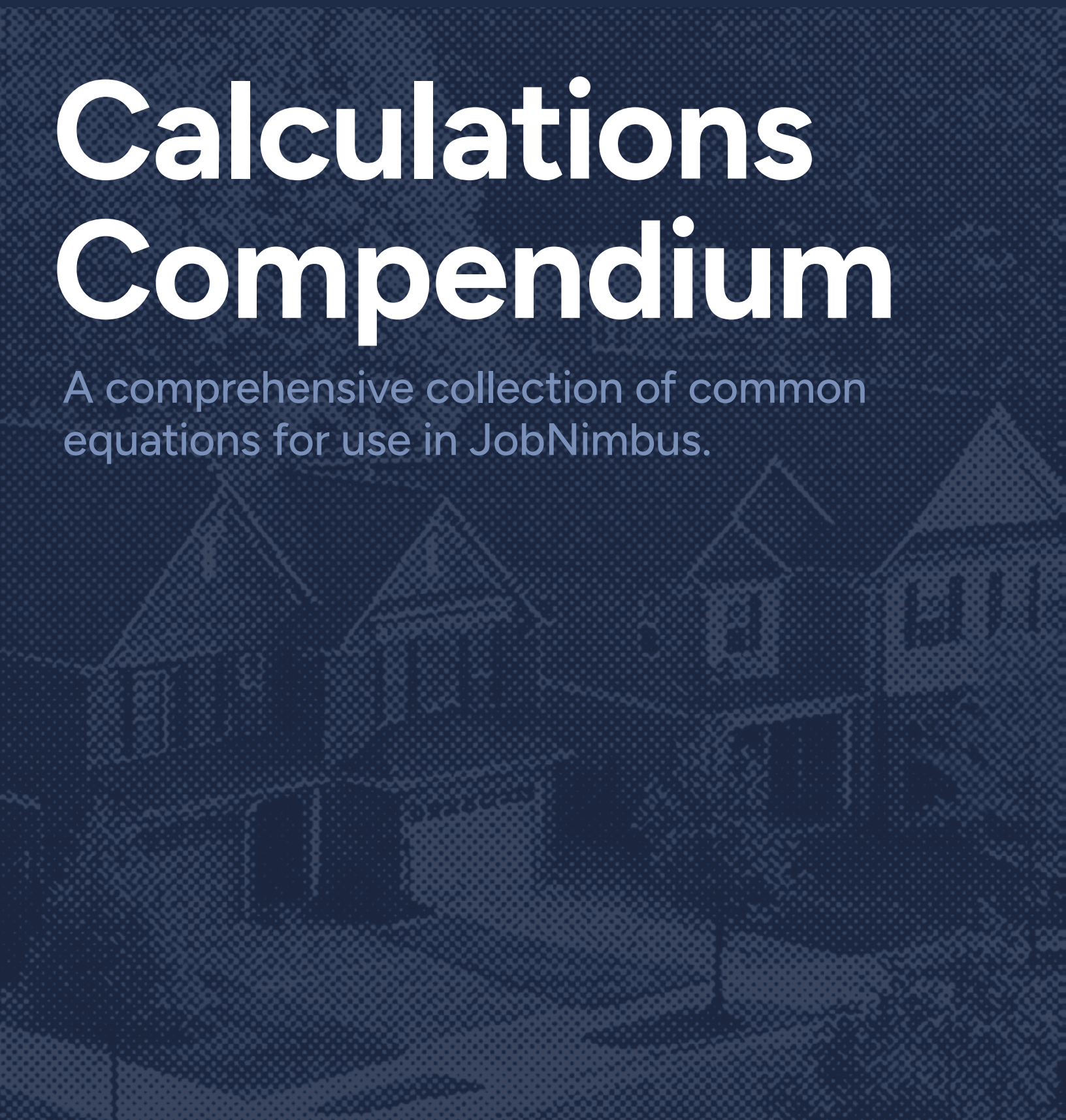
JobNimbus

Calculations Compendium

A comprehensive collection of common equations for use in JobNimbus.



