Safety and Facility Signs

Safety signs are a necessary and required component for warning and communicating messages or notices to your employees, customers and the general public.

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 in your facility is more than a workplace requirement, but an opportunity to prevent costly accidents or dangerous hazards within your facility.

Top 5 things to consider when choosing safety signs

1. **Comply with applicable regulations**
   Several regulating bodies come into play when posting signs throughout your facility. Familiarize yourself with these regulations to increase safety and avoid costly fines.
2. **Display a clear and visible message**
   The header you select is directly tied to the severity of the hazard. Make sure you are communicating the correct message with the right sign headers.
3. **Use visually intuitive pictograms**
   75% of knowledge is gained through visuals. Use pictogram visuals to convey your message quickly and more accurately in multi-language environments.
4. **Location, location, location**
   Location is extremely important when it comes to sign placement. Make sure your signs are posted at eye level and in highly visible locations.
5. **Use the right material for your application**
   Brady offers a wide variety of sign materials for unique applications throughout your facility. But make sure you are choosing the right material to avoid having to replace the sign more frequently than needed.

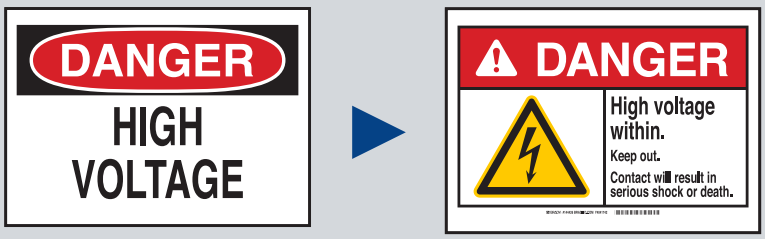
1. Comply with applicable regulations

Check the specific sign requirements of the regulation you're complying with. Exit and fire extinguisher signs are covered by NFPA and IBC, general and chemical hazards by OSHA, traffic and parking signs by the Dept. of Transportation. Layout, text and signal words are covered by OSHA and ANSI. Below are several of the common regulations affecting signs:

Organization	Regulations
OSHA – Occupational Safety and Health Administration	OSHA 1910.37 Means of Egress, General (Exit Signs and Routes) OSHA 1910.144 Safety Color Code for Marking Physical Hazards OSHA 1910.145 Specifications for Accident Prevention Signs and Tags OSHA 1910.146 Permit-Required Confined Spaces OSHA 1910.147 Control of Hazardous Energy (Lockout/Tagout) OSHA 1910.1200 Hazard Communication (includes updated GHS standard) OSHA 1910.303 Electrical Subpart S; ((g)(2)(iii) and (h)(5)(iii)[B] – Warning Signs) OSHA 1926.200 Signs, Signals and Barricades for Construction
DOT – Department of Transportation	Hazardous Materials Warning Placards and Labels - Title 49, Code of Federal Regulations, Part 172 Subpart D–Marking, Subpart E – Labeling, Subpart F-Placarding - Title 49, Code of Federal Regulations, Parts 100-199
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 2015 International Building Code IFC 2015 International Fire Code
IMO – International Maritime Organization	Resolution A.752(18) Egress and Low Level Lighting
ANSI – American National Standards Institute	ANSI Z535.1-2006 (R2011), Safety Color Code ANSI Z535.2-2011, Environmental and Facility Safety Signs ANSI Z535.3-2011, Criteria for Safety Symbols ANSI Z535.4-2011, Product Safety Signs and 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	2010 ADA Standards for Accessible Design; 703 Signs Meet Occupational Health Administration (OSHA 1910.145) and ANSI (ANSI Z535) regulations and guidelines.

ANSI sign standard increases comprehension and safety

Under OSHA's Hazard Communication Standard update, organizations can now use either the American National Standard Institute (ANSI) standards from 1967-1968 (ANSI Z53.1, Z35.1 and Z35.2) or from 2011 (ANSI Z535.1, Z535.2 and Z535.5) for safety signage.



