



Deck Designer Specification Kit For
AZEK

Deck layout diagram



Top view without planks

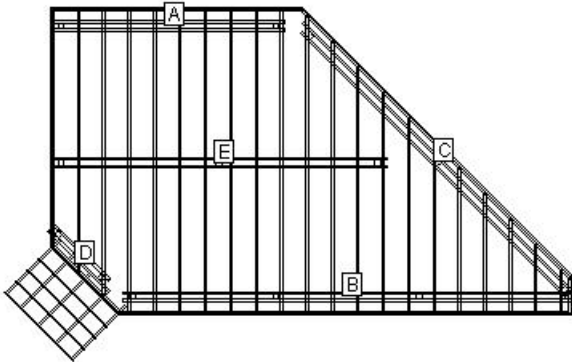


Bottom view with planks



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.

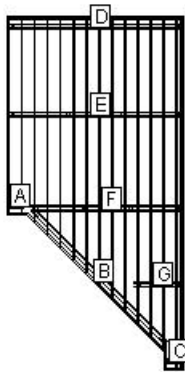
Joists:

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

Stress Analysis: Level 1

Joist Deflection	229
Joist Bending	72
Joist Shear	107
Joist Compression	107
Beam Deflection	91
Beam Bending	50
Beam Shear	55
Post Stability	109

Permit Page: Level 2



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 43" from the top of the decking to the ground level. The top of the deck support posts will therefore be 34" above ground level.

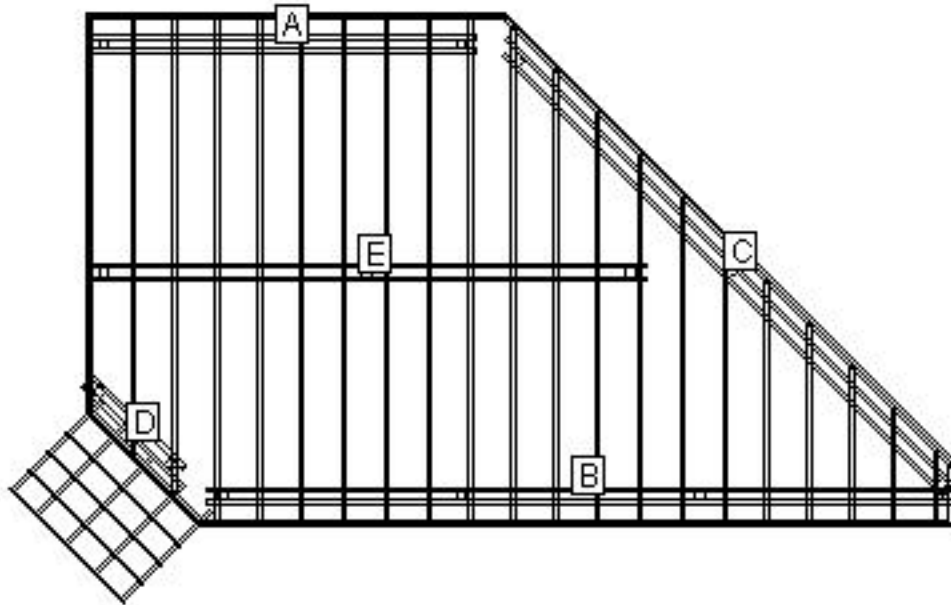
Joists:

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

Stress Analysis: Level 2

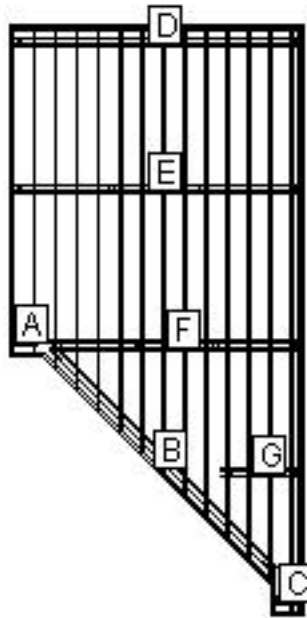
Joist Deflection	136
Joist Bending	50
Joist Shear	92
Joist Compression	92
Beam Deflection	176
Beam Bending	63
Beam Shear	62
Post Stability	120

