



Deck Designer Specification Kit For  
**TimberTech**

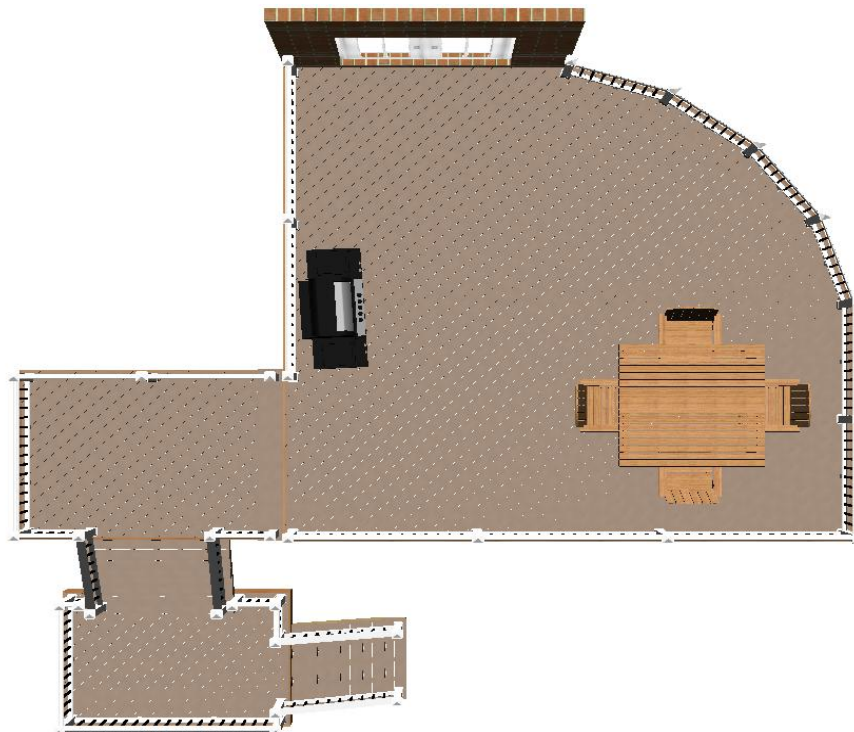
**Deck layout diagram**



Top view without planks

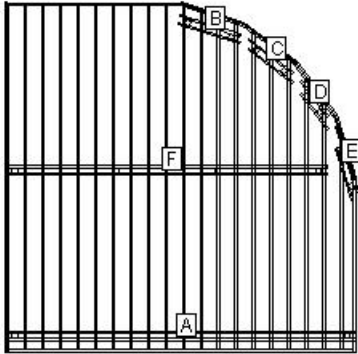


Bottom view with planks



Top view with planks

**Permit Page: Level 1**



**LOAD AND SUPPORT:**

Your deck will support a 45 PSF live load.  
Posts have 36" below ground support.

**DECK AND POST HEIGHT:**

You selected a height of 96" from the top of the decking to the ground level. The top of the deck support posts will therefore be 87" above ground level.

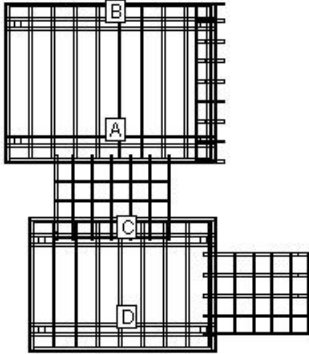
**Joists:**

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

**Stress Analysis: Level 1**

Joist Deflection	142
Joist Bending	57
Joist Shear	115
Joist Compression	115
Beam Deflection	140
Beam Bending	55
Beam Shear	56
Post Stability	115

Permit Page: Level 2



**LOAD AND SUPPORT:**

Your deck will support a 99 PSF live load.  
 Posts have 36" below ground support.

**DECK AND POST HEIGHT:**

You selected a height of 82" from the top of the decking to the ground level. The top of the deck support posts will therefore be 73" above ground level.

