



Deck Designer Specification Kit For  
**TimberTech**

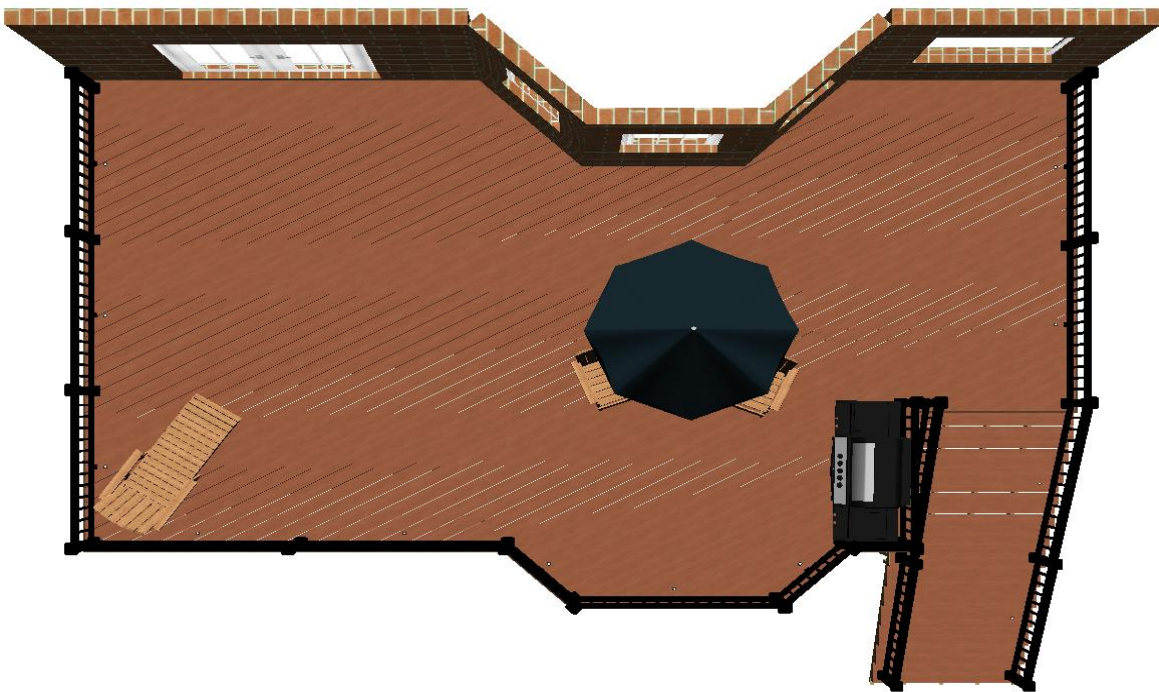
**Deck layout diagram**



Top view without planks

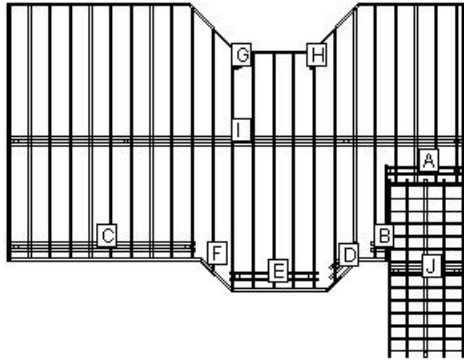


Bottom view with planks



Top view with planks

**Permit Page: Level 1**



**LOAD AND SUPPORT:**

Your deck will support a 42 PSF live load.  
Posts have 36" below ground support.

**DECK AND POST HEIGHT:**

You selected a height of 108" from the top of the decking to the ground level. The top of the deck support posts will therefore be 99" above ground level.

