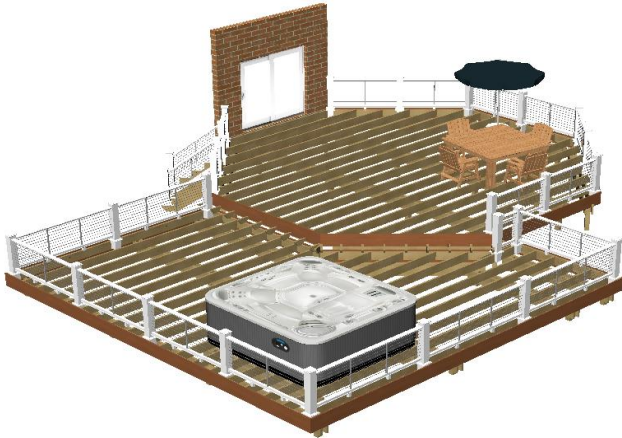


Deck Designer Specification Kit For  
**AZEK**

**Deck layout diagram**



Top view without planks

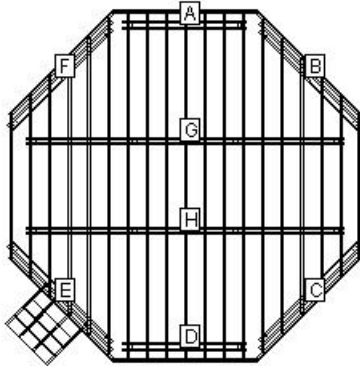


Bottom view with planks



Top view with planks

**Permit Page: Level 1**



**LOAD AND SUPPORT:**

Your deck will support a 59 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.

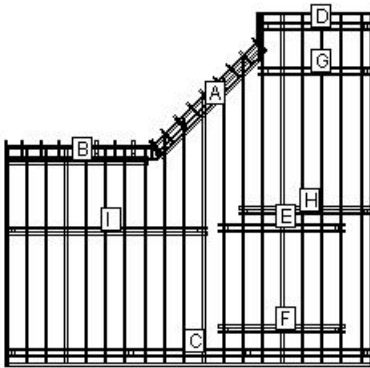
**Joists:**

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

**Stress Analysis: Level 1**

Joist Deflection	286
Joist Bending	83
Joist Shear	115
Joist Compression	115
Beam Deflection	215
Beam Bending	75
Beam Shear	69
Post Stability	130

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.