Beam Layout Level 1



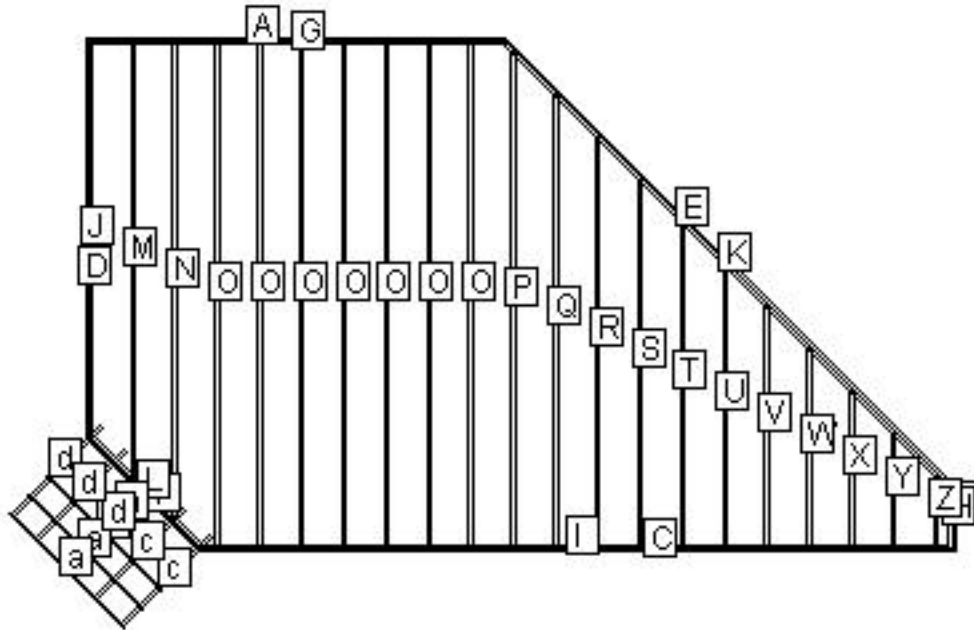
BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	12' 3"	2	11' 3 1/2"
B	23' 6 1/4"	4	7' 6 1/4"
C	20' 2"	3	9' 5 1/2"
D	4' 5 3/4"	2	3' 2 3/4"
E	17' 7"	3	8' 4"

Beam Layout Level 2



BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	1' 7"	1	0
B	19' 3 1/4"	3	9'
C	1' 10 1/4"	2	10 3/4"
D	18' 1/4"	3	8' 6 1/2"
E	18' 1/4"	4	5' 8 1/4"
F	15' 7 1/4"	4	4' 10 1/2"
G	4' 11 1/4"	2	3' 11 3/4"