VERSION 1.0

04/2025

Roofing Calculations

Shingles

MEASUREMENT UNIT: SQ FT
UNIT QTY: BDL OR SQ FT

Typical bundle of shingles covers 33 Square Feet. Dividing 33 from your Total Roof Area (with waste) gives the quantity of bundles needed for the job.

If preference is to price per square for shingles then dividing by 100 will give you the quantity of squares

$$\frac{\text{Total Roof Area} * (1 + \text{Suggested Waste \%})}{33}$$

OR

$$\frac{\text{Total Roof Area} * (1 + \text{Suggested Waste \%})}{100}$$

Ice & Water Barrier

MEASUREMENT UNIT: LF
UNIT QTY: RL

2 SQ rolls typically cover 66 linear feet (brand may vary) this combines application on eaves and rakes adding 10%.

$$\frac{(\text{Total Eaves} + \text{Total Valleys}) \times 1.1}{66}$$

Synthentic Underlayment

MEASUREMENT UNIT: SQ FT
UNIT QTY: RL

Comes in 10 SQ (1000 square feet) rolls so this simply takes your Total Square Footage and divides by 1000.

$$\frac{\text{Total Roof Area}}{1000}$$

Valley Metal

MEASUREMENT UNIT: LF
UNIT QTY: PC

Assumes that a standard piece of valley metal is 10 feet. Waste may be added to this but typically not.

$$\frac{\text{Total Valleys}}{10}$$

Drip Edge

MEASUREMENT UNIT: LF
UNIT QTY: PC

Standard is 10 feet pieces. This adds rakes and eaves and divides by 10 (per piece coverage) to get quantity.

$$\frac{\text{Total Rakes} + \text{Total Eaves}}{10}$$

Starter Shingles

MEASUREMENT UNIT: LF
UNIT QTY: BDL

Assumes 120 linear feet per bundle. Adjust to 100, 116 etc. depending on how many LF brand specific covers.

$$\frac{\text{Total Eaves} + \text{Total Rakes}}{120}$$

Hip & Ridge Cap Shingles

MEASUREMENT UNIT: LF
UNIT QTY: BDL

2 SQ rolls typically cover 66 linear feet (brand may vary) this combines application on eaves and rakes adding 10%.

$$\frac{\text{Total Hips} + \text{Total Ridges}}{33}$$

Ridge Vents

MEASUREMENT UNIT: LF
UNIT QTY: PC

This assumes typical 4' ridge vent pieces, and usually there is no waste %.

$$\frac{\text{Total Ridges}}{4}$$

Labor - Price Per Square

MEASUREMENT UNIT: SQ FT
UNIT QTY: SQ

A simple calculation for pricing labor rates on a per square basis.

If the customer is opting to include a suggested waste percentage in the labor calculation (many do not)

$$\frac{\text{Total Roof Area}}{100}$$

OR

$$\frac{\text{Total Roof Area} \times (1 + \text{Suggested Waste \%})}{100}$$

Labor - Steep Pitch

MEASUREMENT UNIT: SQ FT
UNIT QTY: SQ

Simple calculations for specific pitch region of a roof. One of these calculations needed for each pitch line item.

$$\frac{7/12}{100} \quad \text{OR} \quad \frac{8/12}{100} \quad \text{OR} \quad \frac{9/12}{100} \quad \text{OR} \quad \frac{10/12}{100}$$

Labor - Difficult Access

MEASUREMENT UNIT: SQ FT
UNIT QTY: SQ

Used when accessing a worksite / roof is particularly difficult and requires additional consideration.

$$(\text{Total Roof Area} / 100) \times \text{Difficult Access}\ (0=\text{No}\ 1=\text{Yes})$$

Labor - 2-Story Install

MEASUREMENT UNIT: SQ FT
UNIT QTY: SQ

Calculates the numbers of squares in a defined 2nd story area of a roof.

$$\frac{\text{2-Story Roof Area}}{100}$$

Labor - Install Ridge Vent

MEASUREMENT UNIT: LF
UNIT QTY: LF

Basic calculation for ridge vent installation.

