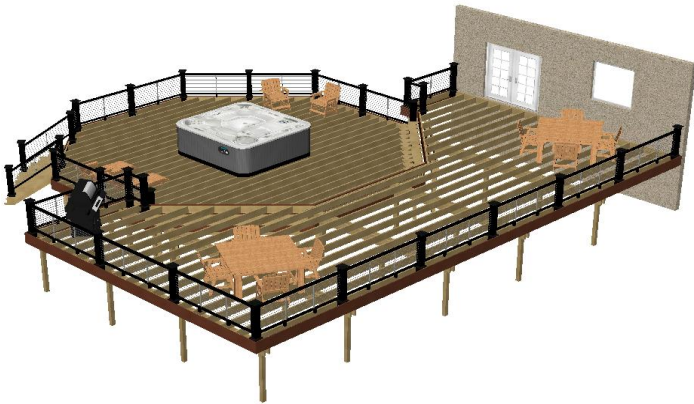


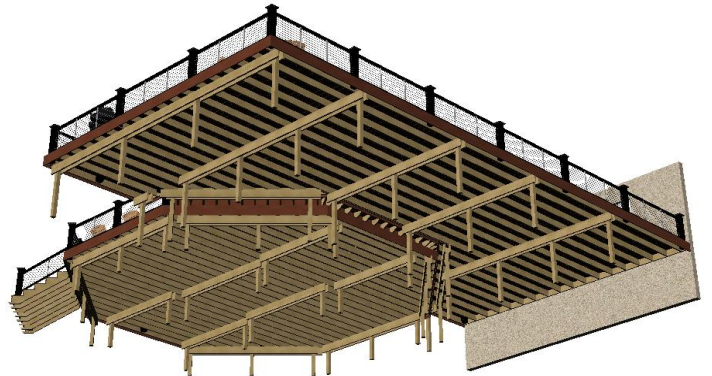


Deck Designer Specification Kit For  
**AZEK**

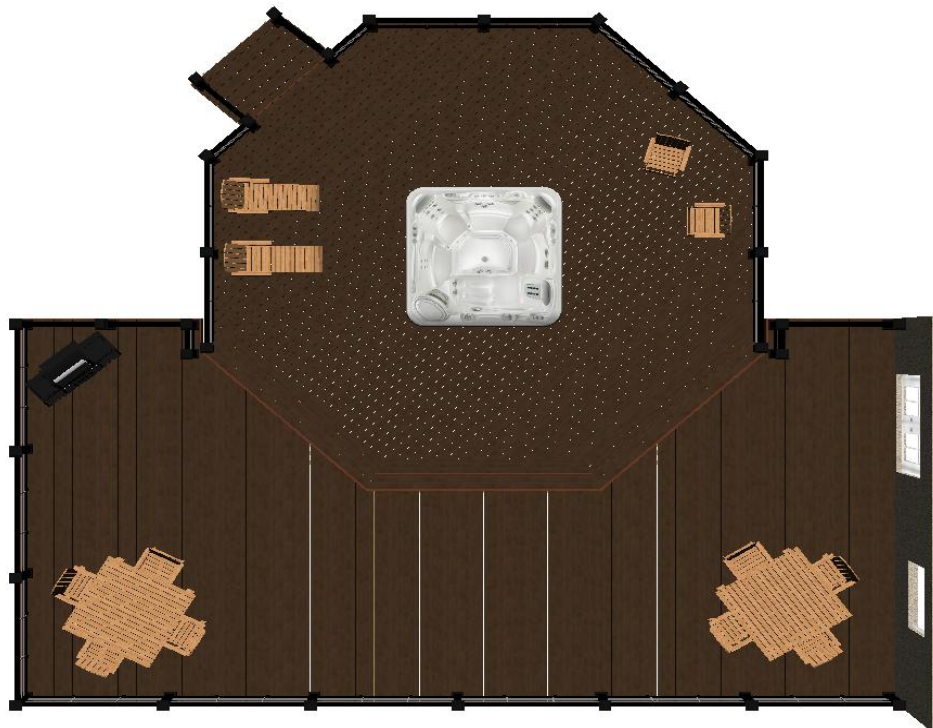
**Deck layout diagram**



Top view without planks

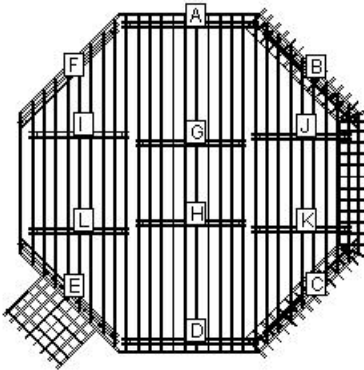


Bottom view with planks



Top view with planks

**Permit Page: Level 1**



**LOAD AND SUPPORT:**

Your deck will support a 35 PSF live load.  
Posts have 36" below ground support.

**DECK AND POST HEIGHT:**

You selected a height of 48" from the top of the decking to the ground level. The top of the deck support posts will therefore be 39" above ground level.

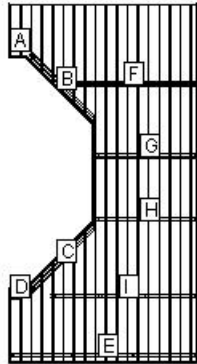
**Joists:**

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

