



Deck Designer Specification Kit For  
**AZEK**

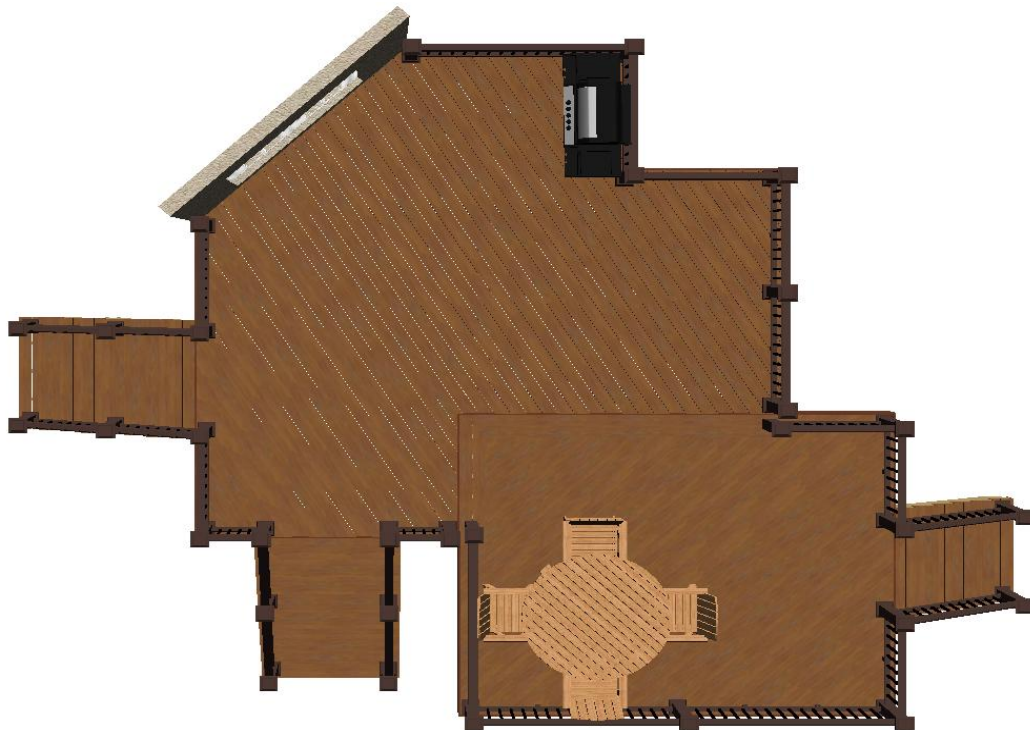
**Deck layout diagram**



Top view without planks

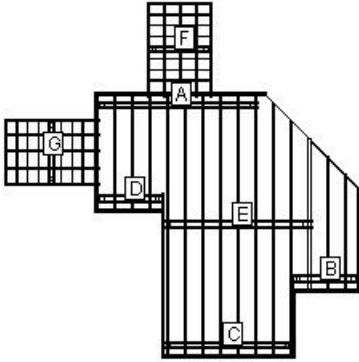


Bottom view with planks



Top view with planks

Permit Page: Level 1



**LOAD AND SUPPORT:**

Your deck will support a 50 PSF live load.  
Posts have 36" below ground support.

**DECK AND POST HEIGHT:**

You selected a height of 66" from the top of the decking to the ground level. The top of the deck support posts will therefore be 57" above ground level.

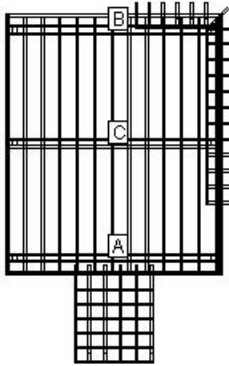
**Joists:**

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

**Stress Analysis: Level 1**

Joist Deflection	173
Joist Bending	60
Joist Shear	99
Joist Compression	99
Beam Deflection	195
Beam Bending	68
Beam Shear	66
Post Stability	138

**Permit Page: Level 2**



**LOAD AND SUPPORT:**

Your deck will support a 43 PSF live load.  
Posts have 36" below ground support.

**DECK AND POST HEIGHT:**

You selected a height of 52" from the top of the decking to the ground level. The top of the deck support posts will therefore be 43" above ground level.