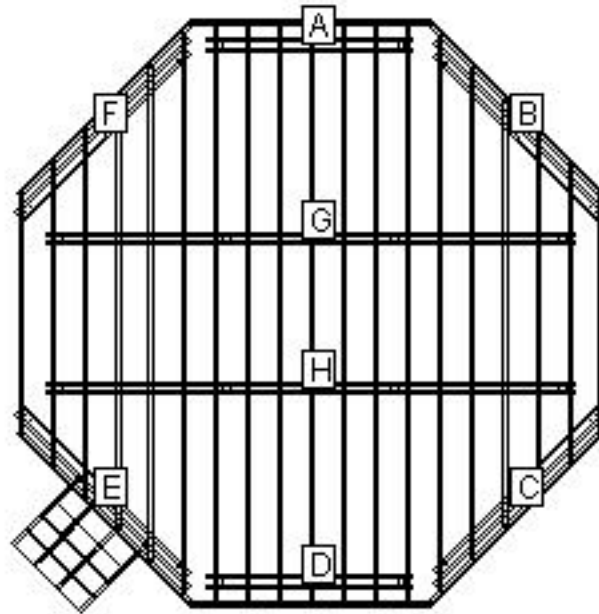
**Joists:**

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

**Stress Analysis: Level 2**

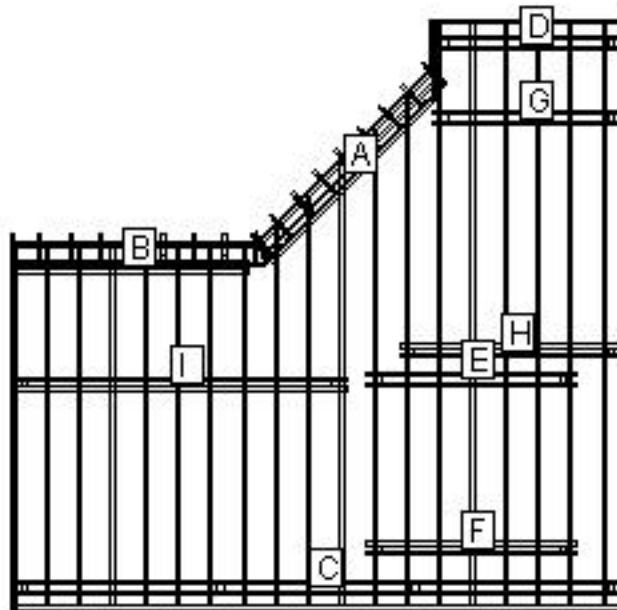
Joist Deflection	143
Joist Bending	52
Joist Shear	94
Joist Compression	94
Beam Deflection	254
Beam Bending	64
Beam Shear	55
Post Stability	124

### Beam Layout Level 1



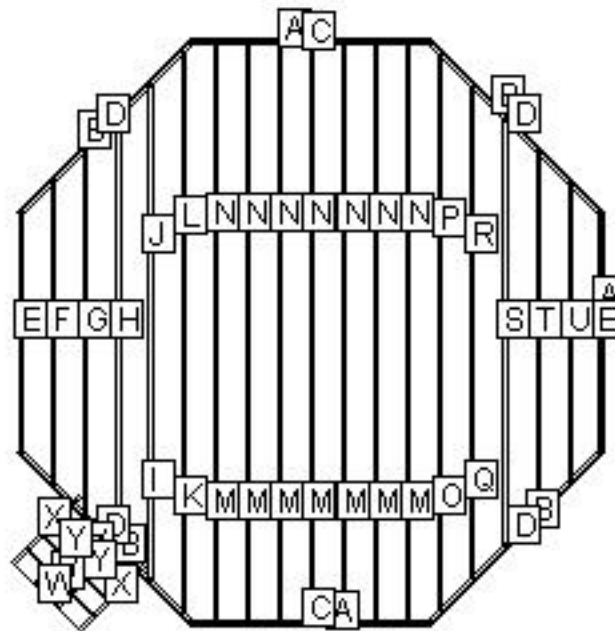
BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	8' 6"	2	7' 6 1/2"
B	10'	2	8' 9"
C	10'	2	8' 9"
D	8' 6"	2	7' 6 1/2"
E	10' 1 1/2"	2	8' 10 1/2"
F	10' 1 1/2"	2	8' 10 1/2"
G	21' 10"	4	6' 11 1/2"
H	21' 10"	4	6' 11 1/2"

### Beam Layout Level 2



BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	9' 3"	2	8'
B	9' 7"	2	8' 7 1/2"
C	24' 10 1/4"	4	7' 11 1/2"
D	7' 9 1/4"	2	6' 9 3/4"
E	8' 6"	2	7' 6 1/2"
F	8' 6"	2	7' 6 1/2"
G	7' 9 1/4"	2	6' 9 3/4"
H	9' 1 1/4"	3	4' 1"
I	13' 7"	3	6' 4"

Materials Cut List: Level 1



LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
A	Cladding	3	10'	23, 23	N	Internal Joist	7	14' 11 3/4"	0, 0
B	Cladding	4	10' 1/4"	23, 23	O	Internal Joist	1	8' 5"	45, 45
C	Header	2	9' 11 1/4"	0, 0	P	Internal Joist	1	14' 7"	45, 45
D	Header	4	9' 11 1/2"	0, 0	Q	Internal Joist	1	7' 1"	45, 45
E	Rim Joist	2	9' 11 1/4"	0, 0	R	Internal Joist	1	13' 3"	45, 45
F	Internal Joist	1	12' 6"	45, 45	S	Internal Joist	1	17' 7 1/2"	45, 45
G	Internal Joist	1	15' 2"	45, 45	T	Internal Joist	1	14' 11 1/2"	45, 45
H	Internal Joist	1	17' 10"	45, 45	U	Internal Joist	1	12' 3 1/2"	45, 45
I	Internal Joist	1	7' 2"	45, 45	V	Riser	3	4'	0, 0
J	Internal Joist	1	13' 4"	45, 45	W	Riser	1	4'	0, 0
K	Internal Joist	1	8' 6"	45, 45	X	Pre Cut Stringer	2	4' 2"	0, 0
L	Internal Joist	1	14' 8"	45, 45	Y	Pre Cut Stringer	2	4' 2"	0, 0

