



Deck Designer Specification Kit For
AZEK

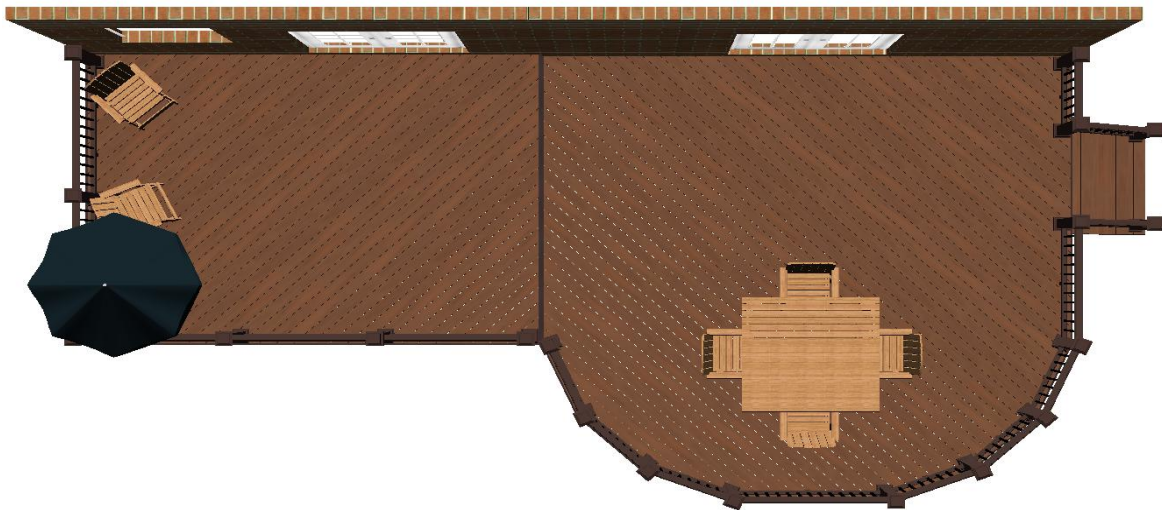
Deck layout diagram



Top view without planks

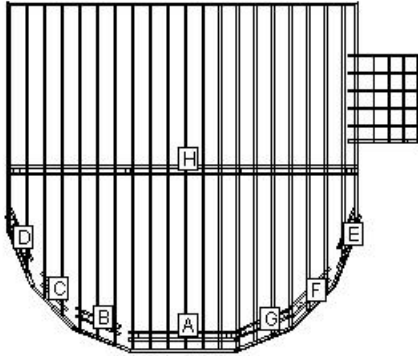


Bottom view with planks



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.

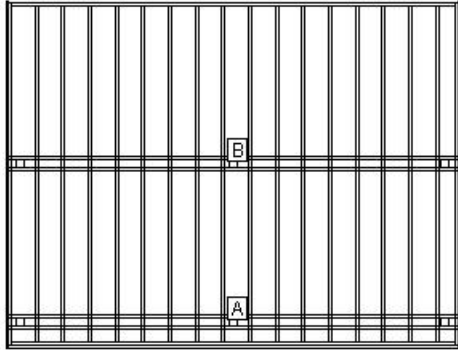
Joists:

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

Stress Analysis: Level 1

| | |
|-------------------|-----|
| Joist Deflection | 205 |
| Joist Bending | 74 |
| Joist Shear | 128 |
| Joist Compression | 128 |
| Beam Deflection | 450 |
| Beam Bending | 79 |
| Beam Shear | 60 |
| Post Stability | 109 |

Permit Page: Level 2



LOAD AND SUPPORT:

Your deck will support a 60 PSF live load.
Posts have 36" below ground support.

DECK AND POST HEIGHT:

You selected a height of 43" from the top of the decking to the ground level. The top of the deck support posts will therefore be 34" above ground level.

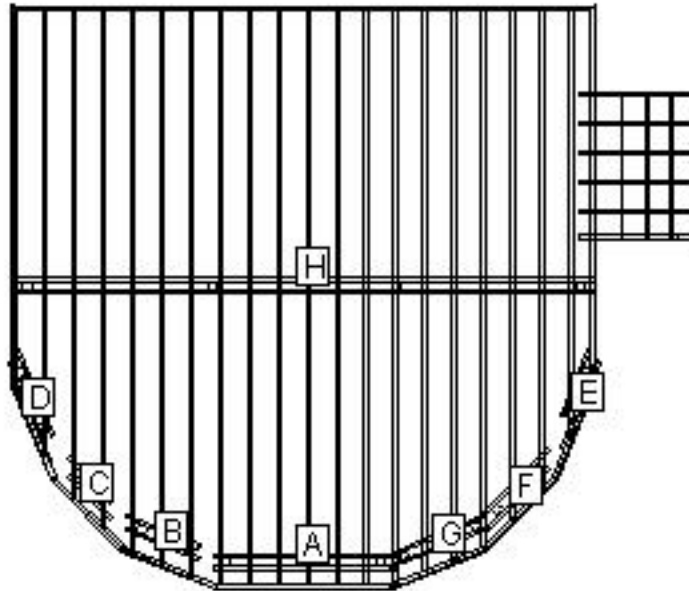
Joists:

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

Stress Analysis: Level 2

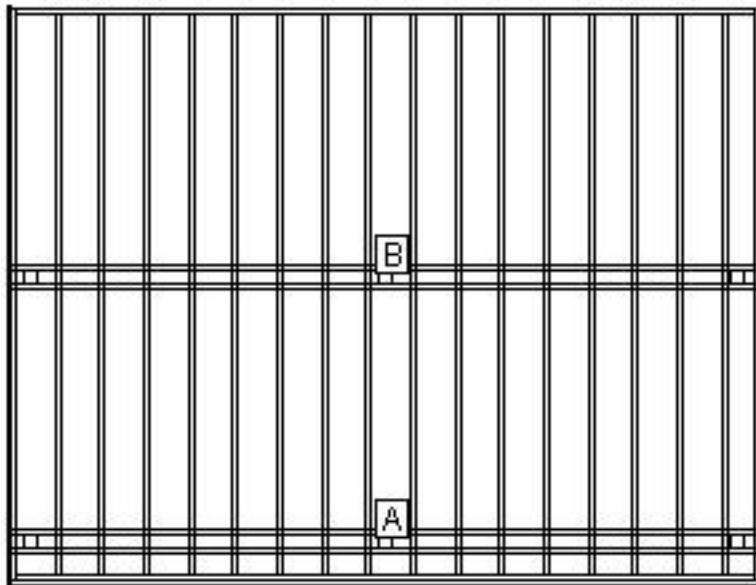
| | |
|-------------------|------|
| Joist Deflection | 1310 |
| Joist Bending | 236 |
| Joist Shear | 223 |
| Joist Compression | 223 |
| Beam Deflection | 283 |
| Beam Bending | 79 |
| Beam Shear | 70 |
| Post Stability | 137 |

Beam Layout Level 1



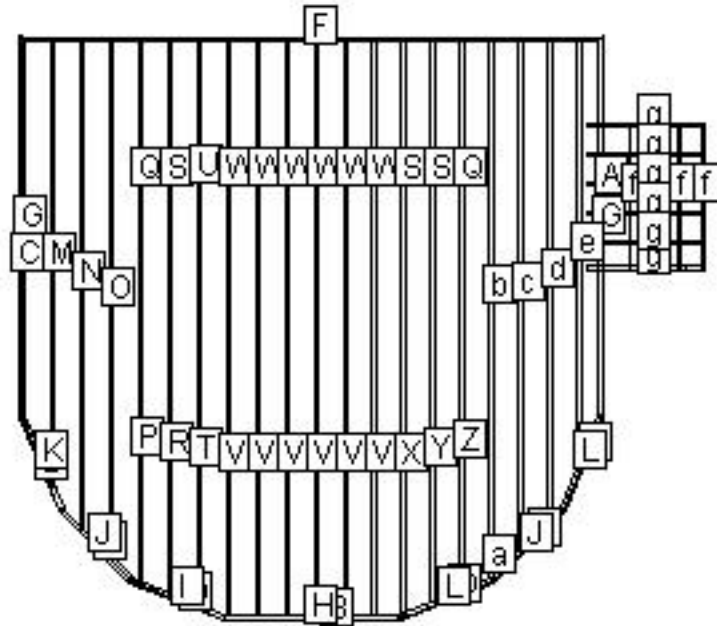
| BEAM LABEL | BEAM LENGTH | POST COUNT | POST SPACING |
|------------|-------------|------------|--------------|
| A | 6' 2 3/4" | 2 | 5' 3 1/4" |
| B | 2' 8 1/2" | 2 | 1' 7 1/2" |
| C | 2' 1 1/2" | 2 | 10 1/2" |
| D | 3' 8 1/4" | 2 | 2' 1/4" |
| E | 3' 3" | 2 | 1' 7" |
| F | 3' | 2 | 1' 9" |
| G | 3' 8" | 2 | 2' 7" |
| H | 19' 10 1/4" | 4 | 6' 3 1/2" |

Beam Layout Level 2



| BEAM LABEL | BEAM LENGTH | POST COUNT | POST SPACING |
|------------|-------------|------------|--------------|
| A | 16' 10 1/4" | 3 | 7' 11 1/2" |
| B | 16' 10 1/4" | 3 | 7' 11 1/2" |

