



Deck Designer Specification Kit For  
**AZEK**

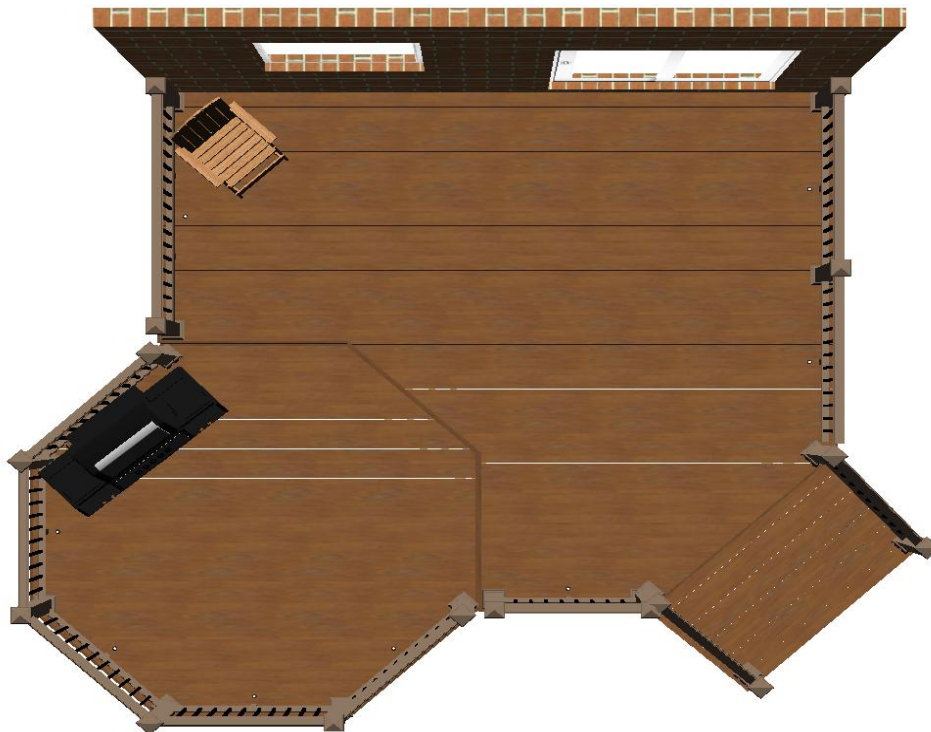
**Deck layout diagram**



Top view without planks

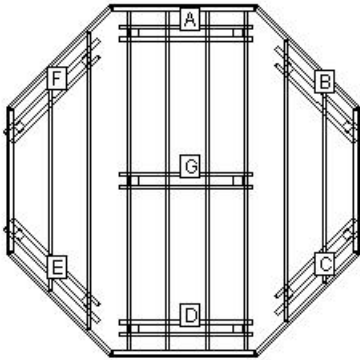


Bottom view with planks



Top view with planks

Permit Page: Level 1



**LOAD AND SUPPORT:**

Your deck will support a 65 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.

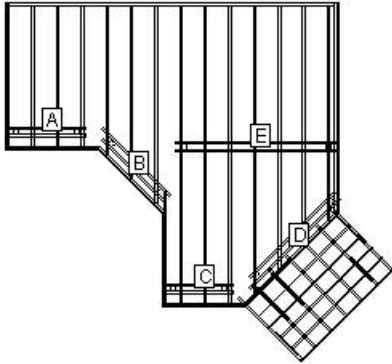
**Joists:**

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

**Stress Analysis: Level 1**

Joist Deflection	243
Joist Bending	75
Joist Shear	109
Joist Compression	109
Beam Deflection	8424
Beam Bending	475
Beam Shear	269
Post Stability	567

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.

