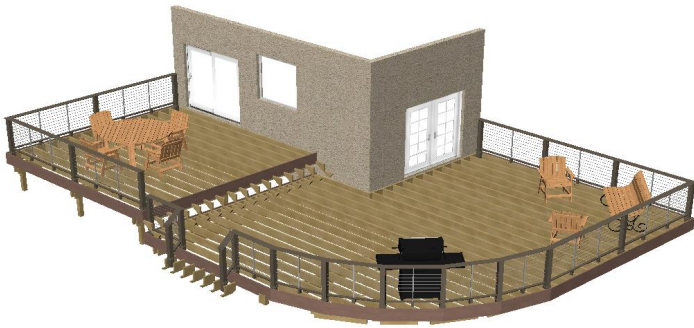


Deck Designer Specification Kit For  
**TimberTech**

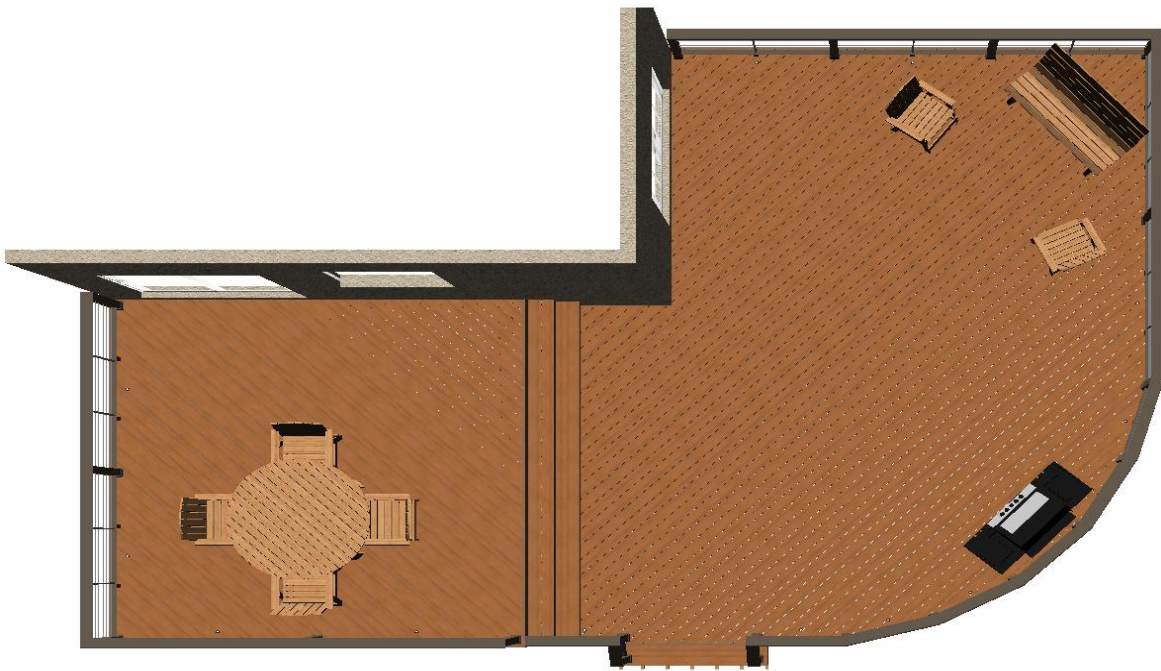
**Deck layout diagram**



Top view without planks

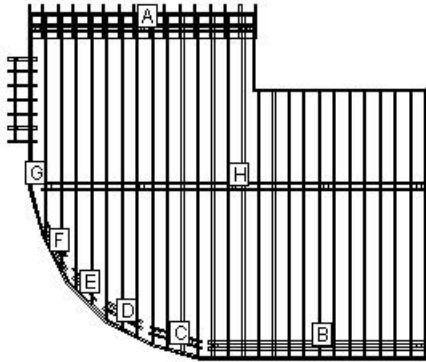


Bottom view with planks



Top view with planks

Permit Page: Level 1



**LOAD AND SUPPORT:**

Your deck will support a 44 PSF live load.  
Posts have 36" below ground support.

**DECK AND POST HEIGHT:**

You selected a height of 18" from the top of the decking to the ground level. The top of the deck support posts will therefore be 9" above ground level.

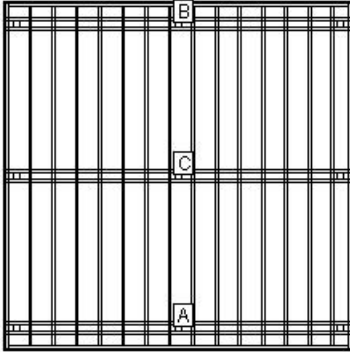
**Joists:**

Set joists on top of beams, 12"; center to center.

