

Deck Designer Specification Kit For
AZEK

Deck layout diagram



Top view without planks

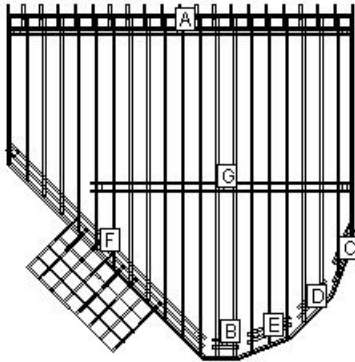


Bottom view with planks



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.

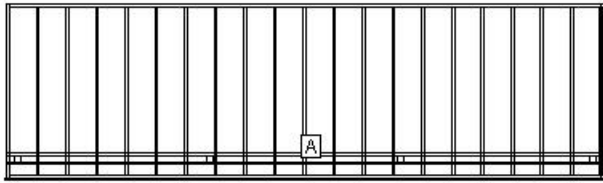
Joists:

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

Stress Analysis: Level 1

Joist Deflection	123
Joist Bending	51
Joist Shear	110
Joist Compression	110
Beam Deflection	136
Beam Bending	53
Beam Shear	53
Post Stability	101

Permit Page: Level 2



LOAD AND SUPPORT:

Your deck will support a 77 PSF live load.
Posts have 36" below ground support.

DECK AND POST HEIGHT:

You selected a height of 50" from the top of the decking to the ground level. The top of the deck support posts will therefore be 41" above ground level.

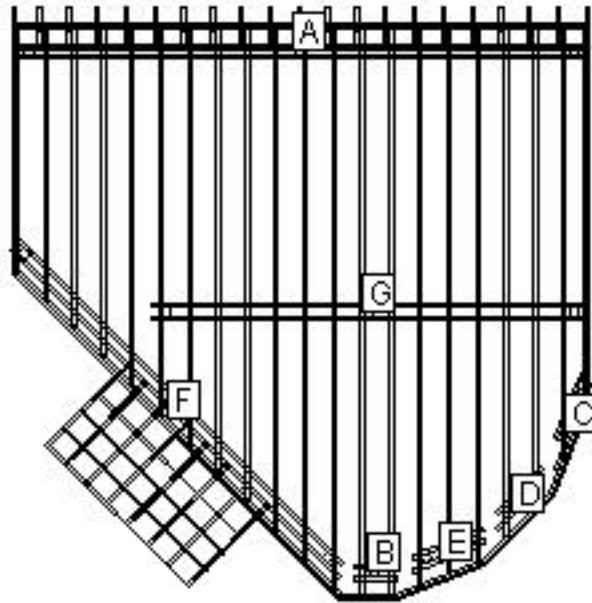
Joists:

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

Stress Analysis: Level 2

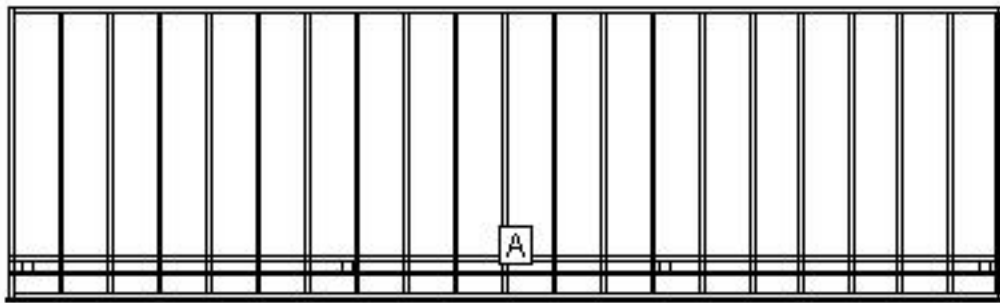
Joist Deflection	578
Joist Bending	130
Joist Shear	142
Joist Compression	142
Beam Deflection	279
Beam Bending	92
Beam Shear	87
Post Stability	174

Beam Layout Level 1



BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	19' 10 1/4"	3	9' 5 1/2"
B	1' 6"	1	0
C	3' 3 1/4"	2	1' 7 1/4"
D	2' 1 1/2"	2	10 1/2"
E	2' 8 1/4"	2	1' 7 1/2"
F	16' 1 3/4"	3	7' 5 1/4"
G	15' 1 1/4"	3	7' 1"

