





Deck Designer Specification Kit For

TimberTech



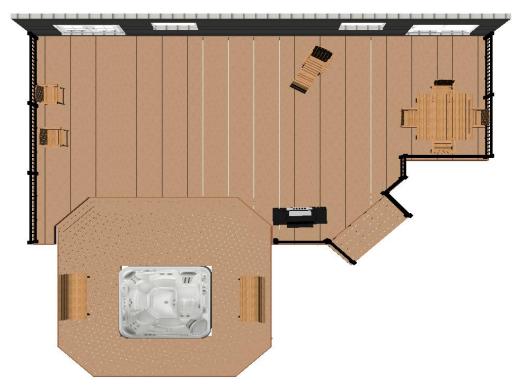


Deck layout diagram



Top view without planks

Bottom view with planks

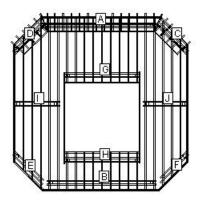


Top view with planks





Permit Page: Level 1



LOAD AND SUPPORT:

Your deck will support a 58 PSF live load. Posts have 36" below ground support.

DECK AND POST HEIGHT:

You selected a height of 18" from the top of the decking to the ground level. The top of the deck support posts will therefore be 9" above ground level.

Joists:

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

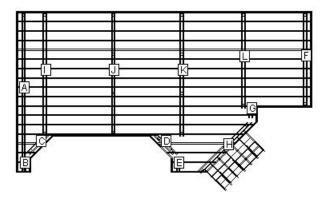
Stress Anavsis: Level 1

| Otless Allay | JOIG. ECVCI I |
|-------------------|---------------|
| Joist Deflection | 184 |
| Joist Bending | 68 |
| Joist Shear | 124 |
| Joist Compression | 124 |
| Beam Deflection | 343 |
| Beam Bending | 92 |
| Beam Shear | 81 |
| Post Stability | 198 |





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 39" from the top of the decking to the ground level. The top of the deck support posts will therefore be 30" above ground level.

Joists:

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

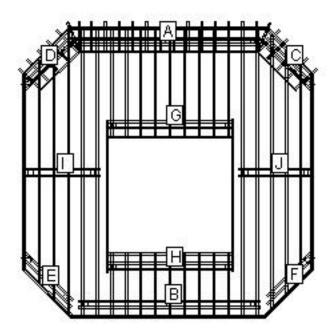
Stress Anavsis: Level 2

| Oli C33 Allay313. ECVCI Z | | | | | |
|---------------------------|--|--|--|--|--|
| 134 | | | | | |
| 50 | | | | | |
| 92 | | | | | |
| 92 | | | | | |
| 192 | | | | | |
| 65 | | | | | |
| 61 | | | | | |
| 115 | | | | | |
| | | | | | |





Beam Layout Level 1

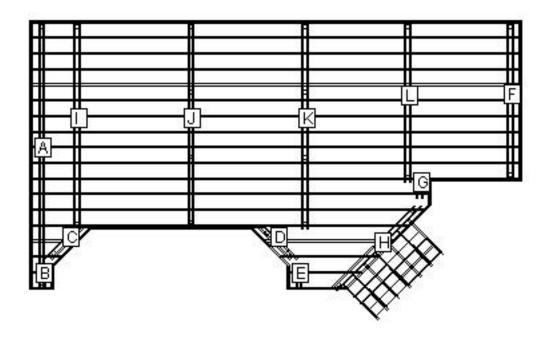


| BEAM LABEL | BEAM LENGTH | POST COUNT | POST SPACING |
|------------|-------------|------------|--------------|
| A | 13' 3" | 3 | 6' 2" |
| В | 12' 6" | 3 | 5' 9 1/4" |
| С | 4' 7" | 2 | 3' 4" |
| D | 4' 7" | 2 | 3' 4" |
| E | 4' 10" | 2 | 3' 7" |
| F | 4' 7" | 2 | 3' 4" |
| G | 8' 9" | 2 | 7' 9 1/2" |
| Н | 8' 9" | 2 | 7' 9 1/2" |
| 1 | 5' 3" | 2 | 4' 3 1/2" |
| J | 5' 1 1/4" | 2 | 4' 1 3/4" |