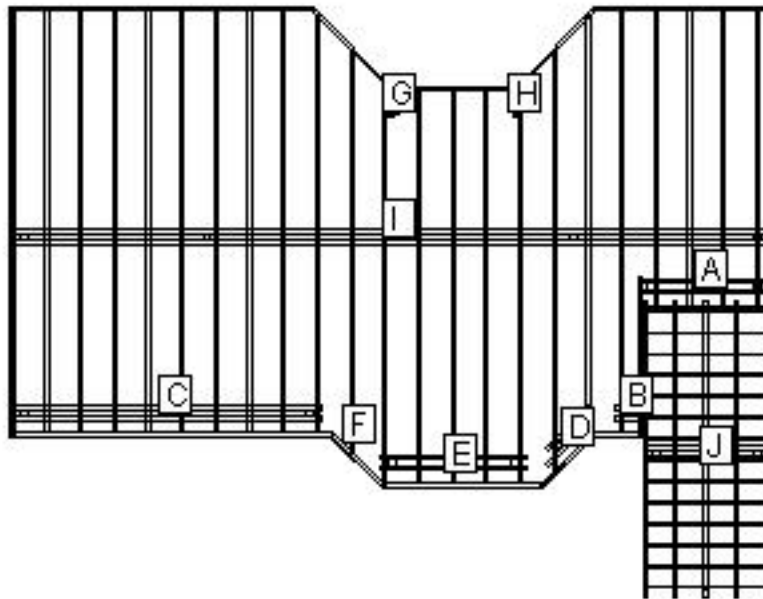
**Joists:**

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

**Stress Analysis: Level 1**

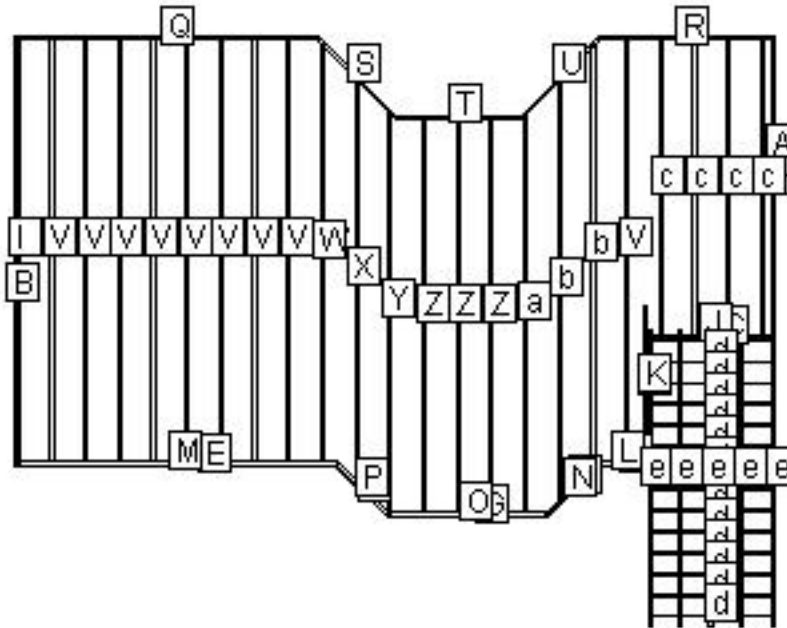
Joist Deflection	197
Joist Bending	65
Joist Shear	103
Joist Compression	103
Beam Deflection	93
Beam Bending	52
Beam Shear	59
Post Stability	113

### Beam Layout Level 1



BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	5' 1 1/2"	2	4' 2"
B	1' 1 1/4"	1	0
C	12' 3"	2	11' 3 1/2"
D	2' 7"	2	1' 4"
E	5' 9 1/4"	2	4' 10"
F	3 1/2"	1	0
G	2 1/4"	1	0
H	2 1/4"	1	0
I	29' 10 1/4"	5	7' 2 3/4"
J	5'	2	4' 1/2"

Materials Cut List: Level 1



LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
A	Cladding	1	12'	45, 45	Q	Header	1	11' 9 1/4"	0, 0
B	Cladding	1	17'	45, 45	R	Header	1	6' 9 1/4"	0, 0
C	Cladding	2	5' 1"	45, 45	S	Header	1	4' 4 1/4"	0, 0
D	Cladding	1	2' 1/4"	23, 45	T	Header	1	4' 10 3/4"	0, 0
E	Cladding	1	12' 8 1/4"	45, 23	U	Header	1	4' 4 1/4"	0, 0
F	Cladding	2	2' 10 1/4"	23, 23	V	Internal Joist	9	16' 7 1/4"	0, 0
G	Cladding	1	6' 4"	23, 23	W	Internal Joist	1	16' 5 1/2"	45, 0
H	Rim Joist	1	11' 10 1/4"	0, 0	X	Internal Joist	1	15' 11"	45, 45
I	Rim Joist	1	16' 10 1/4"	0, 0	Y	Internal Joist	1	15' 9 1/2"	45, 0
J	Header	1	5'	0, 0	Z	Internal Joist	3	15' 6 1/4"	0, 0
K	Rim Joist	1	6' 2 3/4"	0, 0	a	Internal Joist	1	15' 8 3/4"	45, 0
L	Header	1	1' 10"	0, 0	b	Internal Joist	2	16' 7"	45, 45

