



Deck Designer Specification Kit For  
**TimberTech**

**Deck layout diagram**



Top view without planks

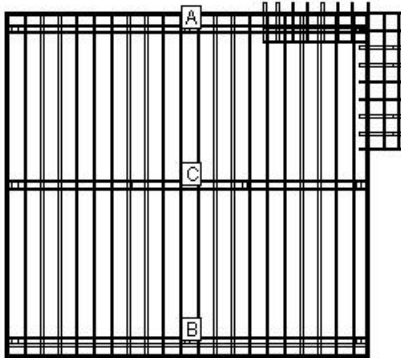


Bottom view with planks



Top view with planks

**Permit Page: Level 1**



**LOAD AND SUPPORT:**

Your deck will support a 44 PSF live load.  
Posts have 36" below ground support.

**DECK AND POST HEIGHT:**

You selected a height of 24" from the top of the decking to the ground level. The top of the deck support posts will therefore be 15" above ground level.

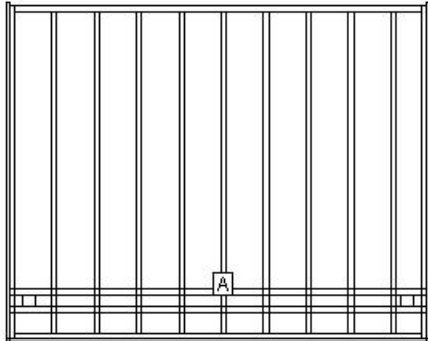
**Joists:**

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

**Stress Analysis: Level 1**

Joist Deflection	246
Joist Bending	83
Joist Shear	134
Joist Compression	134
Beam Deflection	125
Beam Bending	54
Beam Shear	58
Post Stability	107

**Permit Page: Level 2**



**LOAD AND SUPPORT:**

Your deck will support a 74 PSF live load.  
Posts have 36" below ground support.

**DECK AND POST HEIGHT:**

You selected a height of 45" from the top of the decking to the ground level. The top of the deck support posts will therefore be 36" above ground level.

