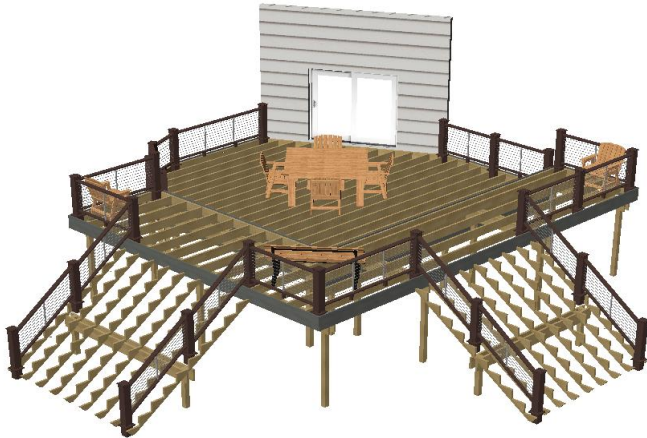




Deck Designer Specification Kit For
AZEK

Deck layout diagram



Top view without planks

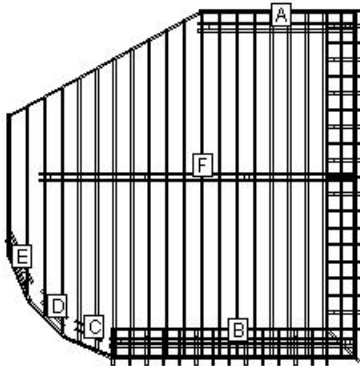


Bottom view with planks



Top view with planks

Permit Page: Level 1



LOAD AND SUPPORT:

Your deck will support a 55 PSF live load.
Posts have 36" below ground support.

DECK AND POST HEIGHT:

You selected a height of 60" from the top of the decking to the ground level. The top of the deck support posts will therefore be 51" above ground level.

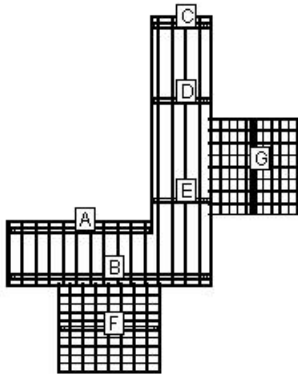
Joists:

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

Stress Analysis: Level 1

| | |
|-------------------|-----|
| Joist Deflection | 173 |
| Joist Bending | 65 |
| Joist Shear | 121 |
| Joist Compression | 121 |
| Beam Deflection | 301 |
| Beam Bending | 87 |
| Beam Shear | 70 |
| Post Stability | 123 |

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 81" from the top of the decking to the ground level. The top of the deck support posts will therefore be 72" above ground level.

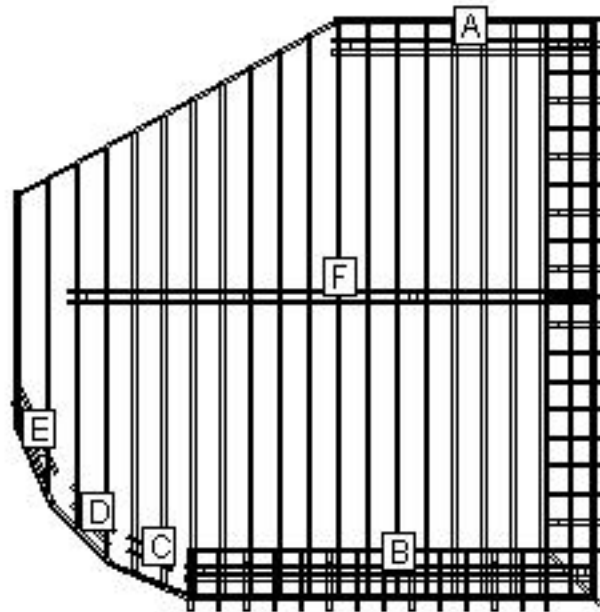
Joists:

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

Stress Analysis: Level 2

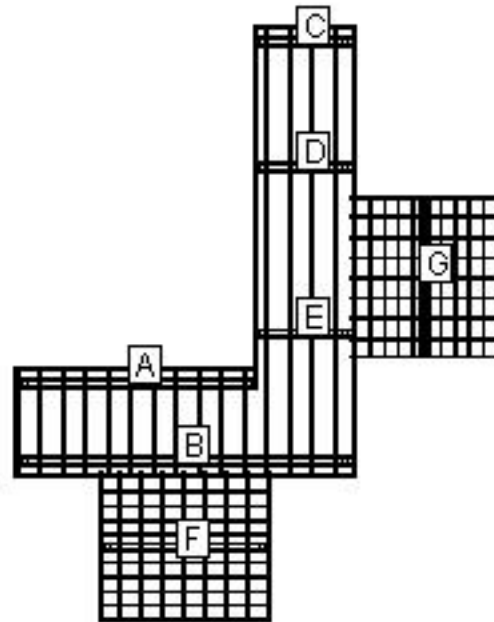
| | |
|-------------------|-----|
| Joist Deflection | 136 |
| Joist Bending | 50 |
| Joist Shear | 92 |
| Joist Compression | 92 |
| Beam Deflection | 69 |
| Beam Bending | 51 |
| Beam Shear | 72 |
| Post Stability | 148 |

Beam Layout Level 1



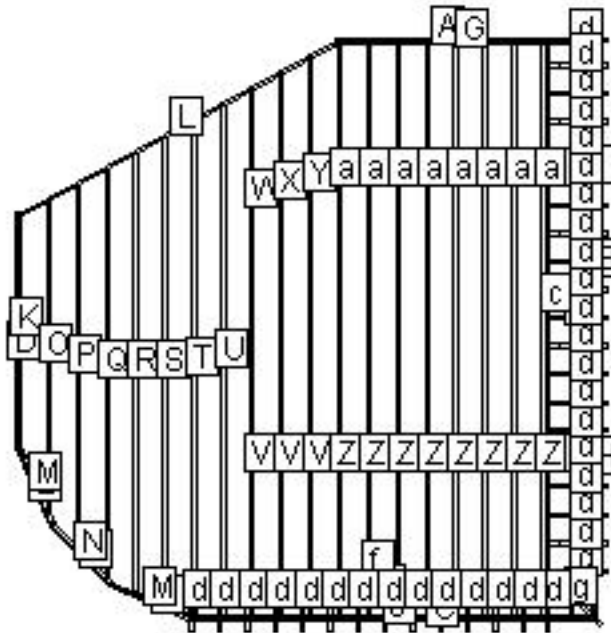
| BEAM LABEL | BEAM LENGTH | POST COUNT | POST SPACING |
|------------|-------------|------------|--------------|
| A | 9' 1/2" | 2 | 8' 1" |
| B | 14' 1/2" | 3 | 6' 6 1/2" |
| C | 1' 7 1/2" | 1 | 0 |
| D | 1' 11" | 1 | 0 |
| E | 3' 2" | 2 | 1' 6 1/4" |
| F | 18' 1 1/4" | 4 | 5' 8 1/2" |

Beam Layout Level 2



| BEAM LABEL | BEAM LENGTH | POST COUNT | POST SPACING |
|------------|-------------|------------|--------------|
| A | 14' 1 1/2" | 2 | 13' 2" |
| B | 19' 10 1/4" | 3 | 9' 5 1/2" |
| C | 5' 10 1/4" | 2 | 4' 10 3/4" |
| D | 5' 10 1/4" | 2 | 4' 10 3/4" |
| E | 5' 10 1/4" | 2 | 4' 10 3/4" |
| F | 10' | 2 | 9' 1/2" |
| G | 9' 6" | 2 | 8' 6 1/2" |

