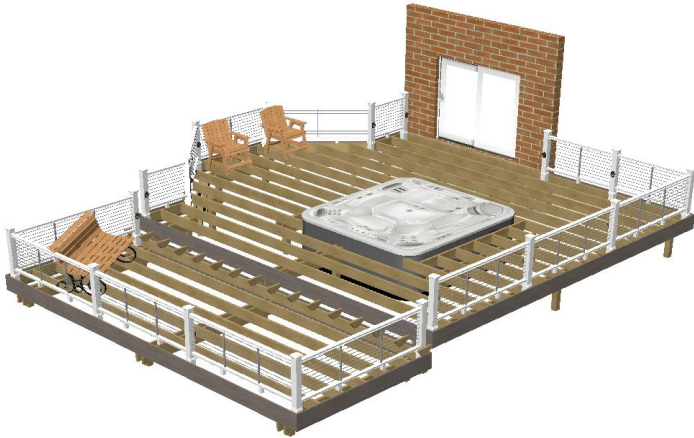
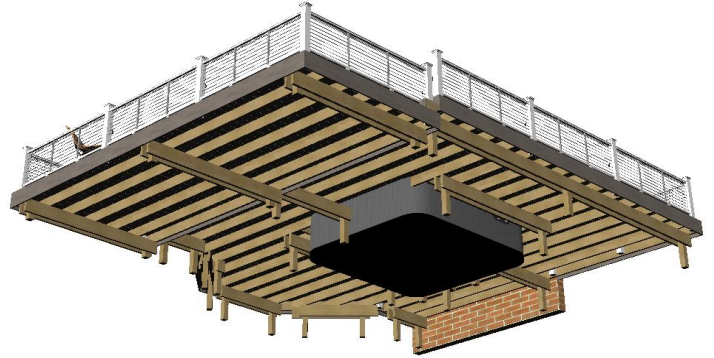


