



Deck Designer Specification Kit For  
**AZEK**

**Deck layout diagram**



Top view without planks

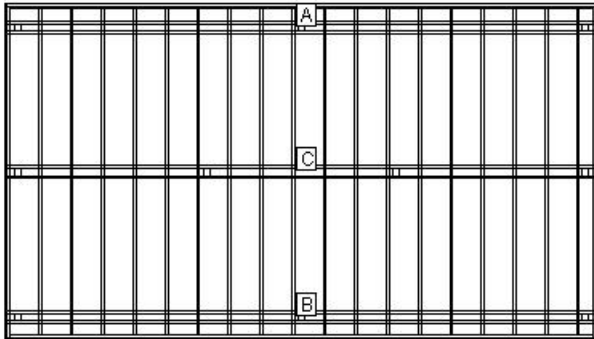


Bottom view with planks



Top view with planks

**Permit Page: Level 1**



**LOAD AND SUPPORT:**

Your deck will support a 41 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.

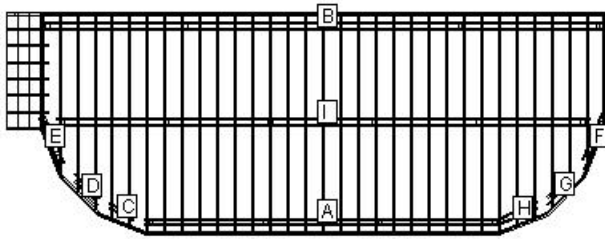
**Joists:**

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

**Stress Analysis: Level 1**

Joist Deflection	880
Joist Bending	166
Joist Shear	161
Joist Compression	161
Beam Deflection	82
Beam Bending	51
Beam Shear	64
Post Stability	132

Permit Page: Level 2



**LOAD AND SUPPORT:**

Your deck will support a 46 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.

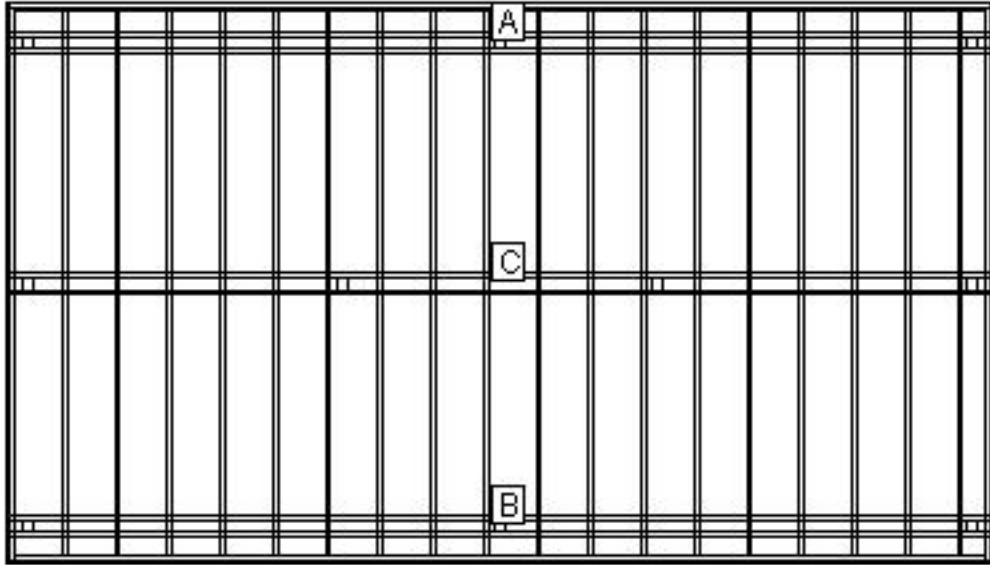
**Joists:**

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

**Stress Analysis: Level 2**

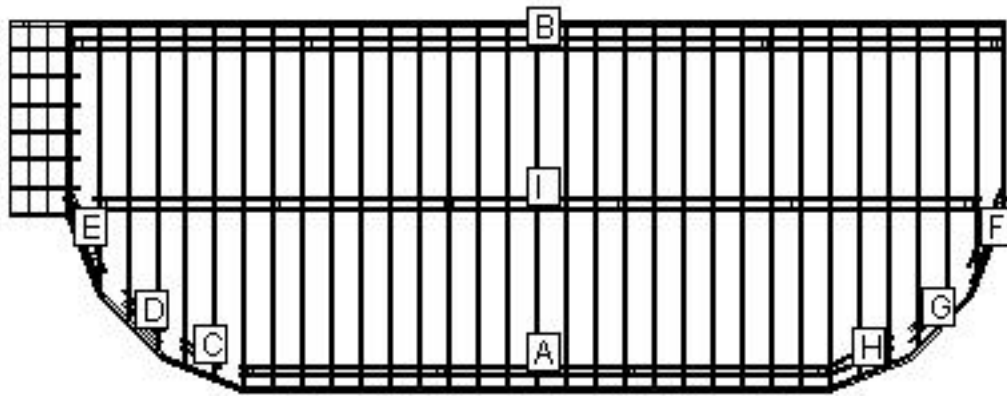
Joist Deflection	365
Joist Bending	98
Joist Shear	123
Joist Compression	123
Beam Deflection	127
Beam Bending	60
Beam Shear	56
Post Stability	109

