

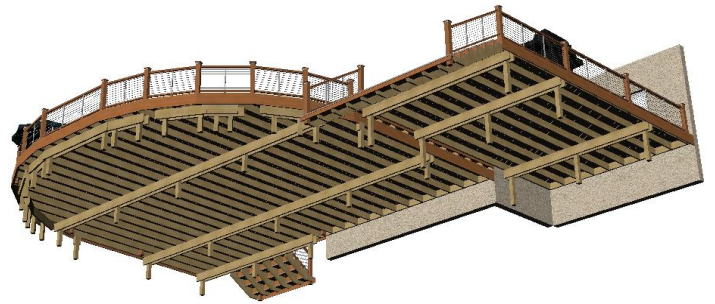


Deck Designer Specification Kit For  
**TimberTech**

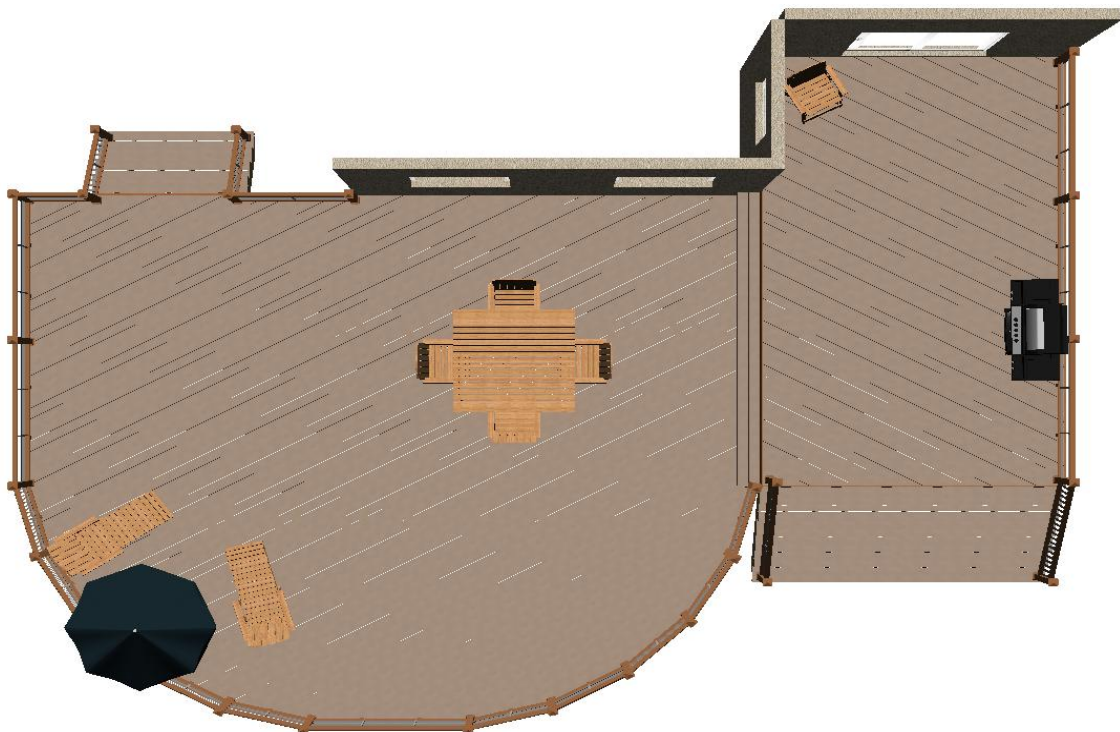
**Deck layout diagram**



Top view without planks

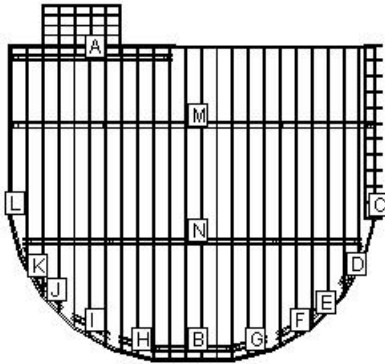


Bottom view with planks



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.

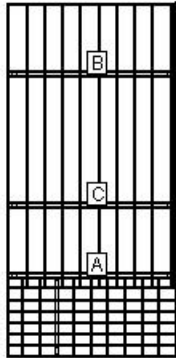
**Joists:**

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

**Stress Analysis: Level 1**

Joist Deflection	136
Joist Bending	50
Joist Shear	92
Joist Compression	92
Beam Deflection	268
Beam Bending	65
Beam Shear	53
Post Stability	99

**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 50" from the top of the decking to the ground level. The top of the deck support posts will therefore be 41" above ground level.

