

The Workplace Safety sign system shown in this section has been developed for both public and restricted areas of Corps projects and facilities. The functions of the signs are: to alert or warn people about workplace hazards of which they may not be aware; to restrict access to workplaces that present dangerous conditions; or to inform people of safety requirements.

The system has been designed in compliance with the standards set for safety signs by:

- The American National Standards Institute,
- The Occupational Health and Safety Administration,
- The U.S. Army *Regulations for Safety Color Code Markings and Signs* and
- EM 385-1-1 (the Corps *Safety and Health Requirements Manual*).

Each of the Corps safety signs is designed for a specific intended purpose. Use of this group of signs is intended to eliminate haphazard selection and posting of visually unrelated safety messages. Implemented as a uniform system, both the singular and total effects of more than one sign in an area will be increased.

There are five basic types of signs in this group: Danger, Caution, Safety, Notice, and Directional signs.

Danger Signs (red): Indicate immediate and grave danger or hazard capable of producing irreversible damage or injury. These signs can include prohibitions against dangerous activity.

Caution Signs (yellow): Call attention to a potential danger or a hazard capable of resulting in severe but not irreversible injury or damage. In some instances, the hazards may be those associated with Danger signs but are of significantly less magnitude.

Safety Signs (green): Include general practices and rules relating to health, first aid, and housekeeping for a safe workplace.

Notice Signs (blue): Control or define access and circulation and/or inform the viewer of other safety requirements. Notice signs are used primarily for information.

Directional Signs (black): Point the way to fire extinguishing equipment, emergency exits, and other emergency-related destinations.

The color format of each of the five sign types described above is shown on page 11-2. Color standards for Workplace Safety signs are provided on page 4-7.

A display of commonly used safety signs is shown on pages 11-4 to 11-10. Adjacent to each sign is a catalog order number for procurement. The wording of these signs has been carefully chosen to be both easy to read and easy to understand. (Refer to the viewing distance and panel size guidelines on page 11-3 to determine appropriate sign size needed.)

Workplace safety legends displayed in the *UNICOR Sign and Decal Products* catalog have been preapproved for use as long as the format follows the grids shown on page 11-3.

The Workplace Safety signs with Danger and Caution headings have standard legends that must be used just as shown in this manual. If a sign with a unique legend not appearing on pages 11-4 to 11-7 or in the UNICOR catalog is needed, the procedures detailed on page 1-13 should be followed. The sign legend should be concise and easy to read and should contain enough information to be easily understood. A positive rather than a negative tone is desired. The function of the site specific custom sign is to alert employees and project visitors to uncommon conditions in a work area that potentially could affect their safety. Since conditions requiring these signs are largely project or regionally specific, sizing and mounting information are not detailed.

Danger signs follow the format illustrated on pages 11-4 and 11-5. Danger and Caution legends appearing in the *UNICOR Sign and Decal Products* catalog are also approved if they follow the format illustrated on page 11-4.

Mounting guidelines are shown on page 11-11.

For assistance in signing for safety, contact your district Safety Officer. For additional information on ordering the signs included in this section contact your district Sign Program Manager.

The Corps Safety signs have a visual impact created by the use of Helvetica Bold typography for the sign legends along with clear, simple colors. The signs are devoid of any unnecessary lines, shapes or graphic devices. The

examples below show the use of the standard colors for each of the various types of safety signs in the system. Reference numbers for each of the colors are specified on page 4-7, Workplace Safety Sign Color Standards.

a) Danger Signs: The word "Danger" is white on a red background. The lettering describing the specific danger is black on a white background.

b) Caution Signs: The word "Caution" is bright yellow on a black background. This color combination is reversed for the descriptive legend with black legend and yellow background.

c) Notice Signs: These signs have a distinctive blue top panel with the legend "Notice" in white. The information on the sign is printed black on a white background.

d) Safety Signs: This type of sign always has a bright green top panel with the "Safety" legend in white. The lettered information on the sign is black on a white background.

e) Directional Signs: The top section of the sign is black with a white legend identifying the subject of the Directional sign. The directional arrow that matches the weight of Helvetica Bold type is printed black on a white background.

Danger

**High
Voltage**

a)

Safety

**Keep Work
Area Clean
and Safe**

d)

Caution

**Keep
This Door
Closed**

b)

**Fire
Blanket**



e)

Notice

**Face Shield
Required
In This Area**

c)

All of the Safety signs on pages 11-4 to 11-10 were prepared using the grid formats shown below. The dimensions of the sign are derived from A, which is the height of a capital letter in the descriptive legend. The lettering is upper and lower case (initial capitals only) Helvetica Bold typeface placed flush to the left with a ragged right margin.