### Beam Layout Level 1



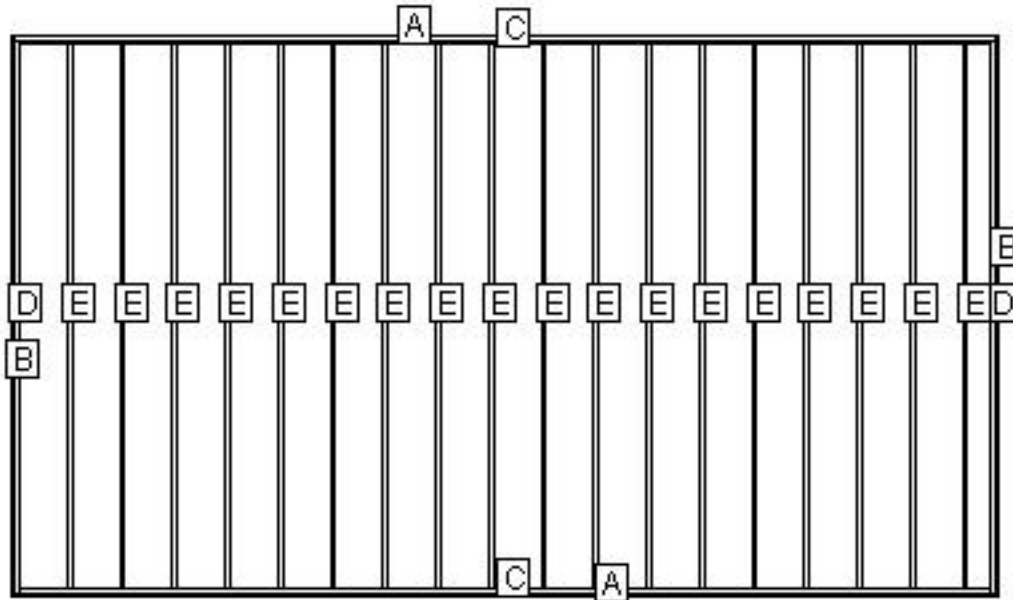
BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	24' 10 1/4"	3	11' 11 1/2"
B	24' 10 1/4"	3	11' 11 1/2"
C	24' 10 1/4"	4	7' 11 1/2"

### Beam Layout Level 2



BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	27' 3/4"	4	8' 8 1/2"
B	42' 8 1/4"	5	10' 5 1/4"
C	2'	2	11"
D	2' 6"	2	1' 3"
E	4' 1 3/4"	2	2' 5 1/2"
F	4' 1 3/4"	2	2' 5 1/2"
G	2' 7"	2	1' 4"
H	3' 1 3/4"	2	2' 3/4"
I	40' 6"	6	7' 11"

