



Deck Designer Specification Kit For  
**AZEK**

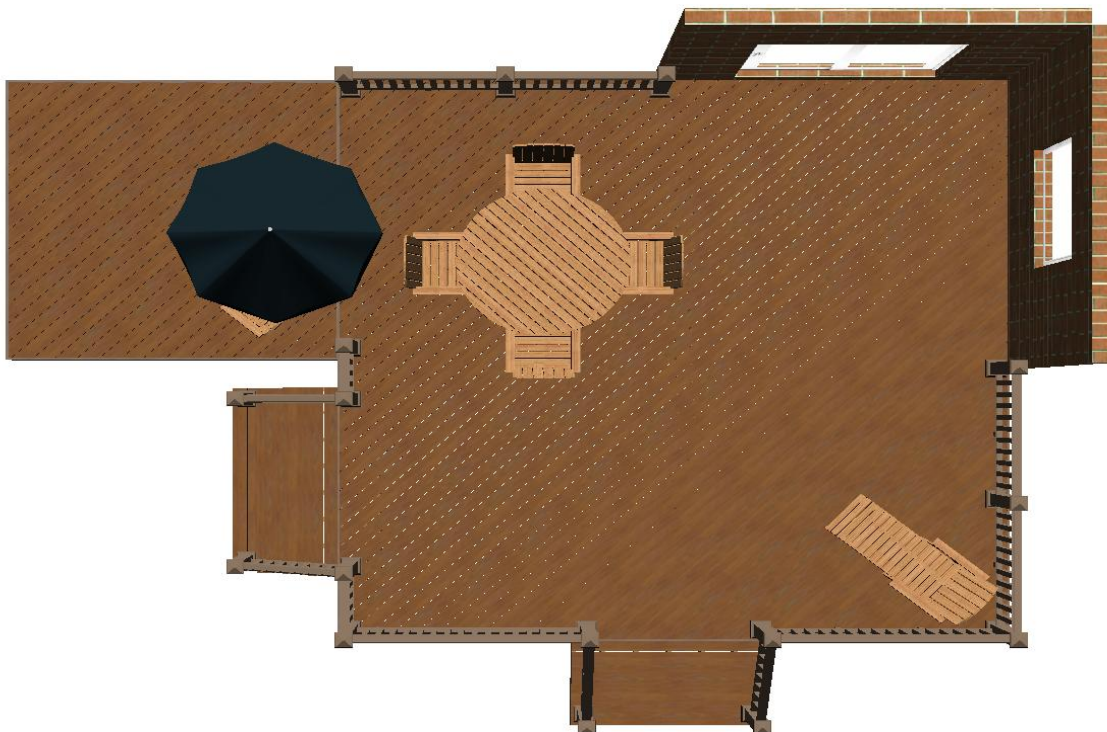
**Deck layout diagram**



Top view without planks

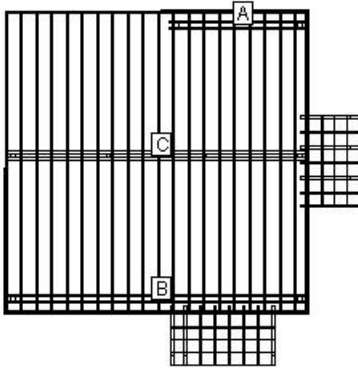


Bottom view with planks



Top view with planks

**Permit Page: Level 1**



**LOAD AND SUPPORT:**

Your deck will support a 48 PSF live load.  
Posts have 36" below ground support.

**DECK AND POST HEIGHT:**

You selected a height of 36" from the top of the decking to the ground level. The top of the deck support posts will therefore be 27" above ground level.

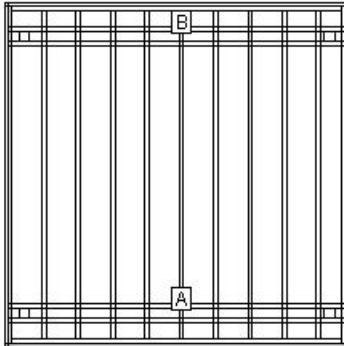
**Joists:**

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

**Stress Analysis: Level 1**

Joist Deflection	205
Joist Bending	74
Joist Shear	128
Joist Compression	128
Beam Deflection	148
Beam Bending	58
Beam Shear	60
Post Stability	109

**Permit Page: Level 2**



**LOAD AND SUPPORT:**

Your deck will support a 63 PSF live load.  
Posts have 36" below ground support.

