



Deck Designer Specification Kit For  
**AZEK**

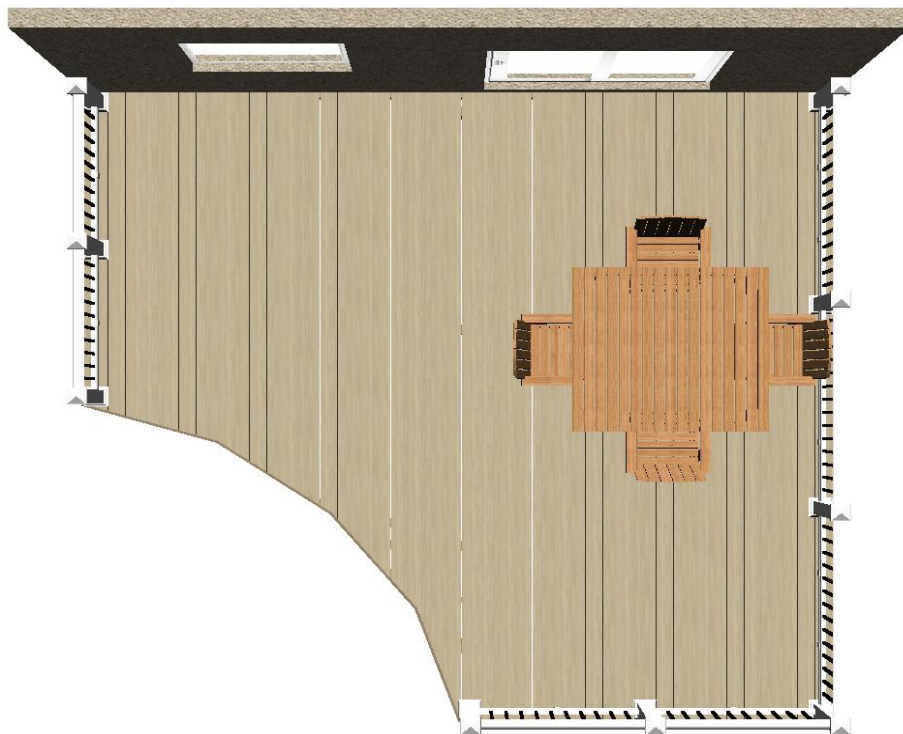
### Deck layout diagram



Top view without planks

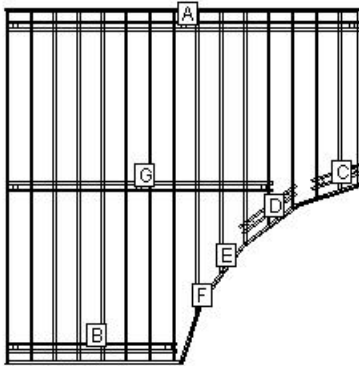


Bottom view with planks



Top view with planks

Permit Page: Level 1



**LOAD AND SUPPORT:**

Your deck will support a 44 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.

