



Deck Designer Specification Kit For  
**TimberTech**

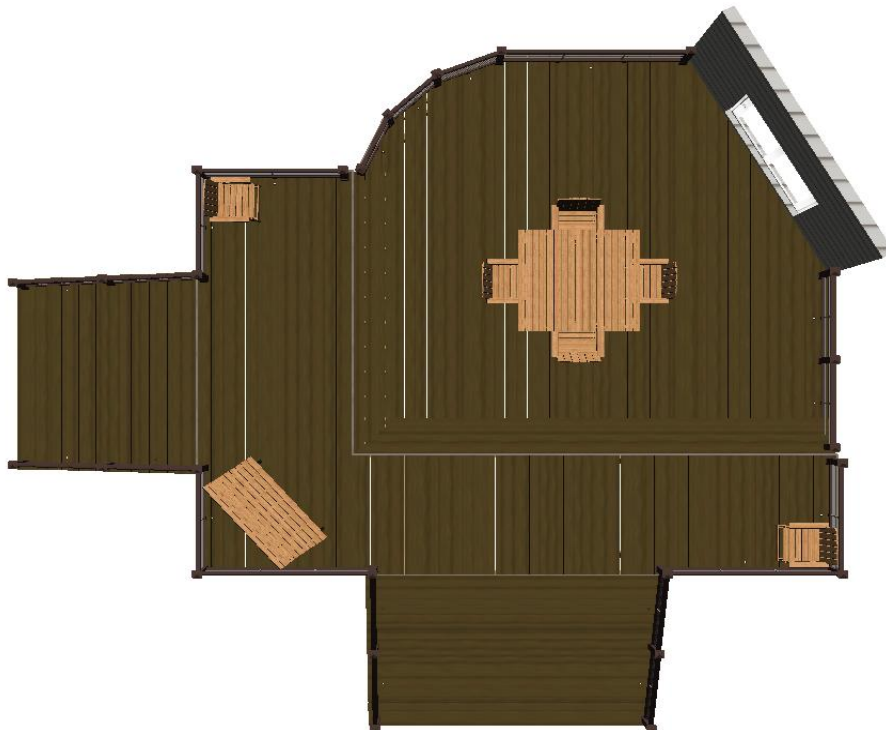
**Deck layout diagram**



Top view without planks

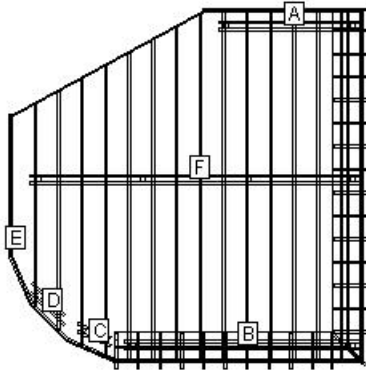


Bottom view with planks



Top view with planks

Permit Page: Level 1



**LOAD AND SUPPORT:**

Your deck will support a 46 PSF live load.  
Posts have 36" below ground support.

**DECK AND POST HEIGHT:**

You selected a height of 60" from the top of the decking to the ground level. The top of the deck support posts will therefore be 51" above ground level.

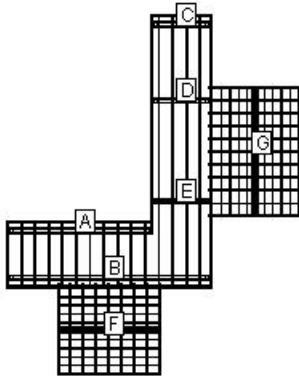
**Joists:**

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

**Stress Analysis: Level 1**

Joist Deflection	159
Joist Bending	56
Joist Shear	97
Joist Compression	97
Beam Deflection	487
Beam Bending	93
Beam Shear	67
Post Stability	120

Permit Page: Level 2



**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 81" from the top of the decking to the ground level. The top of the deck support posts will therefore be 72" above ground level.