**Stress Analysis: Level 1**

Joist Deflection	133
Joist Bending	54
Joist Shear	113
Joist Compression	113
Beam Deflection	459
Beam Bending	76
Beam Shear	56
Post Stability	101

**Permit Page: Level 2**



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

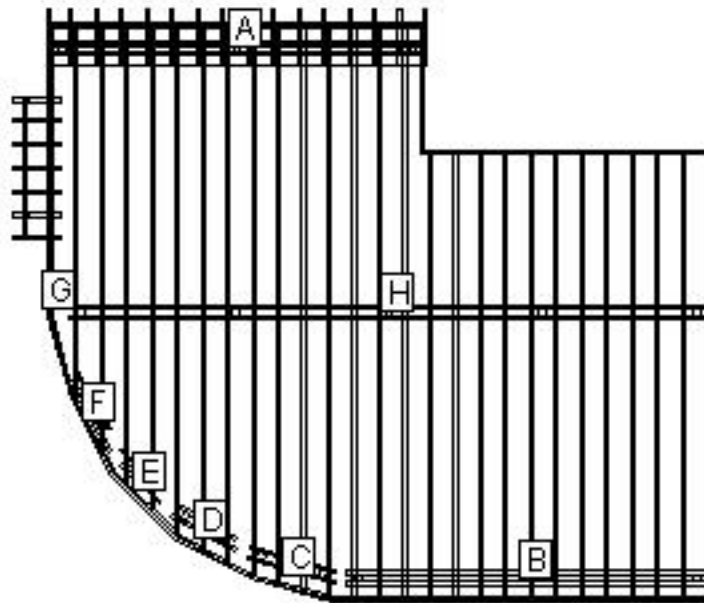
**Joists:**

Set joists on top of beams, 12"; center to center.

**Stress Analysis: Level 2**

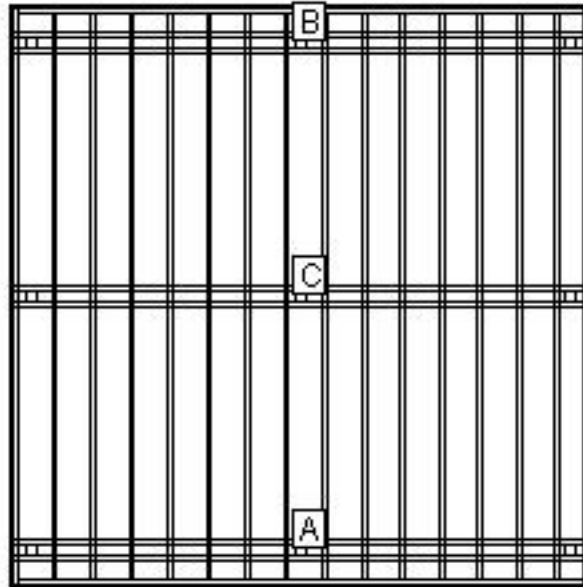
Joist Deflection	901
Joist Bending	190
Joist Shear	198
Joist Compression	198
Beam Deflection	438
Beam Bending	94
Beam Shear	75
Post Stability	142

### Beam Layout Level 1



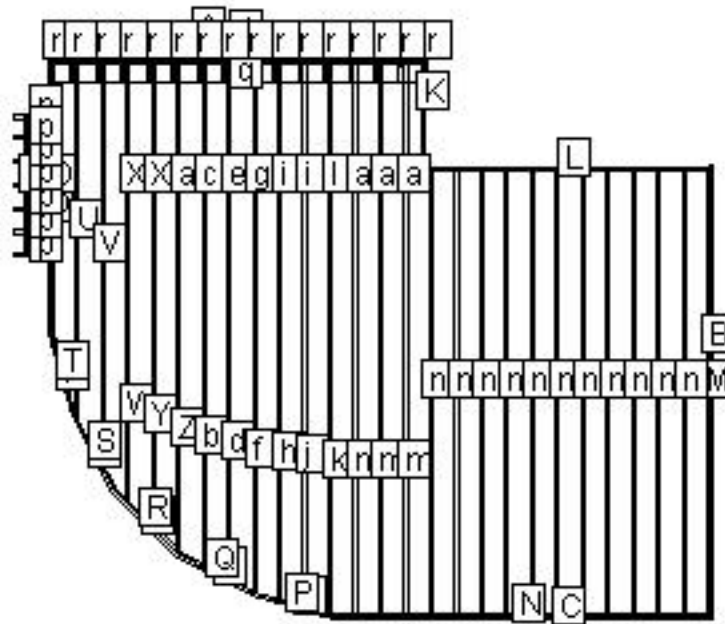
BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	14' 10 1/4"	3	6' 11 1/2"
B	14' 4 1/4"	3	6' 8 1/2"
C	3' 7 1/4"	2	2' 7"
D	2' 10 1/4"	2	1' 9"
E	2' 1 1/2"	2	10 1/2"
F	3' 1"	2	1' 7 1/4"
G	3 1/2"	1	0
H	25' 4 1/4"	5	6' 1 1/4"