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

LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
M	Header	1	12' 6"	0, 0	c	Internal Joist	4	11' 7 1/4"	0, 0
N	Header	1	2' 10"	0, 0	d	Riser	13	5'	0, 0
O	Header	1	6' 3 1/4"	0, 0	e	Stringer	5	14' 2"	0, 0
P	Header	1	2' 10"	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	16	2X8X18 Treated	TREATED
Internal Joist	6	2X8X16 Treated	TREATED
Internal Joist	6	2X8X12 Treated	TREATED
Beam	3	2X10X14 Treated	TREATED
Beam	4	2X10X16 Treated	TREATED
Railing Post	1	4X4X14 Treated	TREATED
Railing Post	3	4X4X18 Treated	TREATED
Railing Section	7	TimberTech 6' RadianceRail Custom Rail Pack - Black - 6'	TIMBERTECH
Railing Section	6	TimberTech 8' RadianceRail Custom Rail Pack - Black - 8'	TIMBERTECH
Railing Section	9	TT/AZEK 31" Round Aluminum Baluster - Black - 31"	TIMBERTECH
Cladding	6	TimberTechEarthwood Evolutions® Terrain Collection Fascia Board, 12" wide - Rustic Elm - 12'	TIMBERTECH
Decking	3	TimberTech Earthwood Evolutions® Tropical Deck Plank, Grooved - Pacific Rosewood - 12'	TIMBERTECH
Decking	51	TimberTech Earthwood Evolutions® Tropical Deck Plank, Grooved - Pacific Rosewood - 20'	TIMBERTECH
Rim Joist	11	2X8X8 Treated	TREATED
Beam	1	2X10X18 Treated	TREATED
Post	1	4X4X8 Treated	TREATED
Post	17	4X4X10 Treated	TREATED
Riser	7	TimberTech Earthwood Evolutions® Terrain Collection Riser Board, 7 1/4" wide - Rustic Elm - 12'	TIMBERTECH
Stair Step	8	TimberTech Earthwood Evolutions® Tropical Deck Plank, Grooved - Pacific Rosewood - 16'	TIMBERTECH
Beam	1	2X10X10 Treated	TREATED
Railing Section	4	TT/AZEK 31" Round Aluminum Stair Baluster - Black - 31"	TIMBERTECH

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
2	1 LB. 10D X1 1/2" Nail
1	5 LB. 10D Hot-Dip Galvanized Nail
1	1 LB. 10D Hot-Dip Galvanized Nail
35	2x8-10" Triple Zinc Joist Hanger JUS28-TZ
1	1LB. 16D Galvanized Common Nail
4	2x6-8" Triple Zinc Right Skewed Joist Hanger SKH26R-TZ
5	2x6-8" Triple Zinc Left Skewed Joist Hanger SKH26L-TZ
5	7" Triple Zinc Angle Clip AC7-TZ
7	THR128-HDG Threaded Rod
14	DTB-TZ Deck Tie Bracket
3	1LB. 8D Galvanized Common Nail
2	1 LB. 1-1/2" Joist Hanger Nail
50	Triple Zinc Rafter Tie RT7-TZ
19	Anchor Bolt AB128
19	4X4 Triple Zinc Deck Post Anchor PA44E-TZ
30	80 L.B. Basic Concrete Mix
1	40 LB. Basic Concrete Mix
2	10 LB. Basic Concrete Mix
15	8" X 48" Concrete Form Tube
304	1/2 Galvanized Flat Washer
7	1/2 Galvanized Hex Nut
152	1/2 X 8" Galvanized Carriage Bolt
5	7" Triple Zinc Angle Clip AC7-TZ
38	4X4 Triple Zinc Deck Post Tie SDPT7-TZ
1	1 LB. 8X3" Philips Head Stainless Deck Screws
19	TimberTech 5" Post Skirt - Black
76	3/8 Galvanized Hex Nut
152	3/8 Galvanized Flat Washer
76	3/8 X 8" Galvanized Carriage Bolt
19	TimberTech 5" x 5" Post Sleeve - Black - 42"
19	TimberTech 5" LED Post Cap Light
19	TimberTech 5" Post Cap - Black
1	TT/AZEK Decklites Dimmer
1	TT/AZEK Wire Guide - 60 Packs of 12 ea.
3	TT/AZEK 100' wire 16/2
1	TT/AZEK Transformer - 12 Volt 150 W
15	TT/AZEK LED In Deck Light (8 Packs of 4 per Unit) - Architectural Bronze
1	TimberTech Cortex - 100 LF Evolutions Pacific Rosewood - Pacific Rosewood
2	TimberTech TOPLoc Fascia Pack Rustic Elm - Rustic Elm



<b>Qty</b>	<b>Description</b>
5	TimberTech CONCEALoc Hidden Fastener - Unit = 8 retail cartons @ 100 sq.ft. coverage each (175 CONCEALoc fasteners, 184 Screws and drive bit) - Brown
66	1/2 X 6" Galvanized Lag Screw

**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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