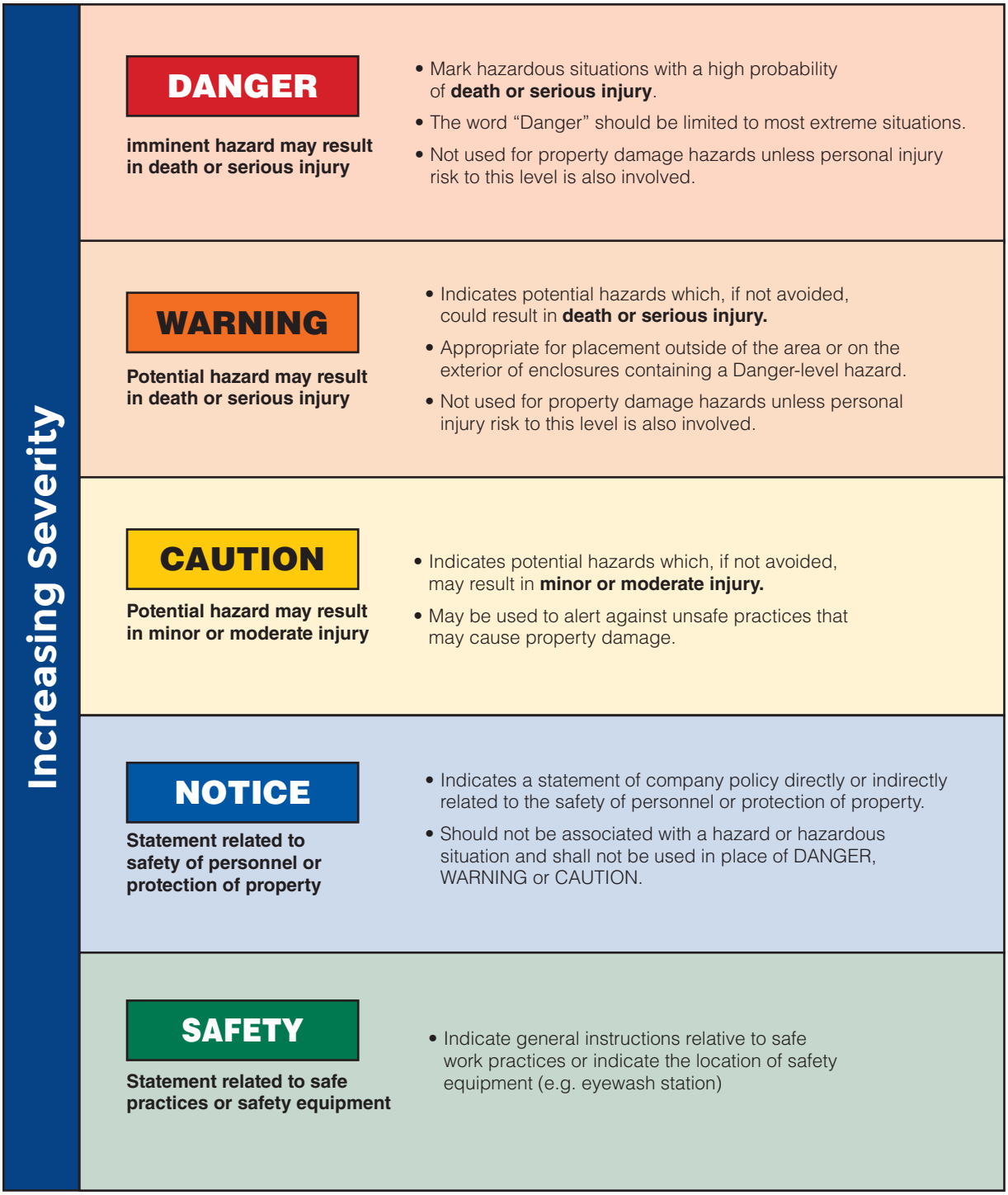
Previous standard **New standard**

Redesign includes:

1. A safety alert symbol in the header
2. Three part text statement with:
   - the hazard
   - the possible consequences
   - how to avoid the hazard
3. More visual pictograms

2. Display a clear and visible message

Sign headers may seem interchangeable, but 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.