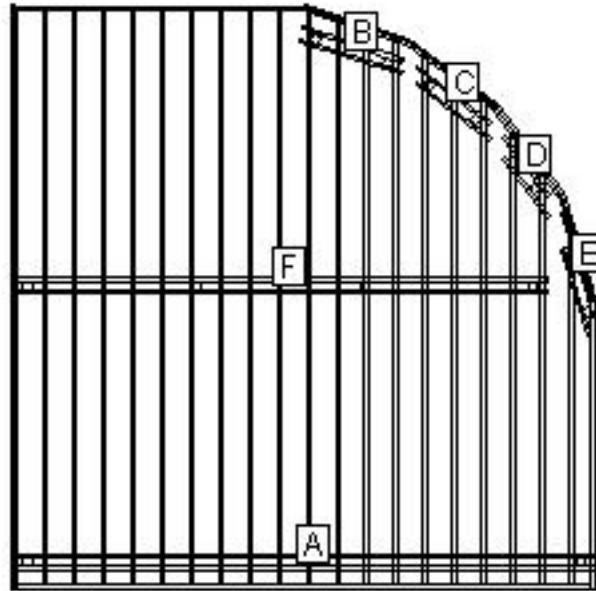
**Joists:**

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

**Stress Analysis: Level 2**

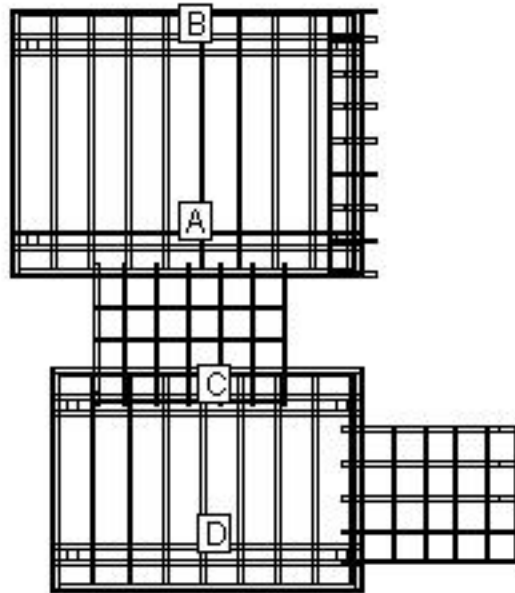
Joist Deflection	6023
Joist Bending	542
Joist Shear	373
Joist Compression	373
Beam Deflection	377
Beam Bending	117
Beam Shear	109
Post Stability	389

### Beam Layout Level 1



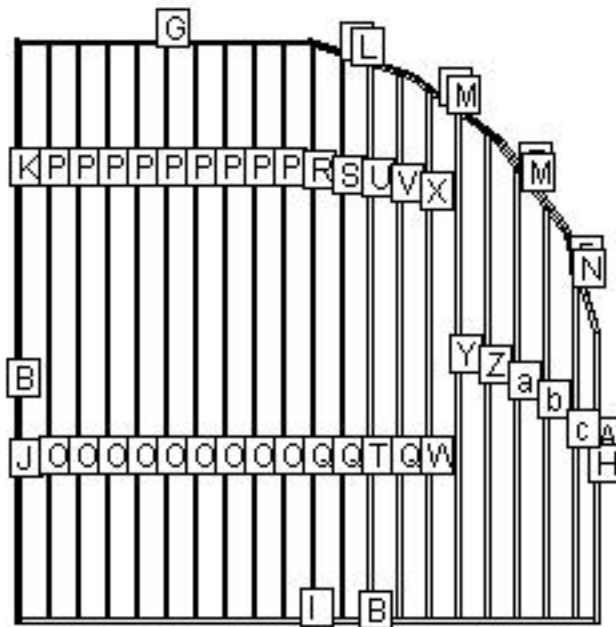
BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	19' 10 1/4"	3	9' 5 1/2"
B	3' 7"	2	2' 6 1/2"
C	3' 1 1/2"	2	1' 11 1/4"
D	2' 6"	2	1' 2"
E	3' 11 3/4"	2	2' 1 1/2"
F	18' 3"	4	5' 9 1/4"

### Beam Layout Level 2



BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	9' 4 1/4"	2	8' 4 3/4"
B	9' 4 1/4"	2	8' 4 3/4"
C	8' 3 1/2"	2	7' 4"
D	8' 3 1/2"	2	7' 4"