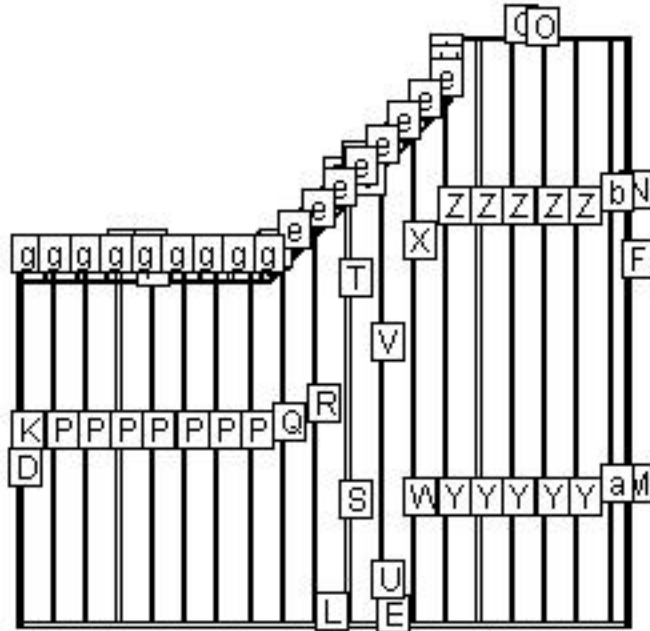
Cut Angles: L=Left, R=Right, F=Front, S=Side