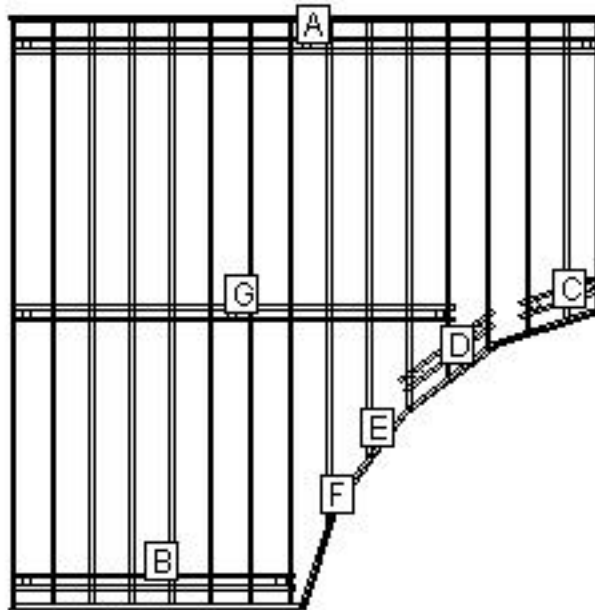
**Joists:**

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

**Stress Analysis: Level 1**

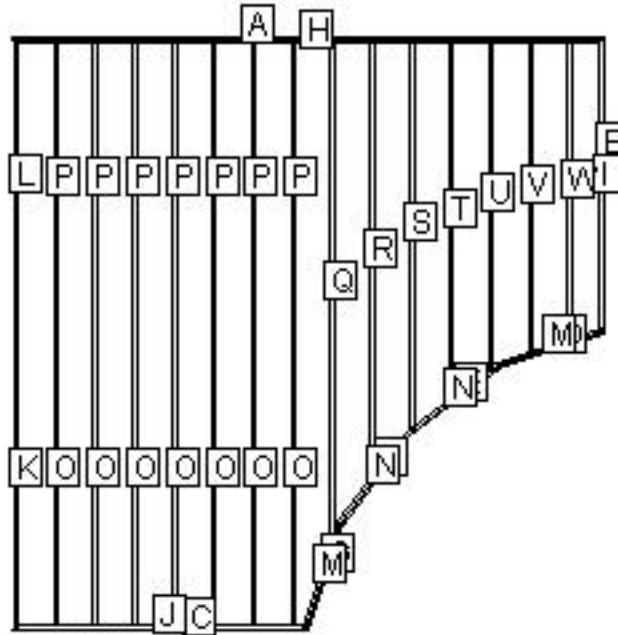
Joist Deflection	161
Joist Bending	57
Joist Shear	97
Joist Compression	97
Beam Deflection	153
Beam Bending	60
Beam Shear	54
Post Stability	102

### Beam Layout Level 1



BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	19' 10 1/4"	3	9' 5 1/2"
B	9' 7"	2	8' 7 1/2"
C	3'	2	1' 11 1/2"
D	3' 8 3/4"	2	2' 6 1/2"
E	3 1/2"	1	0
F	3 1/2"	1	0
G	14' 11"	3	7'