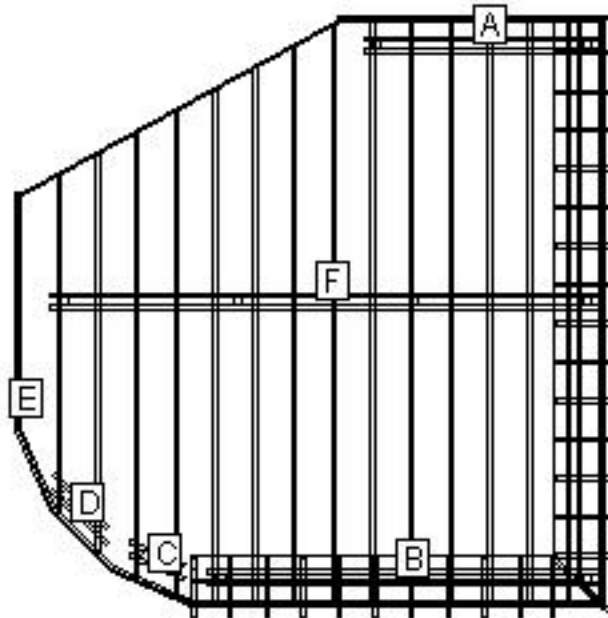
**Joists:**

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

**Stress Analysis: Level 2**

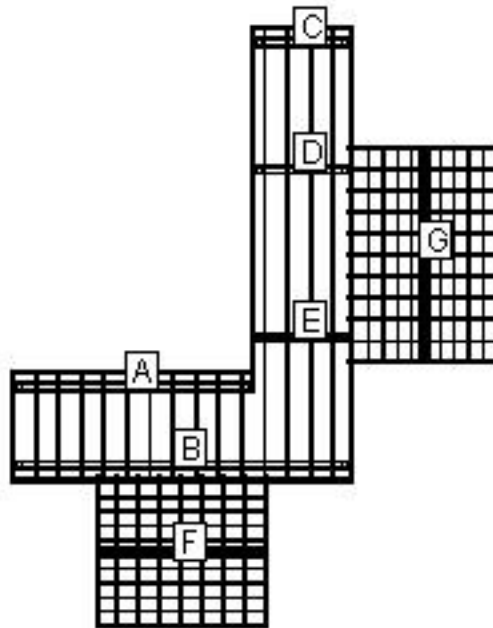
Joist Deflection	136
Joist Bending	50
Joist Shear	92
Joist Compression	92
Beam Deflection	69
Beam Bending	51
Beam Shear	72
Post Stability	148

### Beam Layout Level 1



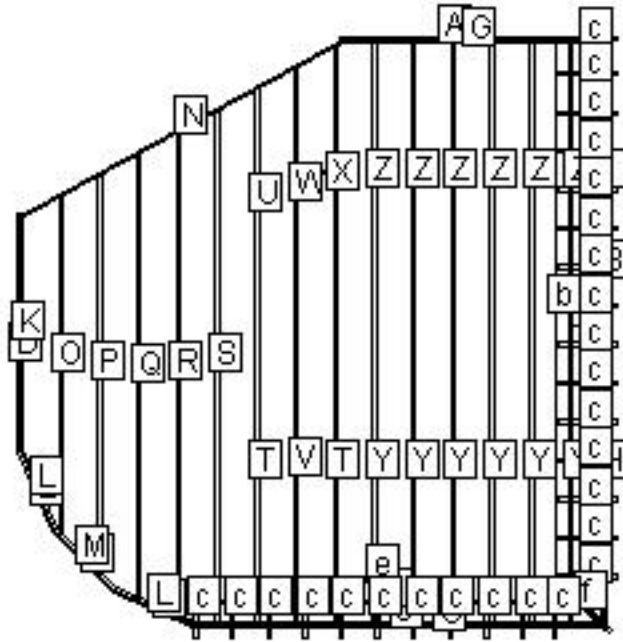
BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	8' 1 1/4"	2	7' 1 3/4"
B	13' 5 1/4"	3	6' 3"
C	2'	2	11"
D	2' 7"	2	1' 4"
E	3 1/2"	1	0
F	18' 9 1/4"	4	5' 11 1/4"

### Beam Layout Level 2



BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	14' 1 1/2"	2	13' 2"
B	19' 10 1/4"	3	9' 5 1/2"
C	5' 10 1/4"	2	4' 10 3/4"
D	5' 10 1/4"	2	4' 10 3/4"
E	5' 10 1/4"	2	4' 10 3/4"
F	10'	2	9' 1/2"
G	12' 6"	2	11' 6 1/2"