**DECK AND POST HEIGHT:**

You selected a height of 29" from the top of the decking to the ground level. The top of the deck support posts will therefore be 20" above ground level.

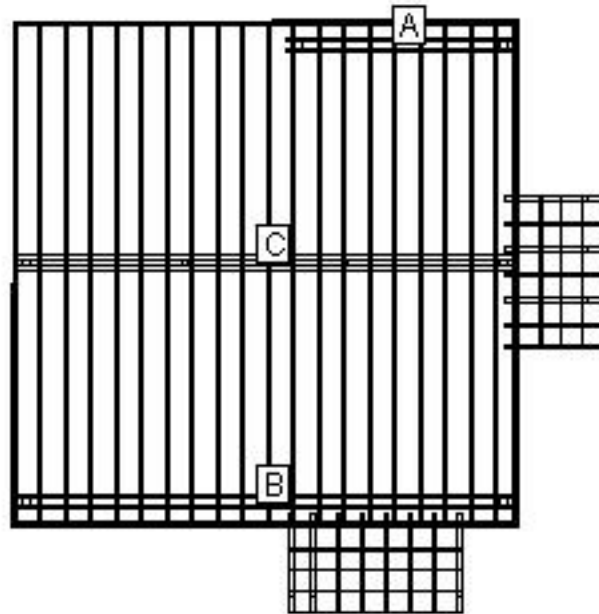
**Joists:**

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

**Stress Analysis: Level 2**

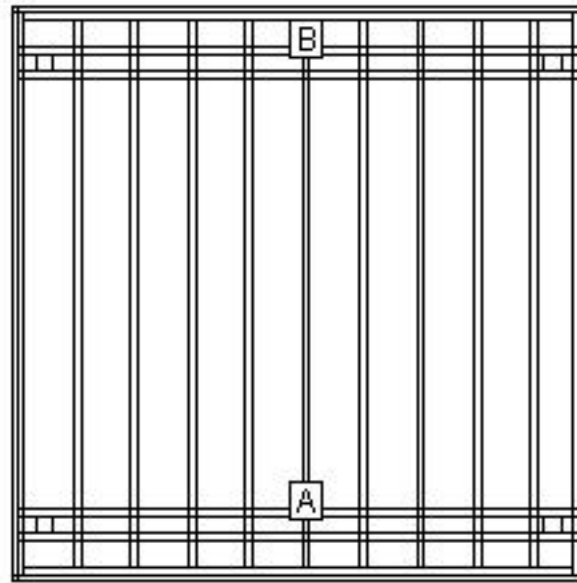
Joist Deflection	388
Joist Bending	113
Joist Shear	154
Joist Compression	154
Beam Deflection	216
Beam Bending	75
Beam Shear	73
Post Stability	266

### Beam Layout Level 1



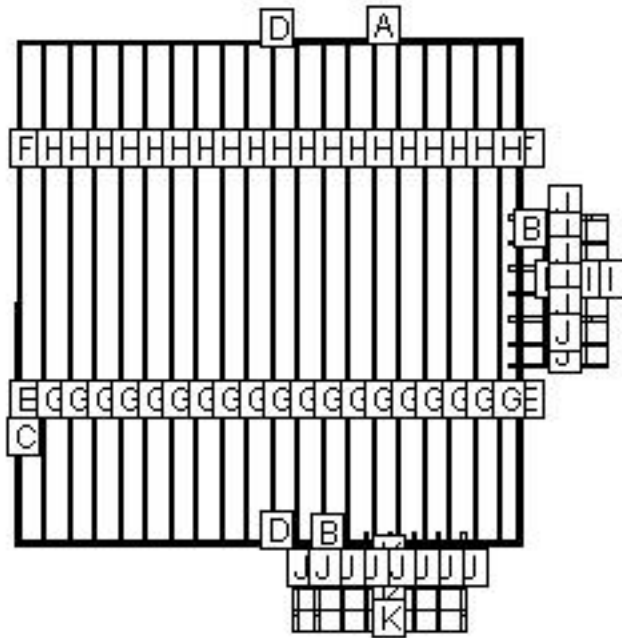
BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	9' 1 1/4"	2	8' 1 3/4"
B	19' 10 1/4"	3	9' 5 1/2"
C	19' 10 1/4"	4	6' 3 1/2"

**Beam Layout Level 2**



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"

