



Deck Designer Specification Kit For  
**AZEK**

### Deck layout diagram



Top view without planks

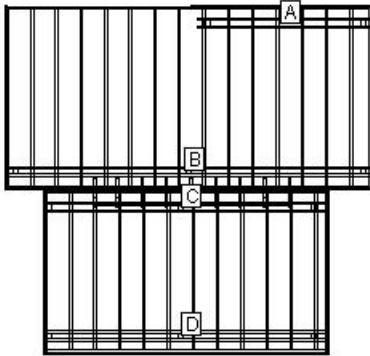


Bottom view with planks



Top view with planks

**Permit Page: Level 1**



**LOAD AND SUPPORT:**

Your deck will support a 52 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.

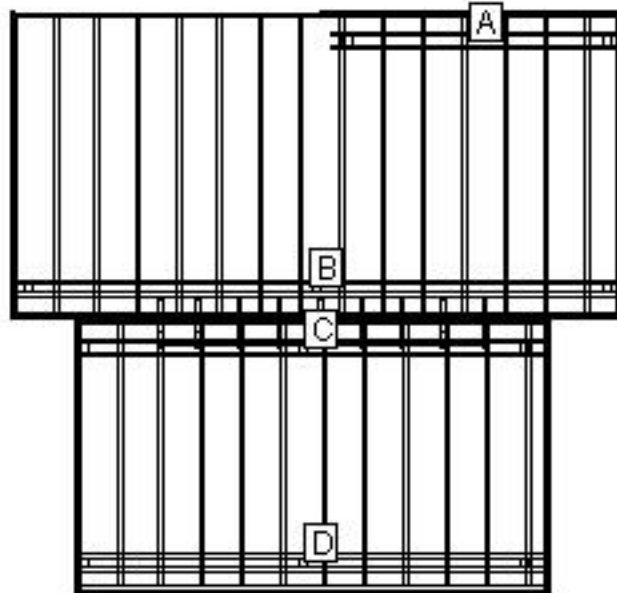
**Joists:**

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

**Stress Analysis: Level 1**

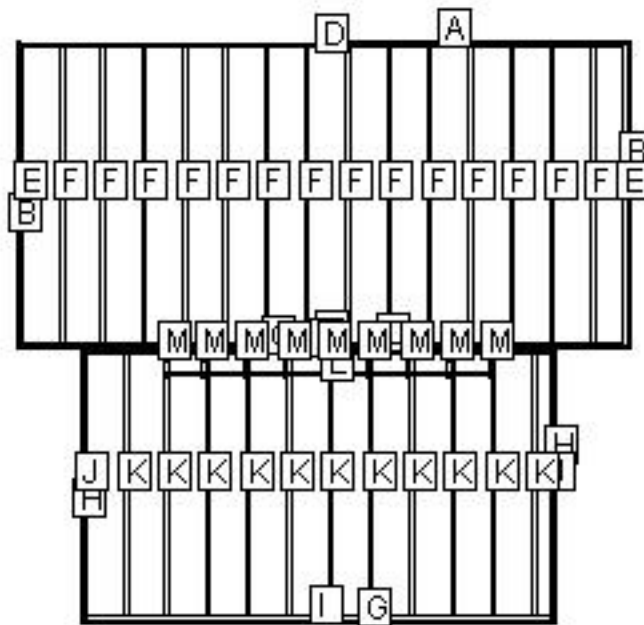
Joist Deflection	509
Joist Bending	120
Joist Shear	136
Joist Compression	136
Beam Deflection	158
Beam Bending	62
Beam Shear	63
Post Stability	129

### Beam Layout Level 1



BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	9' 5 1/4"	2	8' 6"
B	19' 10 1/4"	3	9' 5 1/2"
C	15' 4 1/4"	3	7' 2 1/2"
D	15' 4 1/4"	3	7' 2 1/2"

Materials Cut List: Level 1



LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
A	Cladding	1	9' 11"	45, 0	H	Cladding	2	8' 11 1/2"	45, 45
B	Cladding	2	10'	45, 45	I	Header	2	15' 1 1/4"	0, 0
C	Cladding	1	20'	45, 45	J	Rim Joist	2	8' 9 3/4"	0, 0
D	Header	2	19' 7 1/4"	0, 0	K	Internal Joist	11	8' 6 3/4"	0, 0
E	Rim Joist	2	9' 10 1/4"	0, 0	L	Riser	1	10' 8"	0, 0
F	Internal Joist	14	9' 7 1/4"	0, 0	M	Pre Cut Stringer	9	1' 3"	0, 0
G	Cladding	2	15' 6"	45, 45					

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.