Most legends will use Grid A. A small number of the signs that have longer

descriptive legends are to be constructed on Grid B. Directional Safety signs use Grid C. Refer to page 4-13 for arrow use guidelines.

These grids are to be used when preparing artwork for any Safety sign required that is not included in the following displays. In rare cases where approved Workplace Caution or Danger legends are too long to fit either Grids A or B, the panel height may be increased

1.5A for Grid A and 1.25A for Grid B for each additional line of text.

Workplace Safety signs are to be mounted for optimum viewing. Specify a panel size with enough target value so that it is easily seen in a busy shop environment. The matrix below specifies a standard viewing distance for each panel size using signs constructed on Grids A and C.

Grid A

For SNO, SAF, and approved SDA and SCA legends that exceed four lines, add 1.5A for each additional line of text to panel height. If there is more than one message, place a line space equal to A between the messages.



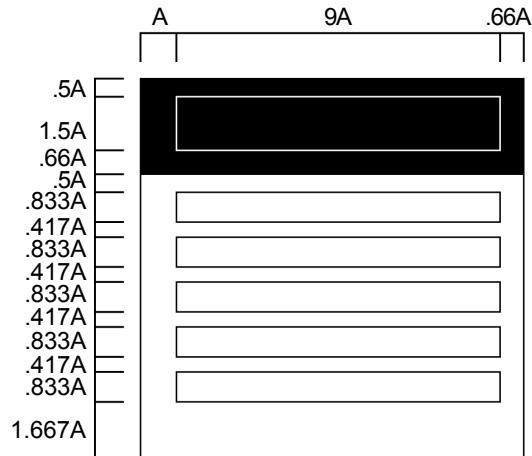
Workplace Safety Signs Panel Size and Viewing Distance Guide

| Panel Size | Legend Size | Viewing Distance |
|------------|-------------|------------------|
| 8"x8" | A = .75" | 21 ft |
| 12"x12" | A = 1.125" | 31.5 ft |
| 16"x16" | A = 1.5" | 42 ft |
| 24"x24" | A = 2.25" | 63 ft |

The viewing distance calculation is to be reduced by 16% for signs constructed with Grid B.

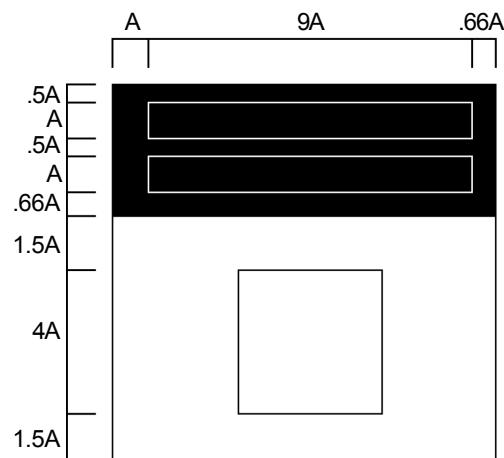
Grid B

For SNO, SAF, and approved SDA and SCA legends that exceed four lines, add 1.25A for each additional line of text to panel height. If there is more than one message, place a line space equal to 0.834A between the messages.



Grid C

Square inside the grid indicates location of arrow.

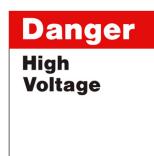
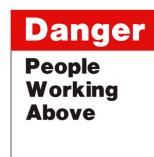


Danger Sign Display

Red, white, and black Danger signs are used to warn of the existence of an immediate hazard or specific danger. Shown below and on page 11-5 are standard Corps Danger signs. These may be ordered using the code number adjacent to each display. Refer to

guidelines on page 11-3 to determine appropriate panel size. Follow specified grid formats to fabricate any Danger sign needed that is not included in this display. See page 1-13 for requesting approval of nonstandard safety sign legends. For color standards, see page 4-7.

Grid A

| | | | |
|---|--|---|---|
|  SDA-01 |  SDA-02 |  SDA-03 |  SDA-04 |
|  SDA-05 |  SDA-06 |  SDA-09 |  SDA-10 |
|  SDA-11 |  SDA-12 |  SDA-13 |  SDA-14 |
|  SDA-15 |  SDA-19 |  SDA-20 |  SDA-27 |
|  SDA-29 | | | |

| Sign Type | Legend Size (A) | Panel Size | Post Size | Specification Code | Mounting Height | Color Bkg/Lgd |
|-----------|-----------------|------------|-----------|--------------------|-----------------|---------------|
| SDA-00 | .75" | 8"x8" | - | ALU-6 | 65" | SR-SW/SK |
| SDA-00 | 1.125" | 12"x12" | - | ALU-6 | 65" | SR-SW/SK |
| SDA-00 | 1.5" | 16"x16" | - | ALU-6 | 78" | SR-SW/SK |
| SDA-00 | 2.25" | 24"x24" | - | ALU-6 | 78" | SR-SW/SK |

