

How much light do you need when the power is gone?

A simple way to size lighting for shelters, assembly points and shared spaces

The rules describe how much light must be available while there is power. Once the power is gone, there is no requirement at all. Here is a way to size it anyway, in three steps.

1 Room light: see the whole room, and each other

Several lamps at a low setting, spread evenly, rather than one bright source. In a dark room the eye is sensitive, and a single bright lamp causes glare and hard shadows that make people see less. Evenness matters more than output. The purpose is to move safely, see each other's faces and stay calm for hours, not minutes.

2 Task light where it matters

The toilet arrangement is the clearest example: someone will change a bag, clean up, or help a child or an older person. That light should stay on, so nobody is searching in the dark behind a curtain. First aid and the information point have the same need.

3 Personal light

A light of one's own, to find something in a bag, read, or see to a child without disturbing everyone else. It is also the only light that follows the person if people have to move.

A starting point to work from

Places	Room light	Task light (toilet etc.)	Total
25 people	3 lamps	1 lamp	4 lamps
50 people	4–6 lamps	1–2 lamps	6–8 lamps
100 people	8–10 lamps	2–3 lamps	10–13 lamps

Based on Sol High Capacity: 300 lumens, 360° light, several light settings, rechargeable by solar or USB, charges a phone, up to 24 days on one charge at the lowest setting. Personal lights come in addition. These figures are a starting point for a conversation, not a standard.

What lux feels like: 1 lux = dusk, you see outlines · 5 lux = under a street lamp · 50 lux = a basement store room with the ceiling light on · 300–500 lux = an office · 10,000+ lux = outdoors in daylight

What the rules say today

- Swedish shelter rules SR 15 § 2:35: there must be an electrical installation for lighting giving at least 50 lux. The requirement is on the installation, meaning while there is mains power.
- The backup-power requirement in SR 15 covers the ventilation equipment, not the lighting.
- MCF (the Swedish Civil Defence Agency), shelter unit, reply by email 18 September 2026: shelters have no backup power, so the ordinary lighting goes out with the grid, and each person is responsible for bringing their own torches, batteries and power banks. For assembly points, the municipality is responsible for establishing, equipping and running them.
- MCF, "Kom igång med trygghetspunkter!": lighting is a precondition for being able to provide information and a sense of safety.
- Emergency escape lighting is sized for evacuation: about 1 lux along escape routes, 5 lux on stairs, for 60 minutes. It is also only required in certain buildings.