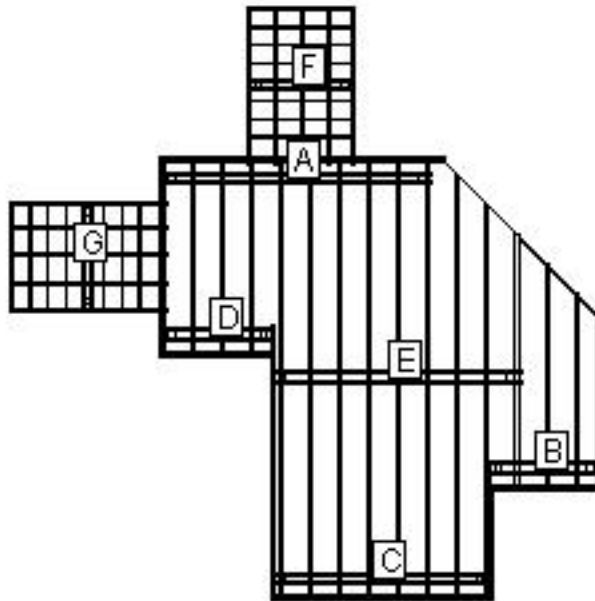
**Joists:**

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

**Stress Analysis: Level 2**

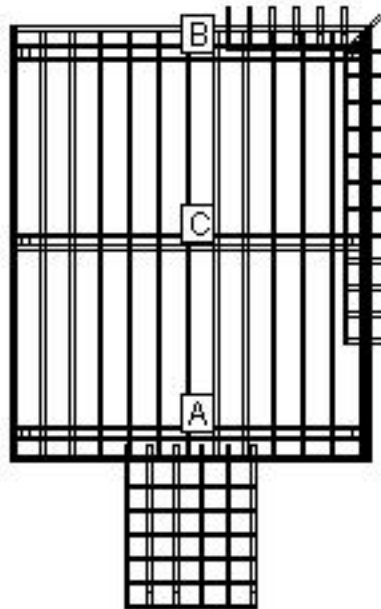
Joist Deflection	856
Joist Bending	185
Joist Shear	195
Joist Compression	195
Beam Deflection	94
Beam Bending	53
Beam Shear	64
Post Stability	172

### Beam Layout Level 1



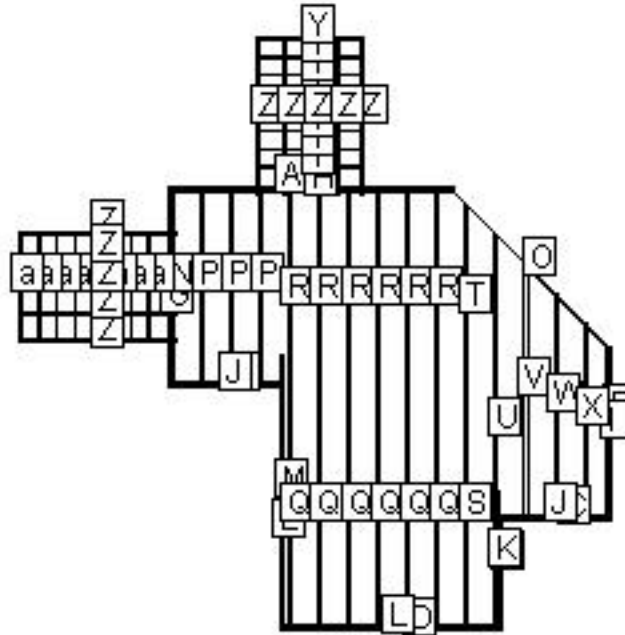
BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	12' 3"	3	5' 8"
B	5' 1 1/2"	2	4' 2"
C	9' 10 1/4"	2	8' 10 3/4"
D	5' 1 1/2"	2	4' 2"
E	11' 3"	3	5' 2"
F	4' 10"	2	3' 10 1/2"
G	5'	2	4' 1/2"

**Beam Layout Level 2**



BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	12' 4 1/4"	2	11' 4 3/4"
B	12' 4 1/4"	2	11' 4 3/4"
C	12' 4 1/4"	3	5' 8 1/2"

Materials Cut List: Level 1



LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
A	Cladding	1	12' 10"	23, 45	O	Header	1	10' 1"	0, 0
B	Cladding	1	7' 10"	45, 23	P	Internal Joist	3	8' 7 1/4"	0, 0
C	Cladding	2	5' 1"	45, 45	Q	Internal Joist	6	9' 10 1/2"	0, 0
D	Cladding	1	10'	45, 45	R	Internal Joist	6	9' 8 3/4"	0, 0
E	Cladding	1	11' 1"	45, 45	S	Internal Joist	1	9' 10 1/2"	45, 0
F	Cladding	1	5' 1"	45, 45	T	Internal Joist	1	9' 1"	45, 0
G	Cladding	1	9'	45, 45	U	Internal Joist	1	17' 7 1/2"	45, 0
H	Header	1	12' 7 1/4"	0, 0	V	Internal Joist	1	11' 3 1/2"	45, 0
I	Rim Joist	1	7' 9"	0, 0	W	Internal Joist	1	9' 11 1/2"	45, 0
J	Header	2	5'	0, 0	X	Internal Joist	1	8' 7 1/2"	45, 0
K	Rim Joist	1	6' 2 3/4"	0, 0	Y	Riser	8	4' 10"	0, 0
L	Header	1	9' 7 1/4"	0, 0	Z	Stringer	10	8' 4"	0, 0

