

Deck Designer Specification Kit For  
**AZEK**

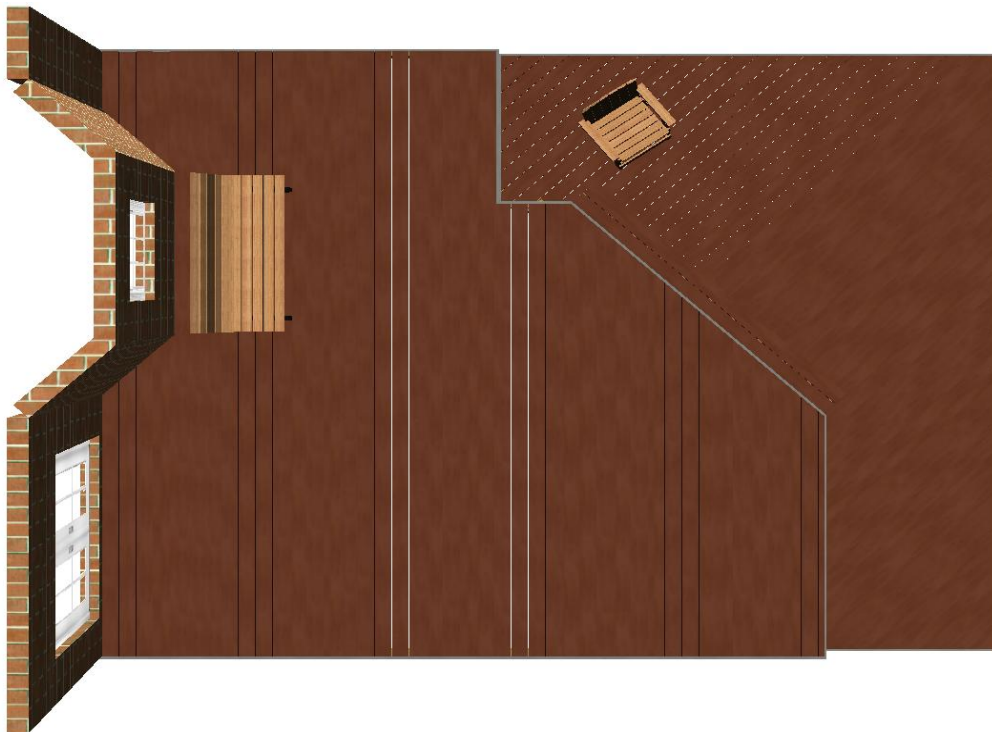
**Deck layout diagram**



Top view without planks

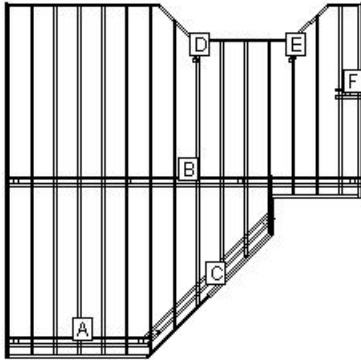


Bottom view with planks



Top view with planks

Permit Page: Level 1



**LOAD AND SUPPORT:**

Your deck will support a 40 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.

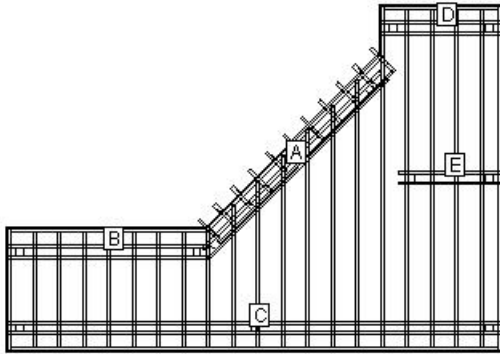
**Joists:**

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

**Stress Analysis: Level 1**

Joist Deflection	133
Joist Bending	50
Joist Shear	92
Joist Compression	92
Beam Deflection	246
Beam Bending	79
Beam Shear	60
Post Stability	109

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 22" from the top of the decking to the ground level. The top of the deck support posts will therefore be 13" above ground level.