Materials Cut List: Level 1



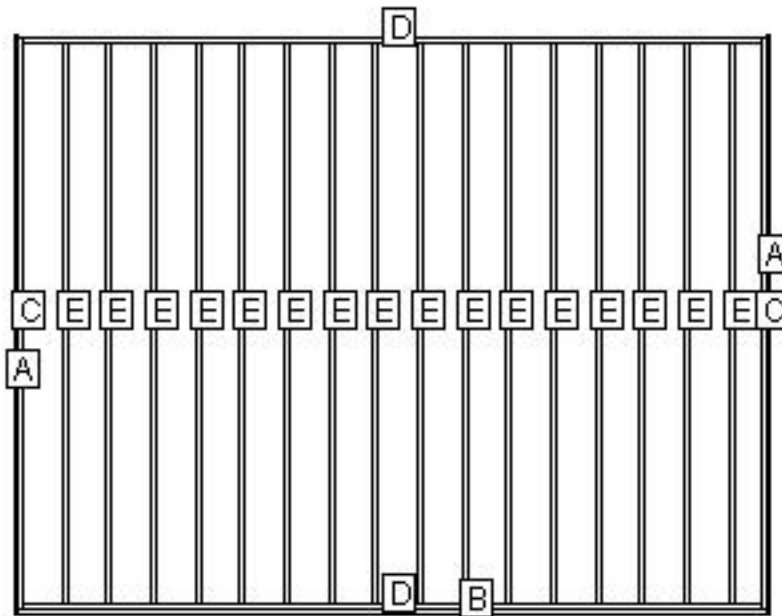
| LABEL | NAME | QTY | LENGTH | BEVELS | LABEL | NAME | QTY | LENGTH | BEVELS |
|-------|-----------|-----|------------|--------|-------|----------------|-----|------------|--------|
| A | Cladding | 1 | 13' | 11, 45 | R | Internal Joist | 1 | 9' 5 1/2" | 0, 22 |
| B | Cladding | 1 | 6' | 11, 11 | S | Internal Joist | 3 | 9' 4 3/4" | 0, 22 |
| C | Cladding | 1 | 13' | 45, 11 | T | Internal Joist | 1 | 9' 11 1/2" | 0, 22 |
| D | Cladding | 4 | 3' 6 1/4" | 11, 11 | U | Internal Joist | 1 | 9' 3 3/4" | 0, 22 |
| E | Cladding | 2 | 3' 5" | 11, 11 | V | Internal Joist | 6 | 10' 2 1/2" | 0, 0 |
| F | Header | 1 | 19' 7 1/4" | 0, 0 | W | Internal Joist | 6 | 9' 4 3/4" | 0, 0 |
| G | Rim Joist | 2 | 12' 11" | 0, 0 | X | Internal Joist | 1 | 10' 2" | 0, 22 |
| H | Header | 1 | 5' 11 3/4" | 0, 0 | Y | Internal Joist | 1 | 9' 9 1/4" | 0, 22 |
| I | Header | 1 | 3' 6" | 0, 0 | Z | Internal Joist | 1 | 9' 4 1/4" | 0, 22 |
| J | Header | 2 | 3' 4 3/4" | 0, 0 | a | Internal Joist | 1 | 10 1/4" | 0, 0 |
| K | Header | 1 | 3' 6" | 0, 0 | b | Internal Joist | 1 | 17' 5 3/4" | 0, 0 |
| L | Header | 2 | 3' 6" | 0, 0 | c | Internal Joist | 1 | 17' 4 1/2" | 0, 45 |

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

| LABEL | NAME | QTY | LENGTH | BEVELS | LABEL | NAME | QTY | LENGTH | BEVELS |
|-------|----------------|-----|------------|--------|-------|------------------|-----|------------|--------|
| M | Internal Joist | 1 | 15' 2 1/2" | 0, 68 | d | Internal Joist | 1 | 16' 4 1/2" | 0, 45 |
| N | Internal Joist | 1 | 16' 7 3/4" | 0, 45 | e | Internal Joist | 1 | 14' 6 1/2" | 0, 68 |
| O | Internal Joist | 1 | 17' 7 3/4" | 0, 45 | f | Riser | 4 | 5' | 0, 0 |
| P | Internal Joist | 1 | 9' 3/4" | 0, 22 | g | Pre Cut Stringer | 6 | 4' 2" | 0, 0 |
| Q | Internal Joist | 2 | 9' 4 1/2" | 0, 22 | | | | | |

