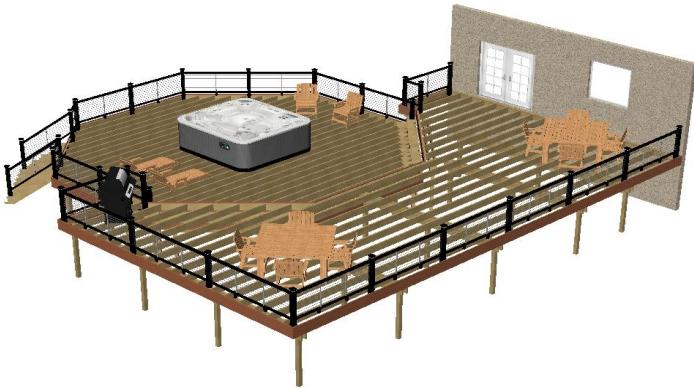


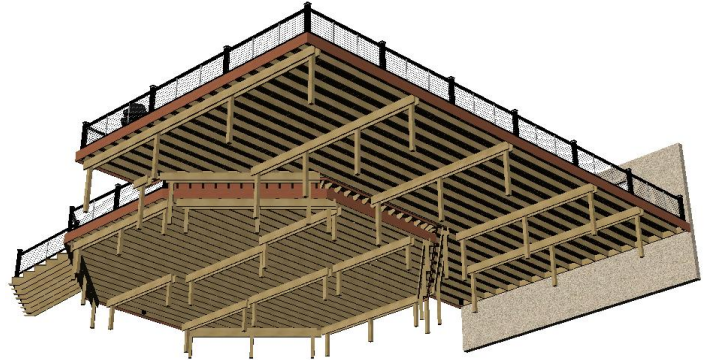


Deck Designer Specification Kit For  
**TimberTech**

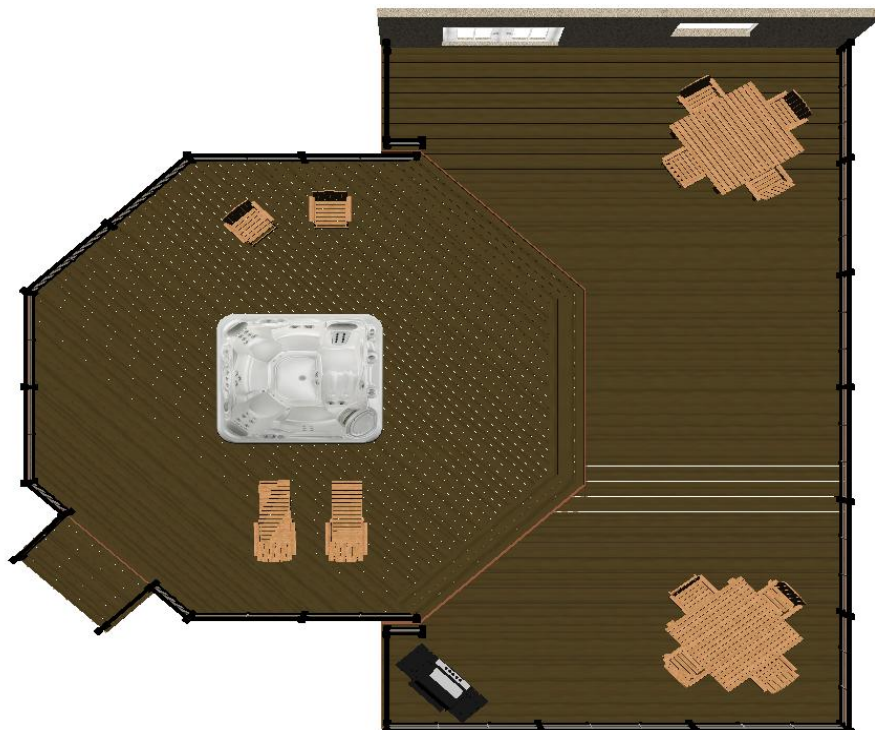
## Deck layout diagram



Top view without planks

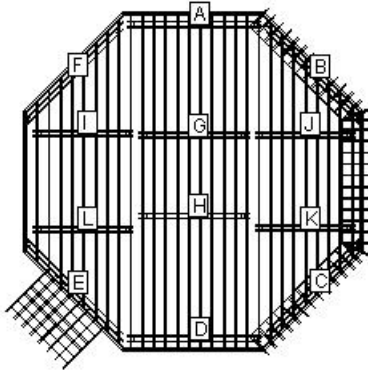


Bottom view with planks



Top view with planks

## Permit Page: Level 1



### LOAD AND SUPPORT:

Your deck will support a 34 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	131
Joist Bending	54
Joist Shear	112
Joist Compression	112
Beam Deflection	146
Beam Bending	46
Beam Shear	44
Post Stability	156

## 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.

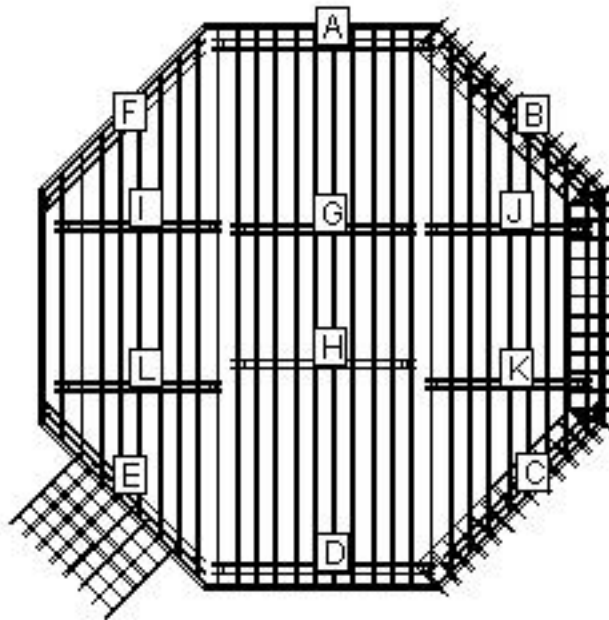
