01 / PROJECT SUMMARY

# Deck Takeoff Sample

16 ft × 10 ft freestanding rectangular deck | 160 sq ft

| 25 | 6 | 0.93 m³ |
|---|---|---|
| Deck boards to buy | Footing assemblies | Concrete with allowance |

## How the structure fits together




Exploded side view. Layers are separated for clarity.

## Scope and assumptions

One level, straight decking rows, two dropped beams and three supports per beam.

The example covers the platform. Stairs, guards, ledger, and permits are outside scope.

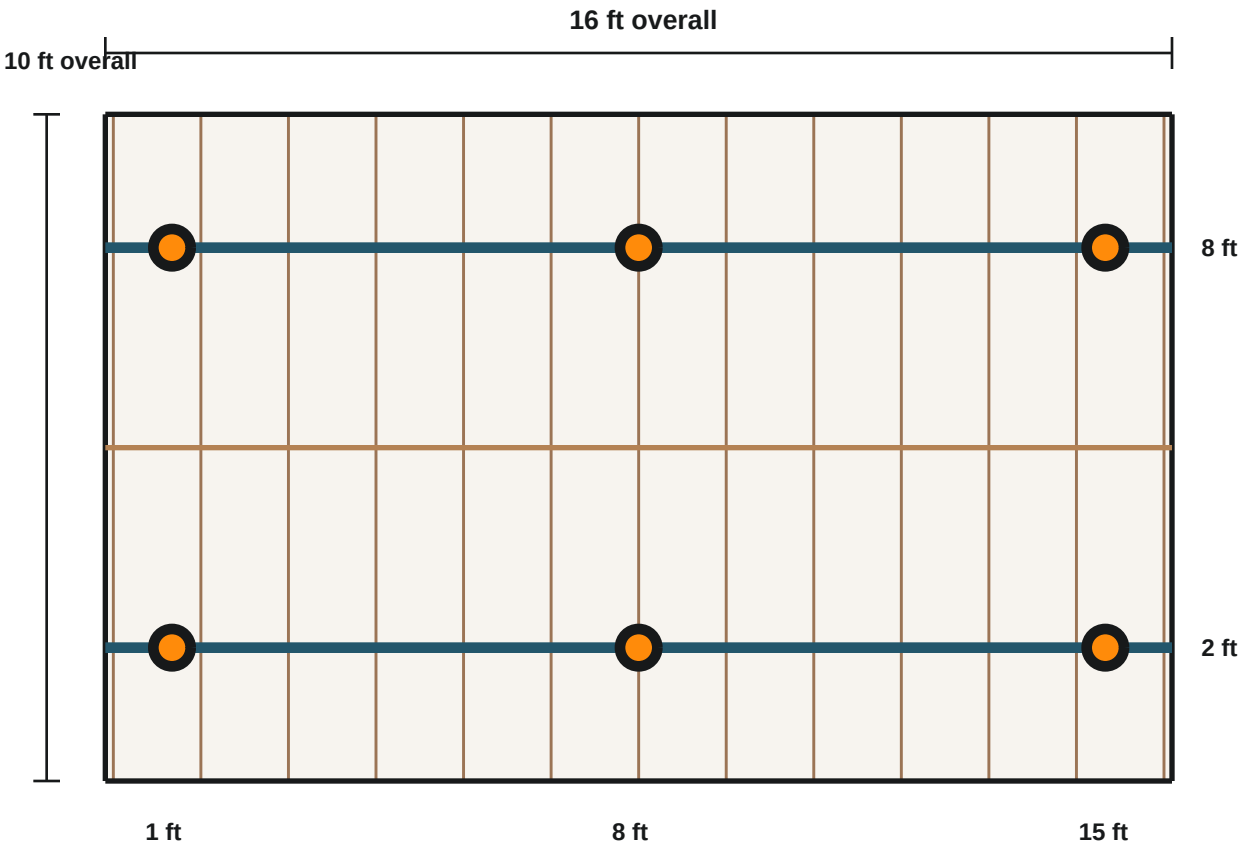
Lumber sizes, connector quantities and foundation geometry are estimating assumptions.

Confirm loads, spans, soil bearing, frost depth, bracing and local requirements before work.

02 / PLAN VIEW

# Framing & Footing Layout

Example centerlines measured from the left and bottom edges of the platform




Orange dots = footing and post centers. Blue lines = beams. Brown lines = joists and blocking.

## Setout and framing notes

Footing centers shown at 1, 8 and 15 ft along both beam rows, 2 and 8 ft from the near edge.

That gives two 7 ft support bays per beam, with a 1 ft end projection to each deck edge.

Joists cross the beams with a 6 ft centerline span and about 2 ft beyond each beam.