3. Use visually intuitive pictograms for increased comprehension

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 multi-lingual signs, which can often be difficult to read.

Examples of standard ISO pictograms are below:

Safety sign letter height (ANSI Z535.2-2011)

The size and letter height used on your sign makes a difference in the readability and clarity of your message.

9.2.2 Overall size of the lettering

The overall size of the lettering shall be determined by the distance from which the sign can be safely and easily read. The message should be concise and practical. Letters shall be adequately spaced and not crowded.

9.2.3 Minimum letter height

Minimum letter height shall be one unit in height for every 150 units of safe viewing distance from the hazard alerting device for signal words and one unit in height for every 300 units viewing distance for the majority of other words contained on the word message panel. The safe viewing distance must be determined for each specific case where a safety sign is needed. The message panel text shall meet the legibility criteria at the determined safe viewing distance.

Viewing Distance	< 4 ft.	5 ft.	8 ft.	10 ft.	15 ft.	20 ft.	30 ft.	40 ft.	60 ft.	80 ft.	100 ft.	125 ft.	150 ft.	200 ft.
In favorable reading conditions minimum letter height is:	0.16 in. *	0.24 in.	0.32 in.	0.40 in.	0.60 in.	0.80 in.	1.20 in.	1.60 in.	2.40 in.	3.20 in.	4.00 in.	5.00 in.	6.00 in.	8.00 in.
In unfavorable reading conditions recommended letter height is:	0.33 in.	0.50 in.	0.66 in.	0.83 in.	1.27 in.	1.68 in.	2.51 in.	3.36 in.	5.04 in.	6.72 in.	8.40 in.	10.49 in.	12.58 in.	16.79 in.

**0.16 inch (4.1 mm) is the suggested minimum type size for use on environmental / facility safety signs.*

4. Sign locations

It is important 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 in mind when choosing sign locations.

- ✔ Signs must be clear, visible and unobstructed.
- ✔ Signs must be placed to alert and inform employees of hazards. They should have sufficient time to avoid the hazard and take appropriate action.
- ✔ Lighting, maintenance and storage should be considered during the placement process to make sure the sign can be clearly illuminated.
- ✔ Inspect, maintain and keep signs clean to ensure they are in good condition.
- ✖ Signs should not be placed in moveable areas or near areas that could obstruct sign visibility.
- ✖ If the message is no longer relevant or the hazard ceases to exist, the sign should be removed as soon as possible.

Brady signs help keep your employees and visitors safe – both inside and outside your facility.

Examples of indoor locations

- Areas with restricted access
- Areas with PPE requirements
- Established emergency egress routes
- Locations with hazardous materials, electrical and confined spaces
- Around machine and equipment
- Areas prone to slips, trips and falls
- Areas with fire, emergency and first aid equipment

Examples of outdoor applications

- Control the flow of vehicle traffic
- Indicate vistor, employee and handicap parking
- Outside shipping and receiving areas
- Around storage and equipment area
- Post security policies including no smoking or prohibited weapons
- Areas of restricted access or admission including employee and visitor entrances

5. The right material for your application

Choosing a sign material may not seem significant, 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.

