



Deck Designer Specification Kit For  
**TimberTech**

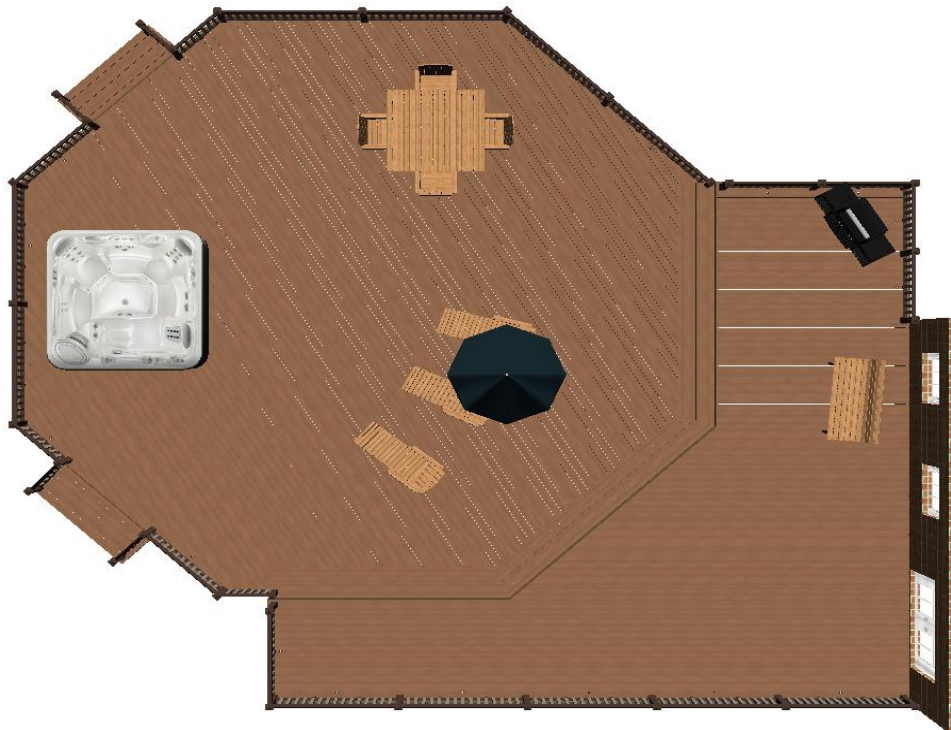
**Deck layout diagram**



Top view without planks

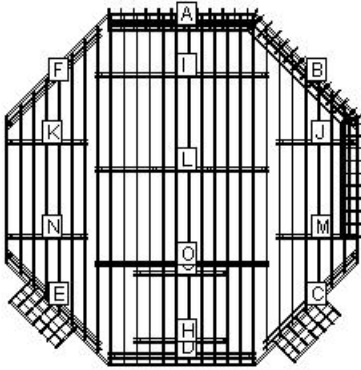


Bottom view with planks



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 30" from the top of the decking to the ground level. The top of the deck support posts will therefore be 21" above ground level.

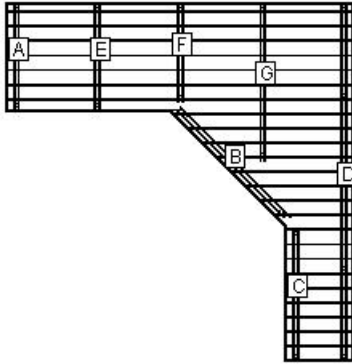
**Joists:**

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	175
Beam Bending	55
Beam Shear	51
Post Stability	101

**Permit Page: Level 2**



**LOAD AND SUPPORT:**

Your deck will support a 43 PSF live load.  
Posts have 36" below ground support.

**DECK AND POST HEIGHT:**

You selected a height of 51" from the top of the decking to the ground level. The top of the deck support posts will therefore be 42" above ground level.