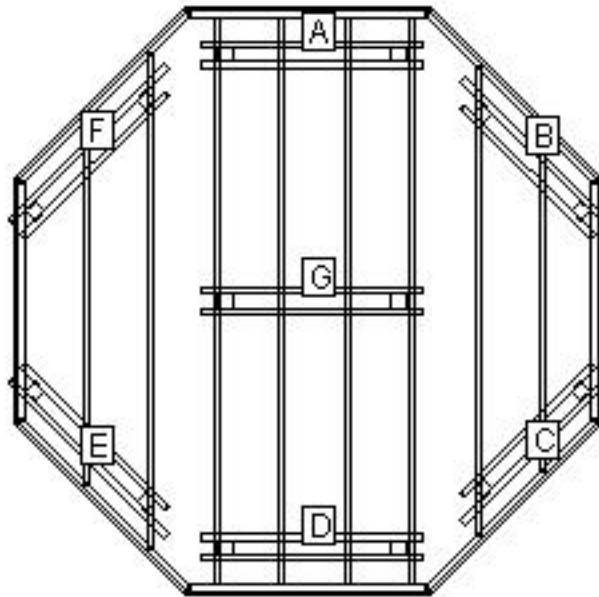
**Joists:**

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

**Stress Analysis: Level 2**

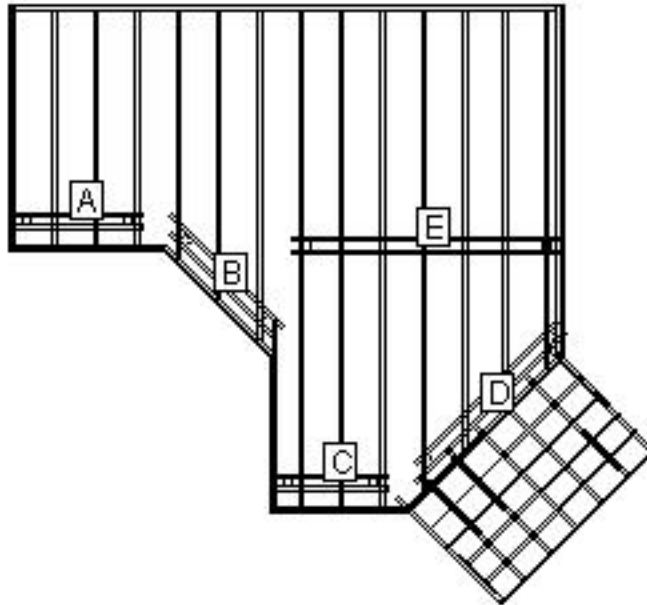
Joist Deflection	132
Joist Bending	50
Joist Shear	92
Joist Compression	92
Beam Deflection	234
Beam Bending	63
Beam Shear	55
Post Stability	192

### Beam Layout Level 1



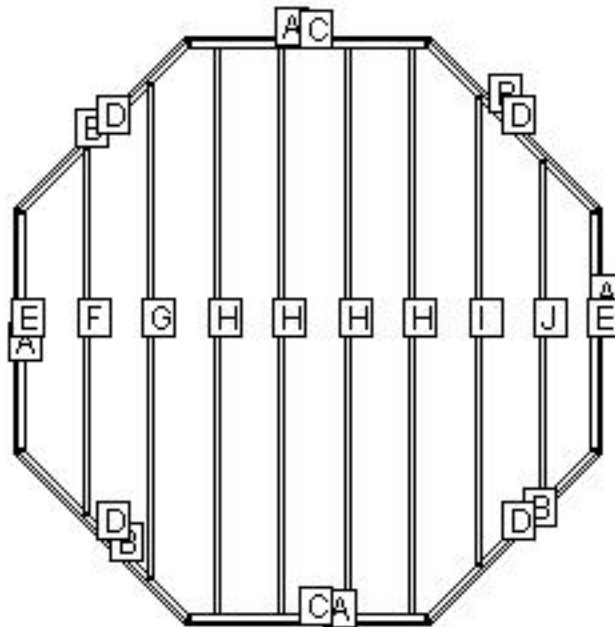
BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	4' 6"	2	3' 6 1/2"
B	4' 1 1/4"	2	2' 10 1/4"
C	4' 1 1/4"	2	2' 10 1/4"
D	4' 6"	2	3' 6 1/2"
E	4' 5 3/4"	2	3' 2 3/4"
F	4' 5 3/4"	2	3' 2 3/4"
G	4' 6"	2	3' 6 1/2"

