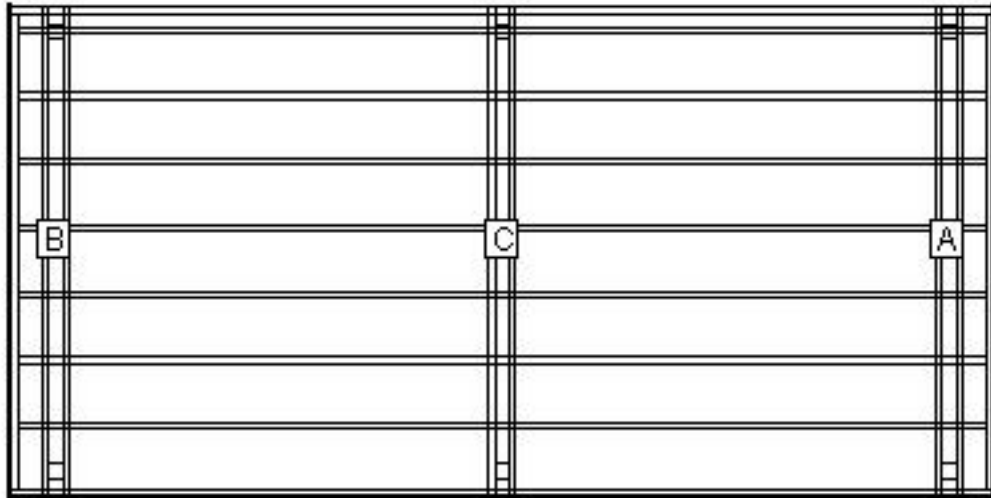
**Joists:**

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

**Stress Analysis: Level 2**

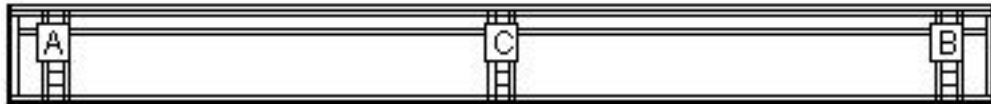
Joist Deflection	184
Joist Bending	62
Joist Shear	101
Joist Compression	101
Beam Deflection	1146488
Beam Bending	4168
Beam Shear	999999999
Post Stability	772

### Beam Layout Level 1



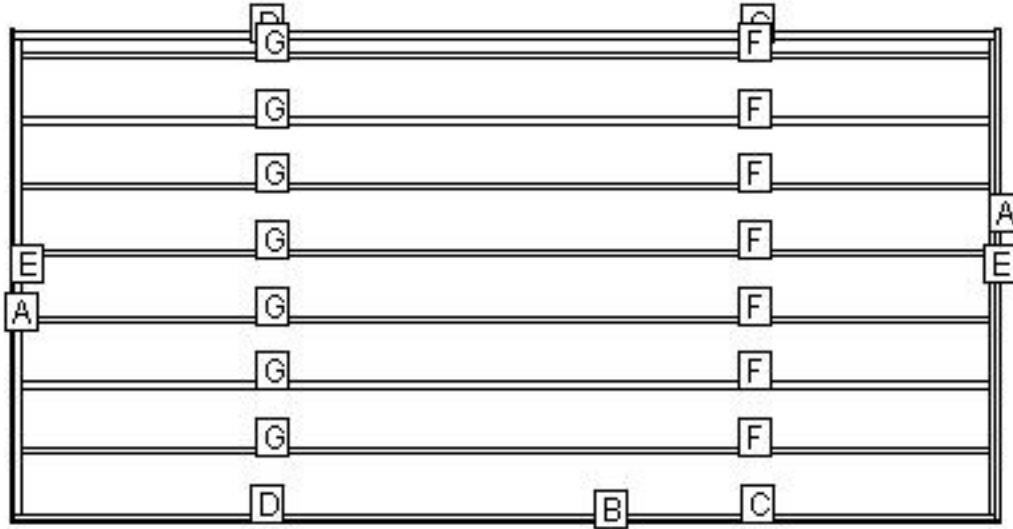
BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	9' 10 1/4"	2	8' 10 3/4"
B	9' 10 1/4"	2	8' 10 3/4"
C	9' 10 1/4"	3	4' 5 1/2"