**Stress Analysis: Level 1**

Joist Deflection	157
Joist Bending	61
Joist Shear	118
Joist Compression	118
Beam Deflection	154
Beam Bending	48
Beam Shear	45
Post Stability	162

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 69" from the top of the decking to the ground level. The top of the deck support posts will therefore be 60" above ground level.

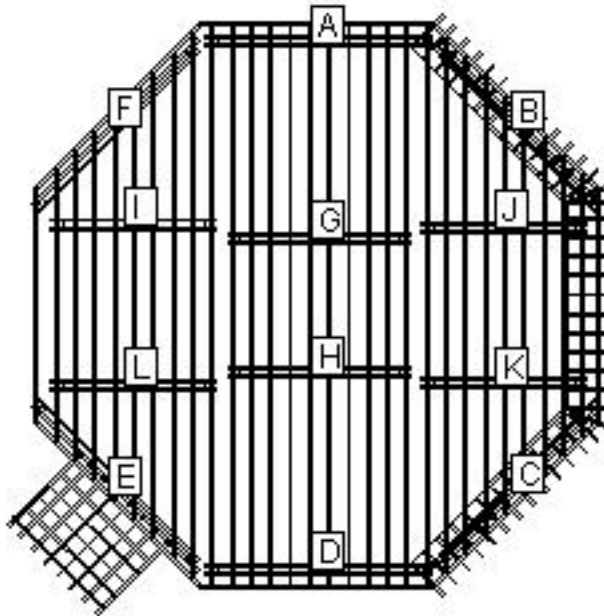
**Joists:**

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

**Stress Analysis: Level 2**

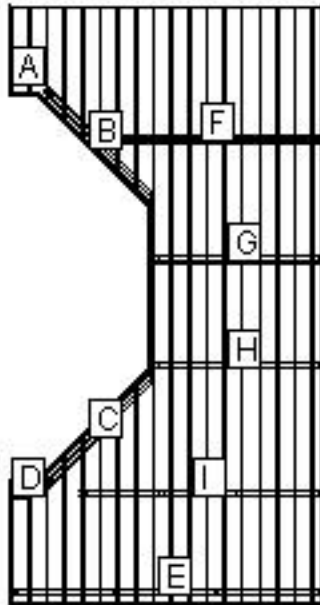
Joist Deflection	135
Joist Bending	50
Joist Shear	92
Joist Compression	92
Beam Deflection	119
Beam Bending	52
Beam Shear	56
Post Stability	122