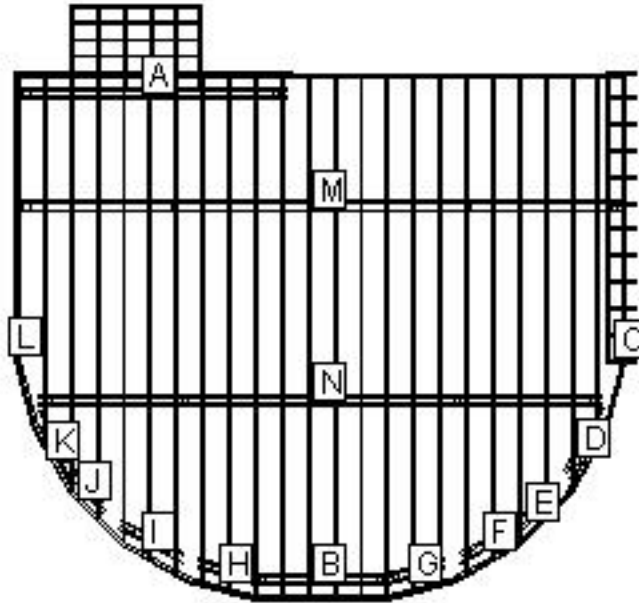
**Joists:**

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

**Stress Analysis: Level 2**

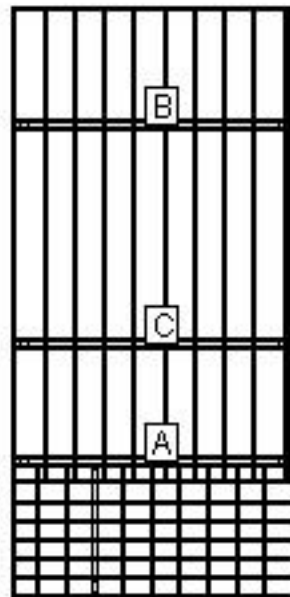
Joist Deflection	136
Joist Bending	50
Joist Shear	92
Joist Compression	92
Beam Deflection	109
Beam Bending	62
Beam Shear	76
Post Stability	150

### Beam Layout Level 1



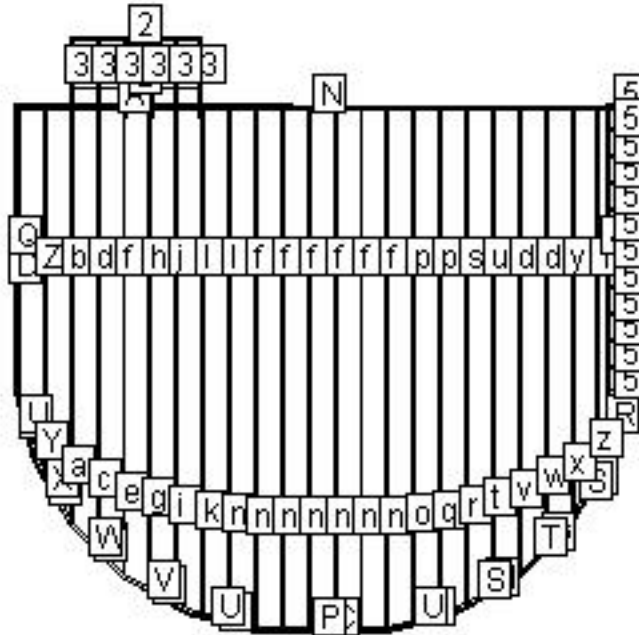
BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	13' 7"	3	6' 4"
B	7'	2	6' 1/4"
C	3 1/2"	1	0
D	3' 2 1/4"	2	1' 8 3/4"
E	2' 2"	2	11"
F	3' 7"	2	2' 5 1/4"
G	3' 1/4"	2	2'
H	3'	2	1' 11 1/2"
I	3' 7 3/4"	2	2' 6 1/4"
J	2' 6 3/4"	2	1' 3 3/4"
K	3' 1/2"	2	1' 6 3/4"
L	3 1/2"	1	0
M	30' 8 1/4"	5	7' 5 1/4"
N	28' 6"	5	6' 10 3/4"

**Beam Layout Level 2**



BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	12' 5 1/4"	2	11' 5 3/4"
B	12' 5 1/4"	3	5' 9"
C	12' 5 1/4"	3	5' 9"