**Beam Layout Level 2**



BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	1' 10 1/4"	2	10 3/4"
B	1' 10 1/4"	2	10 3/4"
C	1' 10 1/4"	2	10 3/4"

Materials Cut List: Level 1



LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
A	Cladding	2	10'	45, 45	E	Header	2	9' 7 1/4"	0, 0
B	Cladding	1	20'	45, 45	F	Internal Joist	7	9' 9 1/2"	0, 0
C	Rim Joist	2	9' 11 1/4"	0, 0	G	Internal Joist	7	9' 9 3/4"	0, 0
D	Rim Joist	2	9' 11"	0, 0					

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

Materials Cut List: Level 2



LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
A	Cladding	1	2'	45, 45	F	Rim Joist	2	9' 11"	0, 0
B	Cladding	2	20'	45, 45	G	Header	1	1' 7 1/4"	0, 0
C	Cladding	1	2'	45, 45	H	Internal Joist	1	9' 9 1/2"	0, 0
D	Header	1	1' 7 1/4"	0, 0	I	Internal Joist	1	9' 9 3/4"	0, 0
E	Rim Joist	2	9' 11 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
Rim Joist	27	2X8X10 Treated	TREATED
Beam	6	2X10X10 Treated	TREATED
Railing Post	1	4X4X8 Treated	TREATED
Railing Post	1	4X4X18 Treated	TREATED
Railing Section	4	AZEK 6' Premier Custom Rail Pack - Brownstone - 6'	AZEK
Railing Section	4	TT/AZEK 31" Round Aluminum Baluster - Black - 31"	AZEK
Cladding	8	AZEK Terra Collection Rim Joist Covers/Fasica - Tahoe® - 12'	AZEK
Decking	44	AZEK Harvest Collection® Deck Plank, Square Shouldered - Slate Gray - 12'	AZEK
Post	2	4X4X8 Treated	TREATED
Decking	5	AZEK Harvest Collection® Deck Plank, Square Shouldered - Slate Gray - 16'	AZEK
Header	2	2X8X8 Treated	TREATED
Beam	1	2X10X12 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	1 LB. 10D X1 1/2" Nail
3	1 LB. 10D Hot-Dip Galvanized Nail
16	2x8-10" Triple Zinc Joist Hanger JUS28-TZ
8	7" Triple Zinc Angle Clip AC7-TZ
3	1LB. 8D Galvanized Common Nail
3	1 LB. 1-1/2" Joist Hanger Nail
36	Triple Zinc Rafter Tie RT7-TZ
13	Anchor Bolt AB128
13	4X4 Triple Zinc Deck Post Anchor PA44E-TZ
20	80 L.B. Basic Concrete Mix
5	10 LB. Basic Concrete Mix
10	8" X 48" Concrete Form Tube
208	1/2 Galvanized Flat Washer
5	1/2 Galvanized Hex Nut
104	1/2 X 8" Galvanized Carriage Bolt
12	4X4 Triple Zinc Deck Post Tie SDPT7-TZ
1	1 LB. 8X3" Philips Head Stainless Deck Screws
6	AZEK 5 1/2" Post Skirt - Brownstone
24	3/8 Galvanized Hex Nut
48	3/8 Galvanized Flat Washer
24	3/8 X 8" Galvanized Carriage Bolt
6	AZEK 5 1/2" Pyramid Cap - Brownstone
6	AZEK 5.5" x 5.5" Post Sleeve - Brownstone - 39"
12	2 Pieces of Joist Material Nailed to Each Joist Splice
3	AZEK Cortex - 100 LF Harvest Collection® - Slate Gray
40	1/2 X 6" Galvanized Lag Screw
1	40 LB. Basic Concrete Mix

**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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