Materials Cut List: Level 1



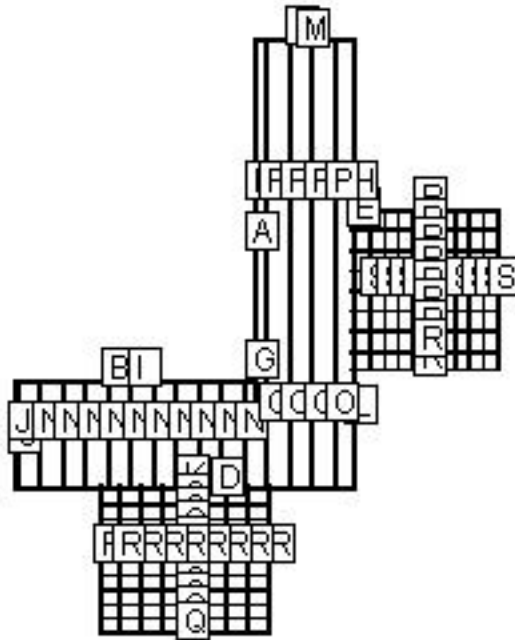
| LABEL | NAME | QTY | LENGTH | BEVELS | LABEL | NAME | QTY | LENGTH | BEVELS |
|-------|-----------|-----|------------|--------|-------|----------------|-----|-------------|--------|
| A | Cladding | 1 | 9' | 45, 14 | R | Internal Joist | 1 | 15' 1" | 29, 23 |
| B | Cladding | 1 | 20' | 45, 45 | S | Internal Joist | 1 | 16' 3/4" | 29, 23 |
| C | Cladding | 1 | 14' | 11, 45 | T | Internal Joist | 1 | 16' 11 1/2" | 29, 0 |
| D | Cladding | 1 | 8' | 31, 11 | U | Internal Joist | 1 | 17' 6" | 29, 0 |
| E | Cladding | 2 | 3' | 11, 11 | V | Internal Joist | 3 | 10' 3 1/2" | 29, 0 |
| F | Cladding | 1 | 2' 11 1/4" | 11, 11 | W | Internal Joist | 1 | 7' 9" | 29, 0 |
| G | Header | 1 | 8' 9 1/2" | 0, 0 | X | Internal Joist | 1 | 8' 3 1/2" | 29, 0 |
| H | Rim Joist | 1 | 10' 5 1/4" | 0, 0 | Y | Internal Joist | 1 | 8' 10" | 29, 0 |
| I | Rim Joist | 1 | 9' 5" | 0, 0 | Z | Internal Joist | 9 | 10' 3 1/2" | 0, 0 |
| J | Header | 1 | 13' 9 1/2" | 0, 0 | a | Internal Joist | 9 | 9' 3 3/4" | 0, 0 |
| K | Rim Joist | 1 | 7' 11 1/4" | 0, 0 | b | Riser | 1 | 19' 2" | 0, 45 |
| L | Header | 1 | 12' 5 1/2" | 0, 0 | c | Riser | 1 | 18' 4" | 0, 45 |

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

| LABEL | NAME | QTY | LENGTH | BEVELS | LABEL | NAME | QTY | LENGTH | BEVELS |
|-------|----------------|-----|------------|--------|-------|----------|-----|--------|--------|
| M | Header | 2 | 2' 11 1/2" | 0, 0 | d | Stringer | 34 | 2' 1" | 0, 0 |
| N | Header | 1 | 2' 11" | 0, 0 | e | Riser | 1 | 13' 2" | 45, 0 |
| O | Internal Joist | 1 | 10' 9" | 29, 67 | f | Riser | 1 | 12' 4" | 45, 0 |
| P | Internal Joist | 1 | 12' 5 3/4" | 29, 45 | g | Stringer | 1 | 2' 8" | 0, 0 |
| Q | Internal Joist | 1 | 14' 1/4" | 29, 45 | | | | | |

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 | 20' 1" | 45, 45 | K | Header | 1 | 19' 7 1/4" | 0, 0 |
| B | Cladding | 1 | 14' 1" | 45, 45 | L | Rim Joist | 1 | 8' 5 1/4" | 0, 0 |
| C | Cladding | 1 | 6' 6" | 45, 45 | M | Header | 1 | 5' 7 1/4" | 0, 0 |
| D | Cladding | 1 | 20' | 45, 45 | N | Internal Joist | 10 | 6' 1 1/4" | 0, 0 |
| E | Cladding | 1 | 26' 6" | 45, 45 | O | Internal Joist | 4 | 8' 3 1/2" | 0, 0 |
| F | Cladding | 1 | 6' | 45, 45 | P | Internal Joist | 4 | 17' 9 3/4" | 0, 0 |
| G | Rim Joist | 1 | 3' 3 3/4" | 0, 0 | Q | Riser | 10 | 10' | 0, 0 |
| H | Rim Joist | 2 | 17' 11" | 0, 0 | R | Stringer | 18 | 10' 5" | 0, 0 |
| I | Header | 1 | 14' | 0, 0 | S | Riser | 10 | 9' 6" | 0, 0 |
| J | Rim Joist | 1 | 6' 4 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 |
|-----------------|-----|---|-----------|
| Internal Joist | 15 | 2X8X12 Treated | TREATED |
| Internal Joist | 8 | 2X8X14 Treated | TREATED |
| Internal Joist | 15 | 2X8X16 Treated | TREATED |
| Internal Joist | 15 | 2X8X18 Treated | TREATED |
| Internal Joist | 6 | 2X8X8 Treated | TREATED |
| Internal Joist | 18 | 2X8X10 Treated | TREATED |
| Beam | 10 | 2X10X10 Treated | TREATED |
| Beam | 4 | 2X10X16 Treated | TREATED |
| Beam | 2 | 2X10X8 Treated | TREATED |
| Beam | 2 | 2X10X12 Treated | TREATED |
| Railing Post | 2 | 4X4X12 Treated | TREATED |
| Railing Post | 4 | 4X4X18 Treated | TREATED |
| Railing Section | 4 | AZEK 8' Premier Custom Rail Pack - Kona® - 8' | AZEK |
| Baluster | 20 | 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 | AZEK |
| Cladding | 15 | AZEK Terra Collection Rim Joist Covers/Fasica - Tahoe® - 12' | AZEK |
| Decking | 122 | AZEK Vintage Collection® Deck Plank, Square Shouldered - Dark Hickory® - 16' | AZEK |
| Decking | 12 | AZEK Vintage Collection® Deck Plank, Square Shouldered - Dark Hickory® - 20' | AZEK |
| Post | 26 | 4X4X8 Treated | TREATED |
| Beam | 1 | 2X10X14 Treated | TREATED |
| Riser | 26 | AZEK Terra Collection Rim Joist Covers/Fasica - Tahoe® - 12' | AZEK |
| Railing Section | 14 | AZEK 6' Premier Custom Rail Pack - Kona® - 6' | AZEK |
| Beam | 2 | 2X10X18 Treated | TREATED |
| Railing Section | 8 | TT/AZEK CableRail 36" Stair Intermediate Baluster [1 angled 9-hole baluster, 1 intermediate base plate, 1 #10x2" pan head screw, 3 #10x1 flat head screws] - Silver | AZEK |



