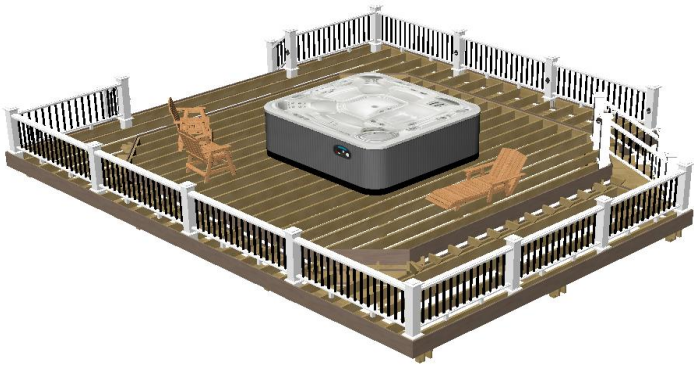




Deck Designer Specification Kit For  
**AZEK**

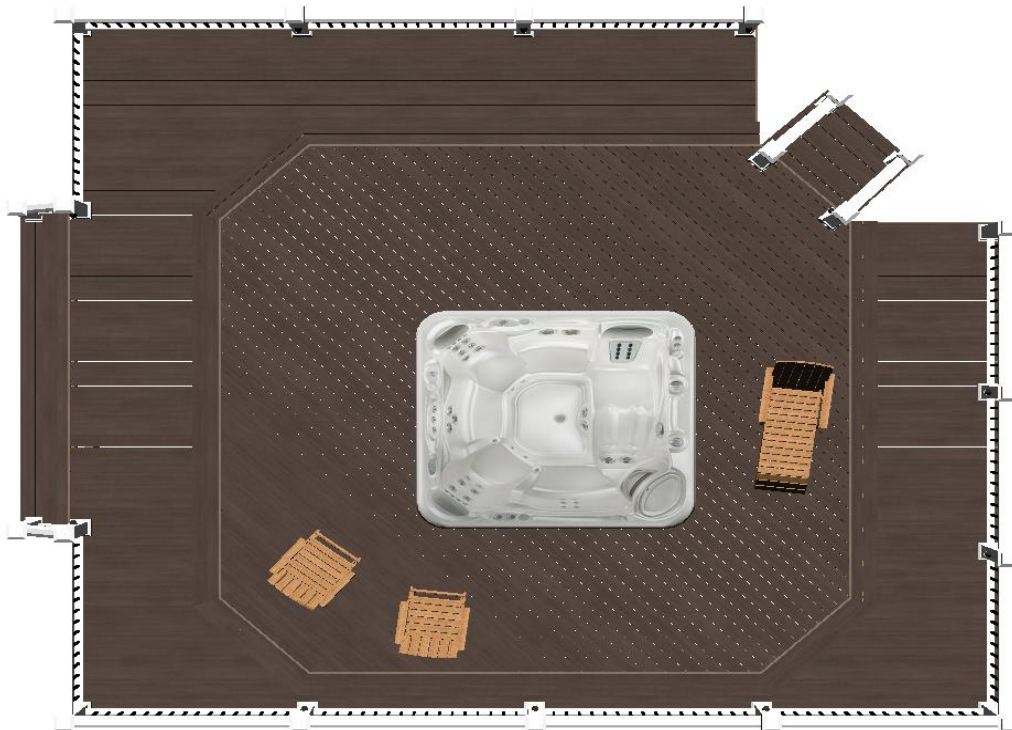
### Deck layout diagram



Top view without planks

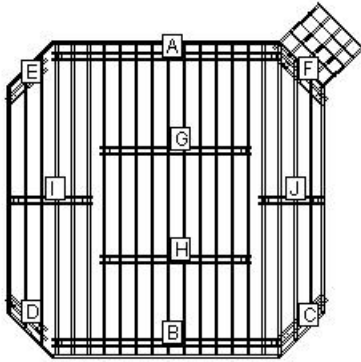


Bottom view with planks



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.