$$\text{Total Ridges}$$

Labor - Additional Layer Tear-Off

MEASUREMENT UNIT: SQ FT
UNIT QTY: SQ

Calculates total roof area, multiplied by the number of layers. (This is typically not known ahead of time).

$$(\text{Total Roof Area} / 100) \times \text{\# of additional layers}$$

Labor - Gutter Install

MEASUREMENT UNIT: LF
UNIT QTY: LF

Simple calculation based upon Total Eaves measurement token.

$$\text{Total Eaves}$$

Fencing Calculations

Fence Boards

MEASUREMENT UNIT: LF
UNIT QTY: EACH

Simple calculation for number of fence boards required for a given length of fencing. Does not include posts - This example is using 6" wide boards.

If using a different width of board, adjust the calculation to match. IE: using 4" boards means 3 boards per foot.

Total Fence Length (LF) x 2

OR

Total Fence Length (LF) x 3

Fence Posts

MEASUREMENT UNIT: LF
UNIT QTY: EACH

Divide the total length of the fence by the distance between posts and add 1 to equation for the last post.

(Total Fence Length (LF) / 8) + 1

Fence Rails

MEASUREMENT UNIT: LF
UNIT QTY: EACH

Rails are the support between your posts for your fence boards. Most fences have 2-3 rails. Fence 6FT+ require 3.

(Total Fence Length (LF) / 8) x 3

Post Base/Caps

MEASUREMENT UNIT: LF
UNIT QTY: BDL OR SQ FT.

Similar calculation to fence posts and used in tandem with that line item. Adjust to match distance between posts.

(Total Fence Length (LF) / 8) + 1

Pre-Fab Sections

MEASUREMENT UNIT: LF
UNIT QTY: PIECE/EACH

Assumes that a standard pre-fab section is 6FT in length (Most common section sizes are 6, 8 or 10 FT sections).

Total Fence Length (LF) / 6

OR

Total Fence Length (LF) / 8

Chain Link Fencing

MEASUREMENT UNIT: LF
UNIT QTY: ROLL

Standard chainlink comes in rolls of 60Ft (18 Meters). Divide total length of fence by length of rolls.

$$\frac{\text{Total Fence Length (LF)}}{60}$$

Fencing Labor

MEASUREMENT UNIT: LF
UNIT QTY: LF

Average labor rates will vary depending on region & season Most are billed on either a LF or per section rate.

Total Fence Length (LF)

OR

Total Fence Length (LF) / 6

Ext. Paint Calculations

Prepwork

MEASUREMENT UNIT: SQ FT
UNIT QTY: HRS

A simple calculation for scraping, sanding and spot priming.

Prep: Hours

Labor - Siding Paint

MEASUREMENT UNIT: SQ FT
UNIT QTY: HRS

This is specific to 2 full coats of paint to all selected house siding areas. 2nd coats of paint require 70% material of 1st.

(Painting: Siding Sq Ft / 110) x 1.7

Brushwork Labor - Trim

MEASUREMENT UNIT: LF
UNIT QTY: HRS

This is specific to 2 full coats to all selected trim areas with premium products. 2nd coats require 70% material of 1st.

Painting: Trim - Hours x 1.7

Doors - Brush & Roll

MEASUREMENT UNIT: EACH
UNIT QTY: HRS

2 full coats of paint to all selected door areas with premium products. 2nd coats require 70% material of 1st.

Painting: Door Hours x 1.7

Additional Bulk Time

MEASUREMENT UNIT: HRS
UNIT QTY: HRS

Additional time given due to the challenging nature of certain project areas.

$$\frac{\text{Misc. Additional Bulk Time in 20 min units}}{3}$$

Siding Paint - 2 Coats

MEASUREMENT UNIT: SQ FT.
UNIT QTY: SQ FT.

Calculates all paint for 2 coats to selected exterior house siding surfaces. 2nd coats require 70% material of 1st coat.