Grid B

| | | | |
|--|---|--|--|
| Danger High Voltage Authorized Personnel Only | Danger Loud, High Pitch Noise Hearing Protection Required | Danger High Intensity Noise Hearing Protection Required | Danger Permit-Required Confined Space Do Not Enter |
| SDA-16 | SDA-17 | SDA-18 | SDA-21 |
| Danger Keep Out of Yellow Area When Crane is Operating | Danger Automatic CO ₂ System Leave Area When Horn Sounds | Danger No Smoking or Open Flame Within 000 Feet | Danger High L.P. Gas Concentration In Building When Light is On or Horn Sounds |
| SDA-22 | SDA-26 | SDA-28 | SDA-30 |

| Sign Type | Legend Size (A) | Panel Size | Post Size | Specification Code | Mounting Height | Color Bkg/Lgd |
|-----------|-----------------|------------|-----------|--------------------|-----------------|---------------|
| SDA-00 | .75" | 8"x8" | - | ALU-6 | 65" | SR-SW/SK |
| SDA-00 | 1.125" | 12"x12" | - | ALU-6 | 65" | SR-SW/SK |
| SDA-00 | 1.5" | 16"x16" | - | ALU-6 | 78" | SR-SW/SK |
| SDA-00 | 2.25" | 24"x24" | - | ALU-6 | 78" | SR-SW/SK |

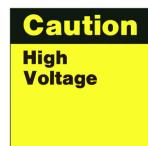
Caution Sign Display

Caution signs are used to warn against potential hazards or to caution against unsafe practices. The standard Corps Caution signs are shown below and on page 11-7 with their respective order codes. Sizing guidelines for Caution signs are on page 11-3. For color standards, see page 4-7.

Grid A



SCA-01



SCA-02



SCA-03



SCA-04



SCA-05



SCA-06



SCA-07



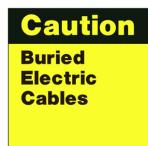
SCA-08



SCA-09



SCA-10



SCA-11



SCA-12



SCA-13



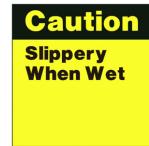
SCA-14



SCA-15



SCA-16



SCA-17



SCA-18



SCA-19

| Sign Type | Legend Size (A) | Panel Size | Post Size | Specification Code | Mounting Height | Color Bkg/Lgd |
|-----------|-----------------|------------|-----------|--------------------|-----------------|---------------|
| SCA-00 | .75" | 8"x8" | - | ALU-6 | 65" | SK-SY/SK |
| SCA-00 | 1.125" | 12"x12" | - | ALU-6 | 65" | SK-SY/SK |
| SCA-00 | 1.5" | 16"x16" | - | ALU-6 | 78" | SK-SY/SK |
| SCA-00 | 2.25" | 24"x24" | - | ALU-6 | 78" | SK-SY/SK |

Grid B



SCA-20



SCA-21



SCA-22



SCA-23



SCA-24



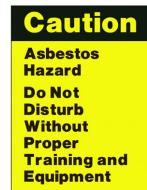
SCA-33



SCA-34



SCA-35



SCA-36

| Sign Type | Legend Size (A) | Panel Size | Post Size | Specification Code | Mounting Height | Color Bkg/Lgd |
|-----------|-----------------|------------|-----------|--------------------|-----------------|---------------|
| SCA-00 | .75" | 8"x8" | - | ALU-6 | 65" | SK-SY/SK |
| SCA-00 | 1.125" | 12"x12" | - | ALU-6 | 65" | SK-SY/SK |
| SCA-00 | 1.5" | 16"x16" | - | ALU-6 | 78" | SK-SY/SK |
| SCA-00 | 2.25" | 24"x24" | - | ALU-6 | 78" | SK-SY/SK |

Notice Sign Display

Notice signs provide information to control or define access and circulation at a site and/or inform the viewer of other safety requirements. Examples of commonly used Notice signs are shown in the display below. To order, refer to

the adjacent code with the appropriate sign size needed (see page 11-3). To fabricate Notice signs, see the grid format instructions also on page 11-3. For color standards, see page 4-7.