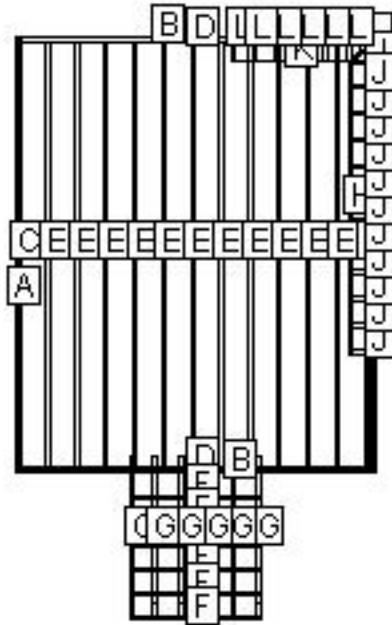
Cut Angles: L=Left, R=Right, F=Front, S=Side

LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
M	Rim Joist	1	12' 3 3/4"	0, 0	a	Riser	8	5'	0, 0
N	Rim Joist	1	8' 10 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	2	15' 1"	45, 45	G	Pre Cut Stringer	6	6' 4 1/2"	0, 0
B	Cladding	2	12' 6"	45, 45	H	Riser	1	10' 2"	45, 0
C	Rim Joist	2	14' 11 1/4"	0, 0	I	Pre Cut Stringer	1	1' 5"	0, 0
D	Header	2	12' 1 1/4"	0, 0	J	Pre Cut Stringer	12	1' 1 1/4"	0, 0
E	Internal Joist	12	14' 8 1/4"	0, 0	K	Riser	1	4' 2"	0, 45
F	Riser	6	4' 6"	0, 0	L	Pre Cut Stringer	6	1' 1 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	3	2X8X14 Treated	TREATED
Internal Joist	16	2X8X10 Treated	TREATED
Internal Joist	9	2X8X18 Treated	TREATED
Internal Joist	1	2X8X12 Treated	TREATED
Beam	8	2X10X14 Treated	TREATED
Beam	2	2X10X10 Treated	TREATED
Beam	2	2X10X12 Treated	TREATED
Railing Post	1	4X4X8 Treated	TREATED
Railing Post	6	4X4X18 Treated	TREATED
Railing Section	2	AZEK 6' Premier Custom Rail Pack - Kona® - 6'	AZEK
Railing Section	14	AZEK 8' Premier Custom Rail Pack - Kona® - 8'	AZEK
Railing Section	10	TT/AZEK 31" Round Aluminum Baluster - Black - 31"	AZEK
Cladding	12	AZEK Arbor Collection® Rim Joist Covers/Fasica - Redland Rose® - 12'	AZEK
Decking	71	AZEK XLM® Deck Plank, Square Shouldered - Harvest Bronze - 20'	AZEK
Header	16	2X8X16 Treated	TREATED
Rim Joist	2	2X8X8 Treated	TREATED
Post	16	4X4X8 Treated	TREATED
Beam	2	2X10X8 Treated	TREATED
Beam	2	2X10X16 Treated	TREATED
Riser	13	AZEK Arbor Collection® Rim Joist Covers/Fasica - Redland Rose® - 12'	AZEK
Railing Section	6	TT/AZEK 31" Round Aluminum Stair Baluster - Black - 31"	AZEK
Pre Cut Stringer	13	3-Step Treated Stair Stringer	TREATED
Pre Cut Stringer	19	2-Step Treated Stair Stringer	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
4	1 LB. 10D X1 1/2" Nail
2	5 LB. 10D Hot-Dip Galvanized Nail
1	1 LB. 10D Hot-Dip Galvanized Nail
47	2x8-10" Triple Zinc Joist Hanger JUS28-TZ
1	1LB. 16D Galvanized Common Nail
5	2x6-8" Triple Zinc Right Skewed Joist Hanger SKH26R-TZ
9	7" Triple Zinc Angle Clip AC7-TZ
1	5" Triple Zinc Angle Clip MP5-TZ
2	THR128-HDG Threaded Rod
4	DTB-TZ Deck Tie Bracket
4	1LB. 8D Galvanized Common Nail
3	1 LB. 1-1/2" Joist Hanger Nail
83	Triple Zinc Rafter Tie RT7-TZ
23	Anchor Bolt AB128
23	4X4 Triple Zinc Deck Post Anchor PA44E-TZ
36	80 L.B. Basic Concrete Mix
1	60 L.B. Basic Concrete Mix
4	10 LB. Basic Concrete Mix
18	8" X 48" Concrete Form Tube
368	1/2 Galvanized Flat Washer
8	1/2 Galvanized Hex Nut
184	1/2 X 8" Galvanized Carriage Bolt
35	7" Triple Zinc Angle Clip AC7-TZ
62	4X4 Triple Zinc Deck Post Tie SDPT7-TZ
1	1 LB. 8X3" Philips Head Stainless Deck Screws
31	AZEK 5 1/2" Post Skirt - Kona®
124	3/8 Galvanized Hex Nut
248	3/8 Galvanized Flat Washer
124	3/8 X 8" Galvanized Carriage Bolt
31	AZEK 5 1/2" LED Lighted Island Cap - Kona®
31	AZEK 5.5" x 5.5" Post Sleeve - Kona® - 39"
7	2 Pieces of Joist Material Nailed to Each Joist Splice
7	AZEK Cortex - 100 LF XLM® Harvest Bronze - Harvest Bronze
22	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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