



Deck Designer Specification Kit For  
**TimberTech**

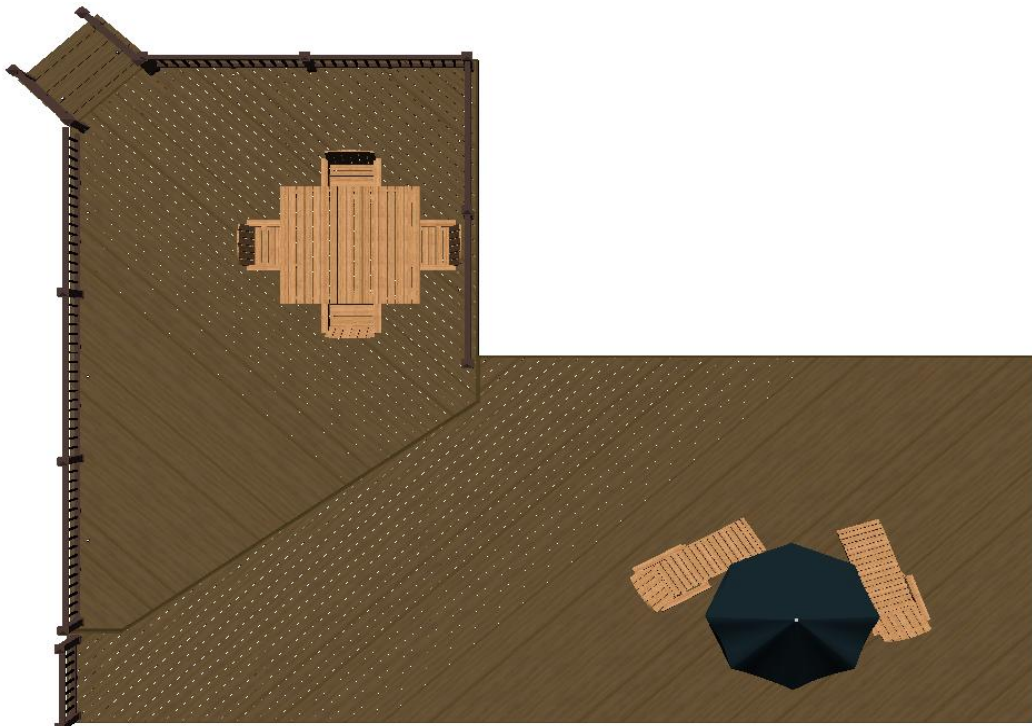
**Deck layout diagram**



Top view without planks

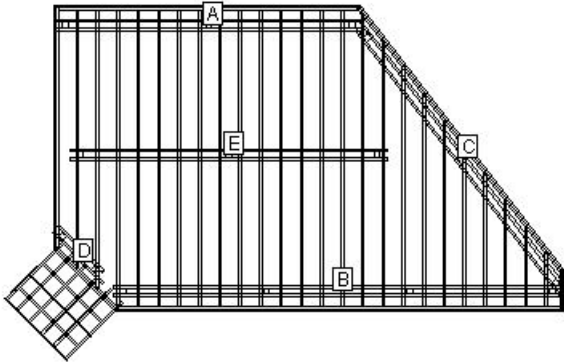


Bottom view with planks



Top view with planks

Permit Page: Level 1



**LOAD AND SUPPORT:**

Your deck will support a 50 PSF live load.  
Posts have 36" below ground support.

**DECK AND POST HEIGHT:**

You selected a height of 36" from the top of the decking to the ground level. The top of the deck support posts will therefore be 27" above ground level.

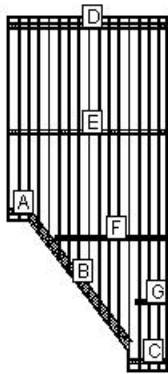
**Joists:**

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

**Stress Analysis: Level 1**

Joist Deflection	155
Joist Bending	60
Joist Shear	118
Joist Compression	118
Beam Deflection	338
Beam Bending	85
Beam Shear	71
Post Stability	136

**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 43" from the top of the decking to the ground level. The top of the deck support posts will therefore be 34" above ground level.