Sign Material Comparison

Material Type	Description		Protected Graphics	For Outdoor Use	Average Outdoor Durability	Chemical Resistance	Abrasion Resistance	Max. Temp	Thickness (inch)
Flexible Sign Materials									
Adhesive	B-302	High performance polyester	✔	✔	8 years	Excellent	Excellent	230° F (100° C)	.006-.010
Adhesive	B-324	BradyGlo™ photoluminescent polyester		-	-	Good	Good	176° F (80° C)	.008
Adhesive	B-485	Polyester film	✔	-	-	Good	Good	122° F (50° C)	.011
Adhesive	B-523	Photoluminescent polyester film		-	-	Good	Good	176° F (80° C)	.0096
Adhesive	B-534	Polyester floor sign with anti-skid tread	✔	-	-	Good	Good	130° F (54° C)	.011
Adhesive	B-808	BradyGlo anti-slip polyester floor sign	✔	-	-	Good	Good	158° F (70° C)	.017
Adhesive	B-819	Anti-slip vinyl floor sign	✔	-	-	Good	Good	158° F (70° C)	.012
Adhesive	B-928	Write-on vinyl with cold temp adhesive	-	✔	2 years	Good	Good	176° F (80° C)	.005
Adhesive	B-946	Self-sticking vinyl	-	✔	10 years	Fair	Good	180° F (82° C)	.004
Adhesive	B-984	Photoluminescent polyester film	-	-	-	Good	Good	176° F (80° C)	.013
Adhesive	B-997	BradyLite® reflective vinyl	-	✔	4-6 years	Good	Good	200° F (93° C)	.007
Non-Adhesive	B-101	Polycoated tagstock	-	-	-	Good	Good	158° F (70° C)	.010
Non-Adhesive	B-586	Eco-friendly paperboard	-	-	-	Good	Good	175° F (80° C)	.060
Non-Adhesive	B-811	Magnetic vinyl	-	✔	2-4 years	Good	Good	158° F (70° C)	.025
Rigid Sign Materials									
Metal	B-555	Aluminum	✔	✔	8 years	Excellent	Excellent	230° F (110° C)	.040-.090
Metal	B-959	Reflective aluminum	-	✔	4-8 years	Good	Good	175° F (80° C)	.040-.080
Metal	B-986	Photoluminescent polyester film on aluminum	-	-	-	Good	Good	175° F (80° C)	.049
Metal	B-995	Diamond-grade™ reflective aluminum	-	✔	7 years	Good	Good	212° F (100° C)	.097
Fiberglass	B-120	Premium fiberglass	✔	✔	25 years	Excellent	Excellent	193° F (90° C)	.100
Fiberglass	B-140	Polyester on fiberglass	✔	✔	8 years	Excellent	Excellent	175° F (79° C)	.070
Fiberglass	B-320	Sub surface printed lexan on fiberglass	✔	✔	8 years	Good	Good	175° F (79° C)	.070
Fiberglass	B-382	Sub surface printed polycarbonate on fiberglass	✔	✔	8 years	Good	Good	175° F (79° C)	.090
Plastic	B-1	Thermoset plastic	-	✔	8 years	Good	Good	193° F (89° C)	.062
Plastic	B-347	BradyGlo™ phosphorescent polyester on polystyrene	-	-	-	Good	Good	175° F (79° C)	.068
Plastic	B-355	BradyGlo steel encased photoluminescent plastic	--	-	-	Good	Good	122° F (50° C)	.250
Plastic	B-401	Polystyrene plastic	✔	✔	5 years	Good	Good	175° F (79° C)	.060
Plastic	B-450	Polyethylene plastic	-	-	-	Good	Good	180° F (82° C)	.055
Plastic	B-493	Plastic v-shaped signs	-	✔	2 years	Good	Good	193° F (90° C)	.100
Plastic	B-563	Eco-friendly plastic (70% post consumer waste)	-	✔	5 years	Good	Good	185° F (85° C)	.055
Plastic	B-793	Polystyrene	-	✔	1-3 years	Poor	Good	165° F (74° C)	-
Plastic	B-836	Temporary sign fluted polypropylene	-	✔	1 year	Good	Good	130° F (54° C)	.156
Plastic	B-866	ToughWash® Polypropylene	✔	-	-	Excellent	Good	175° F (80° C)	.035
Plastic	B-869	ToughWash Metal-Detectable Polypropylene	✔	-	-	Good	Good	175° F (80° C)	.098
Plastic	B-985	Photoluminescent polyester film on polystyrene	-	-	-	Good	Good	175° F (80° C)	.069