Beam Layout Level 2

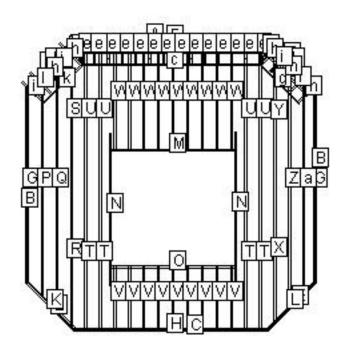


| BEAM LABEL | BEAM LENGTH | POST COUNT | POST SPACING |
|------------|-------------|------------|--------------|
| A | 22' 10 1/4" | 3 | 10' 11 1/2" |
| В | 1' 7" | 1 | 0 |
| С | 3' 8 1/2" | 2 | 2' 5 1/2" |
| D | 3' 8 1/2" | 2 | 2' 5 1/2" |
| E | 1' 7" | 1 | 0 |
| F | 13' 7 1/4" | 3 | 6' 4" |
| G | 1' 7 1/2" | 1 | 0 |
| Н | 10' 1 1/2" | 2 | 8' 10 1/2" |
| 1 | 17' 9 1/4" | 3 | 8' 5" |
| J | 17' 8 1/4" | 4 | 5' 7" |
| K | 17' 9 1/4" | 4 | 5' 7 1/4" |
| L | 13' 9 1/4" | 3 | 6' 5" |





Materials Cut List: Level 1



| LABEL | NAME | QTY | LENGTH | BEVELS | LABEL | NAME | QTY | LENGTH | BEVELS |
|-------|-----------|-----|------------|--------|-------|----------------|-----|-------------|--------|
| Α | Cladding | 1 | 13' 8" | 23, 23 | Т | Internal Joist | 4 | 9' 9 1/2" | 0, 0 |
| В | Cladding | 2 | 13' 6" | 23, 23 | U | Internal Joist | 4 | 9' 9 3/4" | 0, 0 |
| С | Cladding | 1 | 13' 4" | 23, 23 | V | Internal Joist | 9 | 4' 3 1/4" | 0, 0 |
| D | Cladding | 2 | 4' 5 3/4" | 23, 23 | W | Internal Joist | 9 | 7' 5" | 0, 0 |
| E | Cladding | 2 | 4' 8 1/2" | 23, 23 | Χ | Internal Joist | 1 | 9' 4" | 45, 45 |
| F | Header | 1 | 13' 7 1/4" | 0, 0 | Υ | Internal Joist | 1 | 9' 6" | 45, 45 |
| G | Rim Joist | 2 | 13' 5 1/4" | 0, 0 | Z | Internal Joist | 1 | 16' 9 1/2" | 45, 45 |
| Н | Header | 1 | 13' 3 1/4" | 0, 0 | а | Internal Joist | 1 | 14' 9 1/2" | 45, 45 |
| I | Header | 1 | 4' 5" | 0, 0 | b | Riser | 1 | 12' 11 3/4" | 23, 23 |
| J | Header | 1 | 4' 5" | 0, 0 | С | Riser | 1 | 12' 3 1/2" | 23, 23 |
| K | Header | 1 | 4' 8" | 0, 0 | d | Stringer | 2 | 2' 2 1/4" | 0, 0 |
| L | Header | 1 | 4' 8" | 0, 0 | е | Stringer | 14 | 2' 1" | 0, 0 |

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

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| LABEL | . NAME | QTY | LENGTH | BEVELS | LABEL | NAME | QTY | LENGTH | BEVELS |
|-------|----------------|-----|------------|--------|-------|----------|-----|-----------|--------|
| М | Header | 1 | 8' 6" | 0, 0 | f | Riser | 1 | 4' 1 1/2" | 23, 0 |
| Ν | Rim Joist | 2 | 10' 5 1/2" | 0, 0 | g | Riser | 1 | 3' 9 1/2" | 23, 0 |
| 0 | Header | 1 | 8' 6" | 0, 0 | h | Stringer | 5 | 2' 1" | 0, 0 |
| Р | Internal Joist | 1 | 15' 4" | 45, 45 | i | Stringer | 4 | 2' 1" | 0, 0 |
| Q | Internal Joist | 1 | 17' 4" | 45, 45 | j | Riser | 1 | 4' 1 1/2" | 0, 23 |
| R | Internal Joist | 1 | 9' 7" | 45, 45 | k | Riser | 1 | 3' 9 1/2" | 0, 23 |
| S | Internal Joist | 1 | 9' 9" | 45, 45 | I | Stringer | 1 | 2' 1" | 0, 0 |

