

HVAC takeoff worksheet

ILLUSTRATIVE WORKSHEET - hypothetical inputs, not actual client work. Published October 13, 2026.

Calculate the nominal surface of a rectangular straight duct run, with equipment, fittings and insulation kept in separate scope lines.

Worked quantity example

A 24 LF straight duct run measuring 18 by 12 inches has a nominal four-sided surface of $24 \times (2 \times 18 + 2 \times 12) / 12 = 120$ SF.

How quantities stay separate

Work item	Unit	Example quantity	Scope note
Rectangular straight duct surface	SF	120.00	Nominal four-sided area; excludes fittings
Duct fittings and transitions	EA	To measure	Measure or count under the specified basis
Air devices and equipment	EA	To measure	Reconcile equipment and terminal schedules
Duct insulation by assembly	SF	To measure	Verify specified insulation extent and thickness

Using the Excel version

Amber cells hold editable project inputs. Quantity formulas update from the example dimensions or counts. Material and labor unit rates are blank. A line remains unpriced until all three numeric inputs are supplied; an explicit zero rate is accepted.

The subtotal remains unavailable while listed quantities or rates are missing. Different measurement units must not be added into one quantity.

Drawing and scope review

Record the actual project name, drawing issue, addenda and reviewer before replacing the hypothetical inputs.

Document register

Document required	Sheet / revision	Issue date
Mechanical plans, sections and equipment schedules	_____	_____
Duct dimensions, fittings and insulation specifications	_____	_____
Controls sequences, coordination drawings and addenda	_____	_____

Review checks

- 1. Distinguish linear feet from sheet-metal surface area
- 2. Verify the specification measurement basis
- 3. Separate fittings, seams, hangers and fabrication allowances
- 4. Coordinate controls, power, piping and commissioning scope

Basis and limits

The 120 SF example covers nominal straight-duct surface only. It does not represent fabrication quantity, insulation coverage or an engineered design.

Example inputs come from the existing educational trade/service examples on Commercial Estimate Pro. Prices, company project experience and client outcomes are not represented.

Related technical guidance

- [HVAC estimating guide](#)
- [Mechanical estimating guide](#)
- [NIST unit conversion reference](#)