Materials Cut List: Level 1



LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
A	Cladding	1	9'	45, 14	Q	Internal Joist	1	15' 1"	29, 23
B	Cladding	1	20'	45, 45	R	Internal Joist	1	16' 4 1/2"	29, 23
C	Cladding	1	14'	11, 45	S	Internal Joist	1	17' 4"	29, 0
D	Cladding	1	8'	31, 11	T	Internal Joist	2	10' 1 1/2"	29, 0
E	Cladding	2	3'	11, 11	U	Internal Joist	1	7' 11"	29, 0
F	Cladding	1	2' 11 1/4"	11, 11	V	Internal Joist	1	10' 2 1/2"	29, 0
G	Header	1	8' 9 1/2"	0, 0	W	Internal Joist	1	8' 6 3/4"	29, 0
H	Rim Joist	1	10' 3 1/4"	0, 0	X	Internal Joist	1	9' 4 1/2"	29, 0
I	Rim Joist	1	9' 7"	0, 0	Y	Internal Joist	6	10' 1 1/2"	0, 0
J	Header	1	13' 9 1/2"	0, 0	Z	Internal Joist	6	9' 5 3/4"	0, 0
K	Rim Joist	1	7' 11 1/4"	0, 0	a	Riser	1	19' 2"	0, 45
L	Header	2	2' 11 1/2"	0, 0	b	Riser	1	18' 4"	0, 45

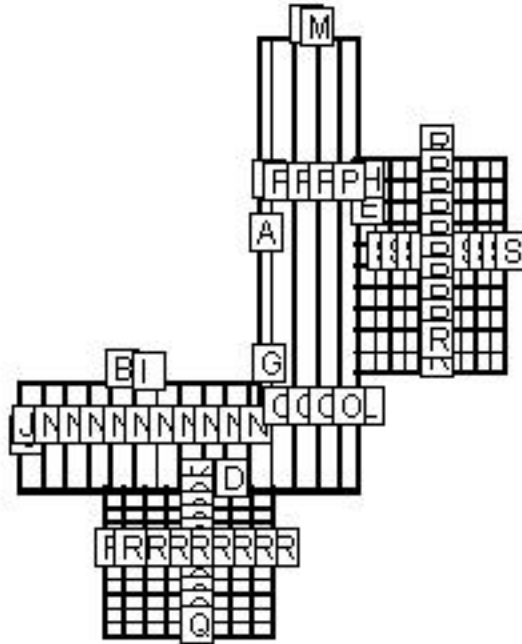
Cut Angles: L=Left, R=Right, F=Front, S=Side

LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
M	Header	1	2' 11"	0, 0	c	Stringer	26	2' 1"	0, 0
N	Header	1	12' 5 1/2"	0, 0	d	Riser	1	13' 2"	45, 0
O	Internal Joist	1	11' 5 1/4"	29, 45	e	Riser	1	12' 4"	45, 0
P	Internal Joist	1	13' 6"	29, 45	f	Stringer	1	2' 8"	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	1	20' 1"	45, 45	K	Header	1	19' 7 1/4"	0, 0
B	Cladding	1	14' 1"	45, 45	L	Rim Joist	1	8' 5 1/4"	0, 0
C	Cladding	1	6' 6"	45, 45	M	Header	1	5' 7 1/4"	0, 0
D	Cladding	1	20'	45, 45	N	Internal Joist	10	6' 1 1/4"	0, 0
E	Cladding	1	26' 6"	45, 45	O	Internal Joist	4	8' 3 1/2"	0, 0
F	Cladding	1	6'	45, 45	P	Internal Joist	4	17' 9 3/4"	0, 0
G	Rim Joist	1	3' 3 3/4"	0, 0	Q	Riser	10	10'	0, 0
H	Rim Joist	2	17' 11"	0, 0	R	Stringer	20	10' 5"	0, 0
I	Header	1	14'	0, 0	S	Riser	10	12' 6"	0, 0
J	Rim Joist	1	6' 4 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	12	2X8X12 Treated	TREATED
Internal Joist	7	2X8X14 Treated	TREATED
Internal Joist	15	2X8X16 Treated	TREATED
Internal Joist	13	2X8X18 Treated	TREATED
Internal Joist	7	2X8X8 Treated	TREATED
Internal Joist	16	2X8X10 Treated	TREATED
Beam	9	2X10X10 Treated	TREATED
Beam	6	2X10X14 Treated	TREATED
Beam	2	2X10X8 Treated	TREATED
Railing Post	1	4X4X12 Treated	TREATED
Railing Post	4	4X4X18 Treated	TREATED
Railing Section	5	TimberTech 8' RadianceRail Custom Rail Pack - Kona® - 8'	TIMBERTECH
Baluster	20	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	15	TimberTech Earthwood Evolutions® Legacy Fascia Board - Ashwood - 12'	TIMBERTECH
Decking	75	TimberTech Earthwood Evolutions® Legacy Deck Plank, Square Shouldered - Mocha - 16'	TIMBERTECH
Decking	52	TimberTech Earthwood Evolutions® Legacy Deck Plank, Square Shouldered - Mocha - 20'	TIMBERTECH
Post	27	4X4X8 Treated	TREATED
Riser	26	TimberTech Earthwood Evolutions® Legacy Riser Board - Ashwood - 12'	TIMBERTECH
Beam	2	2X10X16 Treated	TREATED
Railing Post	1	4X4X8 Treated	TREATED
Railing Section	12	TimberTech 6' RadianceRail Custom Rail Pack - Kona® - 6'	TIMBERTECH
Beam	2	2X10X18 Treated	TREATED