Most popular sign materials

Rigid

B-120 Premium fiberglass

B-120 Premium fiberglass (FB)

- Most durable material – will not chip, fade, rust, shatter or peel
- Graphics protected under fiberglass layer
- Excellent chemical and abrasion resistance and ideal for outdoor and harsh environments
- Up to 25 year outdoor life

B-555 Aluminum

B-555 Aluminum (AL)

- Durable for outdoor usage – withstands wind, rain, sunlight and high temperatures
- Uses UV inks and UV clear coat protection for fade resistance
- Used for parking, building and informational signs
- 5-8 year outdoor life

B-401 Plastic

B-401 Plastic (PL)

- Cost-effective durable polystyrene
- Ideal for directional, informational, department and safety applications
- Conforms to well-curved surfaces
- Up to 5 year outdoor life

Flexible

B-302 Self-sticking polyester

B-302 Self-sticking polyester (SS)

- Withstands wide temperature variations (up to 230° F)
- Protected graphics holds up to repeated spills and cleanings
- Permanent adhesive ideal for machine / equipment signs and labeling
- Up to 8 year outdoor life

B-946 Self-sticking vinyl

B-946 Self-sticking durable vinyl (SSV)

- High gloss vinyl printed with UV resistant inks
- Permanent cold temp acrylic adhesive
- Good for outdoor applications on curved sufaces
- Fair chemical and abrasion resistance
- Durable, provides up to 10 years outdoor life

Lockout Tagout Signs

Brady lockout tagout signs are high quality, industrial-strength safety signs for identifying machinery and equipment that require lockout. These lockout tagout signs can identify energy sources, provide lockout instructions and serve as a reminder for safe lockout tagout procedures. In addition, lockout tagout signs create a safer and a more efficient workplace for employees.

Sign Selection Guide

FB - Premium fiberglass (B-120)
SS - Self-sticking polyester (B-302)
PL - Plastic (B-401)
AL - Aluminum (B-555)
BGSS - BradyGlo™ self-stick polyester (B-324)
BGPL - BradyGlo™ plastic (B-347)
SSV - Self-sticking vinyl (B-946)
MAG- Magnetic vinyl (B-811)

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69763	10" x 14"	FB
85754	7" x 10"	SS
85755	10" x 14"	SS

127484	7" x 10"	SS
127487	10" x 14"	SS
127483	7" x 10"	PL
127486	10" x 14"	PL
127482	7" x 10"	AL
127485	10" x 14"	AL

127490	7" x 10"	SS
127493	10" x 14"	SS
127489	7" x 10"	PL
127492	10" x 14"	PL
127488	7" x 10"	AL
127491	10" x 14"	AL

60175	2.25" x 4.5"	SSV

127496	7" x 10"	SS
127499	10" x 14"	SS
127495	7" x 10"	PL
127498	10" x 14"	PL
127494	7" x 10"	AL
127497	10" x 14"	AL

60162	2" x 2"	SSV

127502	7" x 10"	SS
127505	10" x 14"	SS
127501	7" x 10"	PL
127504	10" x 14"	PL
127500	7" x 10"	AL
127503	10" x 14"	AL

127508	7" x 10"	SS
127511	10" x 14"	SS
127507	7" x 10"	PL
127510	10" x 14"	PL
127506	7" x 10"	AL
127509	10" x 14"	AL

127514	7" x 10"	SS
127517	10" x 14"	SS
127513	7" x 10"	PL
127516	10" x 14"	PL
127512	7" x 10"	AL
127515	10" x 14"	AL