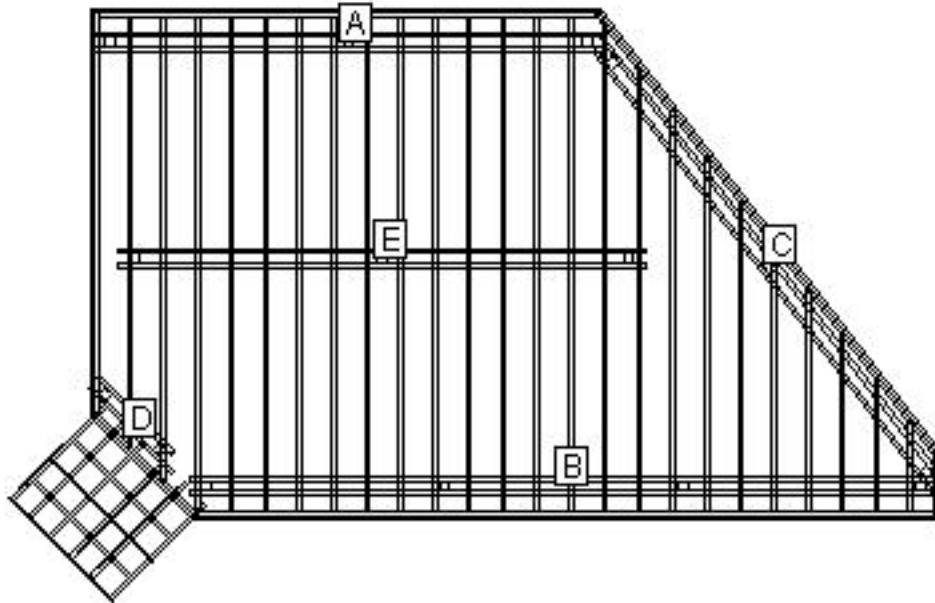
**Joists:**

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

**Stress Analysis: Level 2**

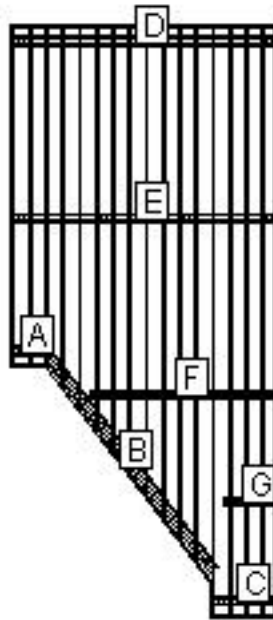
Joist Deflection	129
Joist Bending	53
Joist Shear	112
Joist Compression	112
Beam Deflection	321
Beam Bending	82
Beam Shear	71
Post Stability	121

### Beam Layout Level 1



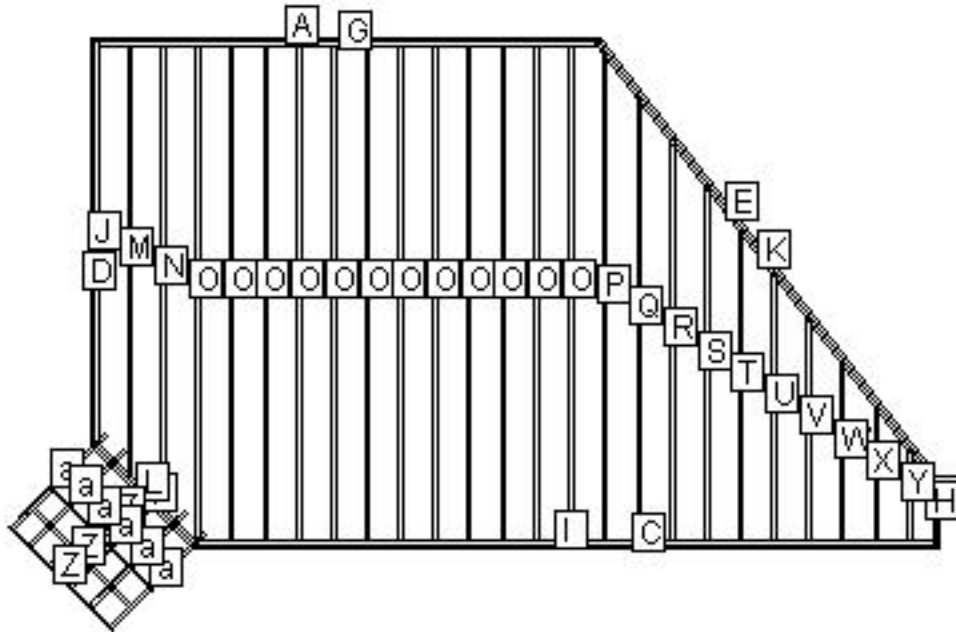
BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	15' 1/4"	3	7' 1/4"
B	22' 1/4"	4	7' 1/4"
C	16' 6 1/4"	3	7' 7"
D	3' 6 1/2"	2	2' 3 1/2"
E	15' 6"	3	7' 3 1/4"