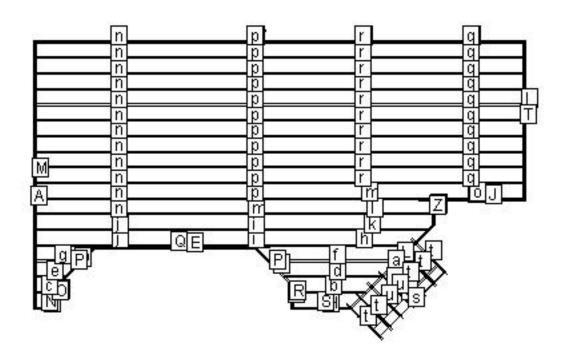
DECK DESIGNER

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 |
|-------|----------|-----|------------|--------|-------|----------------|-----|------------|--------|
| Α | Cladding | 1 | 23' | 45, 45 | Υ | Rim Joist | 1 | 9' 3/4" | 0, 0 |
| В | Cladding | 1 | 2' | 45, 45 | Z | Header | 1 | 2' 3" | 0, 0 |
| С | Cladding | 1 | 2' 1/4" | 45, 23 | а | Header | 1 | 10' 1" | 0, 0 |
| D | Cladding | 1 | 4' 6 1/2" | 23, 23 | b | Internal Joist | 1 | 6' 1 3/4" | 0, 45 |
| E | Cladding | 1 | 13' 8 3/4" | 23, 23 | С | Internal Joist | 1 | 1' 7 1/4" | 0, 0 |
| F | Cladding | 1 | 4' 6 1/2" | 23, 23 | d | Internal Joist | 1 | 8' 3" | 45, 45 |
| G | Cladding | 1 | 2' 1/4" | 23, 45 | е | Internal Joist | 1 | 2' 4 3/4" | 0, 45 |
| Н | Cladding | 1 | 5' 1" | 45, 23 | f | Internal Joist | 1 | 10' 11" | 45, 45 |
| I | Cladding | 1 | 13' 9" | 45, 45 | g | Internal Joist | 1 | 3' 8 3/4" | 0, 45 |
| J | Cladding | 1 | 7' 10" | 45, 45 | h | Internal Joist | 1 | 8' 11" | 0, 45 |
| K | Cladding | 1 | 2' 2" | 23, 45 | i | Internal Joist | 2 | 9' 8" | 0, 45 |
| L | Cladding | 1 | 10' 1 1/2" | 23, 23 | j | Internal Joist | 2 | 13' 6 1/2" | 0, 45 |

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

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DECK DESIGNER



| LABEL | NAME | QTY | LENGTH | BEVELS | LABEL | NAME | QTY | LENGTH | BEVELS |
|-------|-----------|-----|------------|--------|-------|------------------|-----|------------|--------|
| M | Header | 1 | 22' 7 1/4" | 0, 0 | k | Internal Joist | 1 | 10' 3" | 0, 45 |
| N | Rim Joist | 1 | 1' 10 1/4" | 0, 0 | 1 | Internal Joist | 1 | 10' 6 1/2" | 0, 0 |
| 0 | Header | 1 | 1' 10" | 0, 0 | m | Internal Joist | 2 | 9' 10" | 0, 0 |
| Р | Header | 2 | 4' 6 1/2" | 0, 0 | n | Internal Joist | 12 | 13' 5 3/4" | 0, 0 |
| Q | Rim Joist | 1 | 16' 2 1/4" | 0, 0 | 0 | Internal Joist | 1 | 8' 6 1/2" | 0, 0 |
| R | Header | 1 | 1' 10" | 0, 0 | р | Internal Joist | 11 | 9' 9" | 0, 0 |
| S | Rim Joist | 1 | 5' | 0, 0 | q | Internal Joist | 10 | 9' 7 1/2" | 0, 0 |
| Т | Header | 1 | 13' 4 1/4" | 0, 0 | r | Internal Joist | 10 | 8' 9" | 0, 0 |
| U | Rim Joist | 1 | 9' 9 1/4" | 0, 0 | S | Riser | 4 | 7' 11 3/4" | 0, 0 |
| V | Rim Joist | 1 | 8' 8" | 0, 0 | t | Pre Cut Stringer | 5 | 4' 7" | 0, 0 |
| W | Rim Joist | 1 | 9' 10" | 0, 0 | u | Pre Cut Stringer | 2 | 4' 7" | 0, 0 |
| Χ | Rim Joist | 1 | 13' 7" | 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 | 19 | 2X8X14 Treated | TREATED |
| Internal Joist | 8 | 2X8X16 Treated | TREATED |
| Internal Joist | 14 | 2X8X18 Treated | TREATED |
| Internal Joist | 54 | 2X8X10 Treated | TREATED |
| Beam | 10 | 2X10X14 Treated | TREATED |
| Beam | 4 | 2X10X10 Treated | TREATED |
| Cladding | 15 | TimberTech Earthwood Evolutions® Tropical Fascia Board - Pacific Rosewood - 12' | TIMBERTECH |
| Decking | 8 | TimberTech ReliaBoard® Deck Plank, Square Shouldered - Cedar - 12' | TIMBERTECH |
| Decking | 102 | TimberTech ReliaBoard® Deck Plank, Square Shouldered - Cedar - 16' | TIMBERTECH |
| Decking | 50 | TimberTech ReliaBoard® Deck Plank, Square Shouldered - Cedar - 20' | TIMBERTECH |
| Gusset | 6 | 2X8X8 Treated | TREATED |
| Rim Joist | 5 | 2X8X12 Treated | TREATED |
| Post | 13 | 4X4X8 Treated | TREATED |
| Beam | 2 | 2X10X16 Treated | TREATED |
| Riser | 8 | TimberTech Earthwood Evolutions® Tropical Riser Board - Pacific Rosewood - 12' | TIMBERTECH |
| Beam | 6 | 2X10X12 Treated | TREATED |
| Beam | 7 | 2X10X18 Treated | TREATED |
| Pre Cut Stringer | 7 | 4-Step Treated Stair Stringer | TREATED |
| Railing Post | 1 | 4X4X8 Treated | TREATED |
| Railing Post | 3 | 4X4X18 Treated | TREATED |
| Railing Section | 1 | TimberTech 6' RadianceRail Custom Rail Pack - Black - 6' | TIMBERTECH |
| Railing Section | 8 | TimberTech 8' RadianceRail Custom Rail Pack - Black - 8' | TIMBERTECH |
| Railing Section | 8 | TT/AZEK 31" Round Aluminum Baluster - Black - 31" | TIMBERTECH |
| Beam | 1 | 2X10X8 Treated | TREATED |