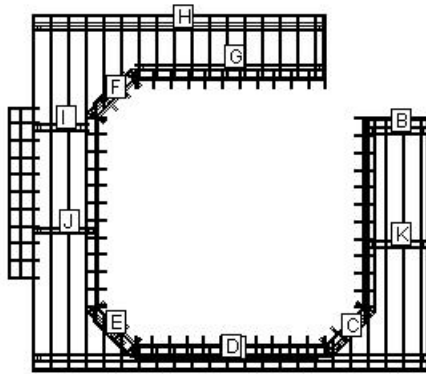
**Joists:**

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

**Stress Analysis: Level 1**

Joist Deflection	246
Joist Bending	83
Joist Shear	134
Joist Compression	134
Beam Deflection	168
Beam Bending	54
Beam Shear	51
Post Stability	181

Permit Page: Level 2



**LOAD AND SUPPORT:**

Your deck will support a 42 PSF live load.  
Posts have 36" below ground support.

**DECK AND POST HEIGHT:**

You selected a height of 22" from the top of the decking to the ground level. The top of the deck support posts will therefore be 13" above ground level.

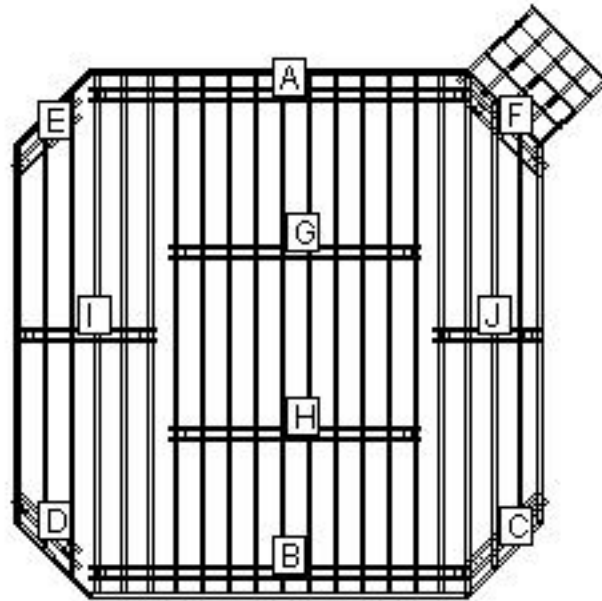
**Joists:**

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

**Stress Analysis: Level 2**

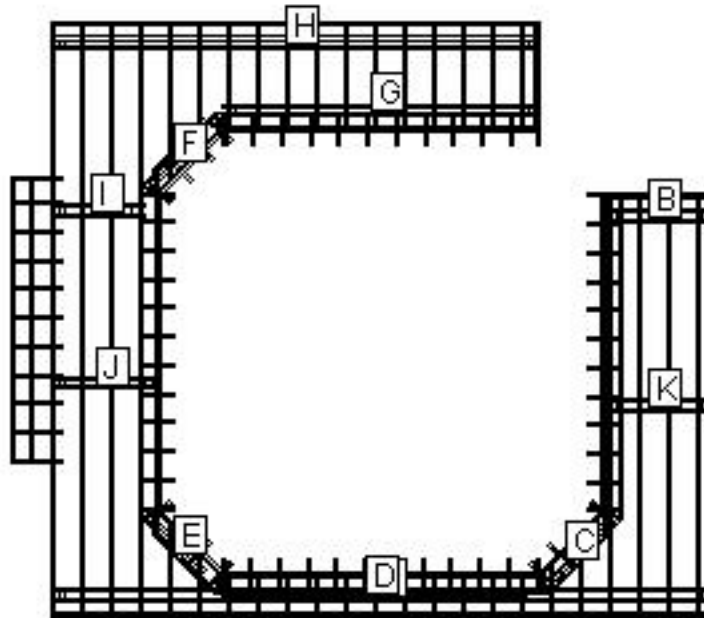
Joist Deflection	143
Joist Bending	52
Joist Shear	94
Joist Compression	94
Beam Deflection	87
Beam Bending	55
Beam Shear	57
Post Stability	117