Deck Designer Specification Kit For  
**TimberTech**

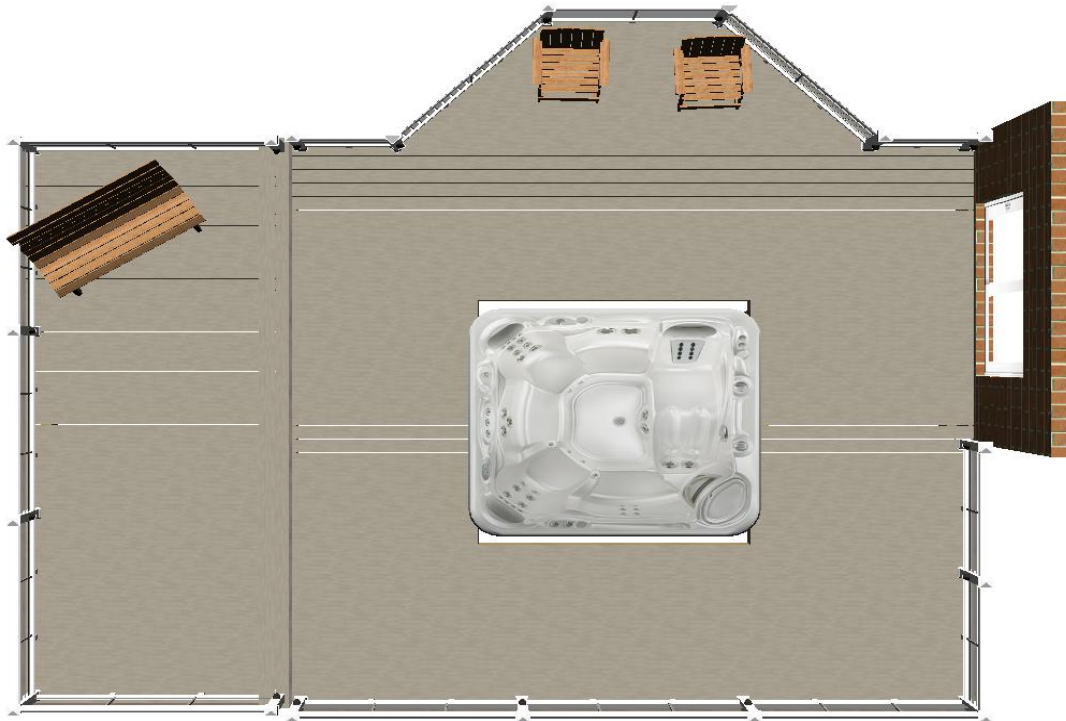
**Deck layout diagram**



Top view without planks

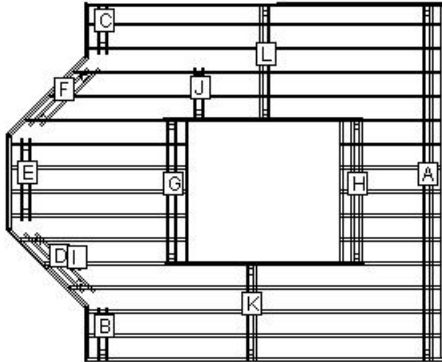


Bottom view with planks



Top view with planks

Permit Page: Level 1



**LOAD AND SUPPORT:**

Your deck will support a 40 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.

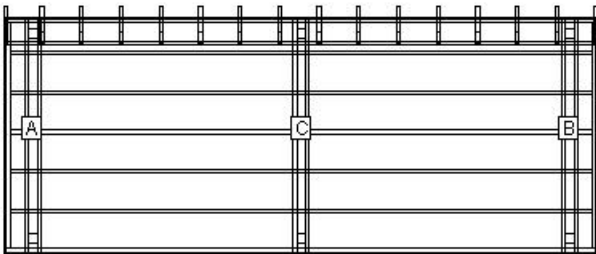
**Joists:**

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

**Stress Analysis: Level 1**

Joist Deflection	134
Joist Bending	50
Joist Shear	92
Joist Compression	92
Beam Deflection	144
Beam Bending	56
Beam Shear	58
Post Stability	118

**Permit Page: Level 2**



**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 22" from the top of the decking to the ground level. The top of the deck support posts will therefore be 13" above ground level.