Materials Cut List: Level 1



LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
A	Cladding	1	13' 11 1/2"	0, 45	d	Internal Joist	3	16' 3 1/2"	0, 45
B	Cladding	1	14' 7"	7, 45	e	Internal Joist	1	7' 2 1/2"	0, 0
C	Cladding	1	6' 9"	7, 7	f	Internal Joist	7	16' 3 3/4"	0, 0
D	Cladding	1	14' 6"	45, 7	g	Internal Joist	1	7' 11 3/4"	0, 29
E	Cladding	1	3' 7 1/2"	8, 7	h	Internal Joist	1	16' 3 1/2"	0, 29
F	Cladding	1	3' 8"	7, 8	i	Internal Joist	1	8' 8 3/4"	0, 29
G	Cladding	1	3' 8"	7, 7	j	Internal Joist	1	16' 3 3/4"	0, 29
H	Cladding	1	3' 8"	8, 7	k	Internal Joist	1	9' 2 1/2"	0, 15
I	Cladding	1	3' 7 1/2"	7, 8	l	Internal Joist	2	16' 3 3/4"	0, 15
J	Cladding	2	3' 7 1/2"	7, 7	m	Internal Joist	1	9' 6 3/4"	0, 15
K	Cladding	1	3' 9"	8, 7	n	Internal Joist	6	9' 10 1/2"	0, 0
L	Cladding	1	3' 8"	8, 8	o	Internal Joist	1	9' 6 3/4"	0, 15

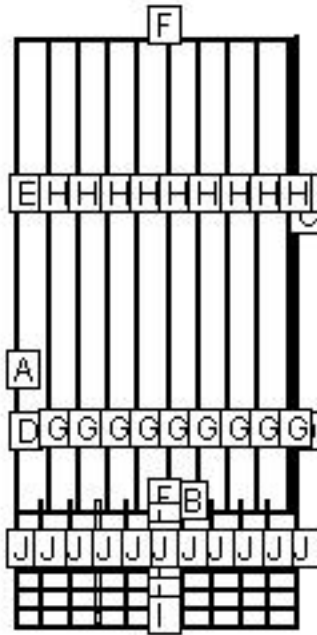
Cut Angles: L=Left, R=Right, F=Front, S=Side

LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
M	Cladding	1	3' 9"	7, 8	p	Internal Joist	2	16' 3 1/2"	0, 15
N	Header	1	30' 5 1/4"	0, 0	q	Internal Joist	1	9' 2 1/2"	0, 15
O	Rim Joist	1	14' 6"	0, 0	r	Internal Joist	1	8' 8 1/2"	0, 30
P	Header	1	6' 9"	0, 0	s	Internal Joist	1	16' 3 3/4"	0, 30
Q	Rim Joist	1	14' 5"	0, 0	t	Internal Joist	1	7' 11 1/4"	0, 30
R	Header	1	3' 7 1/4"	0, 0	u	Internal Joist	1	16' 3 1/2"	0, 30
S	Header	2	3' 7 3/4"	0, 0	v	Internal Joist	1	7' 2"	0, 45
T	Header	1	3' 7 1/2"	0, 0	w	Internal Joist	1	5' 10"	0, 45
U	Header	3	3' 7 1/4"	0, 0	x	Internal Joist	1	4' 4 1/2"	0, 60
V	Header	1	3' 8 1/2"	0, 0	y	Internal Joist	1	16' 3 3/4"	0, 60
W	Header	1	3' 7 1/2"	0, 0	z	Internal Joist	1	2' 1"	0, 60
X	Header	1	3' 8 1/2"	0, 0	1	Internal Joist	1	16' 3 1/2"	0, 60
Y	Internal Joist	1	2' 2 1/4"	0, 61	2	Riser	4	6' 6 3/4"	0, 0
Z	Internal Joist	1	16' 3 1/2"	0, 61	3	Pre Cut Stringer	6	4' 2"	0, 0
a	Internal Joist	1	4' 6 1/2"	0, 61	4	Riser	1	14' 7"	0, 0
b	Internal Joist	1	16' 3 3/4"	0, 61	5	Pre Cut Stringer	12	1' 1 1/4"	0, 0
c	Internal Joist	1	5' 11"	0, 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	14' 7"	0, 45	F	Header	2	12' 2 1/4"	0, 0
B	Cladding	1	12' 7"	45, 45	G	Internal Joist	9	5' 11 1/2"	0, 0
C	Cladding	1	21' 3"	45, 45	H	Internal Joist	9	14' 10 3/4"	0, 0
D	Rim Joist	2	6' 1 1/4"	0, 0	I	Riser	6	12' 7"	0, 0
E	Rim Joist	2	15'	0, 0	J	Pre Cut Stringer	11	6' 1 1/4"	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
Rim Joist	14	2X8X16 Treated	TREATED
Internal Joist	23	2X8X8 Treated	TREATED
Internal Joist	26	2X8X18 Treated	TREATED
Internal Joist	12	2X8X10 Treated	TREATED
Beam	9	2X10X14 Treated	TREATED
Beam	2	2X10X8 Treated	TREATED
Beam	8	2X10X16 Treated	TREATED
Pre Cut Stringer	6	4-Step Treated Stair Stringer	TREATED
Pre Cut Stringer	12	2-Step Treated Stair Stringer	TREATED
Railing Post	1	4X4X14 Treated	TREATED
Railing Post	4	4X4X18 Treated	TREATED
Railing Section	1	TimberTech 6' RadianceRail Custom Rail Pack - Mountain Cedar - 6'	TIMBERTECH
Railing Section	14	TimberTech 8' RadianceRail Custom Rail Pack - Mountain Cedar - 8'	TIMBERTECH
Baluster	29	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	TIMBERTECH
Cladding	13	TimberTech Earthwood Evolutions® Tropical Fascia Board - Pacific Teak - 12'	TIMBERTECH
Decking	62	TimberTech Earthwood Evolutions® Terrain Collection Deck Plank, Square Shouldered - Sandy Birch - 16'	TIMBERTECH
Decking	77	TimberTech Earthwood Evolutions® Terrain Collection Deck Plank, Square Shouldered - Sandy Birch - 20'	TIMBERTECH
Post	15	4X4X8 Treated	TREATED
Beam	2	2X10X18 Treated	TREATED
Riser	12	TimberTech Earthwood Evolutions® Tropical Riser Board - Pacific Teak - 12'	TIMBERTECH
Railing Section	5	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	TIMBERTECH
Pre Cut Stringer	22	3-Step Treated Stair Stringer	TREATED