### Joists:

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

## Stress Analysis: Level 2

Joist Deflection	136
Joist Bending	50
Joist Shear	92
Joist Compression	92
Beam Deflection	121
Beam Bending	53
Beam Shear	57
Post Stability	106

### Beam Layout Level 1



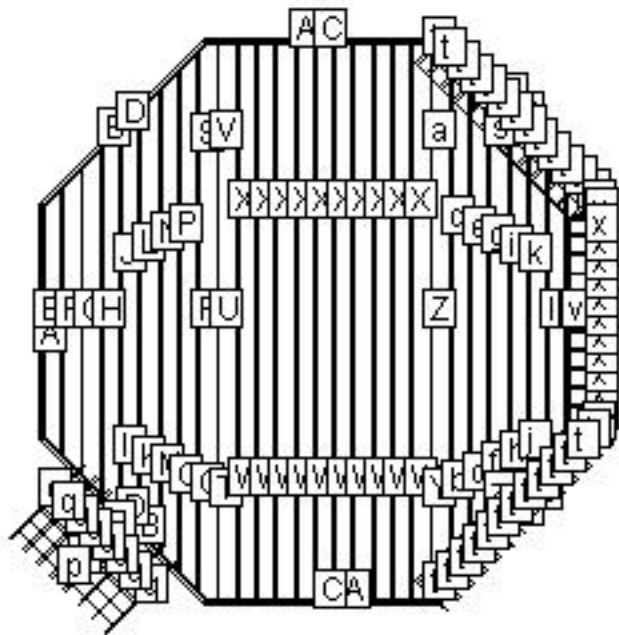
BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	11' 6"	3	5' 3 1/4"
B	11' 7 3/4"	3	5' 2 1/4"
C	11' 7 3/4"	3	5' 2 1/4"
D	11' 6"	3	5' 3 1/4"
E	12' 1/4"	3	5' 4 1/2"
F	12' 1/4"	3	5' 4 3/4"
G	9' 5 1/2"	2	8' 6"
H	9' 5 1/2"	2	8' 6"
I	8' 6"	2	7' 6 1/2"
J	8' 6"	2	7' 6 1/2"
K	8' 6"	2	7' 6 1/2"
L	8' 6"	2	7' 6 1/2"

