



Deck Designer Specification Kit For  
**TimberTech**

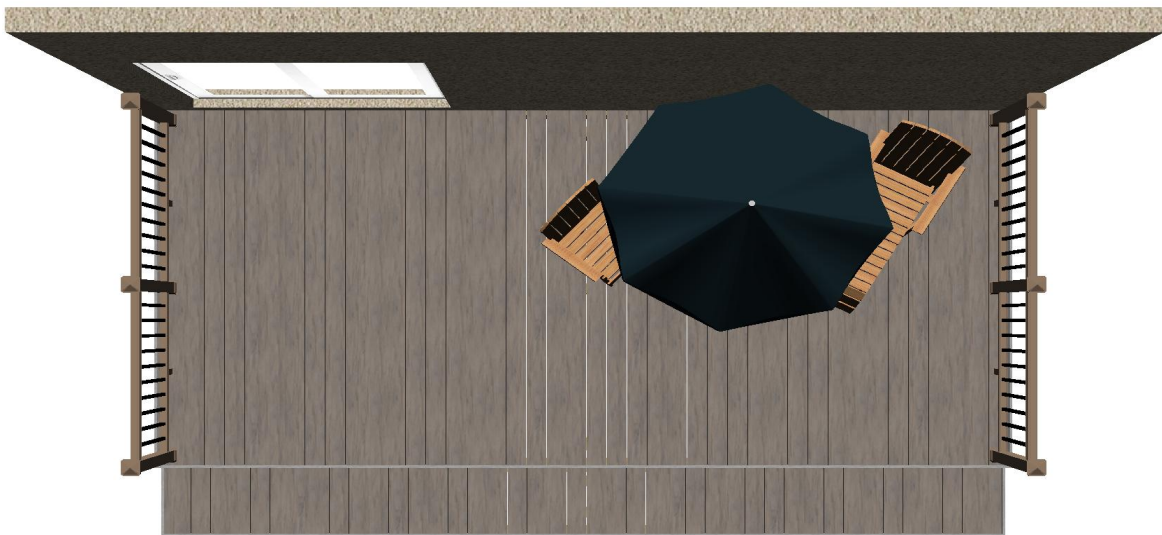
**Deck layout diagram**



Top view without planks

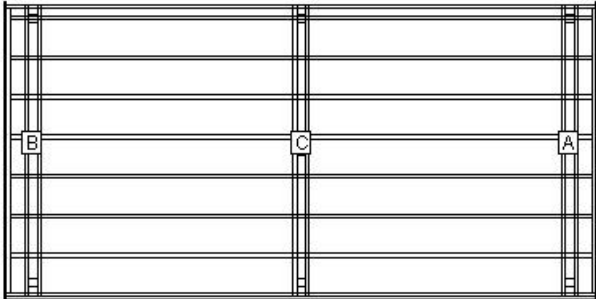


Bottom view with planks



Top view with planks

**Permit Page: Level 1**



**LOAD AND SUPPORT:**

Your deck will support a 52 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.

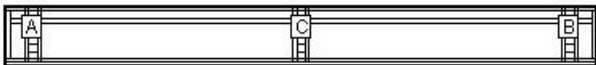
**Stress Analysis: Level 1**

|                   |     |
|-------------------|-----|
| Joist Deflection  | 184 |
| Joist Bending     | 62  |
| Joist Shear       | 101 |
| Joist Compression | 101 |
| Beam Deflection   | 196 |
| Beam Bending      | 68  |
| Beam Shear        | 67  |
| Post Stability    | 160 |

**Permit Page: Level 2**

**LOAD AND SUPPORT:**

Your deck will support a 52 PSF live load.  
Posts have 36" below ground support.



**DECK AND POST HEIGHT:**

You selected a height of 11" from the top of the decking to the ground level. The top of the deck support posts will therefore be 2" above ground level.