### Beam Layout Level 1



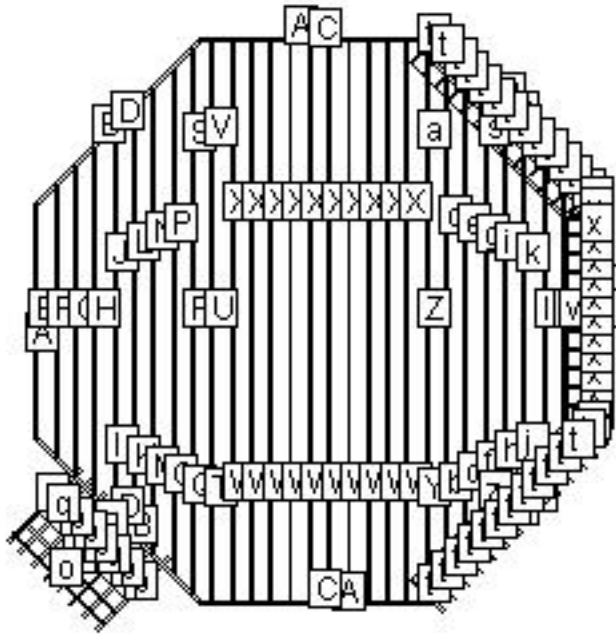
BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	11' 6"	3	5' 3 1/4"
B	11' 7 3/4"	3	5' 2 1/4"
C	11' 7 3/4"	3	5' 2 1/4"
D	11' 6"	3	5' 3 1/4"
E	12' 1/4"	3	5' 4 1/2"
F	12' 1/4"	3	5' 4 3/4"
G	9' 4 3/4"	2	8' 5 1/4"
H	9' 4 3/4"	2	8' 5 1/4"
I	8' 6"	2	7' 6 1/2"
J	8' 6"	2	7' 6 1/2"
K	8' 6"	2	7' 6 1/2"
L	8' 6"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

### Beam Layout Level 2



BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	1' 7"	1	0
B	11' 3"	2	10'
C	11' 3"	2	10'
D	1' 7"	1	0
E	23' 5 1/4"	4	7' 6"
F	17' 1/4"	4	5' 4 1/4"
G	12' 11 1/4"	3	6'
H	12' 11 1/4"	3	6'
I	18' 4 1/4"	4	5' 9 1/2"

Materials Cut List: Level 1



LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
A	Cladding	4	12'	23, 23	a	Internal Joist	1	10' 3 3/4"	0, 0
B	Cladding	4	12' 1/4"	23, 23	b	Internal Joist	1	9' 8"	45, 45
C	Header	2	11' 11 1/4"	0, 0	c	Internal Joist	1	17' 8"	45, 45
D	Header	4	11' 11 1/2"	0, 0	d	Internal Joist	1	8' 8"	45, 45
E	Rim Joist	2	11' 11 1/4"	0, 0	e	Internal Joist	1	16' 8"	45, 45
F	Internal Joist	1	13' 10"	45, 45	f	Internal Joist	1	7' 8"	45, 45
G	Internal Joist	1	15' 10"	45, 45	g	Internal Joist	1	15' 8"	45, 45
H	Internal Joist	1	17' 10"	45, 45	h	Internal Joist	1	6' 9"	45, 45
I	Internal Joist	1	5' 10"	45, 45	i	Internal Joist	1	14' 7"	45, 45
J	Internal Joist	1	14'	45, 45	j	Internal Joist	1	5' 9"	45, 45
K	Internal Joist	1	6' 10"	45, 45	k	Internal Joist	1	13' 7"	45, 45
L	Internal Joist	1	15'	45, 45	l	Internal Joist	1	17' 3 1/2"	45, 45

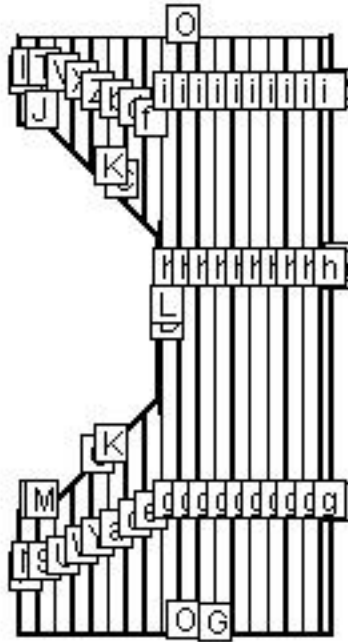
Cut Angles: L=Left, R=Right, F=Front, S=Side

LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
M	Internal Joist	1	7' 10"	45, 45	m	Internal Joist	1	15' 3 1/2"	45, 45
N	Internal Joist	1	16'	45, 45	n	Internal Joist	1	13' 3 1/2"	45, 45
O	Internal Joist	1	8' 10"	45, 45	o	Riser	5	6' 7"	0, 0
P	Internal Joist	1	17'	45, 45	p	Pre Cut Stringer	6	5' 10"	0, 0
Q	Internal Joist	1	9' 10"	45, 45	q	Pre Cut Stringer	2	5' 10"	0, 0
R	Internal Joist	1	8' 3"	45, 45	r	Riser	1	11' 8"	0, 23
S	Internal Joist	1	9' 9"	45, 45	s	Riser	1	11' 4"	0, 23
T	Internal Joist	1	10' 2 1/2"	0, 0	t	Pre Cut Stringer	26	2' 1"	0, 0
U	Internal Joist	1	8' 3"	0, 0	u	Riser	1	11' 3 3/4"	23, 23
V	Internal Joist	1	10' 1 3/4"	0, 0	v	Riser	1	10' 7 1/2"	23, 23
W	Internal Joist	10	10' 10 1/2"	0, 0	w	Pre Cut Stringer	2	2' 2 1/4"	0, 0
X	Internal Joist	10	17' 8 3/4"	0, 0	x	Pre Cut Stringer	12	2' 1"	0, 0
Y	Internal Joist	1	10' 3 1/2"	0, 0	y	Riser	1	11' 8"	23, 0
Z	Internal Joist	1	8'	0, 0	z	Riser	1	11' 4"	23, 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	6' 8"	45, 45	S	Internal Joist	1	8' 11 1/4"	0, 0
B	Cladding	1	2' 1/4"	45, 23	T	Internal Joist	1	6' 3 1/4"	0, 0
C	Cladding	2	12' 1"	23, 23	U	Internal Joist	1	9' 8 3/4"	45, 0
D	Cladding	1	12' 3/4"	23, 23	V	Internal Joist	1	7' 3/4"	0, 45
E	Cladding	1	2' 1/4"	23, 45	W	Internal Joist	1	11' 3/4"	45, 0
F	Cladding	1	9' 4"	45, 45	X	Internal Joist	1	8' 4 3/4"	0, 45
G	Cladding	1	23' 7"	45, 45	Y	Internal Joist	1	12' 4 3/4"	45, 0
H	Cladding	1	45'	45, 45	Z	Internal Joist	1	9' 8 3/4"	0, 45
I	Rim Joist	1	6' 6 1/4"	0, 0	a	Internal Joist	1	13' 8 3/4"	45, 0
J	Header	1	1' 10"	0, 0	b	Internal Joist	1	11' 3/4"	0, 45
K	Header	2	12' 1"	0, 0	c	Internal Joist	1	15' 3/4"	45, 0
L	Rim Joist	1	14' 6 1/4"	0, 0	d	Internal Joist	1	12' 4 3/4"	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' 10"	0, 0	e	Internal Joist	1	16' 4 3/4"	45, 0
N	Rim Joist	1	9' 2 1/4"	0, 0	f	Internal Joist	1	13' 8 3/4"	0, 45
O	Header	2	23' 2 1/4"	0, 0	g	Internal Joist	10	17' 10 1/2"	0, 0
P	Rim Joist	1	17' 11 1/4"	0, 0	h	Internal Joist	10	16' 11"	0, 0
Q	Rim Joist	1	17'	0, 0	i	Internal Joist	10	9' 9 3/4"	0, 0
R	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
Beam	12	2X10X10 Treated	TREATED
Internal Joist	7	2X8X14 Treated	TREATED
Internal Joist	9	2X8X16 Treated	TREATED
Internal Joist	47	2X8X18 Treated	TREATED
Internal Joist	11	2X8X8 Treated	TREATED
Internal Joist	20	2X8X10 Treated	TREATED
Internal Joist	23	2X8X12 Treated	TREATED
Beam	12	2X10X12 Treated	TREATED
Beam	10	2X10X14 Treated	TREATED
Pre Cut Stringer	16	3-Step Treated Stair Stringer	TREATED
Pre Cut Stringer	40	2-Step Treated Stair Stringer	TREATED
Railing Post	1	4X4X14 Treated	TREATED
Railing Post	5	4X4X18 Treated	TREATED
Railing Section	9	AZEK 6' Premier Custom Rail Pack - Black - 6'	AZEK
Railing Section	13	AZEK 8' Premier Custom Rail Pack - Black - 8'	AZEK
Baluster	31	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	19	AZEK Arbor Collection® Rim Joist Covers/Fasica - Redland Rose® - 12'	AZEK
Decking	185	AZEK XLM® Deck Plank, Square Shouldered - Walnut Grove - 20'	AZEK
Post	39	4X4X8 Treated	TREATED
Riser	11	AZEK Arbor Collection® Rim Joist Covers/Fasica - Redland Rose® - 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	AZEK
Pre Cut Stringer	2	4-Step Treated Stair Stringer	TREATED
Beam	5	2X10X8 Treated	TREATED
Beam	2	2X10X16 Treated	TREATED