## 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' 10 1/4"	4	7' 7 1/2"
F	17' 5 1/4"	3	8' 3"
G	13' 5 1/4"	3	6' 3"
H	13' 4 1/4"	3	6' 2 1/2"
I	16' 1 1/4"	4	5' 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

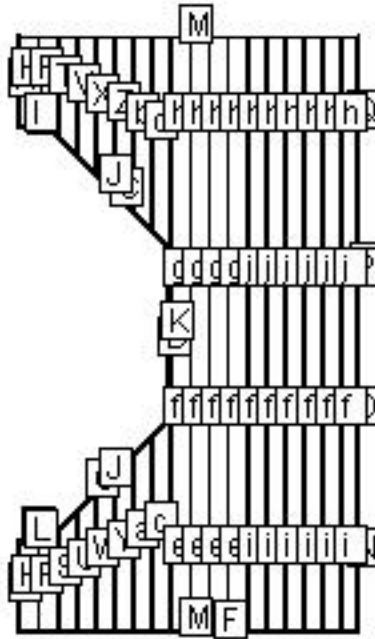
Cut Angles: L=Left, R=Right, F=Front, S=Side

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	3	7'	0, 0
P	Internal Joist	1	17'	45, 45	p	Riser	2	7'	0, 0
Q	Internal Joist	1	9' 10"	45, 45	q	Pre Cut Stringer	8	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	11' 4 1/2"	0, 0	w	Pre Cut Stringer	2	2' 2 1/4"	0, 0
X	Internal Joist	10	17' 2 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	2	6' 6"	45, 45	S	Internal Joist	1	6' 10 3/4"	45, 0
B	Cladding	1	2' 1/4"	45, 23	T	Internal Joist	1	6' 10 3/4"	0, 45
C	Cladding	2	12' 1"	23, 23	U	Internal Joist	1	8' 2 3/4"	45, 0
D	Cladding	1	12' 3/4"	23, 23	V	Internal Joist	1	8' 2 3/4"	0, 45
E	Cladding	1	2' 1/4"	23, 45	W	Internal Joist	1	9' 6 3/4"	45, 0
F	Cladding	1	24'	45, 45	X	Internal Joist	1	9' 6 3/4"	0, 45
G	Cladding	1	42'	45, 45	Y	Internal Joist	1	10' 10 3/4"	45, 0
H	Rim Joist	2	6' 4 1/4"	0, 0	Z	Internal Joist	1	10' 10 3/4"	0, 45
I	Header	1	1' 10"	0, 0	a	Internal Joist	1	12' 2 3/4"	45, 0
J	Header	2	12' 1"	0, 0	b	Internal Joist	1	12' 2 3/4"	0, 45
K	Rim Joist	1	14' 6 1/4"	0, 0	c	Internal Joist	1	13' 6 3/4"	45, 0
L	Header	1	1' 10"	0, 0	d	Internal Joist	1	13' 6 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	2	23' 7 1/4"	0, 0	e	Internal Joist	4	9' 11 1/2"	0, 0
N	Rim Joist	1	10' 1 1/4"	0, 0	f	Internal Joist	10	9' 10"	0, 0
O	Rim Joist	1	9' 10"	0, 0	g	Internal Joist	4	9' 8"	0, 0
P	Rim Joist	1	9' 8"	0, 0	h	Internal Joist	10	12' 1 3/4"	0, 0
Q	Rim Joist	1	12' 3"	0, 0	i	Internal Joist	6	9' 11 1/2"	0, 0
R	Internal Joist	2	6' 1 1/4"	0, 0	j	Internal Joist	6	9' 8"	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>
Beam	14	2X10X10 Treated	TREATED
Internal Joist	20	2X8X14 Treated	TREATED
Internal Joist	8	2X8X16 Treated	TREATED
Internal Joist	25	2X8X18 Treated	TREATED
Internal Joist	10	2X8X8 Treated	TREATED
Internal Joist	39	2X8X10 Treated	TREATED
Internal Joist	24	2X8X12 Treated	TREATED
Beam	12	2X10X12 Treated	TREATED
Beam	8	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	8	TimberTech 6' RadianceRail Custom Rail Pack - Black - 6'	TIMBERTECH
Railing Section	13	TimberTech 8' RadianceRail Custom Rail Pack - Black - 8'	TIMBERTECH
Baluster	30	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	19	TimberTech Earthwood Evolutions® Tropical Fascia Board - Pacific Rosewood - 12'	TIMBERTECH
Decking	109	TimberTech Earthwood Evolutions® Legacy Deck Plank, Square Shouldered - Mocha - 16'	TIMBERTECH
Decking	93	TimberTech Earthwood Evolutions® Legacy Deck Plank, Square Shouldered - Mocha - 20'	TIMBERTECH
Post	38	4X4X8 Treated	TREATED
Riser	11	TimberTech Earthwood Evolutions® Tropical Riser Board - Pacific Rosewood - 12'	TIMBERTECH
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	TIMBERTECH