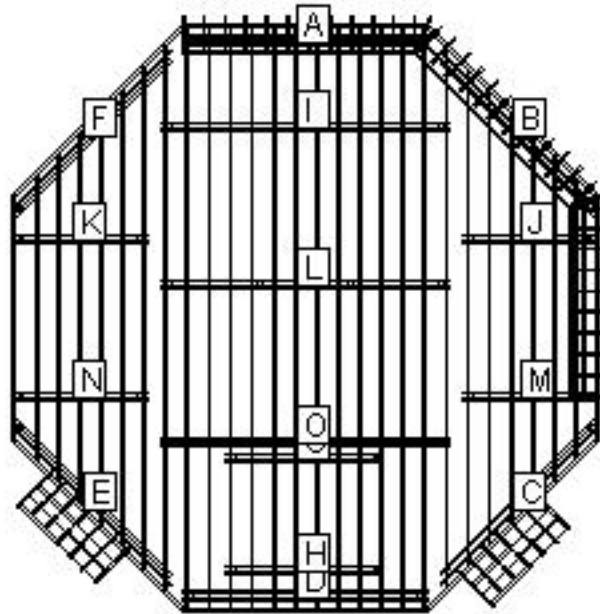
**Joists:**

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

**Stress Analysis: Level 2**

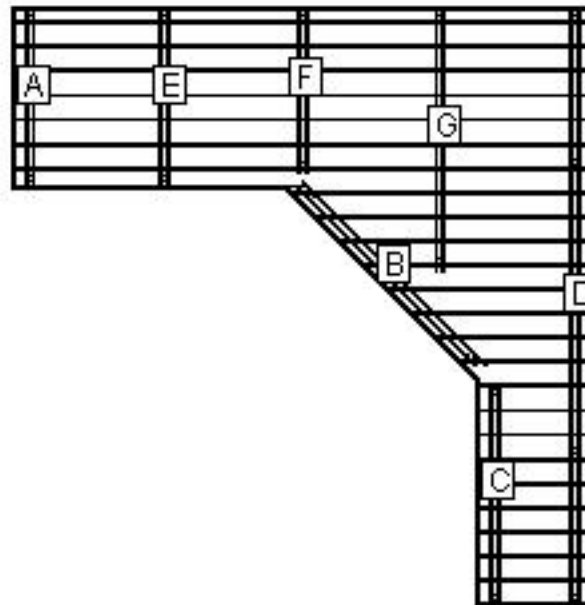
Joist Deflection	156
Joist Bending	56
Joist Shear	96
Joist Compression	96
Beam Deflection	130
Beam Bending	58
Beam Shear	53
Post Stability	127

### Beam Layout Level 1



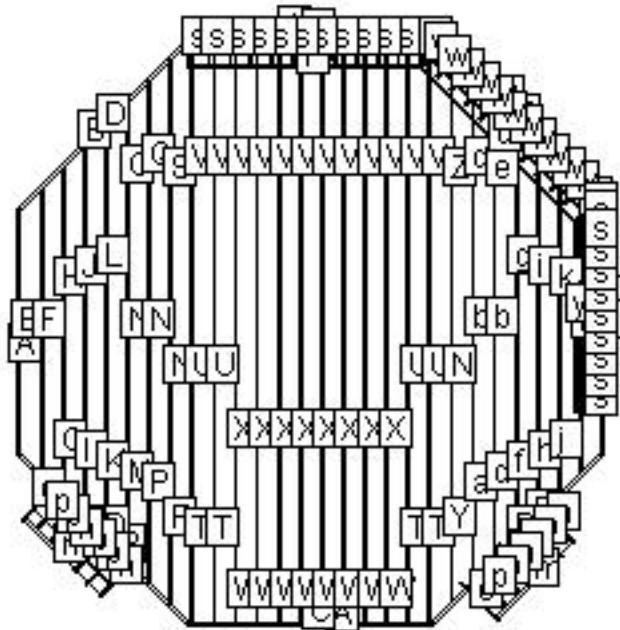
BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	15' 2"	3	7' 1 1/4"
B	13' 9"	3	6' 3"
C	13' 9"	3	6' 3"
D	15' 2"	3	7' 1 1/4"
E	13' 11"	3	6' 4"
F	13' 11"	3	6' 4"
G	9' 9 1/4"	3	4' 5"
H	9' 9 1/4"	3	4' 5"
I	17' 10"	3	8' 5 1/4"
J	8' 3 1/4"	3	3' 8"
K	8' 3"	3	3' 7 3/4"
L	17' 10"	4	5' 7 1/2"
M	8' 3 1/4"	3	3' 8"
N	8' 3"	3	3' 7 3/4"
O	17' 10"	4	5' 7 1/2"

### Beam Layout Level 2



BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	9' 10 1/4"	2	8' 10 3/4"
B	13' 10 1/4"	3	6' 3 1/2"
C	12' 3"	2	11' 3 1/2"
D	32' 10 1/4"	5	7' 11 3/4"
E	9' 10 1/4"	3	4' 5 1/2"
F	9' 1 1/4"	2	8' 1 3/4"
G	14' 5 1/4"	3	6' 9"