Materials Cut List: Level 1



LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
A	Cladding	1	10'	45, 9	P	Internal Joist	9	9' 3 3/4"	0, 0
B	Cladding	2	20'	45, 45	Q	Internal Joist	3	10' 2 1/2"	18, 0
C	Cladding	1	3' 9 1/4"	9, 9	R	Internal Joist	1	9' 4 1/4"	18, 0
D	Cladding	1	3' 9"	8, 9	S	Internal Joist	1	9' 1/4"	18, 0
E	Cladding	1	3' 9"	9, 8	T	Internal Joist	1	10' 3 1/2"	18, 0
F	Cladding	1	3' 9 1/4"	9, 9	U	Internal Joist	1	8' 7 1/2"	18, 0
G	Header	1	9' 9 1/2"	0, 0	V	Internal Joist	1	8' 4 1/2"	18, 0
H	Rim Joist	1	9' 11"	0, 0	W	Internal Joist	1	10' 3 1/2"	37, 0
I	Header	1	19' 7 1/4"	0, 0	X	Internal Joist	1	7' 8 3/4"	37, 0
J	Rim Joist	1	10' 4 1/4"	0, 0	Y	Internal Joist	1	17' 3 1/4"	37, 0
K	Rim Joist	1	9' 6"	0, 0	Z	Internal Joist	1	16' 6 1/4"	37, 0
L	Header	1	3' 9"	0, 0	a	Internal Joist	1	15' 5"	53, 0

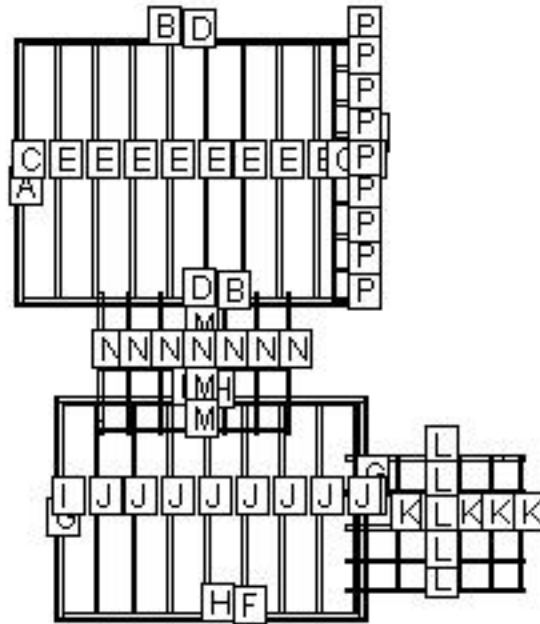
Cut Angles: L=Left, R=Right, F=Front, S=Side

LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
M	Header	2	3' 8 3/4"	0, 0	b	Internal Joist	1	14' 1"	53, 0
N	Header	1	3' 9"	0, 0	c	Internal Joist	1	12'	72, 0
O	Internal Joist	9	10' 3 1/2"	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	2	7' 3"	45, 45	I	Rim Joist	2	5' 10 1/4"	0, 0
B	Cladding	2	9' 6"	45, 45	J	Internal Joist	8	5' 7 1/4"	0, 0
C	Rim Joist	2	7' 1 1/4"	0, 0	K	Riser	5	3' 8 1/4"	0, 0
D	Header	2	9' 1 1/4"	0, 0	L	Pre Cut Stringer	5	5' 4"	0, 0
E	Internal Joist	9	6' 10 1/4"	0, 0	M	Riser	4	5' 2 1/4"	0, 0
F	Cladding	2	8' 5 1/4"	45, 45	N	Stringer	7	4' 4 1/2"	0, 0
G	Cladding	2	6'	45, 45	O	Riser	1	7' 3"	0, 0
H	Header	2	8' 1/2"	0, 0	P	Stringer	9	1' 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	16	2X8X10 Treated	TREATED
Rim Joist	16	2X8X12 Treated	TREATED
Internal Joist	3	2X8X8 Treated	TREATED
Internal Joist	10	2X8X18 Treated	TREATED
Internal Joist	3	2X8X16 Treated	TREATED
Beam	13	2X10X10 Treated	TREATED
Beam	2	2X10X8 Treated	TREATED
Beam	2	2X10X14 Treated	TREATED
Railing Post	1	4X4X12 Treated	TREATED
Railing Post	5	4X4X18 Treated	TREATED
Railing Section	13	TimberTech 8' RadianceRail Custom Rail Pack - White - 8'	TIMBERTECH
Railing Section	13	TT/AZEK 31" Square Aluminum Baluster - Black - 31"	TIMBERTECH
Cladding	13	TimberTech Earthwood Evolutions® Legacy Fascia Board - Tigerwood - 12'	TIMBERTECH
Decking	2	TimberTech Earthwood Evolutions® Terrain Collection Deck Plank, Grooved - Sandy Birch - 12'	TIMBERTECH
Decking	60	TimberTech Earthwood Evolutions® Terrain Collection Deck Plank, Grooved - Sandy Birch - 16'	TIMBERTECH
Decking	12	TimberTech Earthwood Evolutions® Terrain Collection Deck Plank, Grooved - Sandy Birch - 20'	TIMBERTECH
Post	21	4X4X8 Treated	TREATED
Beam	1	2X10X18 Treated	TREATED
Pre Cut Stringer	5	5-Step Treated Stair Stringer	TREATED
Railing Post	1	4X4X14 Treated	TREATED
Railing Section	4	TimberTech 6' RadianceRail Custom Rail Pack - White - 6'	TIMBERTECH
Rim Joist	7	2X8X14 Treated	TREATED
Riser	5	TimberTech Earthwood Evolutions® Legacy Riser Board - Tigerwood - 12'	TIMBERTECH
Railing Section	4	TT/AZEK 31" Square 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
4	1 LB. 10D X1 1/2" Nail
2	5 LB. 10D Hot-Dip Galvanized Nail
63	2x8-10" Triple Zinc Joist Hanger JUS28-TZ
18	5" Triple Zinc Angle Clip MP5-TZ
12	7" Triple Zinc Angle Clip AC7-TZ
2	THR128-HDG Threaded Rod
4	DTB-TZ Deck Tie Bracket
5	1LB. 8D Galvanized Common Nail
4	1 LB. 1-1/2" Joist Hanger Nail
92	Triple Zinc Rafter Tie RT7-TZ
23	Anchor Bolt AB128
23	4X4 Triple Zinc Deck Post Anchor PA44E-TZ
36	80 L.B. Basic Concrete Mix
4	10 LB. Basic Concrete Mix
18	8" X 48" Concrete Form Tube
368	1/2 Galvanized Flat Washer
8	1/2 Galvanized Hex Nut
184	1/2 X 8" Galvanized Carriage Bolt
64	4X4 Triple Zinc Deck Post Tie SDPT7-TZ
1	1 LB. 8X3" Philips Head Stainless Deck Screws
32	TimberTech 5" Post Skirt - White
128	3/8 Galvanized Hex Nut
256	3/8 Galvanized Flat Washer
128	3/8 X 8" Galvanized Carriage Bolt
32	TimberTech 5" x 5" Post Sleeve - White - 42"
32	TimberTech 5" LED Post Cap Light
32	TimberTech 5" Post Cap - White
1	TT/AZEK Wire Guide - 60 Packs of 12 ea.
2	TT/AZEK 100' wire 16/2
1	TT/AZEK Decklites Dimmer
1	TT/AZEK Transformer - 12 Volt 150 W
15	2 Pieces of Joist Material Nailed to Each Joist Splice
1	TimberTech TOPLoc Fascia Bit
3	TimberTech TOPLoc Fascia Pack Teak - Teak
5	TimberTech CONCEALoc Hidden Fastener - Unit = 8 retail cartons @ 100 sq.ft. coverage each (175 CONCEALoc fasteners, 184 Screws and drive bit) - Brown
20	1/2 X 6" Galvanized Lag Screw
1	1 LB. 10D Hot-Dip Galvanized Nail
1	60 L.B. Basic Concrete Mix

<b>Qty</b>	<b>Description</b>
21	7" Triple Zinc Angle Clip AC7-TZ
31	TT/AZEK LED Riser Light - Architectural Bronze
1	TimberTech TOPLoc 100 Sq. Ft. Pack Cedar - Cedar

**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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