### Beam Layout Level 2



BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	14' 10 1/4"	3	6' 11 1/2"
B	14' 10 1/4"	3	6' 11 1/2"
C	14' 10 1/4"	3	6' 11 1/2"

Materials Cut List: Level 1



LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
A	Cladding	1	15'	45, 45	W	Internal Joist	1	6' 10"	0, 45
B	Cladding	1	17' 11"	45, 45	X	Internal Joist	2	11' 2 1/2"	0, 45
C	Cladding	1	14' 11"	8, 45	Y	Internal Joist	1	7' 10"	0, 45
D	Cladding	1	11' 7"	45, 8	Z	Internal Joist	1	8' 9 1/2"	0, 0
E	Cladding	1	3' 5 1/2"	7, 8	a	Internal Joist	4	11' 2 3/4"	0, 0
F	Cladding	1	3' 5 1/4"	8, 7	b	Internal Joist	1	9' 4 1/4"	0, 29
G	Cladding	1	3' 5"	8, 8	c	Internal Joist	1	11' 2 1/2"	0, 29
H	Cladding	1	3' 5 1/4"	7, 8	d	Internal Joist	1	9' 11"	0, 29
I	Cladding	1	3' 5 1/2"	8, 7	e	Internal Joist	1	11' 2 1/2"	0, 29
J	Header	1	14' 7 1/4"	0, 0	f	Internal Joist	1	10' 5 1/4"	0, 0
K	Rim Joist	1	5'	0, 0	g	Internal Joist	1	11' 2 1/2"	0, 0
L	Header	1	11' 3"	0, 0	h	Internal Joist	1	10' 8 1/2"	0, 15

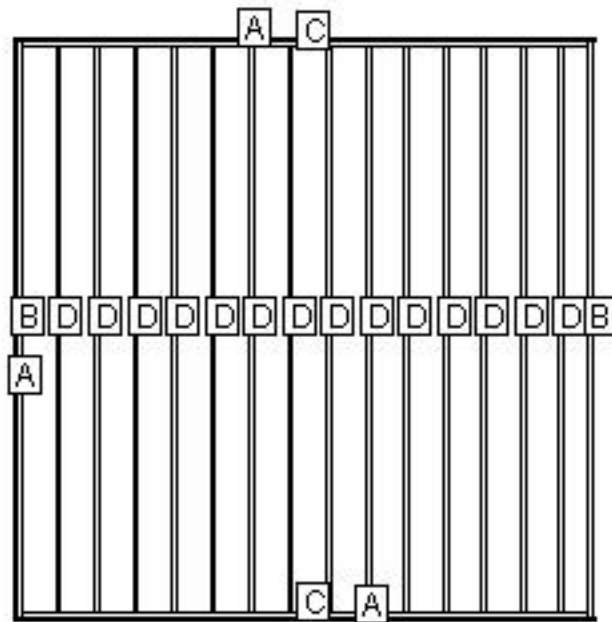
Cut Angles: L=Left, R=Right, F=Front, S=Side

LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
M	Rim Joist	1	17' 9 1/4"	0, 0	i	Internal Joist	2	11' 2 1/2"	0, 15
N	Header	1	14' 8 1/2"	0, 0	j	Internal Joist	1	11'	0, 15
O	Rim Joist	1	11' 6"	0, 0	k	Internal Joist	1	11' 3"	0, 15
P	Header	1	3' 5 1/4"	0, 0	l	Internal Joist	1	11' 2 3/4"	0, 15
Q	Header	1	3' 5"	0, 0	m	Internal Joist	3	11' 3 1/2"	0, 0
R	Header	1	3' 5"	0, 0	n	Internal Joist	11	17' 6 1/4"	0, 0
S	Header	1	3' 5"	0, 0	o	Riser	1	5' 7"	0, 0
T	Header	1	3' 5 1/4"	0, 0	p	Pre Cut Stringer	7	1' 8"	0, 0
U	Internal Joist	1	14' 10"	0, 0	q	Riser	2	15'	0, 0
V	Internal Joist	1	16' 7 1/2"	0, 61	r	Pre Cut Stringer	16	2' 1"	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	3	15'	45, 45	C	Header	2	14' 7 1/4"	0, 0
B	Rim Joist	2	14' 10 1/4"	0, 0	D	Internal Joist	14	14' 7 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
Internal Joist	22	2X8X16 Treated	TREATED
Internal Joist	14	2X8X18 Treated	TREATED
Internal Joist	2	2X8X8 Treated	TREATED
Internal Joist	20	2X8X12 Treated	TREATED
Internal Joist	3	2X8X10 Treated	TREATED
Beam	10	2X10X16 Treated	TREATED
Beam	4	2X10X14 Treated	TREATED
Pre Cut Stringer	23	2-Step Treated Stair Stringer	TREATED
Hand Rail	6	TimberTech Evolutions Rail Contemporary Top Rail - Traditional Walnut - 16'	TIMBERTECH
Railing Post	5	4X4X16 Treated	TREATED
Railing Section	4	TimberTech Evolutions Rail Contemporary Rail Pack - Traditional Walnut - 6'	TIMBERTECH
Railing Section	9	TimberTech Evolutions Rail Contemporary Rail Pack - Traditional Walnut - 8'	TIMBERTECH
Baluster	21	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	11	TimberTechEarthwood Evolutions® Terrain Collection Fascia Board, 12" wide - Brown Oak - 12'	TIMBERTECH
Decking	5	TimberTech Earthwood Evolutions® Tropical Deck Plank, Grooved - Pacific Teak - 12'	TIMBERTECH
Decking	63	TimberTech Earthwood Evolutions® Tropical Deck Plank, Grooved - Pacific Teak - 20'	TIMBERTECH
Header	1	2X8X14 Treated	TREATED
Post	5	4X4X8 Treated	TREATED
Beam	1	2X10X8 Treated	TREATED
Beam	1	2X10X18 Treated	TREATED
Riser	3	TimberTech Earthwood Evolutions® Terrain Collection Riser Board, 7 1/4" wide - Brown Oak - 12'	TIMBERTECH
Stair Step	25	TimberTech Earthwood Evolutions® Tropical Deck Plank, Grooved - Pacific Teak - 16'	TIMBERTECH

**Lumber Materials**

<b>COMPONENT</b>	<b>QTY</b>	<b>DESCRIPTION</b>	<b>WOOD TYPE</b>
Railing Section	1	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
Railing Post	1	4X4X8 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	1 LB. 10D X1 1/2" Nail
1	5 LB. 10D Hot-Dip Galvanized Nail
5	1 LB. 10D Hot-Dip Galvanized Nail
67	2x8-10" Triple Zinc Joist Hanger JUS28-TZ
18	5" Triple Zinc Angle Clip MP5-TZ
1	1LB. 16D Galvanized Common Nail
2	2x6-8" Triple Zinc Right Skewed Joist Hanger SKH26R-TZ
9	7" Triple Zinc Angle Clip AC7-TZ
2	THR128-HDG Threaded Rod
4	DTB-TZ Deck Tie Bracket
5	1LB. 8D Galvanized Common Nail
5	1 LB. 1-1/2" Joist Hanger Nail
117	Triple Zinc Rafter Tie RT7-TZ
29	Anchor Bolt AB128
29	4X4 Triple Zinc Deck Post Anchor PA44E-TZ
46	80 L.B. Basic Concrete Mix
3	10 LB. Basic Concrete Mix
22	8" X 48" Concrete Form Tube
464	1/2 Galvanized Flat Washer
10	1/2 Galvanized Hex Nut
232	1/2 X 8" Galvanized Carriage Bolt
23	7" Triple Zinc Angle Clip AC7-TZ
42	4X4 Triple Zinc Deck Post Tie SDPT7-TZ
1	1 LB. 8X3" Philips Head Stainless Deck Screws
21	TimberTech Evolutions Rail 5"x5" Post Skirt - Traditional Walnut
84	3/8 Galvanized Hex Nut
168	3/8 Galvanized Flat Washer
84	3/8 X 8" Galvanized Carriage Bolt
21	TimberTech Evolutions Rail 5"x5" Post Cover - Traditional Walnut - 42"
1	TT/AZEK CableRail Cable Cutters
1	TT/AZEK CableRail Accessory Kit [Quick-Connect release tool, lacing needle, hanger bolt installation tool] -
16	TT/AZEK CableRail 36" Hardware Kit [9 Quick-Connect fittings, 9 Quick Connect Swivel fittings, 18 hanger bolts, 9 lock nuts] - Stainless
16	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

Qty	Description
1	TT/AZEK CableRail Protector Sleeves [Pack of 20] - Stainless
12	2 Pieces of Joist Material Nailed to Each Joist Splice
1	TimberTech Cortex - 100 LF Evolutions Pacific Teak - Pacific Teak
1	TimberTech TOPLoc Fascia Bit
2	TimberTech TOPLoc Fascia Pack Walnut - Walnut
8	TimberTech CONCEALoc Hidden Fastener - Unit = 8 retail cartons @ 100 sq.ft. coverage each (175 CONCEALoc fasteners, 184 Screws and drive bit) - Brown
64	1/2 X 6" Galvanized Lag Screw
3	TT/AZEK CableRail 100' Stainless Steel Cable - Stainless - 100'
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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