65571	10" x 7"	FB
65570	14" x 10"	FB
85846	5" x 3.5"	SS
85847	7" x 5"	SS
85848	10" x 7"	SS
85849	14" x 10"	SS
22909	10" x 7"	PL
22910	14" x 10"	PL
42432	10" x 7"	AL
42433	14" x 10"	AL

60176	2.25" x 4.5"	SSV

127526	7" x 10"	SS
127529	10" x 14"	SS
127525	7" x 10"	PL
127528	10" x 14"	PL
127524	7" x 10"	AL
127527	10" x 14"	AL

127520	7" x 10"	SS
127523	10" x 14"	SS
127519	7" x 10"	PL
127522	10" x 14"	PL
127518	7" x 10"	AL
127521	10" x 14"	AL

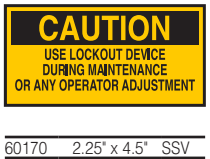
60178	2.25" x 4.5"	SSV

60173	2.25" x 4.5"	SSV

60172	2.25" x 4.5"	SSV

127532	7" x 10"	SS
127535	10" x 14"	SS
127531	7" x 10"	PL
127534	10" x 14"	PL
127530	7" x 10"	AL
127533	10" x 14"	AL

122776	10" x 7"	FB
65516	14" x 10"	FB
85890	5" x 3.5"	SS
85891	7" x 5"	SS
122628	10" x 7"	SS
85893	14" x 10"	SS
22931	10" x 7"	PL
22932	14" x 10"	PL
42454	10" x 7"	AL
42455	14" x 10"	AL



60170	2.25" x 4.5"	SSV

65575	10" x 7"	FB
65576	14" x 10"	FB
85911	5" x 3.5"	SS
85912	7" x 5"	SS
85913	10" x 7"	SS
22943	10" x 7"	PL

66004	5" x 3.5"	MAG
66005	7" x 5"	MAG

127544	7" x 10"	SS
127547	10" x 14"	SS
127543	7" x 10"	PL
127546	10" x 14"	PL
127542	7" x 10"	AL
127545	10" x 14"	AL

66006	5" x 3.5"	MAG
66007	7" x 5"	MAG

66008	5" x 3.5"	MAG
66009	7" x 5"	MAG
50269	7" x 10"	PL

Safety Sign Headers

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. Standard headers and definitions are:

DANGER

- Indicates an imminently hazardous situation which if not avoided, will result in death or serious injury.
- Limited to most extreme situations.
- Not used for property damage hazards unless personal injury risk to this level is also involved.

WARNING

- Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
- Not used for property damage hazards unless personal injury risk is also involved.
- Appropriate for outside of the area or on the exterior of enclosures containing a danger-level hazard.

CAUTION

- Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
- May be used to alert against unsafe practices that may cause property damage.

NOTICE

- Indicates a statement of company policy directly or indirectly related to the safety of personnel or protection of property.
- Should not be associated with a hazard or hazardous situation, and shall not be used in place of DANGER, WARNING or CAUTION.

SAFETY

- Indicate general instructions relative to safe work practices or indicate the location of safety equipment (e.g. eye wash station)

Sign Material Guide

Brady offers a sign material for virtually every application. Whether the sign is used indoors or outdoors, in mild or harsh environments, we have the material to match your application.