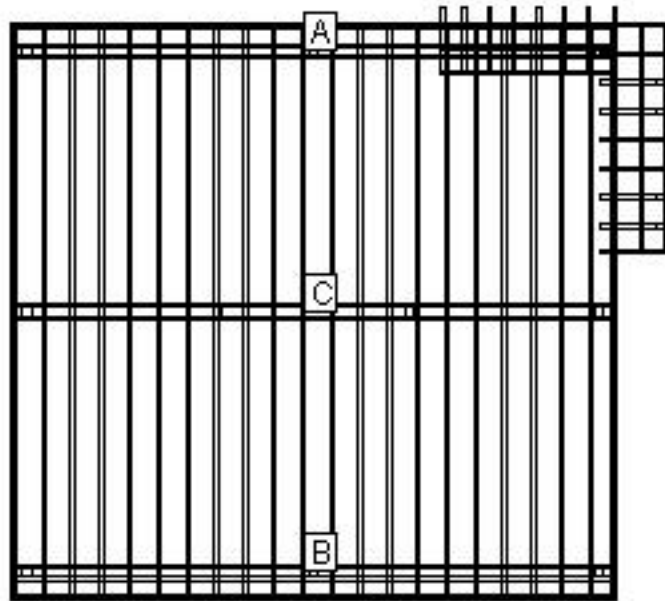
**Joists:**

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

**Stress Analysis: Level 2**

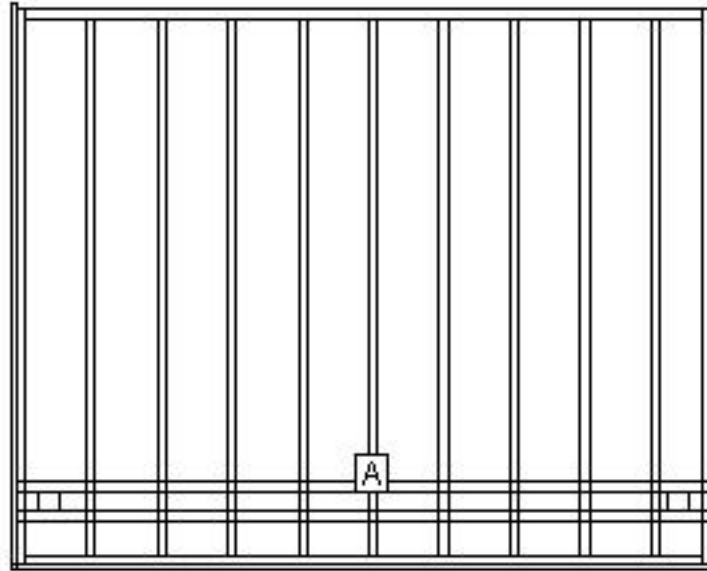
Joist Deflection	770
Joist Bending	173
Joist Shear	189
Joist Compression	189
Beam Deflection	248
Beam Bending	86
Beam Shear	84
Post Stability	305

### Beam Layout Level 1



BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	20' 10 1/4"	3	9' 11 1/2"
B	20' 10 1/4"	3	9' 11 1/2"
C	20' 10 1/4"	4	6' 7 1/2"