**Lumber Materials**

<b>COMPONENT</b>	<b>QTY</b>	<b>DESCRIPTION</b>	<b>WOOD TYPE</b>
Railing Section	8	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

To find a TimberTech Dealer or Contractor in your area, please go to [www.timbertech.com](http://www.timbertech.com)

### Other Materials

Qty	Description
4	TT/AZEK CableRail 100' Stainless Steel Cable - Stainless - 100'
2	5 LB. 10D Hot-Dip Galvanized Nail
1	1LB. 16D Galvanized Common Nail
2	2x6-8" Triple Zinc Right Skewed Joist Hanger SKH26R-TZ
20	5" Triple Zinc Angle Clip MP5-TZ
4	1 LB. 10D X1 1/2" Nail
44	2x8-10" Triple Zinc Joist Hanger JUS28-TZ
7	7" Triple Zinc Angle Clip AC7-TZ
2	5" Triple Zinc Angle Clip MP5-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
84	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
1	40 LB. 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
47	7" Triple Zinc Angle Clip AC7-TZ
50	4X4 Triple Zinc Deck Post Tie SDPT7-TZ
1	1 LB. 8X3" Philips Head Stainless Deck Screws
25	TimberTech 5" Post Skirt - Kona®
100	3/8 Galvanized Hex Nut
200	3/8 Galvanized Flat Washer
100	3/8 X 8" Galvanized Carriage Bolt
25	TimberTech 5" x 5" Post Sleeve - Kona® - 42"
25	TimberTech 5" Post Cap - Kona®
1	TT/AZEK CableRail Cable Cutters
1	TT/AZEK CableRail Accessory Kit [Quick-Connect release tool, lacing needle, hanger bolt installation tool] -
20	TT/AZEK CableRail 36" Hardware Kit [9 Quick-Connect fittings, 9 Quick Connect Swivel fittings, 18 hanger bolts, 9 lock nuts] - Stainless
20	TT/AZEK LED In Deck Light (8 Packs of 4 per Unit) - Architectural Bronze
1	TT/AZEK Decklites Dimmer

Qty	Description
2	TT/AZEK 100' wire 16/2
1	TT/AZEK Transformer - 12 Volt 150 W
1	TT/AZEK CableRail Protector Sleeves [Pack of 20] - Stainless
16	2 Pieces of Joist Material Nailed to Each Joist Splice
7	TimberTech TOPLoc 100 Sq. Ft. Pack Walnut - Walnut
3	TimberTech TOPLoc Fascia Pack Ashwood - Ashwood
26	1/2 X 6" Galvanized Lag Screw
1	TT/AZEK CableRail 500' Stainless Steel Cable - Stainless - 500'
1	1 LB. 10D Hot-Dip Galvanized Nail

**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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