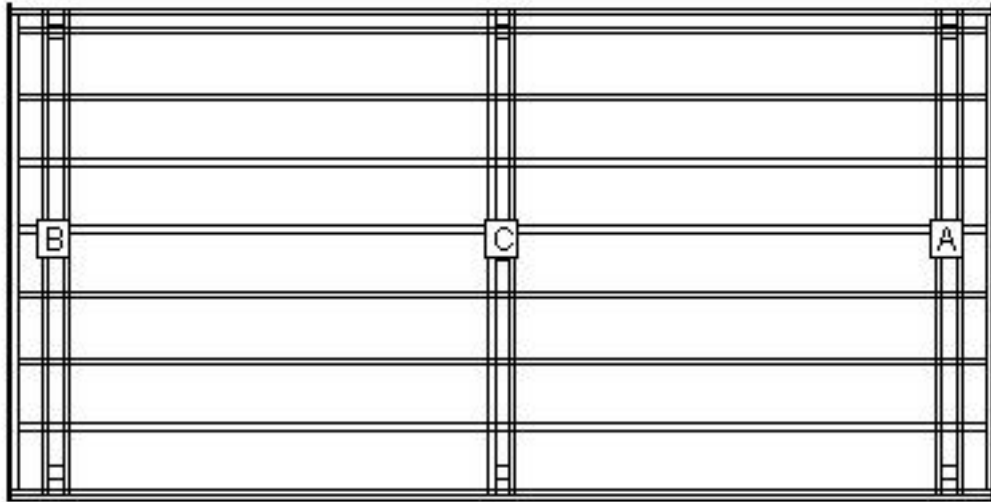
**Joists:**

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

**Stress Analysis: Level 2**

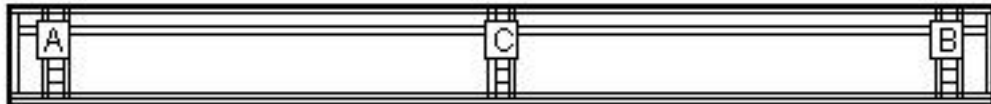
|                   |           |
|-------------------|-----------|
| Joist Deflection  | 184       |
| Joist Bending     | 62        |
| Joist Shear       | 101       |
| Joist Compression | 101       |
| Beam Deflection   | 1146488   |
| Beam Bending      | 4168      |
| Beam Shear        | 999999999 |
| Post Stability    | 772       |

### Beam Layout Level 1



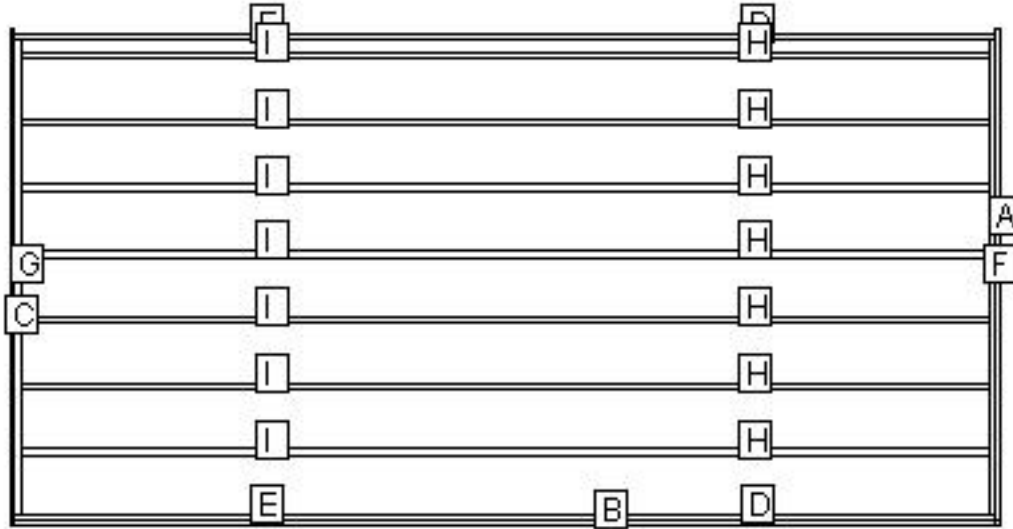
| BEAM LABEL | BEAM LENGTH | POST COUNT | POST SPACING |
|------------|-------------|------------|--------------|
| A          | 9' 10 1/4"  | 2          | 8' 10 3/4"   |
| B          | 9' 10 1/4"  | 2          | 8' 10 3/4"   |
| C          | 9' 10 1/4"  | 3          | 4' 5 1/2"    |

