Safe Use of Lasers in Construction

The construction industry uses lasers for many applications. Lasers may be a concern to people who do not understand the effects and the level of power in the beam.

In construction, the laser is used primarily as a leveling device. It may be set up to indicate elevation, direction, or both. A laser used for this purpose will probably be a Class 1 laser, which is generally considered incapable of producing damaging levels of laser emission.

In its regulation for Non-Ionizing Radiation (29 CFR 1926.54), the Occupational Safety and Health Administration (OSHA) provides the standard for safe laser use. All lasers used in construction are covered by this standard. However, OSHA recognizes that the degree of hazard associated with low power lasers used in construction is relatively low and that Class 1 lasers are generally not hazardous.

Here are some good operating guidelines.

**Safety Rules for Class 1 Lasers in Construction**

- Only qualified and trained people should set up, operate, or adjust the laser.
- The operator must be in the area and have proof of qualifications on his or her person.
- The laser beam should be set up over the heads of people in the area, when possible.
- Never direct the laser beam at people.
- When working with lasers, use your head for thinking, not as a laser target.
- The laser operating area should be posted with laser warning placards.
- The laser should be capped or shut off when not in use.
- Use only mechanical or electronic means for laser beam detectors.
- Avoid using lasers in heavy dust, snow, rain, or fog conditions.
- The laser must have the maximum beam output tag attached.