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Lumber Materials

COMPONENTQTYDESCRIPTIONWOOD TYPERailing Section2TT/AZEK 31" Round Aluminum Stair Baluster - Black - TIMBERTECH

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





Other Materials

| Qty | Description |
|-----|--|
| 2 | 5 LB. 10D Hot-Dip Galvanized Nail |
| 2 | 1 LB. 10D Hot-Dip Galvanized Nail |
| 2 | 1LB. 16D Galvanized Common Nail |
| 7 | 2x6-8" Triple Zinc Left Skewed Joist Hanger SKH26L-TZ |
| 13 | 2x6-8" Triple Zinc Right Skewed Joist Hanger SKH26R-TZ |
| 5 | 1 LB. 10D X1 1/2" Nail |
| 76 | 2x8-10" Triple Zinc Joist Hanger JUS28-TZ |
| 7 | 5" Triple Zinc Angle Clip MP5-TZ |
| 4 | 1LB. 8D Galvanized Common Nail |
| 5 | 1 LB. 1-1/2" Joist Hanger Nail |
| 184 | Triple Zinc Rafter Tie RT7-TZ |
| 51 | Anchor Bolt AB128 |
| 51 | 4X4 Triple Zinc Deck Post Anchor PA44E-TZ |
| 81 | 80 L.B. Basic Concrete Mix |
| 1 | 40 LB. Basic Concrete Mix |
| 2 | 10 LB. Basic Concrete Mix |
| 39 | 8" X 48" Concrete Form Tube |
| 816 | 1/2 Galvanized Flat Washer |
| 17 | 1/2 Galvanized Hex Nut |
| 408 | 1/2 X 8" Galvanized Carriage Bolt |
| 33 | 7" Triple Zinc Angle Clip AC7-TZ |
| 48 | 2 Pieces of Joist Material Nailed to Each Joist Splice |
| 1 | TT/AZEK Transformer - 12 Volt 150 W |
| 1 | TT/AZEK Decklites Dimmer |
| 2 | TT/AZEK 100' wire 16/2 |
| 50 | TT/AZEK LED Riser Light - Architectural Bronze |
| 6 | TimberTech TOPLoc 100 Sq. Ft. Pack Cedar - Cedar |
| 2 | TimberTech TOPLoc Stainless Steel 3" - 85 Sq. Ft. Pack Cedar - Cedar |
| 1 | TimberTech TOPLoc Fascia Bit |
| 3 | TimberTech TOPLoc Fascia Pack Rosewood - Pacific Rosewood |
| 84 | 1/2 X 6" Galvanized Lag Screw |
| 6 | 7" Triple Zinc Angle Clip AC7-TZ |
| 1 | 5 LB. 8D Galvanized Nail |
| 1 | 5 LB. 1-1/2" Joist Hanger Nail |
| 1 | 60 L.B. Basic Concrete Mix |
| 32 | 4X4 Triple Zinc Deck Post Tie SDPT7-TZ |
| 1 | 1 LB. 8X3" Philips Head Stainless Deck Screws |
| 16 | TimberTech 5" Post Skirt - Black |
| 64 | 3/8 Galvanized Hex Nut |





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| Qty | Description |
|-----|--|
| 128 | 3/8 Galvanized Flat Washer |
| 64 | 3/8 X 8" Galvanized Carriage Bolt |
| 16 | TimberTech 5" x 5" Post Sleeve - Black - 42" |
| 16 | TimberTech 5" LED Post Cap Light |
| 16 | TimberTech 5" Post Cap - Black |
| 1 | TT/AZEK Wire Guide - 60 Packs of 12 ea. |







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.

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