Materials Cut List: Level 1



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

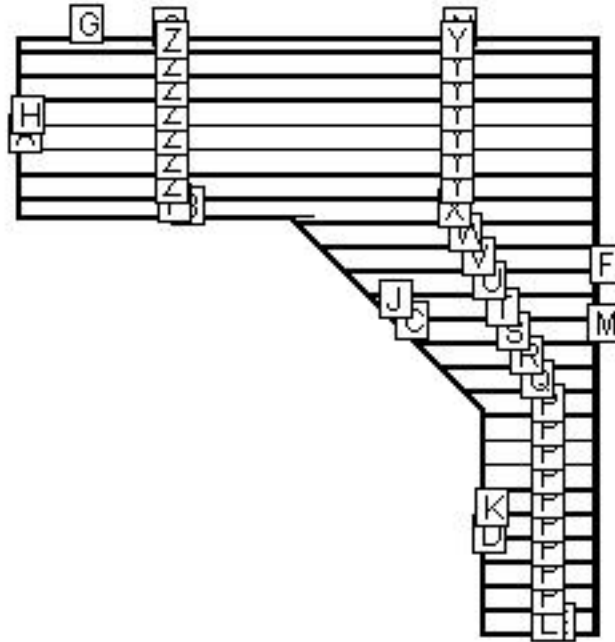
Cut Angles: L=Left, R=Right, F=Front, S=Side

LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
M	Internal Joist	1	9' 3"	45, 45	m	Riser	6	6' 10"	0, 0
N	Internal Joist	4	9' 9"	45, 45	n	Pre Cut Stringer	4	3' 4"	0, 0
O	Internal Joist	1	9' 2"	45, 45	o	Pre Cut Stringer	2	3' 4"	0, 0
P	Internal Joist	1	10' 7"	45, 45	p	Pre Cut Stringer	8	3' 4"	0, 0
Q	Internal Joist	1	10' 6"	45, 45	q	Riser	1	14' 8"	0, 23
R	Internal Joist	1	9' 1"	45, 45	r	Riser	1	14' 3 3/4"	0, 23
S	Internal Joist	1	14' 8"	45, 45	s	Pre Cut Stringer	22	2' 1"	0, 0
T	Internal Joist	4	10' 2 1/2"	0, 0	t	Riser	1	14' 3 1/4"	23, 23
U	Internal Joist	4	9' 9"	0, 0	u	Riser	1	13' 7"	23, 23
V	Internal Joist	12	15' 9 3/4"	0, 0	v	Pre Cut Stringer	2	2' 2 1/4"	0, 0
W	Internal Joist	8	2' 4 1/2"	0, 0	w	Pre Cut Stringer	12	2' 1"	0, 0
X	Internal Joist	8	17' 7"	0, 0	x	Riser	1	12' 1"	23, 0
Y	Internal Joist	1	9'	45, 45	y	Riser	1	11' 8 3/4"	23, 0
Z	Internal Joist	1	14' 7"	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	10'	45, 45	N	Rim Joist	1	16' 1/4"	0, 0
B	Cladding	1	15' 1/4"	45, 23	O	Rim Joist	1	15' 10"	0, 0
C	Cladding	1	15' 1/4"	23, 23	P	Internal Joist	9	6' 1/4"	0, 0
D	Cladding	1	12' 5 1/4"	23, 45	Q	Internal Joist	1	7' 3/4"	45, 0
E	Cladding	1	6' 5"	45, 45	R	Internal Joist	1	8' 4 3/4"	45, 0
F	Cladding	1	33'	45, 45	S	Internal Joist	1	9' 8 3/4"	45, 0
G	Cladding	1	8' 6"	0, 45	T	Internal Joist	1	11' 3/4"	45, 0
H	Header	1	9' 7 1/4"	0, 0	U	Internal Joist	1	12' 4 3/4"	45, 0
I	Rim Joist	1	16' 2 1/4"	0, 0	V	Internal Joist	1	13' 8 3/4"	45, 0
J	Header	1	15' 1/4"	0, 0	W	Internal Joist	1	15' 3/4"	45, 0
K	Header	1	12' 3"	0, 0	X	Internal Joist	1	16' 4 3/4"	45, 0
L	Rim Joist	1	6' 3 1/4"	0, 0	Y	Internal Joist	7	15' 10 1/2"	0, 0