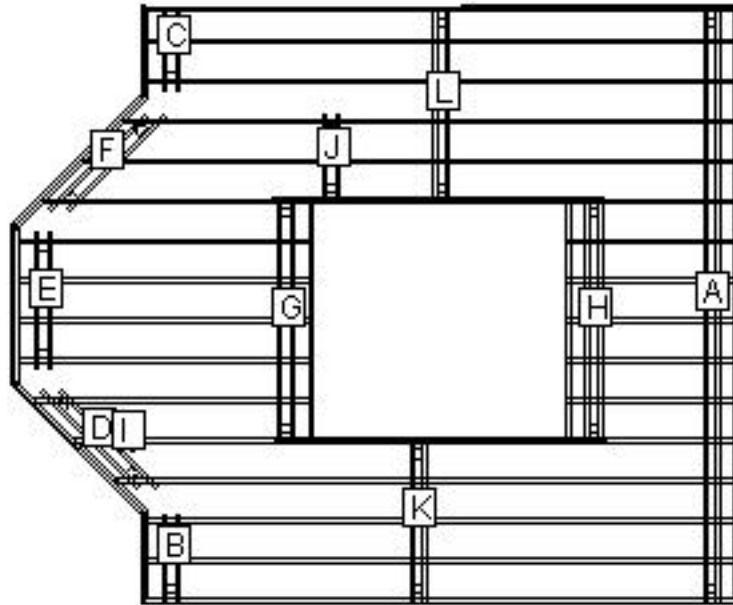
**Joists:**

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

**Stress Analysis: Level 2**

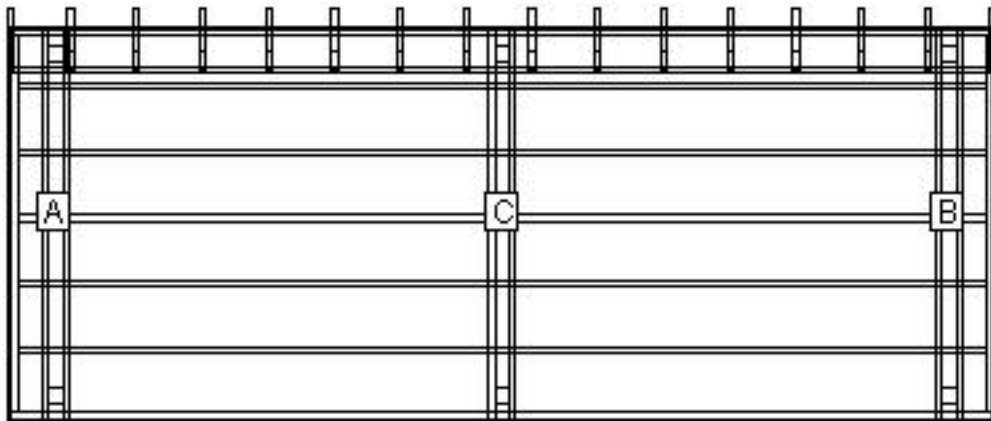
Joist Deflection	184
Joist Bending	62
Joist Shear	101
Joist Compression	101
Beam Deflection	326
Beam Bending	69
Beam Shear	55
Post Stability	182

### Beam Layout Level 1



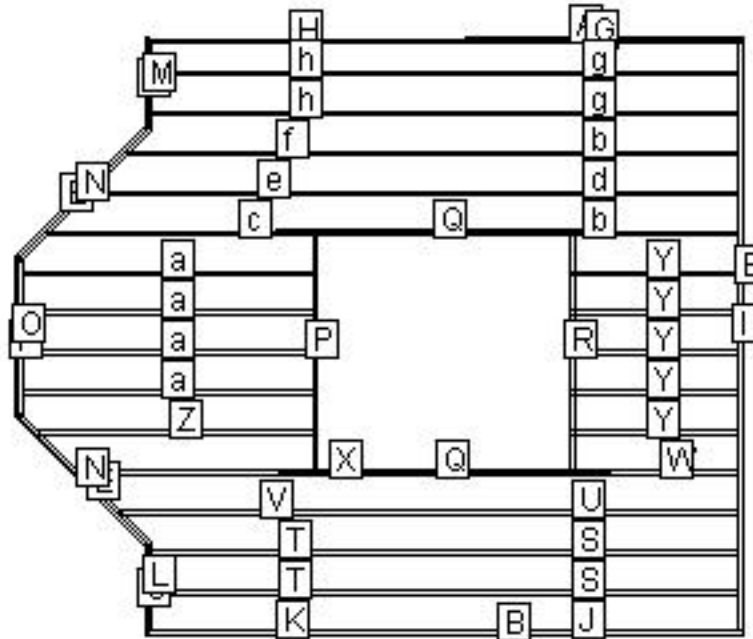
BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	19' 10 1/4"	3	9' 5 1/2"
B	2' 11"	2	1' 11 1/2"
C	2' 9 1/4"	2	1' 10"
D	4' 5 3/4"	2	3' 2 3/4"
E	4' 6"	2	3' 6 1/2"
F	4' 5 3/4"	2	3' 2 3/4"
G	8' 2"	2	7' 2 1/2"
H	8' 2"	2	7' 2 1/2"
I	6"	1	0
J	2' 11"	2	1' 11 1/4"
K	5' 5 1/4"	2	4' 5 3/4"
L	6' 6"	2	5' 6 1/2"

### Beam Layout Level 2



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

Materials Cut List: Level 1



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

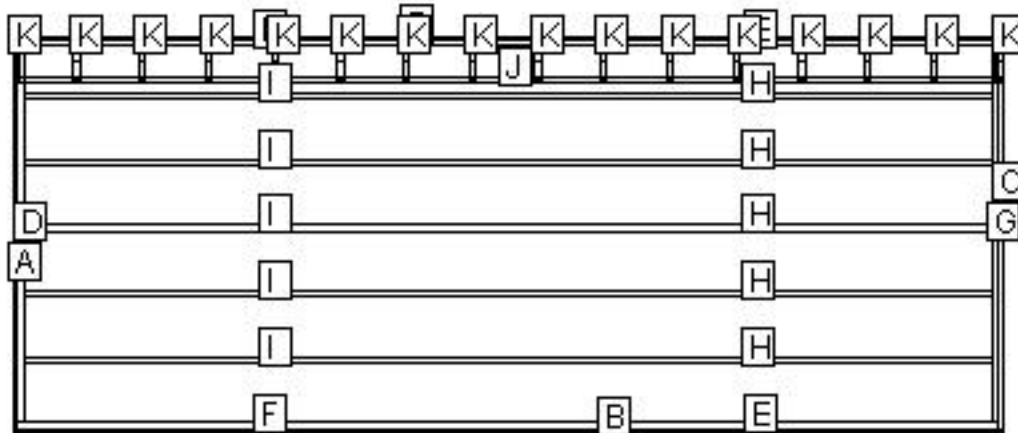
Cut Angles: L=Left, R=Right, F=Front, S=Side

LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
M	Header	1	2' 10"	0, 0	d	Internal Joist	1	9' 10 1/2"	45, 0
N	Header	2	6' 1 1/2"	0, 0	e	Internal Joist	1	11' 11"	45, 0
O	Header	1	5' 3 1/4"	0, 0	f	Internal Joist	1	10' 8"	45, 0
P	Header	1	7' 11"	0, 0	g	Internal Joist	2	9' 9 1/2"	0, 0
Q	Rim Joist	2	11' 1/2"	0, 0	h	Internal Joist	2	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	1	8'	45, 45	G	Header	1	7' 7 1/4"	0, 0
B	Cladding	2	20'	45, 45	H	Internal Joist	5	9' 9 1/2"	0, 0
C	Cladding	1	8'	45, 45	I	Internal Joist	5	9' 9 3/4"	0, 0
D	Header	1	7' 7 1/4"	0, 0	J	Riser	1	20'	0, 0
E	Rim Joist	2	9' 11 1/4"	0, 0	K	Stringer	16	1' 1 1/4"	0, 0
F	Rim Joist	2	9' 11"	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	26	2X8X10 Treated	TREATED
Rim Joist	10	2X8X12 Treated	TREATED
Internal Joist	7	2X8X8 Treated	TREATED
Internal Joist	4	2X8X18 Treated	TREATED
Internal Joist	1	2X8X14 Treated	TREATED
Beam	8	2X10X10 Treated	TREATED
Beam	9	2X10X8 Treated	TREATED
Railing Post	2	4X4X8 Treated	TREATED
Railing Post	3	4X4X18 Treated	TREATED
Railing Section	3	TimberTech 6' RadianceRail Custom Rail Pack - White - 6'	TIMBERTECH
Railing Section	10	TimberTech 8' RadianceRail Custom Rail Pack - White - 8'	TIMBERTECH
Baluster	21	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	13	TimberTech Earthwood Evolutions® Legacy Fascia Board - Ashwood - 12'	TIMBERTECH
Decking	10	TimberTech ReliaBoard® Deck Plank, Square Shouldered - Gray - 12'	TIMBERTECH
Decking	35	TimberTech ReliaBoard® Deck Plank, Square Shouldered - Gray - 16'	TIMBERTECH
Decking	28	TimberTech ReliaBoard® Deck Plank, Square Shouldered - Gray - 20'	TIMBERTECH
Internal Joist	5	2X8X16 Treated	TREATED
Post	9	4X4X8 Treated	TREATED
Beam	3	2X10X18 Treated	TREATED
Riser	2	TimberTech Earthwood Evolutions® Legacy Riser Board - Ashwood - 12'	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
1	TT/AZEK CableRail 500' Stainless Steel Cable - Stainless - 500'
3	1 LB. 10D X1 1/2" Nail
1	5 LB. 10D Hot-Dip Galvanized Nail
42	2x8-10" Triple Zinc Joist Hanger JUS28-TZ
1	1LB. 16D Galvanized Common Nail
3	2x6-8" Triple Zinc Left Skewed Joist Hanger SKH26L-TZ
3	2x6-8" Triple Zinc Right Skewed Joist Hanger SKH26R-TZ
8	7" Triple Zinc Angle Clip AC7-TZ
5	1LB. 8D Galvanized Common Nail
5	1 LB. 1-1/2" Joist Hanger Nail
89	Triple Zinc Rafter Tie RT7-TZ
30	Anchor Bolt AB128
30	4X4 Triple Zinc Deck Post Anchor PA44E-TZ
47	80 L.B. Basic Concrete Mix
1	60 L.B. Basic Concrete Mix
23	8" X 48" Concrete Form Tube
480	1/2 Galvanized Flat Washer
10	1/2 Galvanized Hex Nut
240	1/2 X 8" Galvanized Carriage Bolt
36	4X4 Triple Zinc Deck Post Tie SDPT7-TZ
1	1 LB. 8X3" Philips Head Stainless Deck Screws
18	TimberTech 5" Post Skirt - White
72	3/8 Galvanized Hex Nut
144	3/8 Galvanized Flat Washer
72	3/8 X 8" Galvanized Carriage Bolt
18	TimberTech 5" x 5" Post Sleeve - White - 42"
18	TimberTech 5" Post Cap - White
1	TT/AZEK CableRail Cable Cutters
1	TT/AZEK CableRail Accessory Kit [Quick-Connect release tool, lacing needle, hanger bolt installation tool] -
13	TT/AZEK CableRail 36" Hardware Kit [9 Quick-Connect fittings, 9 Quick Connect Swivel fittings, 18 hanger bolts, 9 lock nuts] - Stainless
1	TT/AZEK Decklites Dimmer
1	TT/AZEK Wire Guide - 60 Packs of 12 ea.
2	TT/AZEK 100' wire 16/2
15	TT/AZEK LED Accent Light - Architectural Bronze
1	TT/AZEK Transformer - 12 Volt 150 W
1	TT/AZEK CableRail Protector Sleeves [Pack of 20] - Stainless
18	2 Pieces of Joist Material Nailed to Each Joist Splice