### Beam Layout Level 2



BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	2' 1"	2	1' 1 1/2"
B	16' 7"	3	7' 7 1/2"
C	3' 10 1/4"	2	2' 10 3/4"
D	15' 10 1/4"	3	7' 5 1/2"
E	15' 10 1/4"	4	4' 11 1/2"
F	11' 1 1/4"	3	5' 1"
G	3' 1 1/4"	2	2' 1 3/4"

Materials Cut List: Level 1



LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
A	Cladding	1	15'	26, 45	O	Internal Joist	12	14' 7 1/4"	0, 0
B	Cladding	1	2'	45, 19	P	Internal Joist	1	14' 4 1/2"	52, 0
C	Cladding	1	22'	23, 45	Q	Internal Joist	1	13' 1"	52, 0
D	Cladding	1	12'	45, 23	R	Internal Joist	1	11' 9 1/2"	52, 0
E	Cladding	1	16' 5"	19, 26	S	Internal Joist	1	10' 6"	52, 0
F	Cladding	1	4' 3"	23, 23	T	Internal Joist	1	9' 2 1/4"	52, 0
G	Header	1	14' 9 1/4"	0, 0	U	Internal Joist	1	7' 10 1/2"	52, 0
H	Rim Joist	1	1' 11"	0, 0	V	Internal Joist	1	6' 7"	52, 0
I	Header	1	21' 9 1/4"	0, 0	W	Internal Joist	1	5' 3 1/2"	52, 0
J	Rim Joist	1	11' 11"	0, 0	X	Internal Joist	1	4'	52, 0
K	Header	1	16' 4"	0, 0	Y	Internal Joist	1	2' 8 1/4"	52, 0
L	Header	1	4' 2 1/4"	0, 0	Z	Riser	4	4' 3"	0, 0

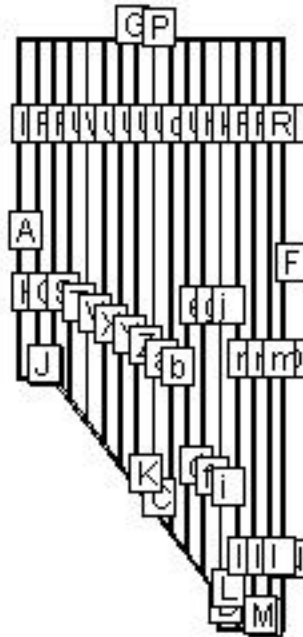
Cut Angles: L=Left, R=Right, F=Front, S=Side

LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
M	Internal Joist	1	12' 8 3/4"	0, 45	a	Pre Cut Stringer	6	4' 2"	0, 0
N	Internal Joist	1	13' 8 3/4"	0, 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	20' 6"	45, 45	U	Internal Joist	6	11' 5 3/4"	0, 52
B	Cladding	1	2' 1/2"	45, 26	V	Internal Joist	1	11' 4 1/2"	0, 52
C	Cladding	1	16' 5 1/2"	26, 19	W	Internal Joist	1	11' 5 3/4"	0, 52
D	Cladding	1	2' 1/4"	19, 45	X	Internal Joist	1	12' 8"	0, 52
E	Cladding	1	4'	45, 45	Y	Internal Joist	1	13' 11 1/2"	0, 52
F	Cladding	1	35' 6"	45, 45	Z	Internal Joist	1	15' 3 1/4"	0, 52
G	Cladding	1	16'	45, 45	a	Internal Joist	1	16' 7"	0, 52
H	Rim Joist	1	8' 9 1/4"	0, 0	b	Internal Joist	1	17' 11 1/2"	0, 52
I	Rim Joist	2	11' 7"	0, 0	c	Internal Joist	1	11' 4 3/4"	0, 52
J	Header	1	1' 10"	0, 0	d	Internal Joist	1	8' 9"	0, 52
K	Header	1	16' 5 1/2"	0, 0	e	Internal Joist	1	10' 5"	0, 52
L	Rim Joist	1	3' 2 1/4"	0, 0	f	Internal Joist	1	10' 1/2"	0, 52

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

LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
M	Header	1	3' 7 1/4"	0, 0	g	Internal Joist	1	10' 6"	0, 52
N	Rim Joist	1	6' 11 1/4"	0, 0	h	Internal Joist	1	11' 4 3/4"	0, 52
O	Rim Joist	1	16' 10"	0, 0	i	Internal Joist	1	11' 4 1/4"	0, 52
P	Header	1	15' 7 1/4"	0, 0	j	Internal Joist	1	10' 5"	0, 52
Q	Internal Joist	1	8' 7 1/2"	0, 0	k	Internal Joist	1	11' 5 3/4"	0, 52
R	Internal Joist	5	11' 5 3/4"	0, 0	l	Internal Joist	3	6' 9 1/2"	0, 0
S	Internal Joist	1	8' 9 1/4"	0, 0	m	Internal Joist	3	16' 10"	0, 0
T	Internal Joist	1	10' 1"	0, 52					