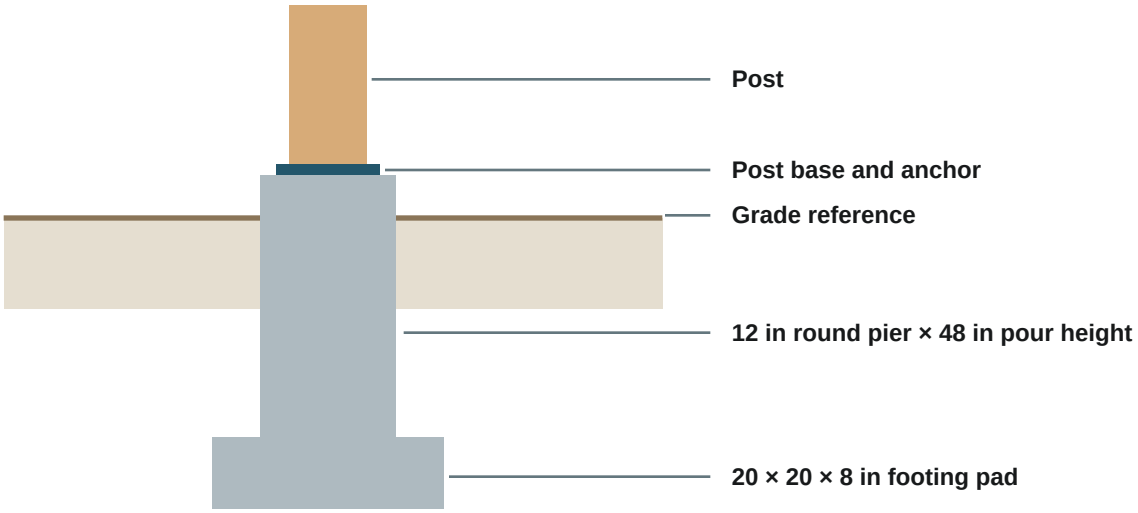
Show two outside joists and 11 interior joists at up to 16 in on center. Verify actual layout.

One blocking row fills the 12 joist bays. Decking runs parallel to the blue beam lines.

03 / FOUNDATION TAKEOFF

# Footings & Concrete

Six identical pier and pad assemblies for estimating




Schematic section. Pour height is a volume input, not an excavation or frost-depth specification.

## Concrete volume worksheet

| Component | Quantity basis | Volume |
|---|---|---|
| Round piers | 6 × pi × (0.5 ft)² × 4 ft | 18.85 ft³ |
| Square pads | 6 × (20 in × 20 in × 8 in) ÷ 1,728 | 11.11 ft³ |
| Net concrete | Piers + pads | 29.96 ft³ |
| With 10% allowance | Net concrete × 1.10 | 32.96 ft³ / 0.93 m³ |
| Bag alternative | Assumed yield 0.50 ft³ per bag | 66 bags |

Confirm actual bag yield or ready-mix minimum with the supplier before ordering.

Order six pier forms and allow formwork for six pads where required by site conditions.

Confirm footing depth, pad area, reinforcement and anchors with the approved design.

04 / MATERIAL SCHEDULE

# Lumber & Connectors

Stock quantities for this example | Cut lengths and fastener models verified at order

| Material | Takeoff basis | Buy / allow |
|---|---|---|
| 5/4 × 6 × 16 ft decking | 22 rows × 1.10, rounded up | 25 boards |
| 2 × 8 × 10 ft joist stock | 11 interior + 2 outside joists | 13 pieces |
| 2 × 8 × 16 ft rim stock | One rim across each joist end | 2 pieces |
| 2 × 8 × 8 ft blocking stock | 12 blocks cut to measured bay widths | 2 pieces |
| 2 × 10 × 16 ft beam stock | Two illustrative 2-ply beams | 4 pieces |
| 6 × 6 treated post stock | Six posts, cut to surveyed elevations | 6 blanks |
| Post bases + concrete anchors | One matching assembly per pier | 6 sets |
| Post-to-beam caps | One cap per post, sized to beam plies | 6 |
| Joist-to-beam ties | 13 joists × 2 beam crossings | 26 |
| Deck screws | 22 rows × 13 joists × 2 × 1.10 = 630 | 2 boxes of 350 |
| Connector fasteners | Use the selected ties, caps and bases schedule | Per model |
| Beam, rim and blocking fasteners | Match approved member connection details | Per detail |
| Joist hangers | Joists bear on dropped beams in this layout | 0 in base scope |
| Ledger lags / structural screws | Freestanding layout has no house ledger | 0 in base scope |
| Bracing / reinforcement | Confirm layout and specification for the actual site | Unpriced |

## When the connection changes

A flush beam or ledger can call for face-mount hangers at supported joist ends.

For a house-attached design, count ledger fasteners from the approved connection schedule.

Confirm compatible exterior-rated connectors and fasteners for the selected treated wood.