Qty	Description
2	TimberTech TOPLoc Fascia Pack Ashwood - Ashwood
3	TimberTech TOPLoc 100 Sq. Ft. Pack Gray - Gray
1	TimberTech TOPLoc Stainless Steel 3"- 85 Sq. Ft. Pack Gray - Gray
22	1/2 X 6" Galvanized Lag Screw
3	TT/AZEK CableRail 100' Stainless Steel Cable - Stainless - 100'
3	1 LB. 10D Hot-Dip Galvanized Nail
1	40 LB. Basic Concrete Mix
2	10 LB. Basic Concrete Mix
16	7" Triple Zinc Angle Clip AC7-TZ

**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.

**AZEK Building Products and its affiliates assume no responsibility for any damages, including direct or consequential, personal injuries suffered, or property or economic losses incurred as a result of the information published within this Deck Design, AZEK Building Products and its affiliate websites or Deck Design Detail Report. Before beginning any project, review the instructions carefully. We cannot anticipate all of your working conditions or the characteristics of your materials and tools. For your safety, you should consider your own skill level and use caution, care and good judgment when following the instructions. If you have doubts, concerns or questions, consult local experts, architects, soil engineers or building authorities. Because local zoning and building codes and regulations vary greatly, you should ALWAYS CHECK WITH LOCAL AUTHORITIES TO ENSURE THAT YOUR PROJECT COMPLIES WITH ALL APPLICABLE CODES AND REGULATIONS. Always read and observe instructions and safety precautions provided by any tool or equipment manufacturer, and follow all accepted safety procedures.**

**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.**

**AZEK Building Products and its affiliates assume no liability or responsibility for your design, construction or use of any product supplied by AZEK Building Products.**

**YOU ASSUME TOTAL RESPONSIBILITY AND RISK FOR YOUR USE OF THE AZEK BUILDING PRODUCTS DESIGN, THE AZEK BUILDING PRODUCTS WEBSITE AND SUPPLIED DECK DESIGN DETAIL REPORT. AZEK BUILDING PRODUCTS PROVIDES THIS WEB-BASED TOOL, ALL INFORMATION, PRODUCTS, AND SERVICES "AS IS" AND DOES NOT MAKE EXPRESS OR IMPLIED WARRANTIES, REPRESENTATIONS, OR ENDORSEMENTS OF ANY KIND WHATSOEVER (INCLUDING WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE).**