### Beam Layout Level 2



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

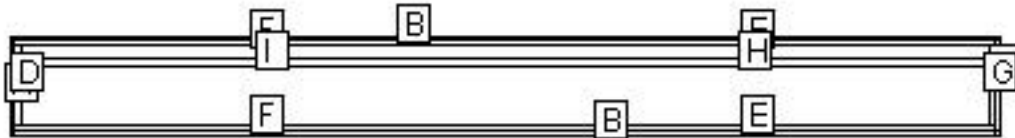
Materials Cut List: Level 1



| LABEL | NAME      | QTY | LENGTH     | BEVELS | LABEL | NAME           | QTY | LENGTH    | BEVELS |
|-------|-----------|-----|------------|--------|-------|----------------|-----|-----------|--------|
| A     | Cladding  | 1   | 10'        | 45, 45 | F     | Header         | 1   | 9' 7 1/4" | 0, 0   |
| B     | Cladding  | 1   | 20'        | 45, 45 | G     | Header         | 1   | 9' 7 1/4" | 0, 0   |
| C     | Cladding  | 1   | 10'        | 45, 45 | H     | Internal Joist | 7   | 9' 9 1/2" | 0, 0   |
| D     | Rim Joist | 2   | 9' 11 1/4" | 0, 0   | I     | Internal Joist | 7   | 9' 9 3/4" | 0, 0   |
| E     | Rim Joist | 2   | 9' 11"     | 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   | 2'         | 45, 45 | F     | Rim Joist      | 2   | 9' 11"    | 0, 0   |
| B     | Cladding  | 2   | 20'        | 45, 45 | G     | Header         | 1   | 1' 7 1/4" | 0, 0   |
| C     | Cladding  | 1   | 2'         | 45, 45 | H     | Internal Joist | 1   | 9' 9 1/2" | 0, 0   |
| D     | Header    | 1   | 1' 7 1/4"  | 0, 0   | I     | Internal Joist | 1   | 9' 9 3/4" | 0, 0   |
| E     | Rim Joist | 2   | 9' 11 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       | 27  | 2X8X10 Treated  | TREATED    |
| Beam            | 6   | 2X10X10 Treated   | TREATED    |
| Railing Post    | 1   | 4X4X8 Treated   | TREATED    |
| Railing Post    | 1   | 4X4X18 Treated  | TREATED    |
| Railing Section | 4   | TimberTech 6' RadianceRail Custom Rail Pack - Brownstone - 6'               | TIMBERTECH |
| Railing Section | 4   | TT/AZEK 31" Round Aluminum Baluster - Black - 31"                           | TIMBERTECH |
| Cladding        | 8   | TimberTech TwinFascia Board - Gray - 12'                                    | TIMBERTECH |
| Decking         | 44  | TimberTech Earthwood Evolutions® Legacy Deck Plank, Grooved - Ashwood - 12' | TIMBERTECH |
| Post            | 2   | 4X4X8 Treated   | TREATED    |
| Decking         | 5   | TimberTech Earthwood Evolutions® Legacy Deck Plank, Grooved - Ashwood - 16' | TIMBERTECH |
| Header          | 2   | 2X8X8 Treated   | TREATED    |
| Beam            | 1   | 2X10X12 Treated   | TREATED    |

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   | 1 LB. 10D X1 1/2" Nail  |
| 3   | 1 LB. 10D Hot-Dip Galvanized Nail   |
| 16  | 2x8-10" Triple Zinc Joist Hanger JUS28-TZ   |
| 8   | 7" Triple Zinc Angle Clip AC7-TZ  |
| 3   | 1LB. 8D Galvanized Common Nail  |
| 3   | 1 LB. 1-1/2" Joist Hanger Nail  |
| 36  | Triple Zinc Rafter Tie RT7-TZ   |
| 13  | Anchor Bolt AB128   |
| 13  | 4X4 Triple Zinc Deck Post Anchor PA44E-TZ   |
| 20  | 80 L.B. Basic Concrete Mix  |
| 5   | 10 LB. Basic Concrete Mix   |
| 10  | 8" X 48" Concrete Form Tube   |
| 208 | 1/2 Galvanized Flat Washer  |
| 5   | 1/2 Galvanized Hex Nut  |
| 104 | 1/2 X 8" Galvanized Carriage Bolt   |
| 12  | 4X4 Triple Zinc Deck Post Tie SDPT7-TZ  |
| 1   | 1 LB. 8X3" Philips Head Stainless Deck Screws   |
| 6   | TimberTech 5" Post Skirt - Brownstone   |
| 24  | 3/8 Galvanized Hex Nut  |
| 48  | 3/8 Galvanized Flat Washer  |
| 24  | 3/8 X 8" Galvanized Carriage Bolt   |
| 6   | TimberTech 5" x 5" Post Sleeve - Brownstone - 42"   |
| 6   | TimberTech 5" Post Cap - Brownstone   |
| 12  | 2 Pieces of Joist Material Nailed to Each Joist Splice  |
| 1   | TimberTech TOPLoc Fascia Bit  |
| 2   | TimberTech TOPLoc Fascia Pack Gray - Gray   |
| 3   | TimberTech CONCEALoc Hidden Fastener - Unit = 8 retail cartons @ 100 sq.ft. coverage each (175 CONCEALoc fasteners, 184 Screws and drive bit) - Brown |
| 40  | 1/2 X 6" Galvanized Lag Screw   |
| 1   | TimberTech Cortex - 100 LF Evolutions Ashwood - Ashwood   |
| 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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