Carry the selected manufacturer’s fastener schedule into the final shopping list.

05 / SHOPPING WORKSHEET

# Example Material Estimate

Illustrative CAD unit prices for demonstrating the takeoff format

| Material | Qty | Unit CAD | Line CAD |
|---|---|---|---|
| Deck boards | 25 | $24.00 | $600.00 |
| 2 × 8 × 10 ft joist stock | 13 | $19.00 | $247.00 |
| 2 × 8 × 16 ft rim stock | 2 | $32.00 | $64.00 |
| 2 × 8 × 8 ft blocking stock | 2 | $15.00 | $30.00 |
| 2 × 10 × 16 ft beam stock | 4 | $46.00 | $184.00 |
| 6 × 6 post blanks | 6 | $42.00 | $252.00 |
| Pier forms | 6 | $26.00 | $156.00 |
| Concrete bags | 66 | $9.00 | $594.00 |
| Post bases and anchors | 6 | $37.00 | $222.00 |
| Post caps | 6 | $28.00 | $168.00 |
| Joist-to-beam ties | 26 | $3.00 | $78.00 |
| Deck screw boxes | 2 | $39.00 | $78.00 |
| Connector / framing fastener allowance | 1 | $110.00 | $110.00 |

**Example materials subtotal** **$2,783.00 CAD**

Taxes, delivery, labour, pad formwork and project-specific reinforcement or bracing are excluded.

Use current supplier quotes for the final estimate. The $79 package fee is separate.

## References to check for an actual project

Ontario Building Code Compendium

Ontario building permit guidance

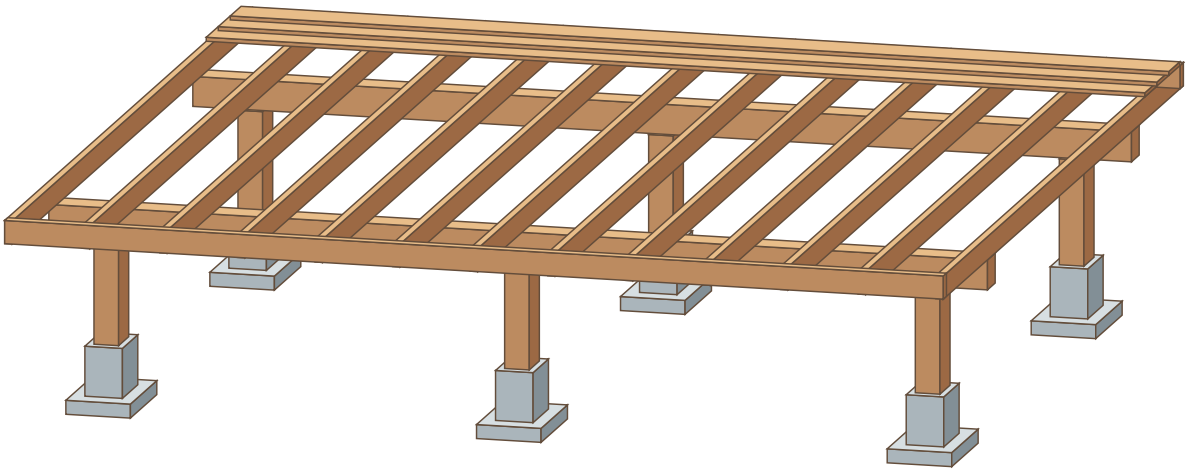
Simpson Strong-Tie joist hanger installation guide

06 / ASSEMBLY VIEWS

# How the Frame Fits Together

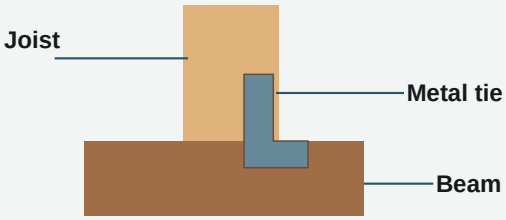
Three views of the same freestanding deck | Schematic illustrations

## Three-quarter view



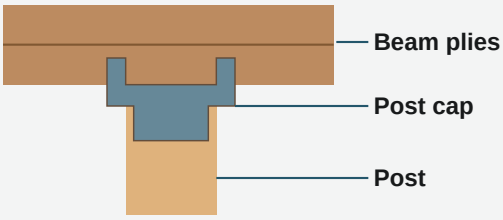
Part of the decking is shown so the joists, beams, and six supports remain visible.

### Joist bearing on beam




The joist sits on top of the dropped beam. A specified tie connects the two members. The rim closes the joist ends in the plan.

### Beam bearing on post




The beam bears on the post. The cap connects the members. The post base and concrete anchor are shown on page 3.

Connector shapes are schematic. Use the fasteners specified for the selected hardware.