

ACCESSING SAFETY KNOWLEDGE (ASK) SHEET: *LASERS – ARE THEY HAZARDOUS?*

Lasers are an important part of the construction industry. They are used in a variety of jobs where layout is performed and an accurate, level reference is needed. Lasers, when in use, are typically not given a second thought when it comes to hazards. However, they can cause damage to your eyes if you fail to follow simple guidelines put in place by the manufacturer and OSHA.

There are different types of lasers, 3 of which are included below.

Point Laser



Light Output:
1.5 milliwatts

Line Laser



1.5 milliwatts

Rotating Laser



3 milliwatts

Laser light differs from ordinary light in 3 ways:

- Monochromatic
- Directional
- Coherent

Lasers can pose more of a hazard than ordinary light because they focus a lot of energy onto a small area.

So what does OSHA say about lasers?

1926.54 addresses nonionizing radiation (lasers) and has some very clear guidelines that are expected to be followed, including but not limited to:

- Only qualified AND trained employees SHALL be assigned to install, adjust, and operate laser equipment
- Proof of qualification of the laser equipment operator SHALL be available and in possession of the operator at all times
- Employees exposed to direct or reflected laser light greater than 5 milliwatts SHALL be provided with antilaser eye protection devices. NOTE: Most lasers used in construction are less than 5 milliwatts.
- Areas in which lasers are used shall be posted with standard laser warning placards
- The laser beam SHALL not be pointed at employees

OSHA does not differentiate between the different classes of lasers and therefore 1926.54 applies regardless of the class. You only have two eyes so protect them. Don't stare directly into the laser light and wear protective eyewear when required.

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