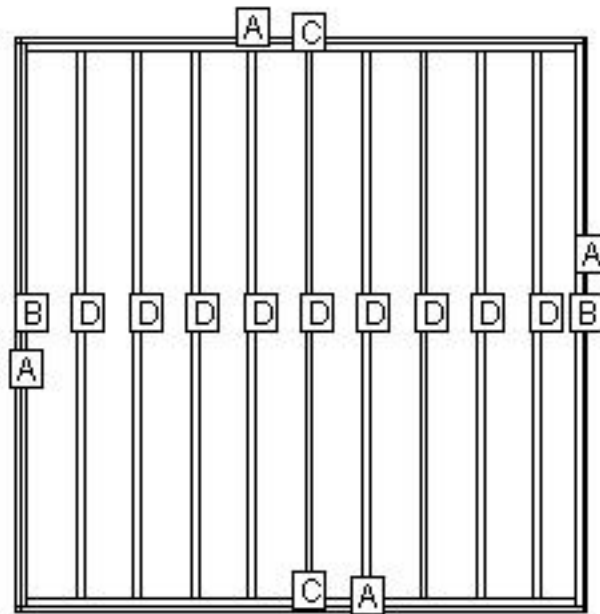
Materials Cut List: Level 1



LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
A	Cladding	1	9' 8"	45, 0	G	Internal Joist	19	10' 2 1/2"	0, 0
B	Cladding	2	20'	45, 45	H	Internal Joist	19	9' 4 3/4"	0, 0
C	Cladding	1	9' 7"	0, 45	I	Riser	4	6'	0, 0
D	Header	2	19' 7 1/4"	0, 0	J	Pre Cut Stringer	15	4' 2"	0, 0
E	Rim Joist	2	10' 4 1/4"	0, 0	K	Riser	4	6' 9"	0, 0
F	Rim Joist	2	9' 6"	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	4	10'	45, 45	C	Header	2	9' 7 1/4"	0, 0
B	Rim Joist	2	9' 10 1/4"	0, 0	D	Internal Joist	9	9' 7 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	34	2X8X10 Treated	TREATED
Rim Joist	21	2X8X12 Treated	TREATED
Beam	10	2X10X10 Treated	TREATED
Beam	2	2X10X8 Treated	TREATED
Beam	2	2X10X14 Treated	TREATED
Pre Cut Stringer	15	4-Step Treated Stair Stringer	TREATED
Railing Post	1	4X4X8 Treated	TREATED
Railing Post	3	4X4X18 Treated	TREATED
Railing Section	7	AZEK 6' Premier Rail Pack - Brownstone - 6'	AZEK
Railing Section	3	AZEK 8' Premier Rail Pack - Brownstone - 8'	AZEK
Railing Section	10	TT/AZEK 31" Square Composite Baluster - Brownstone - 31"	AZEK
Cladding	10	AZEK Arbor Collection® Rim Joist Covers/Fasica - Silver Oak® - 12'	AZEK
Decking	7	AZEK XLM® Deck Plank, Grooved - Harvest Bronze - 12'	AZEK
Decking	18	AZEK XLM® Deck Plank, Grooved - Harvest Bronze - 16'	AZEK
Decking	43	AZEK XLM® Deck Plank, Grooved - Harvest Bronze - 20'	AZEK
Header	2	2X8X8 Treated	TREATED
Header	3	2X8X18 Treated	TREATED
Post	4	4X4X8 Treated	TREATED
Riser	6	AZEK Arbor Collection® Rim Joist Covers/Fasica - Silver Oak® - 12'	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
3	1 LB. 10D X1 1/2" Nail
1	5 LB. 10D Hot-Dip Galvanized Nail
2	1 LB. 10D Hot-Dip Galvanized Nail
56	2x8-10" Triple Zinc Joist Hanger JUS28-TZ
8	7" Triple Zinc Angle Clip AC7-TZ
2	THR128-HDG Threaded Rod
4	DTB-TZ Deck Tie Bracket
4	1LB. 8D Galvanized Common Nail
5	1 LB. 1-1/2" Joist Hanger Nail
74	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
2	40 LB. Basic Concrete Mix
1	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
15	7" Triple Zinc Angle Clip AC7-TZ
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"
21	2 Pieces of Joist Material Nailed to Each Joist Splice
1	AZEK Cortex - 100 LF XLM® Harvest Bronze - Harvest Bronze
5	TimberTech CONCEALoc Hidden Fastener - Unit = 8 retail cartons @ 100 sq.ft. coverage each (175 CONCEALoc fasteners, 184 Screws and drive bit) - Brown
42	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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