Beam Layout Level 2



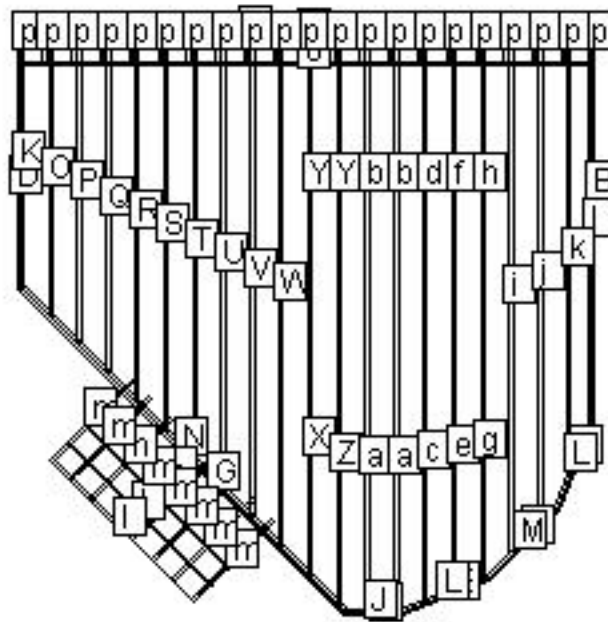
BEAM LABEL
A

BEAM LENGTH
26' 10 1/4"

POST COUNT
4

POST SPACING
8' 7 1/2"

Materials Cut List: Level 1



LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
A	Cladding	1	20'	45, 45	V	Internal Joist	1	16' 4 3/4"	0, 45
B	Cladding	1	13' 4"	11, 45	W	Internal Joist	1	17' 4 3/4"	0, 45
C	Cladding	1	2'	23, 11	X	Internal Joist	1	8' 7"	0, 45
D	Cladding	1	8' 8"	45, 23	Y	Internal Joist	2	9' 9 1/2"	0, 45
E	Cladding	2	3' 4"	11, 11	Z	Internal Joist	1	9' 7"	0, 45
F	Cladding	1	3' 3 1/2"	11, 11	a	Internal Joist	2	9' 9 1/2"	0, 0
G	Cladding	1	16' 1/4"	23, 23	b	Internal Joist	2	9' 9 3/4"	0, 0
H	Header	1	19' 7 1/4"	0, 0	c	Internal Joist	1	9' 6"	0, 22
I	Rim Joist	1	13' 3"	0, 0	d	Internal Joist	1	9' 9 1/2"	0, 22
J	Header	1	1' 11 1/2"	0, 0	e	Internal Joist	1	9' 1"	0, 22
K	Rim Joist	1	8' 7"	0, 0	f	Internal Joist	1	9' 9 3/4"	0, 22
L	Header	2	3' 3 1/2"	0, 0	g	Internal Joist	1	8' 8"	0, 22

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

LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
M	Header	1	3' 3 1/4"	0, 0	h	Internal Joist	1	9' 9 1/2"	0, 22
N	Header	1	15' 11 1/2"	0, 0	i	Internal Joist	1	17' 7 1/2"	0, 45
O	Internal Joist	1	9' 4 3/4"	0, 45	j	Internal Joist	1	16' 7 1/2"	0, 45
P	Internal Joist	1	10' 4 3/4"	0, 45	k	Internal Joist	1	14' 10 3/4"	0, 68
Q	Internal Joist	1	11' 4 3/4"	0, 45	l	Riser	4	7' 1/4"	0, 0
R	Internal Joist	1	12' 4 3/4"	0, 45	m	Pre Cut Stringer	7	4' 2"	0, 0
S	Internal Joist	1	13' 4 3/4"	0, 45	n	Pre Cut Stringer	1	4' 2"	0, 0
T	Internal Joist	1	14' 4 3/4"	0, 45	o	Riser	1	20'	0, 0
U	Internal Joist	1	15' 4 3/4"	0, 45	p	Pre Cut Stringer	21	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
Internal Joist	4	2X8X14 Treated	TREATED
Internal Joist	4	2X8X16 Treated	TREATED
Internal Joist	8	2X8X18 Treated	TREATED
Internal Joist	16	2X8X10 Treated	TREATED
Beam	6	2X10X10 Treated	TREATED
Beam	5	2X10X18 Treated	TREATED
Beam	2	2X10X16 Treated	TREATED
Pre Cut Stringer	8	4-Step Treated Stair Stringer	TREATED
Pre Cut Stringer	21	2-Step Treated Stair Stringer	TREATED
Railing Post	1	4X4X14 Treated	TREATED
Railing Post	2	4X4X18 Treated	TREATED
Railing Section	3	AZEK 6' Premier Custom Rail Pack - Slate Gray - 6'	AZEK
Railing Section	6	AZEK 8' Premier Custom Rail Pack - Slate Gray - 8'	AZEK
Baluster	14	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	9	AZEK Terra Collection Rim Joist Covers/Fasica - Tahoe® - 12'	AZEK
Decking	18	AZEK XLM® Deck Plank, Grooved - Walnut Grove - 12'	AZEK
Decking	55	AZEK XLM® Deck Plank, Grooved - Walnut Grove - 16'	AZEK
Decking	11	AZEK XLM® Deck Plank, Grooved - Walnut Grove - 20'	AZEK
Internal Joist	2	2X8X12 Treated	TREATED
Gusset	23	2X8X8 Treated	TREATED
Post	8	4X4X8 Treated	TREATED
Beam	1	2X10X8 Treated	TREATED
Riser	6	AZEK Terra Collection Rim Joist Covers/Fasica - Tahoe® - 12'	AZEK
Railing Section	2	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	TIMBERTECH
Railing Post	1	4X4X12 Treated	TREATED