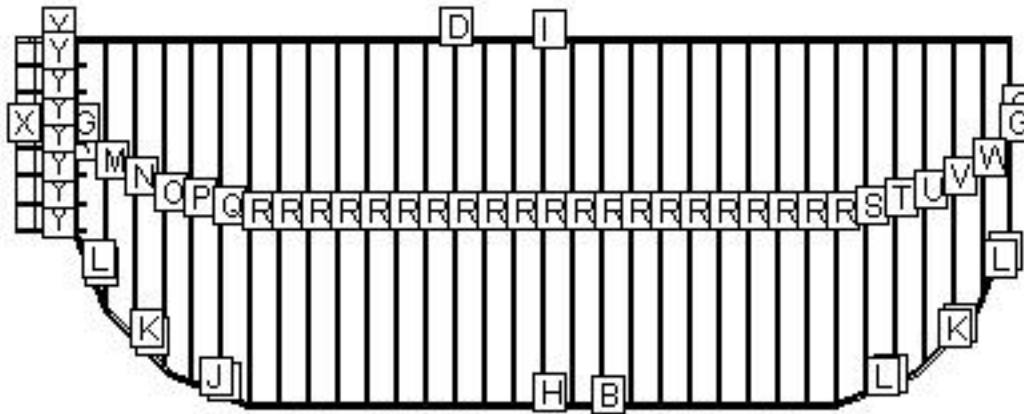
Materials Cut List: Level 1



LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
A	Cladding	2	25'	45, 45	D	Rim Joist	2	14' 1/4"	0, 0
B	Cladding	2	14' 2"	45, 45	E	Internal Joist	18	13' 9 1/4"	0, 0
C	Header	2	24' 7 1/4"	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	8' 10"	45, 11	N	Internal Joist	1	13' 4 3/4"	0, 45
B	Cladding	1	26' 10"	11, 11	O	Internal Joist	1	14' 8 3/4"	0, 45
C	Cladding	1	8' 10"	11, 45	P	Internal Joist	1	15' 5"	0, 22
D	Cladding	1	42' 10"	45, 45	Q	Internal Joist	1	15' 11 1/2"	0, 22
E	Cladding	4	3' 11 1/2"	11, 11	R	Internal Joist	21	16' 5 1/4"	0, 0
F	Cladding	2	4'	11, 11	S	Internal Joist	1	15' 11"	0, 22
G	Rim Joist	2	8' 9"	0, 0	T	Internal Joist	1	15' 4 1/2"	0, 22
H	Header	1	26' 9 3/4"	0, 0	U	Internal Joist	1	14' 7 1/2"	0, 45
I	Header	1	42' 5 1/4"	0, 0	V	Internal Joist	1	13' 3 1/2"	0, 45
J	Header	1	3' 11 1/4"	0, 0	W	Internal Joist	1	11' 7 1/4"	0, 68
K	Header	2	3' 11 3/4"	0, 0	X	Riser	3	8' 10"	0, 0
L	Header	3	3' 11 1/4"	0, 0	Y	Pre Cut Stringer	8	3' 2 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	11' 10 1/4"	0, 68				

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	10	2X8X16 Treated	TREATED
Internal Joist	21	2X8X14 Treated	TREATED
Beam	4	2X10X10 Treated	TREATED
Beam	10	2X10X18 Treated	TREATED
Beam	8	2X10X14 Treated	TREATED
Railing Post	1	4X4X14 Treated	TREATED
Railing Post	3	4X4X18 Treated	TREATED
Railing Section	8	AZEK 6' Premier Rail Pack - Black - 6'	AZEK
Railing Section	5	AZEK 8' Premier Rail Pack - Black - 8'	AZEK
Railing Section	13	TT/AZEK 31" Square Composite Baluster - Slate Gray - 31"	AZEK
Cladding	17	AZEK Vintage Collection® Rim Joist Covers/Fasica - Cypress® - 12'	AZEK
Decking	14	AZEK Vintage Collection® Deck Plank, Square Shouldered - Cypress® - 16'	AZEK
Decking	108	AZEK Vintage Collection® Deck Plank, Square Shouldered - Cypress® - 20'	AZEK
Header	27	2X8X18 Treated	TREATED
Post	11	4X4X8 Treated	TREATED
Internal Joist	2	2X8X12 Treated	TREATED
Beam	8	2X10X12 Treated	TREATED
Beam	3	2X10X8 Treated	TREATED
Pre Cut Stringer	8	3-Step Treated Stair Stringer	TREATED
Header	1	2X8X8 Treated	TREATED
Riser	3	AZEK Vintage Collection® Rim Joist Covers/Fasica - Cypress® - 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
4	1 LB. 10D X1 1/2" Nail
5	1 LB. 10D Hot-Dip Galvanized Nail
88	2x8-10" Triple Zinc Joist Hanger JUS28-TZ
6	7" Triple Zinc Angle Clip AC7-TZ
3	1LB. 8D Galvanized Common Nail
4	1 LB. 1-1/2" Joist Hanger Nail
158	Triple Zinc Rafter Tie RT7-TZ
37	Anchor Bolt AB128
37	4X4 Triple Zinc Deck Post Anchor PA44E-TZ
59	80 L.B. Basic Concrete Mix
3	10 LB. Basic Concrete Mix
28	8" X 48" Concrete Form Tube
592	1/2 Galvanized Flat Washer
12	1/2 Galvanized Hex Nut
296	1/2 X 8" Galvanized Carriage Bolt
38	4X4 Triple Zinc Deck Post Tie SDPT7-TZ
1	1 LB. 8X3" Philips Head Stainless Deck Screws
19	AZEK 5 1/2" Post Skirt - Black
76	3/8 Galvanized Hex Nut
152	3/8 Galvanized Flat Washer
76	3/8 X 8" Galvanized Carriage Bolt
19	AZEK 5 1/2" LED Lighted Island Cap - Black
19	AZEK 5.5" x 5.5" Post Sleeve - Black - 39"
8	AZEK Cortex - 100 LF Vintage Collection® - Cypress
1	5 LB. 10D Hot-Dip Galvanized Nail
12	5" Triple Zinc Angle Clip MP5-TZ
1	1LB. 16D Galvanized Common Nail
2	2x6-8" Triple Zinc Right Skewed Joist Hanger SKH26R-TZ
2	2x6-8" Triple Zinc Left Skewed Joist Hanger SKH26L-TZ
2	5" Triple Zinc Angle Clip MP5-TZ
1	5 LB. 8D Galvanized Nail
1	40 LB. Basic Concrete Mix
8	7" Triple Zinc Angle Clip AC7-TZ

**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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