<b>Lumber Materials</b>			
<b>COMPONENT</b>	<b>QTY</b>	<b>DESCRIPTION</b>	<b>WOOD TYPE</b>
Beam	6	2X10X10 Treated	TREATED
Beam	4	2X10X16 Treated	TREATED
Pre Cut Stringer	9	2-Step Treated Stair Stringer	TREATED
Railing Post	4	4X4X18 Treated	TREATED
Railing Section	2	AZEK 6' Premier Custom Rail Pack - Kona® - 6'	AZEK
Railing Section	6	AZEK 8' Premier Custom Rail Pack - Kona® - 8'	AZEK
Baluster	12	TT/AZEK CableRail 36" Intermediate Baluster [1 9-hole baluster, 1 intermediate base plate, 1 #10x2" pan head screw, 3 #10x1" flat head screws] - Silver	AZEK
Cladding	10	AZEK Arbor Collection® Rim Joist Covers/Fasica - Morado® - 12'	AZEK
Decking	36	AZEK Vintage Collection® Deck Plank, Square Shouldered - Mahogany® - 16'	AZEK
Decking	12	AZEK Vintage Collection® Deck Plank, Square Shouldered - Mahogany® - 20'	AZEK
Header	10	2X8X18 Treated	TREATED
Rim Joist	17	2X8X10 Treated	TREATED
Post	1	4X4X8 Treated	TREATED
Riser	1	AZEK Arbor Collection® Rim Joist Covers/Fasica - Morado® - 12'	AZEK
Railing Section	1	TT/AZEK CableRail 36" Stair Intermediate Baluster [1 angled 9-hole baluster, 1 intermediate base plate, 1 #10x2" pan head screw, 3 #10x1 flat head screws] - Silver	AZEK

To find an AZEK Dealer or Contractor in your area, please go to [www.azek.com](http://www.azek.com)

### Other Materials

Qty	Description
5	TT/AZEK CableRail 100' Stainless Steel Cable - Stainless - 100'
3	1 LB. 10D X1 1/2" Nail
1	5 LB. 10D Hot-Dip Galvanized Nail
2	1 LB. 10D Hot-Dip Galvanized Nail
50	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
3	1LB. 8D Galvanized Common Nail
2	1 LB. 1-1/2" Joist Hanger Nail
50	Triple Zinc Rafter Tie RT7-TZ
11	Anchor Bolt AB128
11	4X4 Triple Zinc Deck Post Anchor PA44E-TZ
17	80 L.B. Basic Concrete Mix
1	60 L.B. Basic Concrete Mix
1	10 LB. Basic Concrete Mix
9	8" X 48" Concrete Form Tube
176	1/2 Galvanized Flat Washer
4	1/2 Galvanized Hex Nut
88	1/2 X 8" Galvanized Carriage Bolt
9	7" Triple Zinc Angle Clip AC7-TZ
40	4X4 Triple Zinc Deck Post Tie SDPT7-TZ
1	1 LB. 8X3" Philips Head Stainless Deck Screws
20	AZEK 5 1/2" Post Skirt - Kona®
80	3/8 Galvanized Hex Nut
160	3/8 Galvanized Flat Washer
80	3/8 X 8" Galvanized Carriage Bolt
20	AZEK 5 1/2" Pyramid Cap - Kona®
20	AZEK 5.5" x 5.5" Post Sleeve - Kona® - 39"
1	TT/AZEK CableRail Cable Cutters
1	TT/AZEK CableRail Accessory Kit [Quick-Connect release tool, lacing needle, hanger bolt installation tool] -
15	TT/AZEK CableRail 36" Hardware Kit [9 Quick-Connect fittings, 9 Quick Connect Swivel fittings, 18 hanger bolts, 9 lock nuts] - Stainless
1	TT/AZEK CableRail Protector Sleeves [Pack of 20] - Stainless
3	AZEK Cortex - 100 LF Vintage Collection® - Mahogany
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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