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	5	2X8X14 Treated	TREATED
Internal Joist	16	2X8X16 Treated	TREATED
Beam	10	2X10X16 Treated	TREATED
Beam	4	2X10X8 Treated	TREATED
Beam	5	2X10X18 Treated	TREATED
Pre Cut Stringer	6	4-Step Treated Stair Stringer	TREATED
Railing Post	2	4X4X8 Treated	TREATED
Railing Post	2	4X4X18 Treated	TREATED
Railing Section	5	TimberTech 6' RadianceRail Custom Rail Pack - Kona® - 6'	TIMBERTECH
Railing Section	5	TimberTech 8' RadianceRail Custom Rail Pack - Kona® - 8'	TIMBERTECH
Railing Section	8	TT/AZEK 31" Square Aluminum Baluster - Black - 31"	TIMBERTECH
Cladding	15	TimberTech Earthwood Evolutions® Legacy Fascia Board - Mocha - 12'	TIMBERTECH
Decking	2	TimberTech Earthwood Evolutions® Legacy Deck Plank, Grooved - Pecan - 12'	TIMBERTECH
Decking	83	TimberTech Earthwood Evolutions® Legacy Deck Plank, Grooved - Pecan - 16'	TIMBERTECH
Decking	21	TimberTech Earthwood Evolutions® Legacy Deck Plank, Grooved - Pecan - 20'	TIMBERTECH
Header	10	2X8X8 Treated	TREATED
Header	13	2X8X18 Treated	TREATED
Rim Joist	25	2X8X12 Treated	TREATED
Post	15	4X4X8 Treated	TREATED
Riser	2	TimberTech Earthwood Evolutions® Legacy Riser Board - Mocha - 12'	TIMBERTECH
Railing Section	2	TT/AZEK 31" Square Aluminum Stair Baluster - Black - 31"	TIMBERTECH
Rim Joist	4	2X8X10 Treated	TREATED
Beam	2	2X10X12 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
3	1 LB. 10D X1 1/2" Nail
1	5 LB. 10D Hot-Dip Galvanized Nail
56	2x8-10" Triple Zinc Joist Hanger JUS28-TZ
1	1LB. 16D Galvanized Common Nail
2	2x6-8" Triple Zinc Right Skewed Joist Hanger SKH26R-TZ
40	5" Triple Zinc Angle Clip MP5-TZ
7	7" Triple Zinc Angle Clip AC7-TZ
3	5" Triple Zinc Angle Clip MP5-TZ
6	1LB. 8D Galvanized Common Nail
2	1 LB. 1-1/2" Joist Hanger Nail
135	Triple Zinc Rafter Tie RT7-TZ
34	Anchor Bolt AB128
34	4X4 Triple Zinc Deck Post Anchor PA44E-TZ
54	80 L.B. Basic Concrete Mix
4	10 LB. Basic Concrete Mix
26	8" X 48" Concrete Form Tube
544	1/2 Galvanized Flat Washer
11	1/2 Galvanized Hex Nut
272	1/2 X 8" Galvanized Carriage Bolt
6	7" Triple Zinc Angle Clip AC7-TZ
28	4X4 Triple Zinc Deck Post Tie SDPT7-TZ
1	1 LB. 8X3" Philips Head Stainless Deck Screws
14	TimberTech 5" Post Skirt - Kona®
56	3/8 Galvanized Hex Nut
112	3/8 Galvanized Flat Washer
56	3/8 X 8" Galvanized Carriage Bolt
14	TimberTech 5" x 5" Post Sleeve - Kona® - 42"
14	TimberTech 5" Post Cap - Kona®
10	TT/AZEK LED In Deck Light (8 Packs of 4 per Unit) - Architectural Bronze
1	TT/AZEK Decklites Dimmer
1	TT/AZEK 100' wire 16/2
1	TT/AZEK Transformer - 12 Volt 150 W
8	TT/AZEK LED Riser Light - Architectural Bronze
1	TimberTech TOPLoc 100 Sq. Ft. Pack Teak - Teak
1	TimberTech TOPLoc Fascia Bit
3	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
3	1 LB. 10D Hot-Dip Galvanized Nail

<b>Qty</b>	<b>Description</b>
1	5 LB. 1-1/2" Joist Hanger Nail
1	40 LB. Basic Concrete Mix
24	2 Pieces of Joist Material Nailed to Each Joist Splice

**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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