

Dwelling Addition Load Calculator

Calculate addition load, planned peak, and service-capacity margin from entered dwelling load groups and existing peak.

Generated October 10, 2026

<https://www.elecatrix.com/residential-load-service/dwelling-addition-load-calculator/>

Inputs

Input	Value	Unit
Addition lighting load	0.8	kW
Addition receptacle load	1.2	kW
Addition HVAC load	3.5	kW
Addition appliance load	2	kW
Existing dwelling peak	14	kW
Entered coincidence factor	80	%
Entered service capacity	24	kW

Results

Result	Value	Unit
Addition connected load	7.5	kW
Entered-coincidence planned peak	20	kW
Entered service capacity margin	4	kW

Calculation details

Detail	Value	Unit
Calculation basis	Addition screen uses entered load groups, existing peak, coincidence factor, and entered service capacity.	
Review boundary	Planning worksheet only; no NEC dwelling load calculation or service approval is made.	

Formulas

addition connected load = lighting + receptacle + HVAC + appliance loads

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$$\text{planned peak after addition} = \text{existing peak} + \text{addition connected load} \times \text{coincidence percent} / 100$$

$$\text{service capacity margin} = \text{entered service capacity} - \text{planned peak after addition}$$

Warnings and limitations

This dwelling addition load screen does not perform an NEC dwelling load calculation, determine final service size, select conductors, approve panels, or replace utility/AHJ review.