Materials Cut List: Level 1



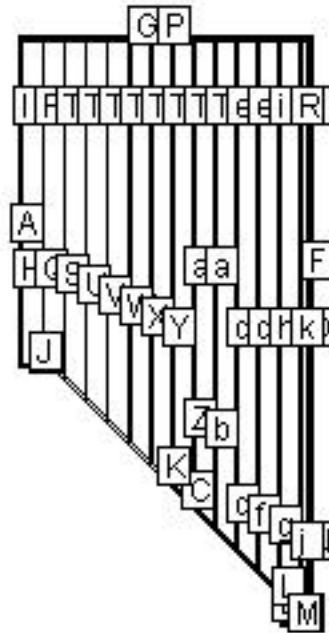
LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
A	Cladding	1	13' 3"	23, 45	P	Internal Joist	1	15' 6 1/2"	45, 0
B	Cladding	1	2'	45, 23	Q	Internal Joist	1	14' 2 1/2"	45, 0
C	Cladding	1	23' 10"	23, 45	R	Internal Joist	1	12' 10 1/2"	45, 0
D	Cladding	1	12' 7"	45, 23	S	Internal Joist	1	11' 6 1/2"	45, 0
E	Cladding	1	20' 1/2"	23, 23	T	Internal Joist	1	10' 2 1/2"	45, 0
F	Cladding	1	5' 1"	23, 23	U	Internal Joist	1	8' 10 1/2"	45, 0
G	Header	1	13' 1/4"	0, 0	V	Internal Joist	1	7' 6 1/2"	45, 0
H	Rim Joist	1	1' 11"	0, 0	W	Internal Joist	1	6' 2 1/2"	45, 0
I	Header	1	23' 7 1/4"	0, 0	X	Internal Joist	1	4' 10 1/2"	45, 0
J	Rim Joist	1	12' 6"	0, 0	Y	Internal Joist	1	3' 6 1/2"	45, 0
K	Header	1	19' 11 3/4"	0, 0	Z	Internal Joist	1	2' 2 1/2"	45, 0
L	Header	1	5'	0, 0	a	Riser	3	5' 1"	0, 0

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

LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
M	Internal Joist	1	13' 7 3/4"	0, 45	b	Riser	1	5' 1"	0, 0
N	Internal Joist	1	14' 11 3/4"	0, 45	c	Pre Cut Stringer	2	4' 2"	0, 0
O	Internal Joist	7	15' 9 1/4"	0, 0	d	Pre Cut Stringer	3	4' 2"	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	20' 6"	45, 45	T	Internal Joist	8	9' 10 1/2"	0, 45
B	Cladding	1	2' 1/4"	45, 23	U	Internal Joist	1	12' 4"	0, 45
C	Cladding	1	20' 1 1/4"	23, 23	V	Internal Joist	1	13' 8"	0, 45
D	Cladding	1	2' 1/4"	23, 45	W	Internal Joist	1	15'	0, 45
E	Cladding	1	2'	45, 45	X	Internal Joist	1	16' 4"	0, 45
F	Cladding	1	36' 8"	45, 45	Y	Internal Joist	1	17' 8"	0, 45
G	Cladding	1	18' 2"	45, 45	Z	Internal Joist	1	9' 3"	0, 45
H	Rim Joist	1	10' 4 1/4"	0, 0	a	Internal Joist	2	9' 9"	0, 45
I	Rim Joist	2	10'	0, 0	b	Internal Joist	1	10' 7"	0, 45
J	Header	1	1' 10"	0, 0	c	Internal Joist	1	4' 1"	0, 45
K	Header	1	20' 1 1/4"	0, 0	d	Internal Joist	2	17' 7"	0, 45
L	Rim Joist	1	3' 2 1/4"	0, 0	e	Internal Joist	2	9' 10 1/2"	0, 45

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

LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
M	Header	1	1' 7 1/4"	0, 0	f	Internal Joist	1	5' 5"	0, 45
N	Rim Joist	1	8' 11 1/4"	0, 0	g	Internal Joist	1	6' 9"	0, 45
O	Rim Joist	1	17' 7"	0, 0	h	Internal Joist	1	17' 7"	0, 45
P	Header	1	17' 9 1/4"	0, 0	i	Internal Joist	1	9' 10 1/2"	0, 45
Q	Internal Joist	1	10' 2 1/2"	0, 0	j	Internal Joist	1	8' 9 1/2"	0, 0
R	Internal Joist	2	9' 10 3/4"	0, 0	k	Internal Joist	1	17' 7"	0, 0
S	Internal Joist	1	11'	0, 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.