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

LABEL NAME	QTY	LENGTH	BEVELS	LABEL NAME	QTY	LENGTH	BEVELS
M Header	1	32' 7 1/4"	0, 0	Z Internal Joist	7	15' 8 3/4"	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
Beam	18	2X10X10 Treated	TREATED
Rim Joist	44	2X8X16 Treated	TREATED
Internal Joist	21	2X8X18 Treated	TREATED
Internal Joist	18	2X8X8 Treated	TREATED
Internal Joist	17	2X8X10 Treated	TREATED
Internal Joist	8	2X8X12 Treated	TREATED
Beam	6	2X10X16 Treated	TREATED
Beam	12	2X10X14 Treated	TREATED
Beam	10	2X10X18 Treated	TREATED
Pre Cut Stringer	14	3-Step Treated Stair Stringer	TREATED
Pre Cut Stringer	36	2-Step Treated Stair Stringer	TREATED
Railing Post	1	4X4X12 Treated	TREATED
Railing Post	5	4X4X18 Treated	TREATED
Railing Section	4	TimberTech 6' RadianceRail Rail Pack - Kona® - 6'	TIMBERTECH
Railing Section	16	TimberTech 8' RadianceRail Rail Pack - Kona® - 8'	TIMBERTECH
Railing Section	20	TT/AZEK 31" Square Composite Baluster - Slate Gray - 31"	TIMBERTECH
Cladding	19	TimberTech Earthwood Evolutions® Legacy Fascia Board - Pecan - 12'	TIMBERTECH
Decking	64	TimberTech Earthwood Evolutions® Tropical Deck Plank, Square Shouldered - Pacific Walnut - 16'	TIMBERTECH
Decking	145	TimberTech Earthwood Evolutions® Tropical Deck Plank, Square Shouldered - Pacific Walnut - 20'	TIMBERTECH
Post	22	4X4X8 Treated	TREATED
Riser	12	TimberTech Earthwood Evolutions® Legacy Riser Board - Pecan - 12'	TIMBERTECH
Pre Cut Stringer	2	4-Step Treated Stair Stringer	TREATED
Internal Joist	6	2X8X14 Treated	TREATED
Railing Post	1	4X4X8 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
3	5 LB. 10D Hot-Dip Galvanized Nail
4	1LB. 16D Galvanized Common Nail
14	2x6-8" Triple Zinc Right Skewed Joist Hanger SKH26R-TZ
23	2x6-8" Triple Zinc Left Skewed Joist Hanger SKH26L-TZ
5	1 LB. 10D X1 1/2" Nail
63	2x8-10" Triple Zinc Joist Hanger JUS28-TZ
5	5" Triple Zinc Angle Clip MP5-TZ
67	Anchor Bolt AB128
67	4X4 Triple Zinc Deck Post Anchor PA44E-TZ
107	80 L.B. Basic Concrete Mix
1	60 L.B. Basic Concrete Mix
4	10 LB. Basic Concrete Mix
51	8" X 48" Concrete Form Tube
1072	1/2 Galvanized Flat Washer
22	1/2 Galvanized Hex Nut
536	1/2 X 8" Galvanized Carriage Bolt
1	5 LB. 8D Galvanized Nail
5	1LB. 8D Galvanized Common Nail
1	5 LB. 1-1/2" Joist Hanger Nail
6	1 LB. 1-1/2" Joist Hanger Nail
223	Triple Zinc Rafter Tie RT7-TZ
50	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	TimberTech 5" Post Skirt - Kona®
120	3/8 Galvanized Hex Nut
240	3/8 Galvanized Flat Washer
120	3/8 X 8" Galvanized Carriage Bolt
30	TimberTech 5" x 5" Post Sleeve - Kona® - 42"
30	TimberTech 5" LED Post Cap Light
30	TimberTech 5" Post Cap - Kona®
1	TT/AZEK Decklites Dimmer
1	TT/AZEK Wire Guide - 60 Packs of 12 ea.
4	TT/AZEK 100' wire 16/2
1	TT/AZEK Transformer - 12 Volt 150 W
24	TT/AZEK LED In Deck Light (8 Packs of 4 per Unit) - Architectural Bronze
50	2 Pieces of Joist Material Nailed to Each Joist Splice
14	TimberTech Cortex - 100 LF Evolutions Pacific Walnut - Pacific Walnut
1	TimberTech TOPLoc Fascia Bit

<b>Qty</b>	<b>Description</b>
4	TimberTech TOPLoc Fascia Pack Teak - Teak
48	1/2 X 6" Galvanized Lag Screw
5	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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