Top 5 Items to Consider When Choosing Safety Signs

Our thanks to Brady for allowing us to reprint the following article.

By: Thomas Smith, Product Manager, Brady Worldwide Inc.

Safety signs are a necessary component for warning and communicating messages or notices to employees and customers. In order to provide a clear and concise message, the sign must meet a variety of requirements and standards. Selecting and placing a safety sign for your facility is more than a workplace requirement, but an opportunity to prevent costly accidents or dangerous hazards for individuals within your facility.

Here are five items to consider when selecting safety signs for your facility:

A thin plastic sign is a poor choice for a windy outdoor employee parking lot that's expected to last 10 years or more. Similarly, a thick aluminum indoor sign identifying the nearest restroom is probably overkill and too expensive. Choosing a material for your safety sign may not seem as significant as the message or regulatory compliance of the sign. But it's important to remember that different materials are equipped for different environments and applications. If you don't select the proper material, you could end up having to replace the sign more frequently than needed.

1. Match the Material to the Application

Most popular sign materials to choose from:

Material	Construction	Environment	Ideal For	Cost
Durable Fiberglass (B-120)	Rigid with graphics embedded or applied to surface, coated / protected.	Outdoor, harsh conditions. Excellent wind, chemical and abrasion resistance.	Parking lots, outdoor storage, site, identification, wall or post mounting.	$$$$-$$$
Tough Aluminum (B-555)	Rigid with graphics applied to the surface, coated / protected.	Indoor/outdoor general purpose. High wind, chemical and abrasion resistance.	Entrance, exit, traffic, parking, building, directional, safety, wall or post mounting.	$$$
Tough Plastic (B-401)	Semi rigid with graphics applied to the surface, coated / protected.	Indoor general purpose, temporary outdoor.	Directional, informational, departmental, safety, special event, temporary construction, wall or post mounting	$$
Self-Sticking Polyester (B-302)	Flexible self adhesive with protected graphics.	Indoor/outdoor, resistant to high/low temperatures and cleaning chemicals.	Informational, directional & safety. On pipes, poles, containers, windows, equipment, storage racks, tanks. Smooth, clean surface mounting	$$
Self-Sticking Vinyl (B-946)	Flexible self adhesive with protected graphics.	Indoor/outdoor – cold temperature adhesive.	Informational, directional & safety. On poles, containers, windows, doors, storage racks, tanks. Flat, smooth, clean surface mounting	$

- **Fiberglass** - Strong, rigid, and weather-resistant, fiberglass is one of the most durable materials for signs. It will not to chip, fade, rust, shatter or peel for up to 25 years. This material also has excellent chemical and abrasion resistance.

- **Aluminum** - Aluminum signs are ideal for both indoor and outdoor use. Offering excellent chemical resistance and abrasion resistance, aluminum signs can withstand tough weather conditions such as wind, rain, sunlight and high temperatures (up to 100°F) for up to eight years. This material is commonly used for parking signs, building signs and informational signs.

- **Plastic** - Plastic is a cost-effective, lightweight and durable material for safety signs. Plastic signs conform to well-curved surfaces and are well suited for most indoor directional, informational, departmental and safety sign applications including fire extinguisher locations.

- **Self-Sticking Polyester and Vinyl** - Self-sticking signs are economical and can be used indoors and outdoors and are extremely easy to mount. They offer an average outdoor durability of up to eight years and have a fair chemical and abrasion resistance.

2. Comply with Applicable Regulations

Be sure to check for specific sign requirements of the regulation which you are trying to comply. There are different safety sign styles, governing regulations and recommended guidelines to choose from, depending on the application and message of your sign.

Below are a few of the more common regulations affecting signs:

Organization	What's Covered
OSHA – Occupational Safety & Health Administration	OSHA 1910.037 Means of Egress, General OSHA 1910.144 Safety Color Code for Marking Physical Hazards OSHA 1910.145 Specifications for Accident Prevention Signs and Tags OSHA 1910.1200 Hazard Communication
DOT – Department of Transportation	Hazardous Materials Warning Placards and Labels Title 49, Code of Federal Regulations, Parts 100-199 MUTCD 2009 (Manual on Uniform Traffic Control Devices) is the most current edition of the MUTCD
NFPA – National Fire Protection Association	NFPA 70: National Electrical Code NFPA 101: Life Safety Code NFPA 101B: Code for Means of Egress for Buildings and Structures NFPA 704: Standard System for the Identification of the Hazards of Materials for Emergency Response
ICC – International Code Council	IBC 2012 International Building Code
ANSI – American National Standards Institute	ANSI Z535.1-2001, Safety Color Code ANSI Z535.2-2002, Environmental and Facility Safety Signs ANSI Z535.3-2003, Criteria for Safety Symbols ANSI Z535.4-2004, Product Safety Signs & Labels
ISO – International Standards Organization	ISO 7010:2011 Prescribes Safety Signs for the Purposes of Accident Prevention, Fire Protection, Health Hazard Information and Emergency Evacuation. ISO 7001:2007 Graphical Symbols, Public Information Symbols
ADA – Americans with Disabilities Act	4.30 Signage