**Beam Layout Level 2**



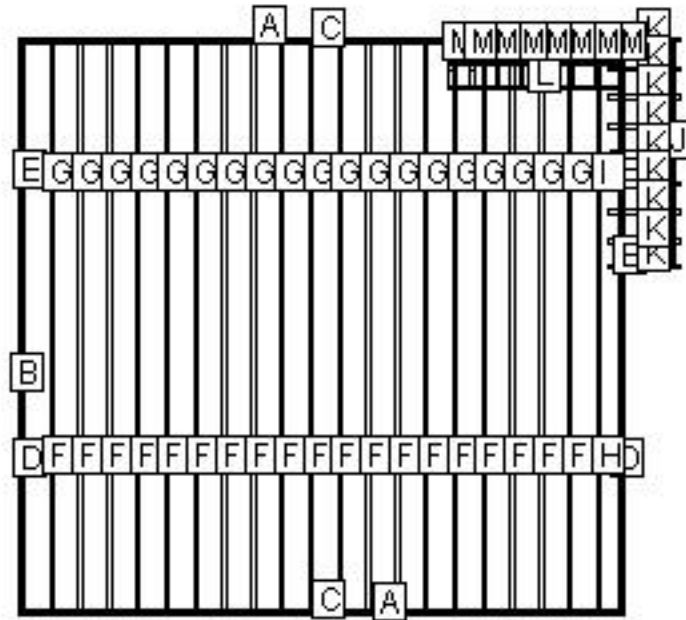
**BEAM LABEL**  
A

**BEAM LENGTH**  
9' 10 1/4"

**POST COUNT**  
2

**POST SPACING**  
8' 10 3/4"

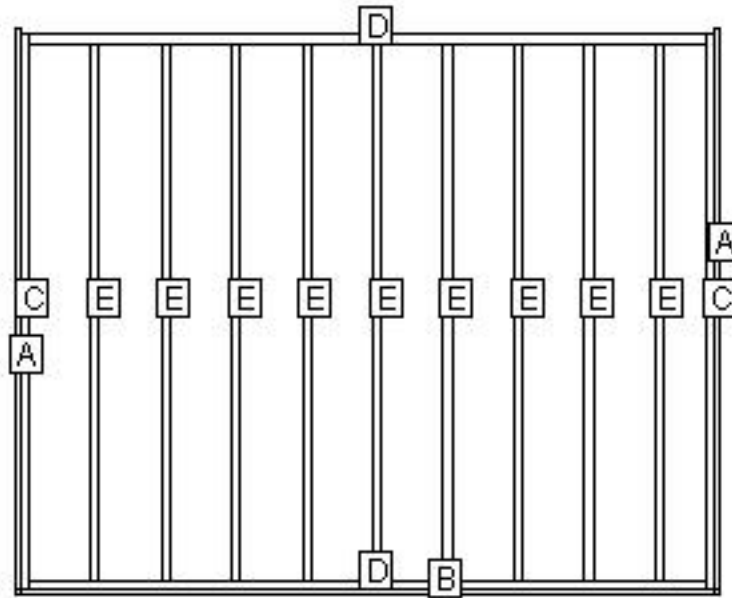
Materials Cut List: Level 1



LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
A	Cladding	2	21'	45, 45	H	Internal Joist	1	9' 9 1/2"	0, 0
B	Cladding	2	20'	45, 45	I	Internal Joist	1	9' 9 3/4"	0, 0
C	Header	2	20' 7 1/4"	0, 0	J	Riser	2	7' 11 1/2"	0, 0
D	Rim Joist	2	9' 11 1/4"	0, 0	K	Pre Cut Stringer	9	2' 6"	0, 0
E	Rim Joist	2	9' 11"	0, 0	L	Riser	2	6' 1"	0, 0
F	Internal Joist	19	9' 9 1/2"	0, 0	M	Pre Cut Stringer	8	2' 1"	0, 0
G	Internal Joist	19	9' 9 3/4"	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	8'	45, 45	D	Header	2	9' 7 1/4"	0, 0
B	Cladding	1	10'	45, 45	E	Internal Joist	9	7' 7 1/4"	0, 0
C	Rim Joist	2	7' 10 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	46	2X8X10 Treated	TREATED
Beam	2	2X10X8 Treated	TREATED
Beam	2	2X10X14 Treated	TREATED
Beam	8	2X10X12 Treated	TREATED
Pre Cut Stringer	9	3-Step Treated Stair Stringer	TREATED
Pre Cut Stringer	8	2-Step Treated Stair Stringer	TREATED
Railing Post	1	4X4X14 Treated	TREATED
Railing Post	3	4X4X18 Treated	TREATED
Railing Section	12	TimberTech 8' RadianceRail Custom Rail Pack - Kona® - 8'	TIMBERTECH
Railing Section	13	TT/AZEK 31" Round Aluminum Baluster - Black - 31"	TIMBERTECH
Cladding	11	TimberTechEarthwood Evolutions® Terrain Collection Fascia Board, 12" wide - Rustic Elm - 12'	TIMBERTECH
Decking	2	TimberTech Earthwood Evolutions® Legacy Deck Plank, Grooved - Ashwood - 12'	TIMBERTECH
Decking	16	TimberTech Earthwood Evolutions® Legacy Deck Plank, Grooved - Ashwood - 16'	TIMBERTECH
Decking	45	TimberTech Earthwood Evolutions® Legacy Deck Plank, Grooved - Ashwood - 20'	TIMBERTECH
Header	13	2X8X8 Treated	TREATED
Header	3	2X8X18 Treated	TREATED
Post	3	4X4X8 Treated	TREATED
Riser	4	TimberTech Earthwood Evolutions® Terrain Collection Riser Board, 7 1/4" wide - Rustic Elm - 12'	TIMBERTECH
Railing Section	1	TT/AZEK 31" Round Aluminum Stair Baluster - Black - 31"	TIMBERTECH
Beam	2	2X10X10 Treated	TREATED
Railing Section	1	TimberTech 6' RadianceRail Custom Rail Pack - Kona® - 6'	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
1	5 LB. 10D Hot-Dip Galvanized Nail
3	1 LB. 10D Hot-Dip Galvanized Nail
58	2x8-10" Triple Zinc Joist Hanger JUS28-TZ
8	7" Triple Zinc Angle Clip AC7-TZ
4	1LB. 8D Galvanized Common Nail
1	5 LB. 1-1/2" Joist Hanger Nail
77	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
4	10 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
17	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 - Kona®
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 - Kona® - 42"
19	TimberTech 5" LED Post Cap Light
19	TimberTech 5" Post Cap - Kona®
1	TT/AZEK Decklites Dimmer
1	TT/AZEK Wire Guide - 60 Packs of 12 ea.
2	TT/AZEK 100' wire 16/2
14	TT/AZEK LED Accent Light - Architectural Bronze
1	TT/AZEK Transformer - 12 Volt 150 W
22	2 Pieces of Joist Material Nailed to Each Joist Splice
1	TimberTech Cortex - 100 LF Evolutions Ashwood - Ashwood
2	TimberTech TOPLoc Fascia Pack Rustic Elm - Rustic Elm
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
2	THR128-HDG Threaded Rod
4	DTB-TZ Deck Tie Bracket

Qty	Description
1	1 LB. 1-1/2" Joist Hanger 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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