



SITE LIGHTING

# PROPER SITE LIGHTING MAKES WORK SAFE

In the European union there is a standard for how much light is needed when working at a construction site, the standard: EN 12464-2, states that on construction sites there needs to be between 20 lux to 200 lux of light available depending on the work handed out. See on chart below the requirements for different tasks and activities.



Type of area, task or activity	Lux requirements
Clearance, excavation and loading	20 lux
Costruction areas, drain pipes mounting, transport, auxiliary and storage tasks	50 lux
Framework element mounting, light reinforcement work, wooden mould and framework mounting, electric piping and cabling	100 lux
Element jointing, demanding electrical, machine and pip mountings	200 lux

In the table above stating the requirements for lighting, two rows are marked with green and two with blue. The green rows are jobs or activities where you would normally stand up and move around, meaning that if you are wearing a headlamp there would be around 2 meters down to the ground/pathway that you would like to illuminate. The two blue rows indicates jobs where you would normally work with things up close no longer away than 1 meter (arms length) and therefore the illumination distance would be the same.

The distance from the light source (headlamp) to the object/area of illumination is very important as the size of the illuminated area depend upon the distance from the light source. The size of the illuminated area also defines the amount of lux available, given that the light source (headlamp) radiates the same amount of light (lumen). In order to asses whether or not the selected light source is sufficient, the power of the light source needs to be taken into account as well as the distance to the area of illumination. In the graph below different powered (lumen) light sources (Headlamps) are plotted in with different distances, showing the change in lux (light intensity). All of the measurements below are made with headlamps set in moon/flood beam radiating a wide light beam.

## Wide flood beam



The Measurements of lux is made with the flood beam light that covers a large area with light.