The majority of facility signs need to meet Occupational Health Administration (OSHA 1910.145) and ANSI (ANSI Z535) regulations and guidelines.

Examples:

To Comply with OSHA 1910.145: Occupational Safety and Health Administration requires safety signs to indicate specific hazards that, without identification, may lead to accidental injury to workers and/or the public or to property damage. These signs must also be designed with rounded or blunt corners and must be free from sharp edges or other sharp projections.
Examples of OSHA regulated messages include "Danger," "Caution" and "Safety" signs.

To Comply with ANSI Z535: ANSI Z535 requires a specific set of standards for sign design and application. In order to comply, signs must include universal pictograms that represent various hazards. In addition, each sign must contain a safety alert symbol and a black and white text box. The use of signs, colors and symbols are intended to identify and warn against specific hazards and accident preventions. These signs are meant to provide a clear and concise safety alert message. Examples of ANSI regulated messages include "Danger," "Warning," "Caution," "Notice" and fire and general safety signs.

3. Keep the Message Clear

Be sure to check for specific sign requirements of the regulation which you are trying to comply. There are different safety sign styles, governing regulations and recommended guidelines to choose from, depending on the application and message of your sign.

Messages such as "Warning" and "Caution" may seem synonymous, but they actually deliver very different messages. ANSI and OSHA specify that safety signs must indicate and define specific hazards that, without identification, may lead to accidental injury to workers, customers or the general public. The standard headers and definitions are listed below.

Danger:

Use this message to mark hazardous situations with a high probability of death or serious injury. Do not use for property damage unless personal injury risk is present. The word "Danger" should be limited to the most extreme situations. Red is used to identify "Danger" signs.

Notice:

Use this message to state company policy as the message relates directly or indirectly to the safety of employees or protection of property. Do not use for hazardous situations where there is a possibility of death or severe injury. Blue is used to identify "Notice" signs.

Warning:

Use this message to mark hazardous situations with some probability of death or serious injury. Do not use for property damage unless personal injury risk is present. Orange is used to identify "Warning" signs.

Emergency:

Use for indicating general instructions relative to safe work practices, procedural reminders and safety equipment locations. Green is used to identify "Emergency" signs.

4. Use Pictograms

As immigration rates increase and demographics evolve, it is essential to communicate messages across many different cultural backgrounds. Everyone within the facility should be able to understand the message being communicated.

Pictograms provide a universal way to communicate warnings to all employees and visitors, regardless of language or demographic and can provide a better understanding of hazards. Pictograms provide an easy-to-understand alternative to bi/tri-lingual signs, which can often be difficult to read.

Caution:

Use this message to warn of hazardous situations which may result in minor or moderate injury. Do not use for situations where there is a possibility of death or severe injury. Caution signs without a safety alert symbol may be used to alert against unsafe practices that can result in property damage only. Yellow is used to identify "Caution" signs.

Examples of standard ISO pictograms are below:

5. Location, Location, Location

After you have considered the material, the message, and style, it is important to make certain that your sign will communicate the safety message to all of your employees, customers and the general public. The sign should be clear, concise and placed in a highly visible location. Placement of the sign is a key aspect in transmitting your message.

Keep the following tips in mind when placing your safety sign.

1. Signs must be placed to alert and inform employees of hazards. They should have sufficient time to avoid the hazard and take appropriate action.

2. Signs must be clear, visible and unobstructed.

3. Signs should be placed in an inert location. Signs should not be placed in moveable areas or near areas that could obstruct sign visibility such as doors or windows.

4. Lighting, maintenance and storage should be considered during the placement process to make sure the sign can be clearly illuminated.

Safety signs should continue to be inspected, maintained and cleaned to ensure they are in good condition and in the appropriate location. If the message is no longer relevant or the hazard ceases to exist, the sign should be removed as soon as possible.