**Lumber Materials**

<b>COMPONENT</b>	<b>QTY</b>	<b>DESCRIPTION</b>	<b>WOOD TYPE</b>
Beam	2	2X10X18 Treated	TREATED
Railing Post	1	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
2	TT/AZEK CableRail 500' Stainless Steel Cable - Stainless - 500'
3	TT/AZEK CableRail 100' Stainless Steel Cable - Stainless - 100'
2	5 LB. 10D Hot-Dip Galvanized Nail
4	1 LB. 10D Hot-Dip Galvanized Nail
4	1LB. 16D Galvanized Common Nail
22	2x6-8" Triple Zinc Right Skewed Joist Hanger SKH26R-TZ
22	2x6-8" Triple Zinc Left Skewed Joist Hanger SKH26L-TZ
5	1 LB. 10D X1 1/2" Nail
60	2x8-10" Triple Zinc Joist Hanger JUS28-TZ
6	5" Triple Zinc Angle Clip MP5-TZ
54	Anchor Bolt AB128
54	4X4 Triple Zinc Deck Post Anchor PA44E-TZ
86	80 L.B. Basic Concrete Mix
1	40 LB. Basic Concrete Mix
41	8" X 48" Concrete Form Tube
864	1/2 Galvanized Flat Washer
18	1/2 Galvanized Hex Nut
432	1/2 X 8" Galvanized Carriage Bolt
2	5 LB. 8D Galvanized Nail
2	5 LB. 1-1/2" Joist Hanger Nail
1	1 LB. 1-1/2" Joist Hanger Nail
204	Triple Zinc Rafter Tie RT7-TZ
48	7" Triple Zinc Angle Clip AC7-TZ
60	4X4 Triple Zinc Deck Post Tie SDPT7-TZ
1	1 LB. 8X3" Philips Head Stainless Deck Screws
30	AZEK 5 1/2" Post Skirt - Black
120	3/8 Galvanized Hex Nut
240	3/8 Galvanized Flat Washer
120	3/8 X 8" Galvanized Carriage Bolt
30	AZEK 5 1/2" LED Lighted Island Cap - Black
30	AZEK 5.5" x 5.5" Post Sleeve - Black - 39"
1	TT/AZEK CableRail Cable Cutters
1	TT/AZEK CableRail Accessory Kit [Quick-Connect release tool, lacing needle, hanger bolt installation tool] -
18	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
47	2 Pieces of Joist Material Nailed to Each Joist Splice
15	AZEK Cortex - 100 LF XLM® Walnut Grove - Walnut Grove

<b>Qty</b>	<b>Description</b>
48	1/2 X 6" Galvanized Lag Screw
6	7" Triple Zinc Angle Clip AC7-TZ
2	THR128-HDG Threaded Rod
4	DTB-TZ Deck Tie Bracket
1	60 L.B. 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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