

Prior to workers installing, adjusting, and operating laser equipment they must be trained in the use of the equipment, according to manufacturer recommendations. Employees must also be aware of hazards associated with equipment use and understand hazard control measures.

The training should be conducted by a qualified representative of the manufacturer or by a knowledgeable individual.

Proof of qualification of training shall be available and in the possession of the operator at all times.

General Precautions

1. Post areas in which lasers are used with standard laser warning placards.
2. Set up operating laser units above the heads of employees when possible.
3. Use beam shutters or caps or turn off the laser when laser transmission is not actually required.
4. Turn off the laser when left unattended for a period of time, such as during lunch hour, overnight, or at change of shifts.
5. Use only mechanical or electronic means as a detector for guiding the internal alignment of the laser.
6. Label laser equipment to indicate maximum output.
7. The laser beam must not be directed at employees.
8. Prohibit laser operation when it is raining or snowing, or when there is dust or fog in the air, where practical. Keep employees out of range of the area of source and target during such weather conditions.
9. Provide employees, working in an area where potential exposure to direct or reflected laser light of more than 5 milli watts exists, with anti-laser eye protection as specified in OSHA standard 1926.102(b)(2).
10. Make sure employees are not exposed to light intensities above "direct staring," "incidental observing," or "diffused reflected light" levels.
11. Make sure employees are not exposed to microwave power densities in excess of 10 milli watts per square centimeter.

The requirements associated with the use of laser equipment is can be found in the OSHA Nonionizing Radiation standard for construction industry, 1926.54.