To find an AZEK and/or TimberTech Dealer or Contractor in your area, please go to www.azek.com

Other Materials

Qty	Description
1	TT/AZEK CableRail 500' Stainless Steel Cable - Stainless - 500'
4	1 LB. 10D X1 1/2" Nail
1	5 LB. 10D Hot-Dip Galvanized Nail
4	1 LB. 10D Hot-Dip Galvanized Nail
61	2x8-10" Triple Zinc Joist Hanger JUS28-TZ
2	1LB. 16D Galvanized Common Nail
11	2x6-8" Triple Zinc Right Skewed Joist Hanger SKH26R-TZ
8	5" Triple Zinc Angle Clip MP5-TZ
2	2x6-8" Triple Zinc Left Skewed Joist Hanger SKH26L-TZ
6	7" Triple Zinc Angle Clip AC7-TZ
2	5" Triple Zinc Angle Clip MP5-TZ
4	1LB. 8D Galvanized Common Nail
3	1 LB. 1-1/2" Joist Hanger Nail
80	Triple Zinc Rafter Tie RT7-TZ
20	Anchor Bolt AB128
20	4X4 Triple Zinc Deck Post Anchor PA44E-TZ
31	80 L.B. Basic Concrete Mix
1	60 L.B. Basic Concrete Mix
1	10 LB. Basic Concrete Mix
15	8" X 48" Concrete Form Tube
320	1/2 Galvanized Flat Washer
7	1/2 Galvanized Hex Nut
160	1/2 X 8" Galvanized Carriage Bolt
29	7" Triple Zinc Angle Clip AC7-TZ
34	4X4 Triple Zinc Deck Post Tie SDPT7-TZ
1	1 LB. 8X3" Philips Head Stainless Deck Screws
17	AZEK 5 1/2" Post Skirt - Slate Gray
68	3/8 Galvanized Hex Nut
136	3/8 Galvanized Flat Washer
68	3/8 X 8" Galvanized Carriage Bolt
17	AZEK 5 1/2" Pyramid Cap - Slate Gray
17	AZEK 5.5" x 5.5" Post Sleeve - Slate Gray - 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 Decklites Dimmer
1	TT/AZEK Wire Guide - 60 Packs of 12 ea.

Qty	Description
3	TT/AZEK 100' wire 16/2
15	TT/AZEK LED Accent Light - Architectural Bronze
1	TT/AZEK Transformer - 12 Volt 150 W
13	TT/AZEK LED In Deck Light (8 Packs of 4 per Unit) - Architectural Bronze
1	TT/AZEK CableRail Protector Sleeves [Pack of 20] - Stainless
7	2 Pieces of Joist Material Nailed to Each Joist Splice
1	AZEK Cortex - 100 LF XLM® Walnut Grove - Walnut Grove
6	TimberTech CONCEALoc Hidden Fastener - Unit = 8 retail cartons @ 100 sq.ft. coverage each (175 CONCEALoc fasteners, 184 Screws and drive bit) - Brown
70	1/2 X 6" Galvanized Lag Screw
2	TT/AZEK CableRail 100' Stainless Steel Cable - Stainless - 100'
2	THR128-HDG Threaded Rod
4	DTB-TZ Deck Tie Bracket
1	40 LB. Basic Concrete Mix

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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