



Deck Designer Specification Kit For  
**TimberTech**

**Deck layout diagram**



Top view without planks

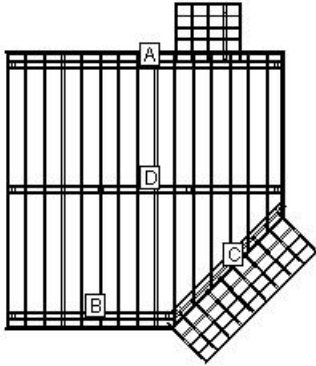


Bottom view with planks



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.

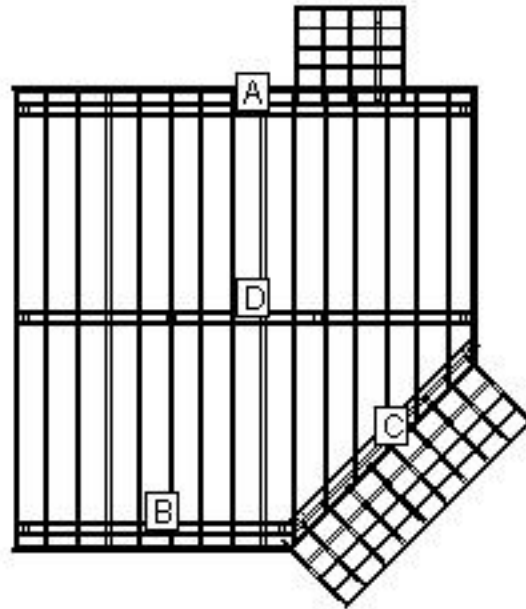
**Joists:**

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

**Stress Analysis: Level 1**

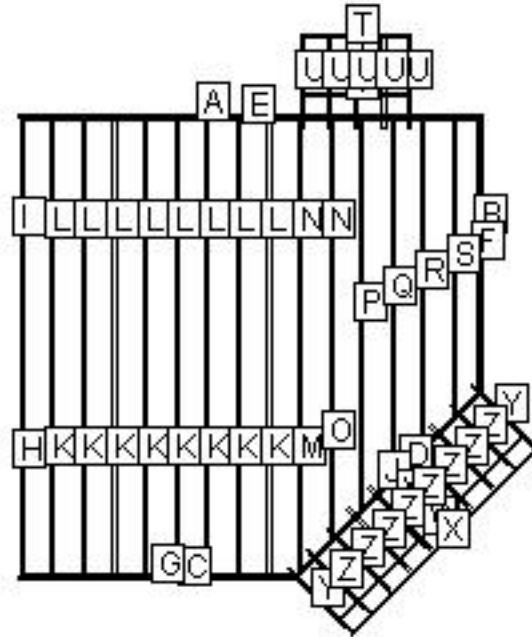
Joist Deflection	178
Joist Bending	61
Joist Shear	100
Joist Compression	100
Beam Deflection	134
Beam Bending	60
Beam Shear	62
Post Stability	113