LABEL NAME	QTY	LENGTH	BEVELS	LABEL NAME	QTY	LENGTH	BEVELS
M	7	8' 9 1/2"	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	2' 1/4"	45, 23	R	Internal Joist	1	16' 8 3/4"	45, 0
B	Cladding	1	10' 1"	23, 23	S	Internal Joist	1	9' 1/2"	45, 0
C	Cladding	1	10' 1/4"	23, 45	T	Internal Joist	1	9'	45, 0
D	Cladding	1	15'	45, 45	U	Internal Joist	1	2' 4 1/2"	45, 0
E	Cladding	1	25'	45, 45	V	Internal Joist	1	17'	45, 0
F	Cladding	1	24' 1"	45, 45	W	Internal Joist	1	9' 3 1/2"	45, 0
G	Cladding	1	7' 11"	45, 45	X	Internal Joist	1	11' 5"	45, 0
H	Rim Joist	1	3' 2 1/4"	0, 0	Y	Internal Joist	5	9' 3 1/2"	0, 0
I	Header	1	10' 1"	0, 0	Z	Internal Joist	5	14' 4 3/4"	0, 0
J	Header	1	9' 10"	0, 0	a	Internal Joist	1	10' 4 1/2"	0, 0
K	Rim Joist	1	14' 10 1/4"	0, 0	b	Internal Joist	1	13' 3 3/4"	0, 0
L	Header	1	24' 7 1/4"	0, 0	c	Riser	1	10' 4 3/4"	23, 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	10' 6 1/4"	0, 0	d	Stringer	1	1' 2"	0, 0
N	Rim Joist	1	13' 5"	0, 0	e	Stringer	9	1' 1 1/4"	0, 0
O	Header	1	7' 6 1/4"	0, 0	f	Riser	1	10' 4 1/2"	0, 23
P	Internal Joist	7	14' 7 1/4"	0, 0	g	Stringer	9	1' 1 1/4"	0, 0
Q	Internal Joist	1	15' 4 3/4"	45, 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	6	2X8X14 Treated	TREATED
Internal Joist	25	2X8X16 Treated	TREATED
Internal Joist	7	2X8X18 Treated	TREATED
Internal Joist	6	2X8X8 Treated	TREATED
Internal Joist	27	2X8X10 Treated	TREATED
Beam	20	2X10X10 Treated	TREATED
Beam	4	2X10X12 Treated	TREATED
Beam	8	2X10X8 Treated	TREATED
Beam	4	2X10X16 Treated	TREATED
Pre Cut Stringer	4	4-Step Treated Stair Stringer	TREATED
Railing Post	5	4X4X18 Treated	TREATED
Railing Section	11	AZEK 6' Trademark Custom Rail Pack - White - 6'	AZEK
Railing Section	9	AZEK 8' Trademark Custom Rail Pack - White - 8'	AZEK
Baluster	26	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	16	AZEK Vintage Collection® Rim Joist Covers/Fasica - Cypress® - 12'	AZEK
Decking	112	AZEK XLM® Deck Plank, Square Shouldered - RusticBark - 20'	AZEK
Gusset	4	2X8X12 Treated	TREATED
Post	11	4X4X8 Treated	TREATED
Riser	4	AZEK Vintage Collection® Rim Joist Covers/Fasica - Cypress® - 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
Beam	2	2X10X18 Treated	TREATED
Beam	2	2X10X14 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'
2	5 LB. 10D Hot-Dip Galvanized Nail
3	1LB. 16D Galvanized Common Nail
10	2x6-8" Triple Zinc Right Skewed Joist Hanger SKH26R-TZ
15	2x6-8" Triple Zinc Left Skewed Joist Hanger SKH26L-TZ
3	1 LB. 10D X1 1/2" Nail
45	2x8-10" Triple Zinc Joist Hanger JUS28-TZ
5	5" Triple Zinc Angle Clip MP5-TZ
7	1LB. 8D Galvanized Common Nail
6	1 LB. 1-1/2" Joist Hanger Nail
152	Triple Zinc Rafter Tie RT7-TZ
42	Anchor Bolt AB128
42	4X4 Triple Zinc Deck Post Anchor PA44E-TZ
67	80 L.B. Basic Concrete Mix
3	10 LB. Basic Concrete Mix
32	8" X 48" Concrete Form Tube
672	1/2 Galvanized Flat Washer
14	1/2 Galvanized Hex Nut
336	1/2 X 8" Galvanized Carriage Bolt
23	7" Triple Zinc Angle Clip AC7-TZ
54	4X4 Triple Zinc Deck Post Tie SDPT7-TZ
1	1 LB. 8X3" Philips Head Stainless Deck Screws
27	AZEK 5 1/2" Post Skirt - White
108	3/8 Galvanized Hex Nut
216	3/8 Galvanized Flat Washer
108	3/8 X 8" Galvanized Carriage Bolt
27	AZEK 5 1/2" Pyramid Cap - White
27	AZEK 5.5" x 5.5" Post Sleeve - White - 39"
1	TT/AZEK CableRail Cable Cutters
1	TT/AZEK CableRail Accessory Kit [Quick-Connect release tool, lacing needle, hanger bolt installation tool] -
17	TT/AZEK CableRail 36" Hardware Kit [9 Quick-Connect fittings, 9 Quick Connect Swivel fittings, 18 hanger bolts, 9 lock nuts] - Stainless
22	TT/AZEK LED In Deck Light (8 Packs of 4 per Unit) - Architectural Bronze
1	TT/AZEK Decklites Dimmer
2	TT/AZEK 100' wire 16/2
1	TT/AZEK Transformer - 12 Volt 150 W
1	TT/AZEK CableRail Protector Sleeves [Pack of 20] - Stainless
21	2 Pieces of Joist Material Nailed to Each Joist Splice

<b>Qty</b>	<b>Description</b>
8	AZEK Cortex - 100 LF XLM® RusticBark - RusticBark
1	TT/AZEK CableRail 100' Stainless Steel Cable - Stainless - 100'
1	1 LB. 10D Hot-Dip Galvanized Nail
5	7" Triple Zinc Angle Clip AC7-TZ
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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