((Painting: Siding Sq Ft + Painting: Stucco Sq Ft) / 250) x 1.7

Trim & Door Paint

MEASUREMENT UNIT: EACH/LF
UNIT QTY: HRS

Calculates all paint for 2 coats to selected trim & door surfaces. 2nd coats require 70% material of the 1st.

(((Painting: Trim Hours + Painting: Door Hours) / 15) +
(Painting: Trim 15' units / 25)) x 1.7

Paint Disposal/Cleanup

MEASUREMENT UNIT: CUBIC INCHES
UNIT QTY: TONS

Simple calculation for product and waste disposal costs.

Misc. Cleanup Hours

Int. Paint Calculations

Prepwork - Minor

MEASUREMENT UNIT: SQ FT
UNIT QTY: HRS

A simple calculation for scraping, sanding and spot priming.

Prep: Hours

Prepwork - Major

MEASUREMENT UNIT: SQ FT
UNIT QTY: HRS

Calculation for additional patchwork/repair and sanding time to damaged walls in selected areas.

Prep: Hours (Major Repair)

Prepwork - Pole Sanding

MEASUREMENT UNIT: SQ FT
UNIT QTY: HRS

Determine prep work required for pole sand any rough or uneven areas

$$\frac{\text{Prep: Pole Sanding Sq Ft}}{400}$$

Prepwork - Drop Cloth

MEASUREMENT UNIT: EACH
UNIT QTY: EACH

This is specific to 2 full coats to all selected trim areas with premium products. 2nd coats require 70% material of 1st.

Misc: Number of Rooms

Labor - Int. Paint

MEASUREMENT UNIT: LF & SQ FT
UNIT QTY: HRS

2 full coats of paint to all selected areas. Based upon standard 8ft walls. 2nd coat of paint requires 70% material.

(((Paint: 8' wall linear x 8) + Paint: Additional Wall Sq Ft) / 150) x 1.7

Labor - Paint Trim

MEASUREMENT UNIT: HRS
UNIT QTY: HRS

2 coats to all selected trim areas. 2nd coat requires 70% material of 1st.

Painting: Trim Hours x 1.7

Labor - Paint Door

MEASUREMENT UNIT: HRS
UNIT QTY: HRS

2 coats to all selected door areas. 2nd coat requires 70% material of the 1st.

Painting: Door Hours x 1.7

Labor - Paint Railings

MEASUREMENT UNIT: HRS
UNIT QTY: HRS

2 coats to all selected house railings, spindles and surrounding trim areas. 2nd coat requires 70% material.

(Painting: Railings - # of Spindles / 12) x 1.7

Paint - Trim & Door

MEASUREMENT UNIT: LF/HR
UNIT QTY: GAL

2 coats to all selected trim and door surfaces. 2nd coat requires 70% material.

((Painting: Railings - # of Spindles / 150) + ((Painting: Trim Hours + Painting: Door Hours) / 15) + (Painting: Trim in 15' units / 25)) x 1.7

Paint - Walls

MEASUREMENT UNIT: SQ FT/LF
UNIT QTY: GAL

Calculation for all paint work to walls, with 2 coats to selected wall surfaces. 2nd coat uses 70% material of 1st.

(((Painting: 8' wall linear x 8) + Painting: Additional Wall Sq Ft) / 400) x 1.7

Paint - Disposal

MEASUREMENT UNIT: HRS
UNIT QTY: HRS

This is specific to 2 full coats to all selected trim areas with premium products. 2nd coats require 70% material of 1st.

Misc: Clean-up Hours

Paint - Special Conditions

MEASUREMENT UNIT: HRS
UNIT QTY: HRS

Addtional time given to access seldcted areas safely. Ladder placements, equipment setup etc.

$$\frac{\text{Misc: Special Condition 20 min unit}}{3}$$

Additional Bulk Time

MEASUREMENT UNIT: HRS
UNIT QTY: HRS

Calculation for additional time needed given due to the challenging nature of certain project areas.

$$\frac{\text{Misc: Special Condition 20 min unit}}{3}$$