### Beam Layout Level 1



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

Materials Cut List: Level 1



LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
A	Cladding	1	20'	45, 45	N	Internal Joist	2	9' 8 1/2"	0, 45
B	Cladding	1	12'	23, 45	O	Internal Joist	1	8' 5"	0, 45
C	Cladding	1	12'	45, 23	P	Internal Joist	1	16' 9 1/2"	0, 45
D	Cladding	1	11' 4"	23, 23	Q	Internal Joist	1	15' 5 1/2"	0, 45
E	Header	1	19' 7 1/4"	0, 0	R	Internal Joist	1	14' 1 1/2"	0, 45
F	Rim Joist	1	11' 11"	0, 0	S	Internal Joist	1	12' 9 1/2"	0, 45
G	Header	1	11' 9 1/4"	0, 0	T	Riser	4	4' 8"	0, 0
H	Rim Joist	1	10' 1/4"	0, 0	U	Pre Cut Stringer	5	4' 2"	0, 0
I	Rim Joist	1	9' 10"	0, 0	V	Riser	2	11' 4"	0, 0
J	Header	1	11' 3"	0, 0	W	Riser	1	11' 4"	0, 0
K	Internal Joist	8	9' 10 1/2"	0, 0	X	Riser	1	11' 4"	0, 0
L	Internal Joist	8	9' 8 3/4"	0, 0	Y	Pre Cut Stringer	2	4' 2"	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	9' 9"	0, 45	Z Pre Cut Stringer	8	4' 2"	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	21	2X8X10 Treated	TREATED
Rim Joist	4	2X8X12 Treated	TREATED
Internal Joist	2	2X8X18 Treated	TREATED
Internal Joist	2	2X8X16 Treated	TREATED
Internal Joist	2	2X8X14 Treated	TREATED
Beam	4	2X10X10 Treated	TREATED
Beam	4	2X10X14 Treated	TREATED
Beam	2	2X10X12 Treated	TREATED
Beam	2	2X10X8 Treated	TREATED
Pre Cut Stringer	15	4-Step Treated Stair Stringer	TREATED
Hand Rail	1	TimberTech Earthwood Evolutions® Tropical Deck Plank, Square Shouldered - Pacific Walnut - 16'	TIMBERTECH
Hand Rail	3	TimberTech Earthwood Evolutions® Tropical Deck Plank, Square Shouldered - Pacific Walnut - 20'	TIMBERTECH
Railing Post	1	4X4X12 Treated	TREATED
Railing Post	3	4X4X16 Treated	TREATED
Railing Section	9	TimberTech Evolutions BuilderBoard, packaged as 2 - 6' boards - Traditional Walnut - 6'	TIMBERTECH
Railing Section	1	TimberTech Evolutions BuilderBoard, packaged as 2 - 8' boards - Traditional Walnut - 8'	TIMBERTECH
Railing Section	7	TimberTech 36" Metal Baluster Pack - 25" Baluster Height - Black - 6'8'	TIMBERTECH
Cladding	5	TimberTech Earthwood Evolutions® Terrain Collection Fascia Board, 12" wide - Silver Maple - 12'	TIMBERTECH
Decking	17	TimberTech Earthwood Evolutions® Legacy Deck Plank, Square Shouldered - Mocha - 16'	TIMBERTECH
Decking	34	TimberTech Earthwood Evolutions® Legacy Deck Plank, Square Shouldered - Mocha - 20'	TIMBERTECH
Post	4	4X4X8 Treated	TREATED
Riser	6	TimberTech Earthwood Evolutions® Terrain Collection Riser Board, 7 1/4" wide - Silver Maple - 12'	TIMBERTECH
Railing Section	4	TimberTech 36" Metal Baluster Stair Pack - 23.75" Baluster Height - Black - 6'8'	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
23	2x8-10" Triple Zinc Joist Hanger JUS28-TZ
1	1LB. 16D Galvanized Common Nail
5	2x6-8" Triple Zinc Left Skewed Joist Hanger SKH26L-TZ
3	7" Triple Zinc Angle Clip AC7-TZ
1	5" Triple Zinc Angle Clip MP5-TZ
3	1LB. 8D Galvanized Common Nail
3	1 LB. 1-1/2" Joist Hanger Nail
48	Triple Zinc Rafter Tie RT7-TZ
12	Anchor Bolt AB128
12	4X4 Triple Zinc Deck Post Anchor PA44E-TZ
19	80 L.B. Basic Concrete Mix
1	40 LB. Basic Concrete Mix
9	8" X 48" Concrete Form Tube
192	1/2 Galvanized Flat Washer
4	1/2 Galvanized Hex Nut
96	1/2 X 8" Galvanized Carriage Bolt
15	7" Triple Zinc Angle Clip AC7-TZ
30	4X4 Triple Zinc Deck Post Tie SDPT7-TZ
1	1 LB. 8X3" Philips Head Stainless Deck Screws
15	TimberTech Evolutions Rail 5"x5" Post Skirt - Traditional Walnut
60	3/8 Galvanized Hex Nut
120	3/8 Galvanized Flat Washer
60	3/8 X 8" Galvanized Carriage Bolt
30	TimberTech Evolutions Rail Hardware Mounting Kit - Traditional Walnut
15	TimberTech Evolutions Rail 5"x5" Post Cover - Traditional Walnut - 42"
22	TimberTech Evolutions Rail Foot Block - Traditional Walnut
11	2 Pieces of Joist Material Nailed to Each Joist Splice
1	TT/AZEK Transformer - 12 Volt 150 W
1	TT/AZEK Decklites Dimmer
1	TT/AZEK 100' wire 16/2
28	TT/AZEK LED Riser Light - Architectural Bronze
3	TimberTech TOPLoc 100 Sq. Ft. Pack Walnut - Walnut
1	TimberTech TOPLoc Fascia Bit
1	TimberTech TOPLoc Fascia Pack Dark Gray - Dark Gray
40	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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