Module 7, Signs, Signals, and Barricades



Construction sites can be hazards waiting to happen. Fortunately, if you work on large Construction sites, you know how important safety signs, tags, and labels are.

Safety signs play a key role in safety Construction projects. In fact, accident prevention signs are thought to be one of the oldest items of safety equipment used. It will never be known how many eyes, lives, or buildings have been saved because a sign was used to remind workers to wear eye protection or to not smoke because of flammable liquids are in the area. Signs warn people of tripping hazards, Hot work activities in an area, Hazardous Material Storage Areas, Lock-out Tag-out activities taking place, and Environmental watch areas.

Safety and Health signs notify people of potentially dangerous areas such as:

- Tripping hazards
- Hot work activities that are being performed in an area.
- No Smoking Zones
- Hazardous Material Storage Areas
- Lock-out Tag-out activities taking place.
- Welding areas
- Confined Space work
- And, Environmental watch areas, to name a few

STANDARDIZATION

Uniformity of signs, intelligently located and properly worded, should provide an automatic warning, caution, or notice to all employees no matter where they work with a meaning that is clearly understood immediately.

Of course, hazards should be eliminated wherever possible, but if they can't be eliminated the employee should be informed of the hazard, through signage.

The movement of pedestrians, cars, trucks, and machinery the construction site, shows a definite need for standardization of signs. The same signs used in both places reduces confusion and moves traffic more rapidly and with less confusion.

DEFINITIONS

The word "sign" as used in this course, refers to a surface on which letters or other markings appear. Excluded from this definition, however, are safety posters or bulletins used for employee education.

When we use the word "shall" it is to be understood as mandatory.

The word "should" is to be understood as advisory.

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And the word "approved" means approval by the authority having jurisdiction.

SIGN CLASSIFICATION

Danger Signs

Danger signs shall be used only where an immediate hazard exists. There shall be no variation in the type of design of signs posted to warn of specific dangers and radiation hazards.

All employees shall be instructed that danger signs indicate immediate danger and that special precautions are necessary.

Danger signs shall follow the specifications illustrated in Figure 1 below.

Danger signs shall have red as the predominating color for the upper panel; black outline on the borders; and a white lower panel for additional sign wording.

Caution signs

Caution signs shall be used only to warn against potential hazards or to caution against unsafe practices.

Caution signs shall have yellow as the predominating color; black upper panel and borders: yellow lettering of "caution" on the black panel; and the lower yellow panel for additional sign wording. Black lettering shall be used for additional wording.

The standard color of the background shall be yellow, and the panel, black with yellow letters. Any letters used against the yellow background shall be black. The colors shall be those of opaque glossy samples as specified in Table 2.

Exit Signs

Exit signs, when required, shall be lettered in legible red letters, not less than 6 inches high, on a white field and the principal stroke of the letters shall be at least three-fourths inch in width.

Safety instruction signs.

Safety instruction signs, when used, shall be white with green upper panel with white letters to convey the principal message. Any additional wording on the sign shall be black letters on the white background.

Directional signs.

Directional signs, other than automotive traffic signs specified in paragraph (g) of this section, shall be white with a black panel and a white directional symbol. Any additional wording on the sign shall be black letters on the white background.

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Traffic control signs and devices.

At points of hazard, construction areas shall be posted with legible traffic control signs and protected by traffic control devices.

The design and use of all traffic control devices, including signs, signals, markings, barricades, and other devices, for protection of construction workers shall conform to Part 6 of the MUTCD (incorporated by reference, see §1926.6).

Accident prevention tags.

Accident prevention tags shall be used as a temporary means of warning employees of an existing hazard, such as defective tools, equipment, etc. They shall not be used in place of, or as a substitute for, accident prevention signs.

Informational Signs

Informational signs should be used where it is advisable to convey general information, on subjects not necessarily of a safety nature, in order to avoid confusion and misunderstandings. Signs such as those which mark toilets, offices, entrances, and locker rooms fall in this classification.

Sign Design and Colors

Sign Finish

The decision to use reflective materials, fluorescent coatings, paint backed enamel, or porcelain enamel for the sign finish should be made after careful consideration of such factors as the purpose of the sign, normal visibility requirements, visibility requirements during emergencies such as fire or power failure; the deleterious elements which the sign is subjected to and the desired life of the sign.

Artificial illumination may be used to increase the effectiveness of certain signs.

Design Features

The colors, proportions, and location of the identification panels on each sign indicated in the following sections shall be regarded as standard. All signs shall be furnished with rounded or blunt corners and shall be free from sharp edges, burrs, splinters, or other sharp projections. The ends shall be located in such a way that they do not constitute a hazard.

Danger Signs

The colors red, black, and white shall be those of opaque glossy samples as specified in Table 1, Fundamental Specification of Safety Colors for CIE Standard Source "C," USA Standard Z53.1-1967.

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Radiation Warning Signs

Standard Colors

The background shall be yellow; the panel, reddish purple with yellow letters; the symbol, reddish purple. Any letters used against the yellow background shall be black. The colors shall be those of opaque glossy samples as specified in Table 1 of USA Standard Z53.1-1967. of dimensioning, design, and orientation of the standard symbol (one blade pointed downward and centered on the vertical axis) shall be executed as illustrated. The symbol shall be prominently displayed, and of a size consistent with the size of the equipment or .material or area to which it is attached.

Standard Proportions.

Sign proportions shall be the same as those recommended for danger signs (see Table 1).