Grid A

| | | | |
|--|--|---|---|
| Notice Keep Aisles Clear SNO-01 | Notice Fire Door Do Not Block SNO-02 | Notice No Exit SNO-03 | Notice No Smoking SNO-04 |
| Notice No Pedestrians Allowed SNO-05 | Notice Employees Only SNO-06 | Notice Authorized Personnel Only SNO-07 | Notice Full Cylinders SNO-08 |
| Notice Empty Cylinders SNO-09 | Notice No Vehicles Allowed Without Permit SNO-10 | Notice No Vehicles Allowed SNO-11 | Notice Face Shield Required In This Area SNO-13 |

Grid B

| | |
|--|---|
| Notice Make Your Workplace Safe Before Starting the Job SNO-12 | Notice Wear Ear and Eye Protection When Using All Equipment In This Shop SNO-15 |
|--|---|

| Sign Type | Legend Size (A) | Panel Size | Post Size | Specification Code | Mounting Height | Color Bkg/Lgd |
|-----------|-----------------|------------|-----------|--------------------|-----------------|---------------|
| SNO-00 | .75" | 8"x8" | - | ALU-6 | 65" | SB-SW/SK |
| SNO-00 | 1.125" | 12"x12" | - | ALU-6 | 65" | SB-SW/SK |
| SNO-00 | 1.5" | 16"x16" | - | ALU-6 | 78" | SB-SW/SK |
| SNO-00 | 2.25" | 24"x24" | - | ALU-6 | 78" | SB-SW/SK |

Safety signs call attention to the general rules or good practices that create a safe workplace. The standard Corps Safety signs are shown below with their respective order codes. Sizing guidelines for Safety signs are on page 11-3. For color standards, see page 4-7.

Grid A

| | | | |
|--|---|---|---|
| Safety Make Your Workplace Safe | Safety Keep Work Area Clean and Safe | Safety Permission Required Before Entering | Safety Report All Injuries |
| SAF-01 | SAF-02 | SAF-03 | SAF-04 |

Grid B



SAF-05

| Sign Type | Legend Size (A) | Panel Size | Post Size | Specification Code | Mounting Height | Color Bkg/Lgd |
|-----------|-----------------|------------|-----------|--------------------|-----------------|---------------|
| SAF-00 | .75" | 8"x8" | - | ALU-6 | 65" | SG-SW/SK |
| SAF-00 | 1.125" | 12"x12" | - | ALU-6 | 65" | SG-SW/SK |
| SAF-00 | 1.5" | 16"x16" | - | ALU-6 | 78" | SG-SW/SK |
| SAF-00 | 2.25" | 24"x24" | - | ALU-6 | 78" | SG-SW/SK |

Directional Sign Display

Directional signs that relate to accident prevention use a format similar to all other Workplace Safety signs (see Grid C, page 11-3). Shown in the display below are commonly used signs of this type. To order, identify the sign by the

adjacent code. Indicate sign panel size required (see page 11-3) and arrow direction on the order. For color standards, see page 4-7.

Grid C



SDR-01



SDR-02



SDR-03



SDR-04



SDR-05



SDR-06



SDR-07



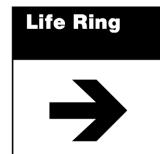
SDR-08



SDR-09



SDR-10



SDR-11

| Sign Type | Legend Size (A) | Panel Size | Post Size | Specification Code | Mounting Height | Color Bkg/Lgd |
|-----------|-----------------|------------|-----------|--------------------|-----------------|---------------|
| SDR-00 | .75" | 8"x8" | - | ALU-6 | 65" | SK-SW/SK |
| SDR-00 | 1.125" | 12"x12" | - | ALU-6 | 65" | SK-SW/SK |
| SDR-00 | 1.5" | 16"x16" | - | ALU-6 | 78" | SK-SW/SK |
| SDR-00 | 2.25" | 24"x24" | - | ALU-6 | 78" | SK-SW/SK |

Signs are placed to alert and inform in sufficient time to avoid the hazard or take appropriate action. They should be sized for easy reading from the viewing distance required. In visually complex industrial shops, a sign that is too small will be lost. Conversely, an overly large sign can overwhelm an area.

Signs should be placed where they will not create distractions. Care should be taken to avoid grouping too many signs together in one location. Small sign panels placed for close viewing are appropriately placed at eye level: (5'-5"). Larger signs posted in big spaces or for viewing at greater distances should be placed proportionally higher. Signs

should not be placed where moveable objects may obscure them. Only place those signs that relate to a specific piece of equipment on that equipment.

Before ordering a sign, place a cardboard panel in the proposed location to verify the size and placement location.

a) 8" x 8" panel mounted at eye level for viewing up to 21 feet.

b) 12" x 12" panel mounted at eye level for viewing up to 31.5 feet.

c) 16" x 16" panel mounted 6'-6" or higher level for viewing up to 42 feet.

d) 24" x 24" panel mounted 6'-6" or higher level for viewing up to 63 feet.