**Lumber Materials**

<b>COMPONENT</b>	<b>QTY</b>	<b>DESCRIPTION</b>	<b>WOOD TYPE</b>
Railing Post	1	4X4X8 Treated	TREATED
Header	2	2X8X14 Treated	TREATED
Gusset	1	2X8X12 Treated	TREATED

To find an AZEK and/or TimberTech Dealer or Contractor in your area, please go to [www.timbertech.com](http://www.timbertech.com)

### Other Materials

Qty	Description
1	TT/AZEK CableRail 500' Stainless Steel Cable - Stainless - 500'
4	TT/AZEK CableRail 100' Stainless Steel Cable - Stainless - 100'
4	1 LB. 10D X1 1/2" Nail
1	5 LB. 10D Hot-Dip Galvanized Nail
5	1 LB. 10D Hot-Dip Galvanized Nail
46	2x8-10" Triple Zinc Joist Hanger JUS28-TZ
24	5" Triple Zinc Angle Clip MP5-TZ
1	1LB. 16D Galvanized Common Nail
2	2x6-8" Triple Zinc Right Skewed Joist Hanger SKH26R-TZ
2	2x6-8" Triple Zinc Left Skewed Joist Hanger SKH26L-TZ
7	7" Triple Zinc Angle Clip AC7-TZ
1	5" Triple Zinc Angle Clip MP5-TZ
4	THR128-HDG Threaded Rod
8	DTB-TZ Deck Tie Bracket
5	1LB. 8D Galvanized Common Nail
1	5 LB. 1-1/2" Joist Hanger Nail
116	Triple Zinc Rafter Tie RT7-TZ
41	Anchor Bolt AB128
41	4X4 Triple Zinc Deck Post Anchor PA44E-TZ
65	80 L.B. Basic Concrete Mix
4	10 LB. Basic Concrete Mix
31	8" X 48" Concrete Form Tube
656	1/2 Galvanized Flat Washer
14	1/2 Galvanized Hex Nut
328	1/2 X 8" Galvanized Carriage Bolt
29	7" Triple Zinc Angle Clip AC7-TZ
52	4X4 Triple Zinc Deck Post Tie SDPT7-TZ
1	1 LB. 8X3" Philips Head Stainless Deck Screws
26	TimberTech 5" Post Skirt - Mountain Cedar
104	3/8 Galvanized Hex Nut
208	3/8 Galvanized Flat Washer
104	3/8 X 8" Galvanized Carriage Bolt
26	TimberTech 5" x 5" Post Sleeve - Mountain Cedar - 42"
26	TimberTech 5" LED Post Cap Light
26	TimberTech 5" Post Cap - Mountain Cedar
1	TT/AZEK CableRail Cable Cutters
1	TT/AZEK CableRail Accessory Kit [Quick-Connect release tool, lacing needle, hanger bolt installation tool] -

Qty	Description
23	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 Wire Guide - 60 Packs of 12 ea.
3	TT/AZEK 100' wire 16/2
1	TT/AZEK Decklites Dimmer
1	TT/AZEK Transformer - 12 Volt 150 W
1	TT/AZEK CableRail Protector Sleeves [Pack of 20] - Stainless
33	2 Pieces of Joist Material Nailed to Each Joist Splice
60	TT/AZEK LED Riser Light - Architectural Bronze
6	TimberTech TOPLoc 100 Sq. Ft. Pack Cedar - Cedar
3	TimberTech TOPLoc Fascia Pack Teak - Teak
74	1/2 X 6" Galvanized Lag Screw
3	1 LB. 1-1/2" Joist Hanger Nail
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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