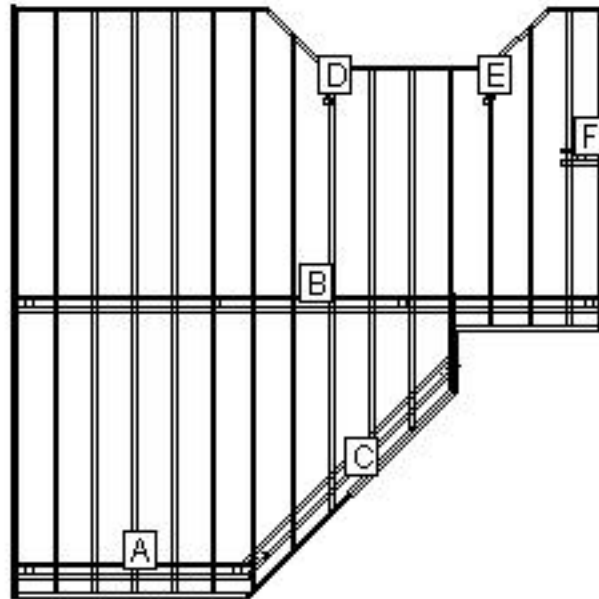
**Joists:**

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

**Stress Analysis: Level 2**

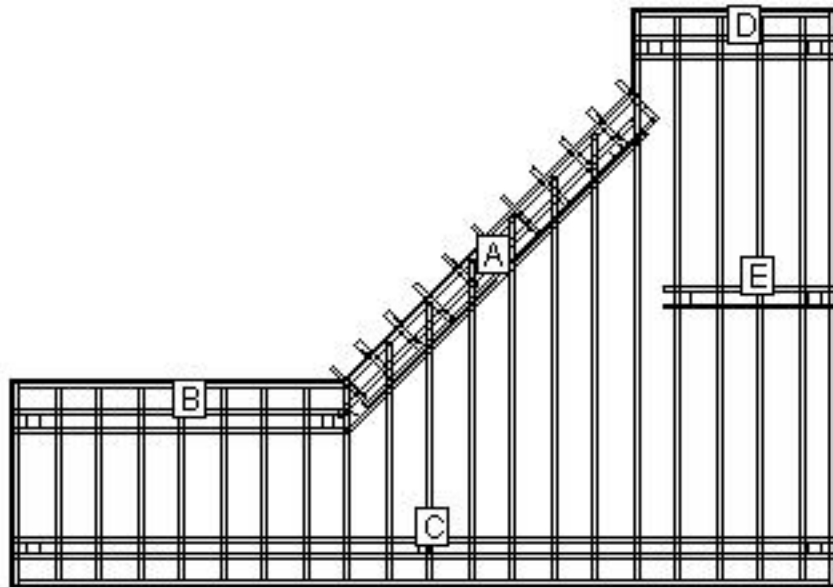
Joist Deflection	158
Joist Bending	61
Joist Shear	118
Joist Compression	118
Beam Deflection	144
Beam Bending	56
Beam Shear	58
Post Stability	117

### Beam Layout Level 1



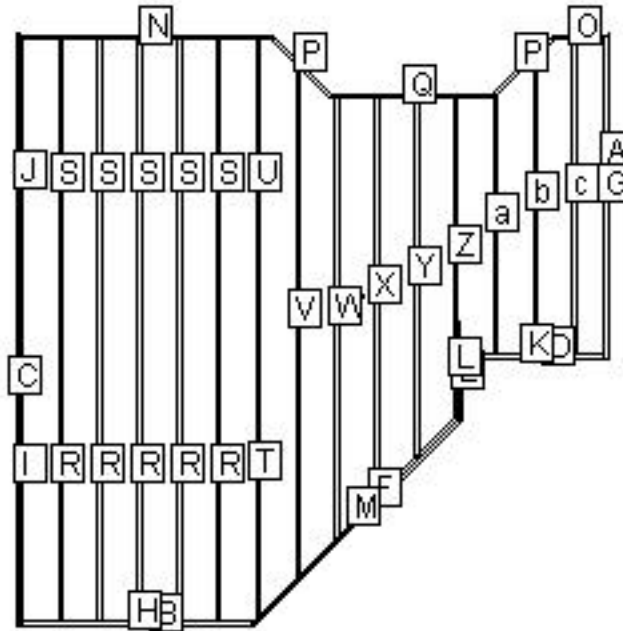
BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	8' 1/4"	2	7' 1"
B	19' 10 1/4"	4	6' 3 1/2"
C	10' 1/4"	2	8' 9 1/4"
D	2 1/4"	1	0
E	2 1/4"	1	0
F	1' 5 1/4"	1	0