Material Type	Description		Protected Graphics	For Outdoor Use	Average Outdoor Durability	Chemical Resistance	Abrasion Resistance	Max. Temp	Thickness (inch)
Flexible Sign Materials									
Adhesive	B-302	High performance polyester	✔	✔	8 years	Excellent	Excellent	230° F (100° C)	.006-.010
Adhesive	B-324	BradyGlo™ photoluminescent polyester		-	-	Good	Good	176° F (80° C)	.008
Adhesive	B-485	Polyester film	✔	-	-	Good	Good	122° F (50° C)	.011
Adhesive	B-523	Photoluminescent polyester film		-	-	Good	Good	176° F (80° C)	.0096
Adhesive	B-534	Polyester floor sign with anti-skid tread	✔	-	-	Good	Good	130° F (54° C)	.011
Adhesive	B-808	BradyGlo anti-slip polyester floor sign	✔	-	-	Good	Good	158° F (70° C)	.017
Adhesive	B-819	Anti-slip vinyl floor sign	✔	-	-	Good	Good	158° F (70° C)	.012
Adhesive	B-928	Write-on vinyl with cold temp adhesive	-	✔	2 years	Good	Good	176° F (80° C)	.005
Adhesive	B-946	Self-sticking vinyl	-	✔	10 years	Fair	Good	180° F (82° C)	.004
Adhesive	B-984	Photoluminescent polyester film	-	-	-	Good	Good	176° F (80° C)	.013
Adhesive	B-997	BradyLite® reflective vinyl	-	✔	4-6 years	Good	Good	200° F (93° C)	.007
Non-Adhesive	B-101	Polycoated tagstock	-	-	-	Good	Good	158° F (70° C)	.010
Non-Adhesive	B-586	Eco-friendly paperboard	-	-	-	Good	Good	175° F (80° C)	.060
Non-Adhesive	B-811	Magnetic vinyl	-	✔	2-4 years	Good	Good	158° F (70° C)	.025
Rigid Sign Materials									
Metal	B-555	Aluminum	✔	✔	8 years	Excellent	Excellent	230° F (110° C)	.040-.090
Metal	B-959	Reflective aluminum	-	✔	4-8 years	Good	Good	175° F (80° C)	.040-.080
Metal	B-986	Photoluminescent polyester film on aluminum	-	-	-	Good	Good	175° F (80° C)	.049
Metal	B-995	Diamond-grade™ reflective aluminum	-	✔	7 years	Good	Good	212° F (100° C)	.097
Fiberglass	B-120	Premium fiberglass	✔	✔	25 years	Excellent	Excellent	193° F (90° C)	.100
Fiberglass	B-140	Polyester on fiberglass	✔	✔	8 years	Excellent	Excellent	175° F (79° C)	.070
Fiberglass	B-320	Sub surface printed lexan on fiberglass	✔	✔	8 years	Good	Good	175° F (79° C)	.070
Fiberglass	B-382	Sub surface printed polycarbonate on fiberglass	✔	✔	8 years	Good	Good	175° F (79° C)	.090
Plastic	B-1	Thermoset plastic	-	✔	8 years	Good	Good	193° F (89° C)	.062
Plastic	B-347	BradyGlo™ phosphorescent polyester on polystyrene	-	-	-	Good	Good	175° F (79° C)	.068
Plastic	B-355	BradyGlo steel encased photoluminescent plastic	--	-	-	Good	Good	122° F (50° C)	.250
Plastic	B-401	Polystyrene plastic	✔	✔	5 years	Good	Good	175° F (79° C)	.060
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Plastic	B-493	Plastic v-shaped signs	-	✔	2 years	Good	Good	193° F (90° C)	.100
Plastic	B-563	Eco-friendly plastic (70% post consumer waste)	-	✔	5 years	Good	Good	185° F (85° C)	.055
Plastic	B-793	Polystyrene	-	✔	1-3 years	Poor	Good	165° F (74° C)	-
Plastic	B-836	Temporary sign fluted polypropylene	-	✔	1 year	Good	Good	130° F (54° C)	.156
Plastic	B-866	ToughWash® Polypropylene	✔	-	-	Excellent	Good	175° F (80° C)	.035
Plastic	B-869	ToughWash Metal-Detectable Polypropylene	✔	-	-	Good	Good	175° F (80° C)	.098
Plastic	B-985	Photoluminescent polyester film on polystyrene	-	-	-	Good	Good	175° F (80° C)	.069