### Beam Layout Level 1



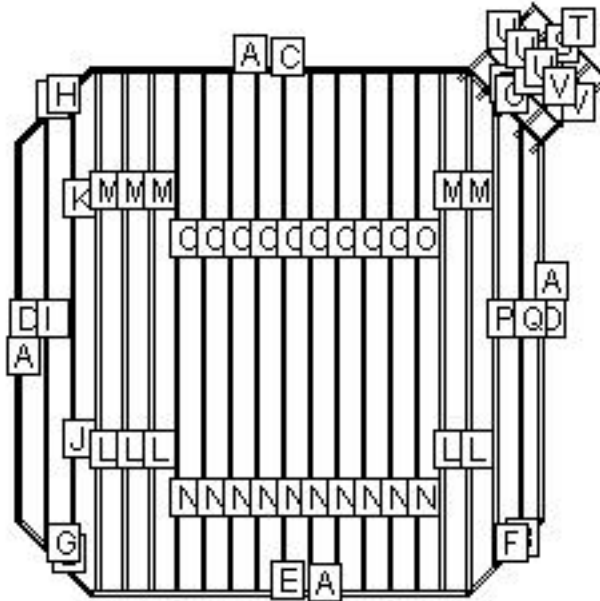
BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	14' 5 1/4"	3	6' 9"
B	14' 5 1/4"	3	6' 9"
C	4' 1 1/2"	2	2' 10 1/2"
D	3' 6 1/2"	2	2' 3 1/2"
E	3' 6 1/2"	2	2' 3 1/2"
F	4' 1 1/2"	2	2' 10 1/2"
G	9' 6"	2	8' 6 1/2"
H	9' 6"	2	8' 6 1/2"
I	5' 3"	2	4' 3 1/2"
J	4' 1 1/4"	2	3' 1 3/4"

### Beam Layout Level 2



BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	29' 10 1/4"	4	9' 7 1/2"
B	4' 10 1/4"	2	3' 10 3/4"
C	3' 5 3/4"	2	2' 2 3/4"
D	13' 10"	2	12' 10 1/2"
E	2' 11"	2	1' 8"
F	2' 11"	2	1' 8"
G	14' 3 1/4"	2	13' 3 3/4"
H	22' 1/4"	3	10' 6 1/2"
I	4' 3"	2	3' 3 1/2"
J	4' 10 1/4"	2	3' 10 3/4"
K	4' 10 1/4"	2	3' 10 3/4"