**Lumber Materials**

<b>COMPONENT</b>	<b>QTY</b>	<b>DESCRIPTION</b>	<b>WOOD TYPE</b>
Pre Cut Stringer	2	4-Step Treated Stair Stringer	TREATED
Beam	2	2X10X16 Treated	TREATED
Beam	4	2X10X18 Treated	TREATED
Beam	1	2X10X8 Treated	TREATED

To find a TimberTech Dealer or Contractor in your area, please go to [www.timbertech.com](http://www.timbertech.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
53	Anchor Bolt AB128
53	4X4 Triple Zinc Deck Post Anchor PA44E-TZ
85	80 L.B. Basic Concrete Mix
1	40 LB. Basic Concrete Mix
40	8" X 48" Concrete Form Tube
848	1/2 Galvanized Flat Washer
17	1/2 Galvanized Hex Nut
424	1/2 X 8" Galvanized Carriage Bolt
1	5 LB. 8D Galvanized Nail
2	5 LB. 1-1/2" Joist Hanger Nail
2	1 LB. 1-1/2" Joist Hanger Nail
201	Triple Zinc Rafter Tie RT7-TZ
48	7" Triple Zinc Angle Clip AC7-TZ
58	4X4 Triple Zinc Deck Post Tie SDPT7-TZ
1	1 LB. 8X3" Philips Head Stainless Deck Screws
29	TimberTech 5" Post Skirt - Black
116	3/8 Galvanized Hex Nut
232	3/8 Galvanized Flat Washer
116	3/8 X 8" Galvanized Carriage Bolt
29	TimberTech 5" x 5" Post Sleeve - Black - 42"
29	TimberTech 5" LED Post Cap Light
29	TimberTech 5" Post Cap - Black
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 Wire Guide - 60 Packs of 12 ea.
2	TT/AZEK 100' wire 16/2

Qty	Description
1	TT/AZEK Decklites Dimmer
1	TT/AZEK Transformer - 12 Volt 150 W
1	TT/AZEK CableRail Protector Sleeves [Pack of 20] - Stainless
58	2 Pieces of Joist Material Nailed to Each Joist Splice
1	TimberTech TOPLoc 500 Sq. Ft. Pack Walnut - Walnut
1	TimberTech TOPLoc Fascia Bit
4	TimberTech TOPLoc Fascia Pack Rosewood - Pacific Rosewood
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
4	1LB. 8D Galvanized Common Nail
2	10 LB. Basic Concrete Mix
4	TimberTech TOPLoc 100 Sq. Ft. Pack Walnut - Walnut

**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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