





Deck Designer Specification Kit For

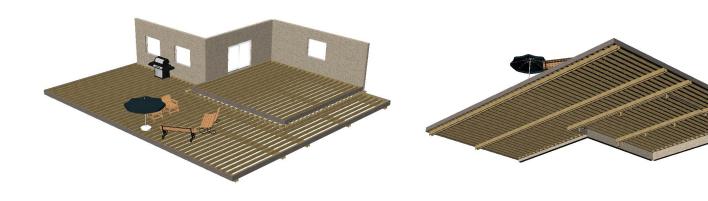
# TimberTech

www.TimberTech.com All rights reserved copyright ©2015 AZEK Building Products





# Deck layout diagram



Top view without planks

Bottom view with planks



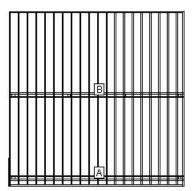
Top view with planks

www.TimberTech.com Page 2





### Permit Page: Level 1



#### LOAD AND SUPPORT:

Your deck will support a 48 PSF live load. Posts have 36" below ground support.

#### DECK AND POST HEIGHT:

.

You selected a height of 30" from the top of the decking to the ground level. The top of the deck support posts will therefore be 21" above ground level.

#### Joists:

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

	Stress Anaysis: Level 1				
Joist Deflection	205				
Joist Bending	74				
Joist Shear	128				
Joist Compression	128				
Beam Deflection	148				
Beam Bending	58				
Beam Shear	60				
Post Stability	109				

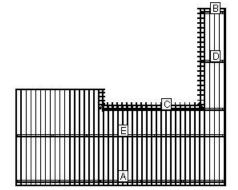
-

# www.TimberTech.com





### Permit Page: Level 2



#### LOAD AND SUPPORT:

Your deck will support a 41 PSF live load. Posts have 36" below ground support.

#### **DECK AND POST HEIGHT:**

You selected a height of 16" from the top of the decking to the ground level. The top of the deck support posts will therefore be 7" above ground level.

#### Joists:

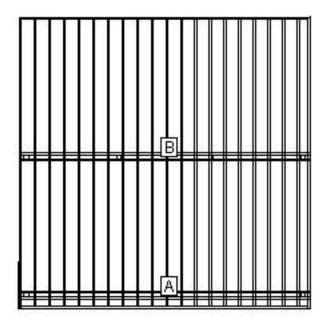
Set joists on top of beams, 12"; center to center.

Stress Anaysis: Level 2				
Joist Deflection	162			
Joist Bending	62			
Joist Shear	119			
Joist Compression	119			
Beam Deflection	191			
Beam Bending	57			
Beam Shear	51			
Post Stability	96			





# Beam Layout Level 1

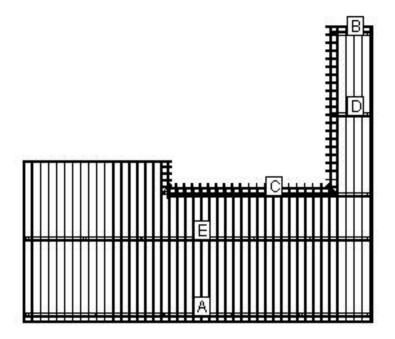


BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	19' 10 1/4"	3	9' 5 1/2"
В	19' 10 1/4"	4	6' 3 1/2"





Beam Layout Level 2

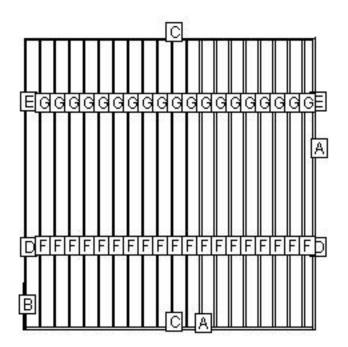


BEAM LABEL	BEAM LENGTH	POST COUNT	POST SPACING
A	43' 4 1/4"	6	8' 5 3/4"
В	5' 3 1/4"	2	4' 3 3/4"
С	25' 6 1/2"	4	8' 2 1/4"
D	5' 3 1/4"	2	4' 3 3/4"
E	43' 4 1/4"	7	7' 1"





# Materials Cut List: Level 1



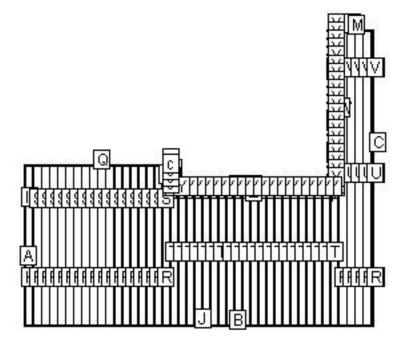
LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
А	Cladding	2	20'	45, 45	Е	Rim Joist	2	9' 6"	0, 0
В	Cladding	1	3' 3"	0, 45	F	Internal Joist	19	10' 2 1/2"	0, 0
С	Header	2	19' 7 1/4"	0, 0	G	Internal Joist	19	9' 4 3/4"	0, 0
D	Rim Joist	2	10' 4 1/4"	0, 0					