Materials Cut List: Level 1



LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
A	Cladding	1	20'	45, 45	M	Header	2	3' 8 3/4"	0, 0
B	Cladding	1	10'	36, 45	N	Header	2	3' 9 1/4"	0, 0
C	Cladding	1	10'	45, 36	O	Internal Joist	7	9' 9 1/2"	0, 0
D	Cladding	1	3' 9 1/4"	9, 36	P	Internal Joist	7	9' 9 3/4"	0, 0
E	Cladding	1	3' 9 1/4"	8, 9	Q	Internal Joist	1	16' 10 3/4"	0, 72
F	Cladding	1	3' 9 1/4"	9, 8	R	Internal Joist	1	14' 8 1/4"	0, 53
G	Cladding	1	3' 9 1/4"	36, 9	S	Internal Joist	1	12' 11 3/4"	0, 37
H	Header	1	19' 7 1/4"	0, 0	T	Internal Joist	1	11' 11 3/4"	0, 37
I	Rim Joist	1	9' 10 1/2"	0, 0	U	Internal Joist	1	10' 11 3/4"	0, 37
J	Header	1	9' 9"	0, 0	V	Internal Joist	1	10' 5 1/4"	0, 18
K	Rim Joist	1	9' 11 1/4"	0, 0	W	Internal Joist	1	10'	0, 18
L	Rim Joist	1	9' 11"	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	19	2X8X10 Treated	TREATED
Internal Joist	3	2X8X18 Treated	TREATED
Internal Joist	1	2X8X16 Treated	TREATED
Internal Joist	1	2X8X14 Treated	TREATED
Internal Joist	3	2X8X12 Treated	TREATED
Beam	6	2X10X10 Treated	TREATED
Beam	3	2X10X16 Treated	TREATED
Railing Post	1	4X4X14 Treated	TREATED
Railing Post	1	4X4X18 Treated	TREATED
Railing Section	7	AZEK 6' Trademark Custom Rail Pack - White - 6'	AZEK
Railing Section	7	TT/AZEK 31" Round Aluminum Baluster - Black - 31"	AZEK
Cladding	5	AZEK Harvest Collection® Rim Joist Covers/Fasica - Brownstone - 12'	AZEK
Decking	11	AZEK Arbor Collection® Deck Plank, Grooved - Hazelwood® - 12'	AZEK
Decking	8	AZEK Arbor Collection® Deck Plank, Grooved - Hazelwood® - 16'	AZEK
Decking	24	AZEK Arbor Collection® Deck Plank, Grooved - Hazelwood® - 20'	AZEK
Gusset	1	2X8X8 Treated	TREATED
Post	2	4X4X8 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
4	1 LB. 10D Hot-Dip Galvanized Nail
21	2x8-10" Triple Zinc Joist Hanger JUS28-TZ
14	5" Triple Zinc Angle Clip MP5-TZ
3	7" Triple Zinc Angle Clip AC7-TZ
1	5" Triple Zinc Angle Clip MP5-TZ
2	1LB. 8D Galvanized Common Nail
2	1 LB. 1-1/2" Joist Hanger Nail
44	Triple Zinc Rafter Tie RT7-TZ
14	Anchor Bolt AB128
14	4X4 Triple Zinc Deck Post Anchor PA44E-TZ
22	80 L.B. Basic Concrete Mix
1	40 LB. Basic Concrete Mix
1	10 LB. Basic Concrete Mix
11	8" X 48" Concrete Form Tube
224	1/2 Galvanized Flat Washer
5	1/2 Galvanized Hex Nut
112	1/2 X 8" Galvanized Carriage Bolt
18	4X4 Triple Zinc Deck Post Tie SDPT7-TZ
1	1 LB. 8X3" Philips Head Stainless Deck Screws
9	AZEK 5 1/2" Post Skirt - White
36	3/8 Galvanized Hex Nut
72	3/8 Galvanized Flat Washer
36	3/8 X 8" Galvanized Carriage Bolt
9	AZEK 5 1/2" Pyramid Cap - White
9	AZEK 5.5" x 5.5" Post Sleeve - White - 39"
8	2 Pieces of Joist Material Nailed to Each Joist Splice
4	TimberTech CONCEALoc Hidden Fastener - Unit = 8 retail cartons @ 100 sq.ft. coverage each (175 CONCEALoc fasteners, 184 Screws and drive bit) - Brown
40	1/2 X 6" Galvanized Lag Screw
1	AZEK Cortex - 100 LF Arbor Collection® - Hazelwood

**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.

**AZEK Building Products and its affiliates assume no responsibility for any damages, including direct or consequential, personal injuries suffered, or property or economic losses incurred as a result of the information published within this Deck Design, AZEK Building Products and its affiliate websites or Deck Design Detail Report. Before beginning any project, review the instructions carefully. We cannot anticipate all of your working conditions or the characteristics of your materials and tools. For your safety, you should consider your own skill level and use caution, care and good judgment when following the instructions. If you have doubts, concerns or questions, consult local experts, architects, soil engineers or building authorities. Because local zoning and building codes and regulations vary greatly, you should ALWAYS CHECK WITH LOCAL AUTHORITIES TO ENSURE THAT YOUR PROJECT COMPLIES WITH ALL APPLICABLE CODES AND REGULATIONS. Always read and observe instructions and safety precautions provided by any tool or equipment manufacturer, and follow all accepted safety procedures.**

**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.**

**AZEK Building Products and its affiliates assume no liability or responsibility for your design, construction or use of any product supplied by AZEK Building Products.**

**YOU ASSUME TOTAL RESPONSIBILITY AND RISK FOR YOUR USE OF THE AZEK BUILDING PRODUCTS DESIGN, THE AZEK BUILDING PRODUCTS WEBSITE AND SUPPLIED DECK DESIGN DETAIL REPORT. AZEK BUILDING PRODUCTS PROVIDES THIS WEB-BASED TOOL, ALL INFORMATION, PRODUCTS, AND SERVICES "AS IS" AND DOES NOT MAKE EXPRESS OR IMPLIED WARRANTIES, REPRESENTATIONS, OR ENDORSEMENTS OF ANY KIND WHATSOEVER (INCLUDING WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE).**