### Beam Layout Level 2



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

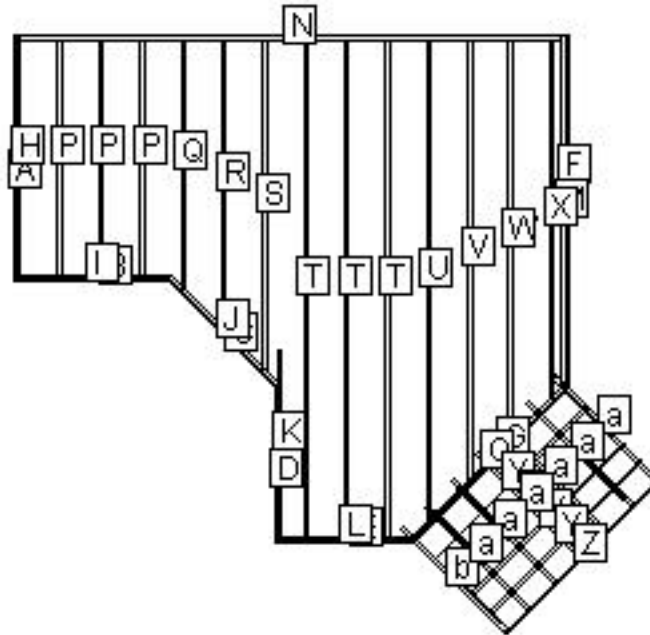
Materials Cut List: Level 1



LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
A	Cladding	4	5'	23, 23	F	Internal Joist	1	7' 6"	45, 45
B	Cladding	4	4' 11 1/2"	23, 23	G	Internal Joist	1	10' 2"	45, 45
C	Header	2	4' 11 1/4"	0, 0	H	Internal Joist	4	11' 7 1/4"	0, 0
D	Header	4	4' 10 3/4"	0, 0	I	Internal Joist	1	9' 7 1/2"	45, 45
E	Rim Joist	2	4' 11 1/4"	0, 0	J	Internal Joist	1	6' 11 1/2"	45, 45

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	8'	45, 45	O	Header	1	7' 1/4"	0, 0
B	Cladding	1	5' 1/4"	45, 23	P	Internal Joist	3	7' 7 1/4"	0, 0
C	Cladding	1	5' 1/4"	23, 23	Q	Internal Joist	1	8' 3/4"	0, 45
D	Cladding	1	5' 1/4"	23, 45	R	Internal Joist	1	9' 4 3/4"	0, 45
E	Cladding	1	4' 6"	45, 23	S	Internal Joist	1	10' 8 3/4"	0, 45
F	Cladding	1	11' 6"	23, 45	T	Internal Joist	3	16' 1 1/4"	0, 0
G	Cladding	1	7' 1"	23, 23	U	Internal Joist	1	15' 7 1/2"	0, 45
H	Rim Joist	1	7' 10 1/4"	0, 0	V	Internal Joist	1	14' 3 1/2"	0, 45
I	Header	1	4' 10"	0, 0	W	Internal Joist	1	12' 11 1/2"	0, 45
J	Header	1	5'	0, 0	X	Internal Joist	1	11' 7 1/2"	0, 45
K	Rim Joist	1	6' 2 1/4"	0, 0	Y	Riser	4	7' 1"	0, 0
L	Header	1	4' 3 1/4"	0, 0	Z	Riser	1	7' 1"	0, 0

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



<b>LABEL</b>	<b>NAME</b>	<b>QTY</b>	<b>LENGTH</b>	<b>BEVELS</b>	<b>LABEL</b>	<b>NAME</b>	<b>QTY</b>	<b>LENGTH</b>	<b>BEVELS</b>
M	Rim Joist	1	11' 5"	0, 0	a	Pre Cut Stringer	6	5' 1 1/2"	0, 0
N	Header	1	17' 7 1/4"	0, 0	b	Pre Cut Stringer	1	5' 1 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.