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
А	Cladding	1	20' 1"	45, 45	Р	Rim Joist	1	4' 6 3/4"	0, 0
В	Cladding	1	43' 6"	45, 45	Q	Header	1	17' 8 1/4"	0, 0
С	Cladding	1	36' 10"	45, 45	R	Internal Joist	22	10' 2 1/2"	0, 0
D	Cladding	1	5' 5"	45, 45	S	Internal Joist	17	9' 5 3/4"	0, 0
Е	Cladding	1	20' 1"	45, 45	Т	Internal Joist	21	16' 5 1/4"	0, 0
F	Cladding	1	20' 2"	45, 45	U	Internal Joist	5	15' 6"	0, 0
G	Cladding	1	3' 4"	45, 45	V	Internal Joist	5	10' 8 3/4"	0, 0
Н	Rim Joist	2	10' 4 1/4"	0, 0	W	Riser	1	20' 11"	45, 0
I	Rim Joist	1	9' 7"	0, 0	Х	Stringer	1	1' 5"	0, 0
J	Header	1	43' 1 1/4"	0, 0	Y	Stringer	42	1' 1 1/4"	0, 0
K	Rim Joist	1	15' 6"	0, 0	Z	Riser	1	21' 10"	45, 45
L	Rim Joist	2	10' 10"	0, 0	а	Stringer	1	1' 5"	0, 0

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

www.TimberTech.com Page 8





LABEL	NAME	QTY	LENGTH	BEVELS	LABEL	NAME	QTY	LENGTH	BEVELS
М	Header	1	5' 1/4"	0, 0	b	Riser	1	4' 2"	0, 45
Ν	Rim Joist	1	10' 4 3/4"	0, 0	С	Stringer	5	1' 1 1/4"	0, 0
0	Header	1	20' 4 3/4"	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	39	2X8X10 Treated	TREATED
Rim Joist	53	2X8X12 Treated	TREATED
Beam	8	2X10X10 Treated	TREATED
Beam	3	2X10X8 Treated	TREATED
Beam	2	2X10X14 Treated	TREATED
Cladding	18	TimberTech Earthwood Evolutions® Legacy Fascia Board - Ashwood - 12'	TIMBERTECH
Decking	9	TimberTech Earthwood Evolutions® Legacy Deck Plank, Square Shouldered - Ashwood - 16'	TIMBERTECH
Decking	141	TimberTech Earthwood Evolutions® Legacy Deck Plank, Square Shouldered - Ashwood - 20'	TIMBERTECH
Header	4	2X8X8 Treated	TREATED
Header	32	2X8X18 Treated	TREATED
Post	4	4X4X8 Treated	TREATED
Internal Joist	7	2X8X16 Treated	TREATED
Beam	6	2X10X18 Treated	TREATED
Beam	7	2X10X16 Treated	TREATED
Gusset	1	2X8X14 Treated	TREATED
Riser	5	TimberTech Earthwood Evolutions® Legacy Riser Board - Ashwood - 12'	TIMBERTECH

To find an AZEK and/or TimberTech Dealer or Contractor in your area, please go to www.timbertech.com





## **Other Materials**

Qty	Description
3	1 LB. 10D X1 1/2" Nail
3	1 LB. 10D Hot-Dip Galvanized Nail
124	2x8-10" Triple Zinc Joist Hanger JUS28-TZ
10	7" Triple Zinc Angle Clip AC7-TZ
4	THR128-HDG Threaded Rod
8	DTB-TZ Deck Tie Bracket
3	1LB. 8D Galvanized Common Nail
6	1 LB. 1-1/2" Joist Hanger Nail
175	Triple Zinc Rafter Tie RT7-TZ
28	Anchor Bolt AB128
28	4X4 Triple Zinc Deck Post Anchor PA44E-TZ
44	80 L.B. Basic Concrete Mix
4	10 LB. Basic Concrete Mix
21	8" X 48" Concrete Form Tube
448	1/2 Galvanized Flat Washer
9	1/2 Galvanized Hex Nut
224	1/2 X 8" Galvanized Carriage Bolt
52	2 Pieces of Joist Material Nailed to Each Joist Splice
3	TimberTech TOPLoc Fascia Pack Ashwood - Ashwood
12	TimberTech Cortex - 100 LF Evolutions Ashwood - Ashwood
112	1/2 X 6" Galvanized Lag Screw
1	5 LB. 10D X1 1/2" Nail
2	5 LB. 10D Hot-Dip Galvanized Nail
1	5 LB. 8D Galvanized Nail
1	5 LB. 1-1/2" Joist Hanger Nail
1	60 L.B. Basic Concrete Mix
49	7" Triple Zinc Angle Clip AC7-TZ



**Timber**Tech



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).