Lumber Materials

COMPONENT	QTY	DESCRIPTION	WOOD TYPE
Rim Joist	5	2X8X14 Treated	TREATED
Internal Joist	12	2X8X16 Treated	TREATED
Internal Joist	8	2X8X12 Treated	TREATED
Beam	2	2X10X14 Treated	TREATED
Beam	4	2X10X8 Treated	TREATED
Beam	4	2X10X16 Treated	TREATED
Beam	11	2X10X10 Treated	TREATED
Beam	4	2X10X12 Treated	TREATED
Beam	3	2X10X18 Treated	TREATED
Pre Cut Stringer	5	4-Step Treated Stair Stringer	TREATED
Railing Post	1	4X4X8 Treated	TREATED
Railing Post	2	4X4X18 Treated	TREATED
Railing Section	8	AZEK 6' Premier Custom Rail Pack - Kona® - 6'	AZEK
Railing Section	3	AZEK 8' Premier Custom Rail Pack - Kona® - 8'	AZEK
Railing Section	9	TT/AZEK 31" Square Aluminum Baluster - Black - 31"	AZEK
Cladding	16	AZEK Harvest Collection® Rim Joist Covers/Fasica - Kona® - 12'	AZEK
Decking	88	AZEK Vintage Collection® Deck Plank, Square Shouldered - Mahogany® - 16'	AZEK
Decking	28	AZEK Vintage Collection® Deck Plank, Square Shouldered - Mahogany® - 20'	AZEK
Header	14	2X8X18 Treated	TREATED
Internal Joist	19	2X8X10 Treated	TREATED
Rim Joist	7	2X8X8 Treated	TREATED
Post	15	4X4X8 Treated	TREATED
Riser	2	AZEK Harvest Collection® Rim Joist Covers/Fasica - Kona® - 12'	AZEK
Railing Section	2	TT/AZEK 31" Square Aluminum Stair Baluster - Black - 31"	TIMBERTECH
Railing Post	1	4X4X14 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
2	1 LB. 10D X1 1/2" Nail
1	5 LB. 10D Hot-Dip Galvanized Nail
42	2x8-10" Triple Zinc Joist Hanger JUS28-TZ
3	1LB. 16D Galvanized Common Nail
24	2x6-8" Triple Zinc Right Skewed Joist Hanger SKH26R-TZ
7	7" Triple Zinc Angle Clip AC7-TZ
3	5" Triple Zinc Angle Clip MP5-TZ
6	1LB. 8D Galvanized Common Nail
6	1 LB. 1-1/2" Joist Hanger Nail
121	Triple Zinc Rafter Tie RT7-TZ
33	Anchor Bolt AB128
33	4X4 Triple Zinc Deck Post Anchor PA44E-TZ
52	80 L.B. Basic Concrete Mix
2	40 LB. Basic Concrete Mix
3	10 LB. Basic Concrete Mix
25	8" X 48" Concrete Form Tube
528	1/2 Galvanized Flat Washer
11	1/2 Galvanized Hex Nut
264	1/2 X 8" Galvanized Carriage Bolt
5	7" Triple Zinc Angle Clip AC7-TZ
32	4X4 Triple Zinc Deck Post Tie SDPT7-TZ
1	1 LB. 8X3" Philips Head Stainless Deck Screws
16	AZEK 5 1/2" Post Skirt - Kona®
64	3/8 Galvanized Hex Nut
128	3/8 Galvanized Flat Washer
64	3/8 X 8" Galvanized Carriage Bolt
16	AZEK 5 1/2" Pyramid Cap - Kona®
16	AZEK 5.5" x 5.5" Post Sleeve - Kona® - 39"
11	TT/AZEK LED In Deck Light (8 Packs of 4 per Unit) - Architectural Bronze
1	TT/AZEK Decklites Dimmer
1	TT/AZEK 100' wire 16/2
1	TT/AZEK Transformer - 12 Volt 150 W
12	TT/AZEK LED Riser Light - Architectural Bronze
7	AZEK Cortex - 100 LF Vintage Collection® - Mahogany
3	1 LB. 10D Hot-Dip Galvanized Nail
22	2 Pieces of Joist Material Nailed to Each Joist Splice

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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