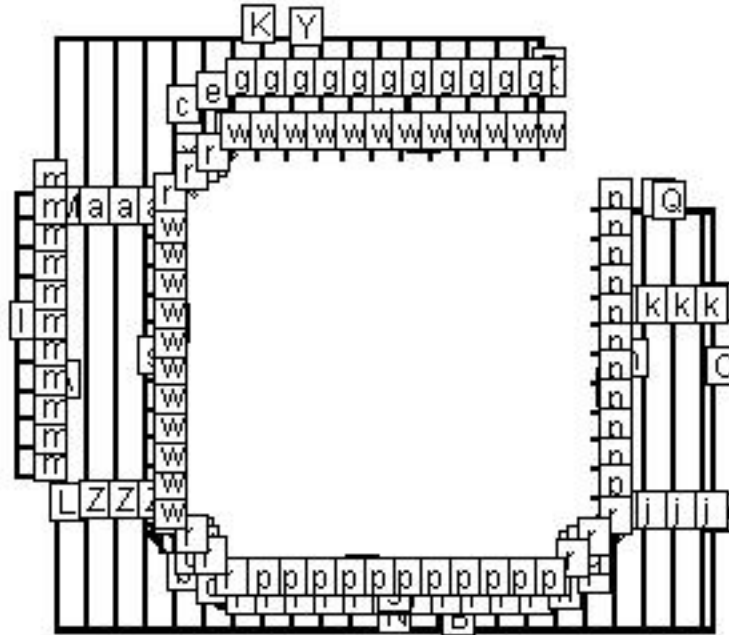
Materials Cut List: Level 1



LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
A	Cladding	4	14' 4"	23, 23	L	Internal Joist	5	9' 9 1/2"	0, 0
B	Cladding	4	4'	23, 23	M	Internal Joist	5	9' 9 3/4"	0, 0
C	Header	1	14' 3 1/4"	0, 0	N	Internal Joist	10	6' 1/2"	0, 0
D	Rim Joist	2	14' 3 1/4"	0, 0	O	Internal Joist	10	13' 6 3/4"	0, 0
E	Header	1	14' 3 1/4"	0, 0	P	Internal Joist	1	17' 7 1/2"	45, 45
F	Header	1	3' 11 1/4"	0, 0	Q	Internal Joist	1	15' 7 1/2"	45, 45
G	Header	2	3' 11 1/4"	0, 0	R	Riser	2	4'	0, 0
H	Header	1	3' 11 1/4"	0, 0	S	Riser	1	4'	0, 0
I	Internal Joist	1	16' 2"	45, 45	T	Riser	1	4'	0, 0
J	Internal Joist	1	9' 2"	45, 45	U	Pre Cut Stringer	3	4' 2"	0, 0
K	Internal Joist	1	9'	45, 45	V	Pre Cut Stringer	2	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	27'	45, 45	a	Internal Joist	3	16' 2 3/4"	0, 0
B	Cladding	1	30'	45, 45	b	Internal Joist	1	3' 11 1/2"	45, 0
C	Cladding	1	19' 2"	45, 45	c	Internal Joist	1	6' 11 1/2"	0, 45
D	Cladding	2	5'	45, 45	d	Internal Joist	1	2' 7 1/2"	45, 0
E	Cladding	1	14' 4 1/4"	45, 23	e	Internal Joist	1	5' 7 1/2"	0, 45
F	Cladding	1	4' 1"	23, 23	f	Internal Joist	11	1' 7 1/4"	0, 0
G	Cladding	2	14' 4 3/4"	23, 23	g	Internal Joist	11	4' 7 1/4"	0, 0
H	Cladding	1	4' 1"	23, 23	h	Internal Joist	1	2' 2 3/4"	45, 0
I	Cladding	1	4' 1"	23, 23	i	Internal Joist	1	3' 6 3/4"	45, 0
J	Cladding	1	14' 4 1/4"	23, 45	j	Internal Joist	4	9' 4 1/2"	0, 0
K	Cladding	1	22' 2"	45, 45	k	Internal Joist	4	9' 4 3/4"	0, 0
L	Rim Joist	1	10' 6 1/4"	0, 0	l	Riser	2	13'	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	16' 4"	0, 0	m	Pre Cut Stringer	11	2' 2 1/2"	0, 0
N	Header	1	29' 7 1/4"	0, 0	n	Riser	1	14' 8 1/2"	23, 0
O	Rim Joist	1	9' 6 1/4"	0, 0	o	Pre Cut Stringer	2	1' 2"	0, 0
P	Rim Joist	1	9' 6"	0, 0	p	Pre Cut Stringer	24	1' 1 1/4"	0, 0
Q	Header	1	4' 7 1/4"	0, 0	q	Riser	1	4' 9"	23, 23
R	Rim Joist	1	15' 6 1/4"	0, 0	r	Pre Cut Stringer	12	1' 1 1/4"	0, 0
S	Header	1	4' 1"	0, 0	s	Riser	2	15' 1"	23, 23
T	Header	1	14' 4 3/4"	0, 0	t	Pre Cut Stringer	2	1' 2"	0, 0
U	Header	2	4' 1"	0, 0	u	Riser	1	4' 9"	23, 23
V	Rim Joist	1	16' 10 1/4"	0, 0	v	Pre Cut Stringer	2	1' 2"	0, 0
W	Header	1	14' 2"	0, 0	w	Pre Cut Stringer	24	1' 1 1/4"	0, 0
X	Rim Joist	1	4' 10 1/4"	0, 0	x	Riser	1	4' 9"	23, 23
Y	Header	1	21' 9 1/4"	0, 0	y	Riser	1	14' 8 1/2"	0, 23
Z	Internal Joist	3	10' 4 1/2"	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
Beam	6	2X10X10 Treated	TREATED
Rim Joist	9	2X8X16 Treated	TREATED
Internal Joist	16	2X8X18 Treated	TREATED
Internal Joist	24	2X8X10 Treated	TREATED
Internal Joist	11	2X8X8 Treated	TREATED
Internal Joist	11	2X8X14 Treated	TREATED
Beam	9	2X10X16 Treated	TREATED
Pre Cut Stringer	5	4-Step Treated Stair Stringer	TREATED
Cladding	23	AZEK Arbor Collection® Rim Joist Covers/Fasica - Silver Oak® - 12'	AZEK
Decking	63	AZEK Vintage Collection® Deck Plank, Square Shouldered - Dark Hickory® - 16'	AZEK
Decking	49	AZEK Vintage Collection® Deck Plank, Square Shouldered - Dark Hickory® - 20'	AZEK
Post	12	4X4X8 Treated	TREATED
Beam	2	2X10X8 Treated	TREATED
Beam	3	2X10X18 Treated	TREATED
Riser	11	AZEK Arbor Collection® Rim Joist Covers/Fasica - Silver Oak® - 12'	AZEK
Hand Rail	4	AZEK 5.5" Top Rail - White - 10'	AZEK
Railing Post	1	6X6X14 Treated	TREATED
Railing Section	12	AZEK 8' Reserve Custom Rail Pack - White - 8'	AZEK
Railing Section	2	TT/AZEK 31" Round Aluminum Stair Baluster - Black - 31"	AZEK
Rim Joist	4	2X8X12 Treated	TREATED
Beam	8	2X10X12 Treated	TREATED
Beam	2	2X10X14 Treated	TREATED
Pre Cut Stringer	83	2-Step Treated Stair Stringer	TREATED
Hand Rail	2	AZEK 5.5" Top Rail - White - 8'	AZEK
Hand Rail	4	AZEK 5.5" Top Rail - White - 12'	AZEK
Railing Post	1	6X6X8 Treated	TREATED
Railing Post	3	6X6X18 Treated	TREATED