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

Other Materials

| Qty | Description |
|-----|---|
| 4 | TT/AZEK CableRail 100' Stainless Steel Cable - Stainless - 100' |
| 26 | 5" Triple Zinc Angle Clip MP5-TZ |
| 2 | 5 LB. 10D Hot-Dip Galvanized Nail |
| 2 | 1 LB. 10D Hot-Dip Galvanized Nail |
| 1 | 1LB. 16D Galvanized Common Nail |
| 2 | 2x6-8" Triple Zinc Right Skewed Joist Hanger SKH26R-TZ |
| 5 | 1 LB. 10D X1 1/2" Nail |
| 51 | 2x8-10" Triple Zinc Joist Hanger JUS28-TZ |
| 7 | 7" Triple Zinc Angle Clip AC7-TZ |
| 2 | 5" Triple Zinc Angle Clip MP5-TZ |
| 2 | THR128-HDG Threaded Rod |
| 4 | DTB-TZ Deck Tie Bracket |
| 5 | 1LB. 8D Galvanized Common Nail |
| 5 | 1 LB. 1-1/2" Joist Hanger Nail |
| 96 | Triple Zinc Rafter Tie RT7-TZ |
| 28 | Anchor Bolt AB128 |
| 28 | 4X4 Triple Zinc Deck Post Anchor PA44E-TZ |
| 45 | 80 L.B. 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 |
| 53 | 7" Triple Zinc Angle Clip AC7-TZ |
| 52 | 4X4 Triple Zinc Deck Post Tie SDPT7-TZ |
| 1 | 1 LB. 8X3" Philips Head Stainless Deck Screws |
| 26 | AZEK 5 1/2" Post Skirt - Kona® |
| 104 | 3/8 Galvanized Hex Nut |
| 208 | 3/8 Galvanized Flat Washer |
| 104 | 3/8 X 8" Galvanized Carriage Bolt |
| 26 | AZEK 5 1/2" Pyramid Cap - Kona® |
| 26 | AZEK 5.5" x 5.5" Post Sleeve - Kona® - 39" |
| 1 | TT/AZEK CableRail Cable Cutters |
| 1 | TT/AZEK CableRail Accessory Kit [Quick-Connect release tool, lacing needle, hanger bolt installation tool] - |
| 20 | TT/AZEK CableRail 36" Hardware Kit [9 Quick-Connect fittings, 9 Quick Connect Swivel fittings, 18 hanger bolts, 9 lock nuts] - Stainless |
| 18 | TT/AZEK LED In Deck Light (8 Packs of 4 per Unit) - Architectural Bronze |
| 1 | TT/AZEK Decklites Dimmer |
| 2 | TT/AZEK 100' wire 16/2 |

| Qty | Description |
|------------|---|
| 1 | TT/AZEK Transformer - 12 Volt 150 W |
| 1 | TT/AZEK CableRail Protector Sleeves [Pack of 20] - Stainless |
| 19 | 2 Pieces of Joist Material Nailed to Each Joist Splice |
| 10 | AZEK Cortex - 100 LF Vintage Collection® - Dark Hickory |
| 26 | 1/2 X 6" Galvanized Lag Screw |
| 1 | TT/AZEK CableRail 500' Stainless Steel Cable - Stainless - 500' |
| 2 | 10 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.

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).