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 | 13' | 45, 45 | D | Header | 2 | 16' 7 1/4" | 0, 0 |
| B | Cladding | 1 | 17' | 45, 45 | E | Internal Joist | 16 | 12' 7 1/4" | 0, 0 |
| C | Rim Joist | 2 | 12' 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 | 21 | 2X8X14 Treated | TREATED |
| Internal Joist | 2 | 2X8X16 Treated | TREATED |
| Internal Joist | 9 | 2X8X18 Treated | TREATED |
| Internal Joist | 17 | 2X8X10 Treated | TREATED |
| Internal Joist | 8 | 2X8X12 Treated | TREATED |
| Internal Joist | 1 | 2X8X8 Treated | TREATED |
| Beam | 5 | 2X10X8 Treated | TREATED |
| Beam | 2 | 2X10X14 Treated | TREATED |
| Pre Cut Stringer | 6 | 4-Step Treated Stair Stringer | TREATED |
| Railing Post | 1 | 4X4X12 Treated | TREATED |
| Railing Post | 3 | 4X4X18 Treated | TREATED |
| Railing Section | 8 | AZEK 6' Premier Custom Rail Pack - Kona® - 6' | AZEK |
| Railing Section | 3 | AZEK 8' Premier Custom Rail Pack - Kona® - 8' | AZEK |
| Railing Section | 10 | TT/AZEK 31" Round Aluminum Baluster - Black - 31" | AZEK |
| Cladding | 9 | AZEK Harvest Collection® Rim Joist Covers/Fasica - Kona® - 12' | AZEK |
| Decking | 4 | AZEK Vintage Collection® Deck Plank, Grooved - Mahogany® - 12' | AZEK |
| Decking | 58 | AZEK Vintage Collection® Deck Plank, Grooved - Mahogany® - 16' | AZEK |
| Decking | 21 | AZEK Vintage Collection® Deck Plank, Grooved - Mahogany® - 20' | AZEK |
| Post | 9 | 4X4X8 Treated | TREATED |
| Beam | 6 | 2X10X18 Treated | TREATED |
| Riser | 2 | AZEK Harvest Collection® Rim Joist Covers/Fasica - Kona® - 12' | AZEK |
| Railing Section | 2 | TT/AZEK 31" Round Aluminum Stair Baluster - Black - 31" | TIMBERTECH |
| Railing Post | 1 | 4X4X8 Treated | TREATED |

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

Other Materials

| Qty | Description |
|-----|---|
| 3 | 1 LB. 10D X1 1/2" Nail |
| 1 | 5 LB. 10D Hot-Dip Galvanized Nail |
| 58 | 2x8-10" Triple Zinc Joist Hanger JUS28-TZ |
| 14 | 5" Triple Zinc Angle Clip MP5-TZ |
| 1 | 1LB. 16D Galvanized Common Nail |
| 2 | 2x6-8" Triple Zinc Right Skewed Joist Hanger SKH26R-TZ |
| 3 | 2x6-8" Triple Zinc Left Skewed Joist Hanger SKH26L-TZ |
| 6 | 7" Triple Zinc Angle Clip AC7-TZ |
| 2 | 5" Triple Zinc Angle Clip MP5-TZ |
| 4 | THR128-HDG Threaded Rod |
| 8 | DTB-TZ Deck Tie Bracket |
| 4 | 1LB. 8D Galvanized Common Nail |
| 4 | 1 LB. 1-1/2" Joist Hanger Nail |
| 78 | Triple Zinc Rafter Tie RT7-TZ |
| 24 | Anchor Bolt AB128 |
| 24 | 4X4 Triple Zinc Deck Post Anchor PA44E-TZ |
| 38 | 80 L.B. Basic Concrete Mix |
| 3 | 10 LB. Basic Concrete Mix |
| 18 | 8" X 48" Concrete Form Tube |
| 384 | 1/2 Galvanized Flat Washer |
| 8 | 1/2 Galvanized Hex Nut |
| 192 | 1/2 X 8" Galvanized Carriage Bolt |
| 6 | 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 | AZEK 5 1/2" Post Skirt - Kona® |
| 76 | 3/8 Galvanized Hex Nut |
| 152 | 3/8 Galvanized Flat Washer |
| 76 | 3/8 X 8" Galvanized Carriage Bolt |
| 19 | AZEK 5 1/2" LED Lighted Island Cap - Kona® |
| 19 | AZEK 5.5" x 5.5" Post Sleeve - Kona® - 39" |
| 13 | 2 Pieces of Joist Material Nailed to Each Joist Splice |
| 1 | AZEK Cortex - 100 LF Vintage Collection® - Mahogany |
| 6 | TimberTech CONCEALoc Hidden Fastener - Unit = 8 retail cartons @ 100 sq.ft. coverage each (175 CONCEALoc fasteners, 184 Screws and drive bit) - Brown |
| 74 | 1/2 X 6" Galvanized Lag Screw |
| 3 | 1 LB. 10D Hot-Dip Galvanized Nail |
| 1 | 40 LB. Basic Concrete Mix |

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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