**Lumber Materials**

<b>COMPONENT</b>	<b>QTY</b>	<b>DESCRIPTION</b>	<b>WOOD TYPE</b>
Railing Section	1	AZEK 6' Reserve Custom Rail Pack - White - 6'	AZEK
Railing Section	12	TT/AZEK 31" Round Aluminum Baluster - Black - 31"	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
6	1 LB. 10D Hot-Dip Galvanized Nail
2	1LB. 16D Galvanized Common Nail
6	2x6-8" Triple Zinc Right Skewed Joist Hanger SKH26R-TZ
8	2x6-8" Triple Zinc Left Skewed Joist Hanger SKH26L-TZ
3	1 LB. 10D X1 1/2" Nail
94	2x8-10" Triple Zinc Joist Hanger JUS28-TZ
7	5" Triple Zinc Angle Clip MP5-TZ
47	Anchor Bolt AB128
47	4X4 Triple Zinc Deck Post Anchor PA44E-TZ
75	80 L.B. Basic Concrete Mix
2	40 LB. Basic Concrete Mix
1	10 LB. Basic Concrete Mix
36	8" X 48" Concrete Form Tube
752	1/2 Galvanized Flat Washer
16	1/2 Galvanized Hex Nut
376	1/2 X 8" Galvanized Carriage Bolt
3	1LB. 8D Galvanized Common Nail
7	1 LB. 1-1/2" Joist Hanger Nail
166	Triple Zinc Rafter Tie RT7-TZ
82	7" Triple Zinc Angle Clip AC7-TZ
25	2 Pieces of Joist Material Nailed to Each Joist Splice
9	AZEK Cortex - 100 LF Vintage Collection® - Dark Hickory
40	4X4 Triple Zinc Deck Post Tie SDPT7-TZ
1	1 LB. 8X3" Philips Head Stainless Deck Screws
20	AZEK 6" Post Skirt - White
80	3/8 Galvanized Hex Nut
160	3/8 Galvanized Flat Washer
80	3/8 X 8" Galvanized Carriage Bolt
20	AZEK 6" Island Cap - White
20	AZEK 6" x 6" Post Sleeve - White - 9'
1	TT/AZEK Decklites Dimmer
1	TT/AZEK Wire Guide - 60 Packs of 12 ea.
2	TT/AZEK 100' wire 16/2
16	TT/AZEK LED Accent Light - Architectural Bronze
1	TT/AZEK Transformer - 12 Volt 150 W
1	5 LB. 10D X1 1/2" Nail
2	5 LB. 10D Hot-Dip Galvanized Nail
7	7" Triple Zinc Angle Clip AC7-TZ
1	5 LB. 8D Galvanized Nail

**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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