### Beam Layout Level 2



BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	10' 1"	2	8' 10"
B	8' 1"	2	7' 1 1/2"
C	19' 10 1/4"	3	9' 5 1/2"
D	4' 10 1/4"	2	3' 10 3/4"
E	4' 1 1/4"	2	3' 1 3/4"

Materials Cut List: Level 1



LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
A	Cladding	1	11'	45, 45	P	Header	2	2' 10"	0, 0
B	Cladding	1	8'	45, 23	Q	Header	1	5' 4 3/4"	0, 0
C	Cladding	1	20'	45, 45	R	Internal Joist	5	9' 9 1/2"	0, 0
D	Cladding	1	5' 1"	45, 45	S	Internal Joist	5	9' 9 3/4"	0, 0
E	Cladding	1	2' 1"	23, 45	T	Internal Joist	1	9' 8"	0, 45
F	Cladding	1	9' 11"	23, 23	U	Internal Joist	1	9' 9 1/2"	0, 45
G	Rim Joist	1	10' 10 1/4"	0, 0	V	Internal Joist	1	17' 3 1/2"	45, 45
H	Header	1	7' 9 1/4"	0, 0	W	Internal Joist	1	14' 9 1/2"	0, 45
I	Rim Joist	1	9' 11 1/4"	0, 0	X	Internal Joist	1	13' 5 1/2"	0, 45
J	Rim Joist	1	9' 11"	0, 0	Y	Internal Joist	1	12' 1 1/2"	0, 45
K	Header	1	5'	0, 0	Z	Internal Joist	1	10' 9 1/2"	0, 0
L	Rim Joist	1	3' 3 1/4"	0, 0	a	Internal Joist	1	8' 8 3/4"	0, 0

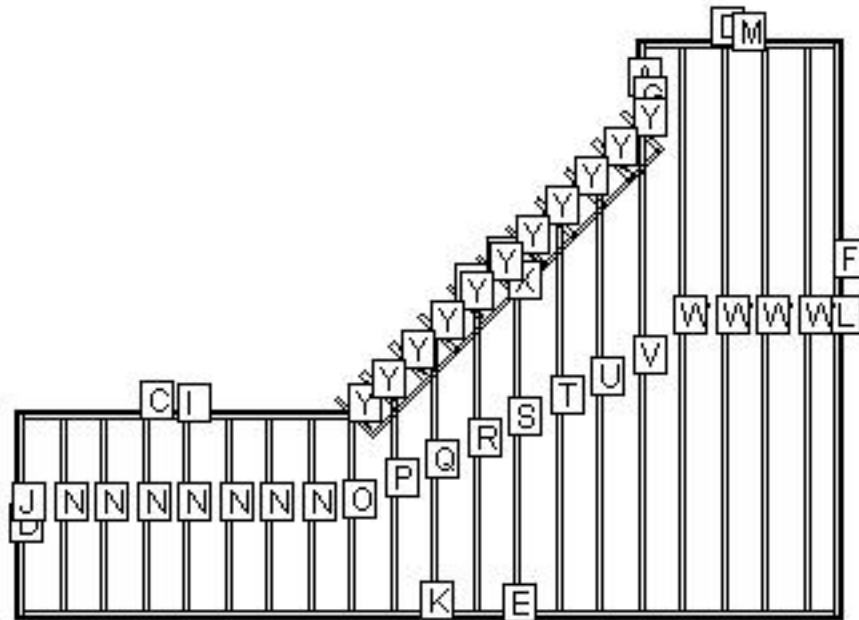
Cut Angles: L=Left, R=Right, F=Front, S=Side

LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
M	Header	1	9' 10"	0, 0	b	Internal Joist	1	10' 3/4"	45, 0
N	Header	1	8' 5 1/4"	0, 0	c	Internal Joist	1	10' 7 1/4"	0, 0
O	Header	1	1' 9 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	2' 1/4"	45, 23	N	Internal Joist	7	4' 7 1/4"	0, 0
B	Cladding	1	9' 11 1/2"	23, 23	O	Internal Joist	1	4' 8 3/4"	0, 0
C	Cladding	1	8' 1/4"	23, 45	P	Internal Joist	1	5' 8 3/4"	45, 0
D	Cladding	2	5'	45, 45	Q	Internal Joist	1	6' 8 3/4"	45, 0
E	Cladding	1	20'	45, 45	R	Internal Joist	1	7' 8 3/4"	45, 0
F	Cladding	1	14'	45, 45	S	Internal Joist	1	8' 8 3/4"	45, 0
G	Rim Joist	1	3' 2 1/4"	0, 0	T	Internal Joist	1	9' 8 3/4"	45, 0
H	Header	1	9' 11 1/2"	0, 0	U	Internal Joist	1	10' 8 3/4"	45, 0
I	Header	1	7' 10"	0, 0	V	Internal Joist	1	11' 8 3/4"	45, 0
J	Rim Joist	1	4' 10 1/4"	0, 0	W	Internal Joist	4	13' 7 1/4"	0, 0
K	Header	1	19' 7 1/4"	0, 0	X	Riser	1	9' 11"	0, 0
L	Rim Joist	1	13' 10 1/4"	0, 0	Y	Stringer	11	1' 1 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	4' 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	18	2X8X10 Treated	TREATED
Internal Joist	8	2X8X18 Treated	TREATED
Internal Joist	3	2X8X16 Treated	TREATED
Internal Joist	8	2X8X14 Treated	TREATED
Internal Joist	5	2X8X12 Treated	TREATED
Beam	8	2X10X10 Treated	TREATED
Beam	3	2X10X8 Treated	TREATED
Beam	2	2X10X14 Treated	TREATED
Beam	4	2X10X12 Treated	TREATED
Cladding	12	AZEK XLM® Natural Fascia Board - RiverRock - 12'	AZEK
Decking	18	AZEK Arbor Collection® Deck Plank, Square Shouldered - Redland Rose® - 12'	AZEK
Decking	33	AZEK Arbor Collection® Deck Plank, Square Shouldered - Redland Rose® - 16'	AZEK
Decking	20	AZEK Arbor Collection® Deck Plank, Square Shouldered - Redland Rose® - 20'	AZEK
Gusset	3	2X8X8 Treated	TREATED
Post	6	4X4X8 Treated	TREATED
Beam	1	2X10X18 Treated	TREATED
Riser	1	AZEK XLM® Natural Fascia Board - RiverRock - 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
6	1 LB. 10D Hot-Dip Galvanized Nail
52	2x8-10" Triple Zinc Joist Hanger JUS28-TZ
2	1LB. 16D Galvanized Common Nail
13	2x6-8" Triple Zinc Left Skewed Joist Hanger SKH26L-TZ
1	2x6-8" Triple Zinc Right Skewed Joist Hanger SKH26R-TZ
9	7" Triple Zinc Angle Clip AC7-TZ
2	5" Triple Zinc Angle Clip MP5-TZ
4	THR128-HDG Threaded Rod
8	DTB-TZ Deck Tie Bracket
4	1LB. 8D Galvanized Common Nail
3	1 LB. 1-1/2" Joist Hanger Nail
81	Triple Zinc Rafter Tie RT7-TZ
22	Anchor Bolt AB128
22	4X4 Triple Zinc Deck Post Anchor PA44E-TZ
34	80 L.B. Basic Concrete Mix
2	60 L.B. 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
7	2 Pieces of Joist Material Nailed to Each Joist Splice
5	AZEK Cortex - 100 LF Arbor Collection® - Redland Rose
44	1/2 X 6" Galvanized Lag Screw
11	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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