<b>Lumber Materials</b>			
<b>COMPONENT</b>	<b>QTY</b>	<b>DESCRIPTION</b>	<b>WOOD TYPE</b>
Internal Joist	7	2X8X12 Treated	TREATED
Railing Post	1	4X4X8 Treated	TREATED
Railing Post	3	4X4X18 Treated	TREATED
Railing Section	10	AZEK 6' Premier Custom Rail Pack - Brownstone - 6'	AZEK
Railing Section	9	TT/AZEK 31" Square Aluminum Baluster - Black - 31"	AZEK
Cladding	9	AZEK Arbor Collection® Rim Joist Covers/Fasica - Morado® - 12'	AZEK
Decking	16	AZEK XLM® Deck Plank, Grooved - Harvest Bronze - 12'	AZEK
Decking	20	AZEK XLM® Deck Plank, Grooved - Harvest Bronze - 16'	AZEK
Header	4	2X8X16 Treated	TREATED
Rim Joist	2	2X8X10 Treated	TREATED
Internal Joist	7	2X8X8 Treated	TREATED
Internal Joist	7	2X8X18 Treated	TREATED
Beam	3	2X10X10 Treated	TREATED
Beam	4	2X10X18 Treated	TREATED
Post	10	4X4X8 Treated	TREATED
Internal Joist	1	2X8X14 Treated	TREATED
Beam	3	2X10X8 Treated	TREATED
Pre Cut Stringer	7	5-Step Treated Stair Stringer	TREATED
Railing Section	1	AZEK 8' Premier Custom Rail Pack - Brownstone - 8'	AZEK
Decking	17	AZEK XLM® Deck Plank, Grooved - Harvest Bronze - 20'	AZEK
Riser	5	AZEK Arbor Collection® Rim Joist Covers/Fasica - Morado® - 12'	AZEK
Railing Section	2	TT/AZEK 31" Square Aluminum Stair Baluster - Black - 31"	AZEK

To find an AZEK and/or TimberTech 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
7	2x6-8" Triple Zinc Right Skewed Joist Hanger SKH26R-TZ
8	2x6-8" Triple Zinc Left Skewed Joist Hanger SKH26L-TZ
2	1 LB. 10D X1 1/2" Nail
27	2x8-10" Triple Zinc Joist Hanger JUS28-TZ
6	5" Triple Zinc Angle Clip MP5-TZ
3	1LB. 8D Galvanized Common Nail
2	1 LB. 1-1/2" Joist Hanger Nail
46	Triple Zinc Rafter Tie RT7-TZ
24	Anchor Bolt AB128
24	4X4 Triple Zinc Deck Post Anchor PA44E-TZ
38	80 L.B. Basic Concrete Mix
1	40 LB. Basic Concrete Mix
3	10 LB. Basic Concrete Mix
18	8" X 48" Concrete Form Tube
384	1/2 Galvanized Flat Washer
8	1/2 Galvanized Hex Nut
192	1/2 X 8" Galvanized Carriage Bolt
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 - Brownstone
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 - Brownstone
16	AZEK 5.5" x 5.5" Post Sleeve - Brownstone - 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
4	TimberTech CONCEALoc Hidden Fastener - Unit = 8 retail cartons @ 100 sq.ft. coverage each (175 CONCEALoc fasteners, 184 Screws and drive bit) - Brown
36	1/2 X 6" Galvanized Lag Screw
1	AZEK Cortex - 100 LF XLM® Harvest Bronze - Harvest Bronze
4	7" Triple Zinc Angle Clip AC7-TZ
2	THR128-HDG Threaded Rod
4	DTB-TZ Deck Tie Bracket
7	7" Triple Zinc Angle Clip AC7-TZ

**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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