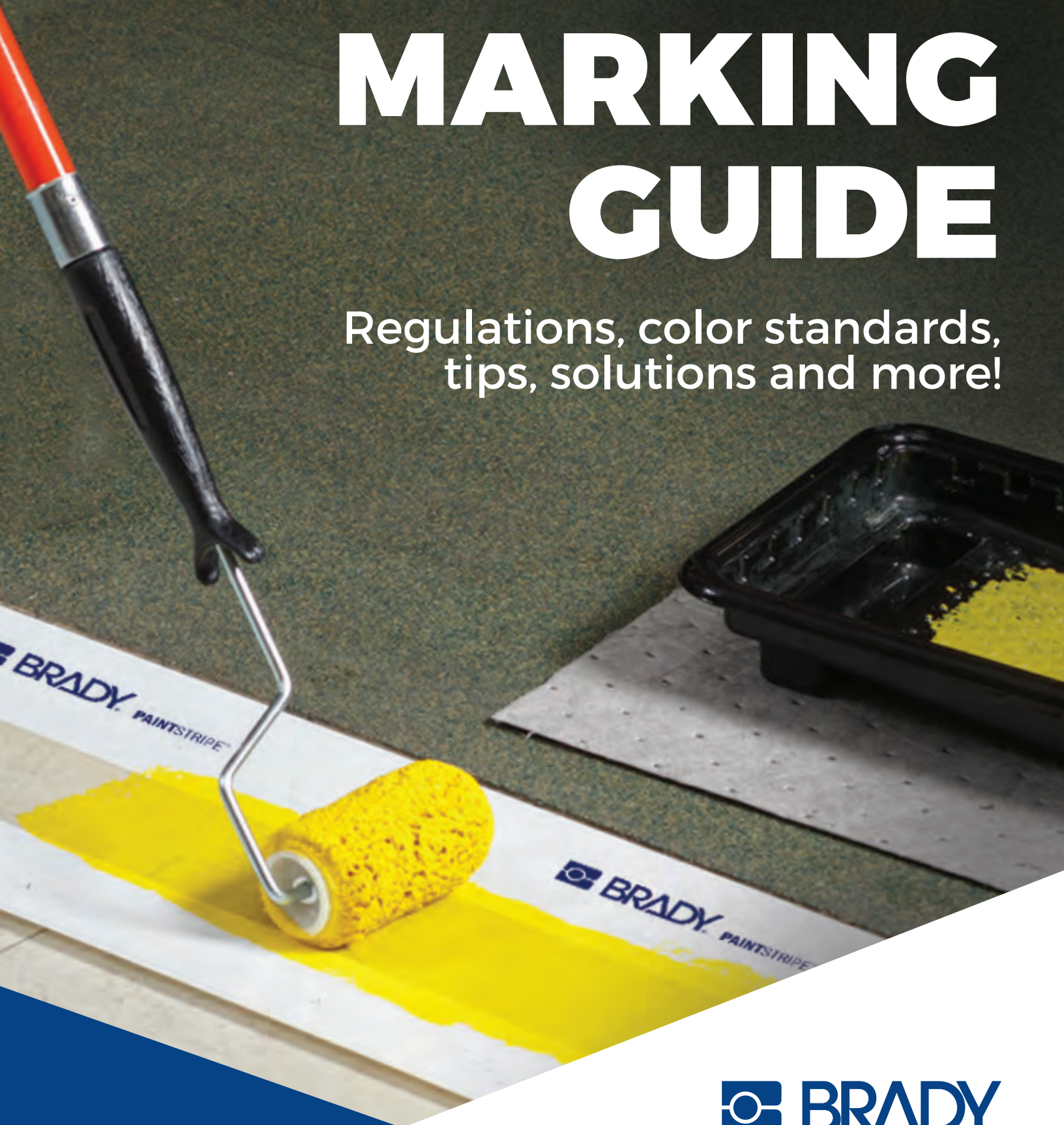


FLOOR MARKING GUIDE

Regulations, color standards, tips, solutions and more!



Floor marking plays an important role in creating and maintaining a safer, leaner and more efficient facility. In this guide, you'll learn about the benefits of establishing a consistent color standard for floor marking, receive tips and a color guide for implementing a standard, and gain additional insight through floor marking examples and solution recommendations.



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CHAPTER 1

Benefits of Color-Coded Floor Marking

Using consistent, color-coded floor marking in your workplace can lead to a number of benefits. Let's take a look at a few:

Leaner, More Efficient Operations

When you have a consistent floor marking color system, employees are able to associate certain colors with certain areas or actions. This allows them to quickly and easily move around the facility to complete their tasks and find what they're looking for. Using color in the workplace helps to:

- 1. Speed Visual Search:** When you are looking for a certain material storage area, knowing what color floor marking to look for helps you find it faster.
- 2. Emphasize Information:** Marking aiseways and exit paths throughout your facility helps to emphasize the safest path to walk through. This helps to keep pedestrians and forklifts safe, and provide quick egress guidance in an emergency.
- 3. Show Associations:** If you mark a cart with a certain color tape or paint, and also mark off the area the cart belongs in with the same color tape or paint, you can easily associate the cart with its intended location.
- 4. Transmit Important Messages:** Hazards that are consistently marked with bright colors (red/yellow) quickly tell employees that the area is unsafe or should be kept clear.

CHAPTER 1

Benefits of Color-Coded Floor Marking

Improved Safety

By using a standard color-coding for floor tape and paint, you can easily warn workers at-a-glance of hazardous areas, equipment or forklift traffic paths. Workplace safety is improved when employees are visually aware of unsafe areas that should be kept clear, items are stored in their designated areas to reduce trip hazards, safe walking paths are marked, and exit routes are clearly marked.

Beyond Floor Marking

When establishing a safer, more efficient workplace, other key visuals include:

- ANSI Safety Signs
- HazCom/GHS Labels
- Lockout Tagout Equipment and Labels
- Arc Flash Labels
- Fire, Emergency Egress and First Aid Identification
- Machine and Equipment Identification
- Pipe Markers
- Inventory Labels

Visit BradyID.com/5SPlusGuide to learn more.



CHAPTER 2

Regulations and Industry Standards

When it comes to workplace visuals, there are a number of relevant standards that require or imply the need for marking and color coding:

OSHA - Use of Mechanical Equipment

1910.176(a) Where mechanical handling equipment is used, sufficient safe clearances shall be allowed for aisles, at loading docks, through doorways and wherever turns or passage must be made. Aisles and passageways shall be kept clear and in good repair, with no obstruction across or in aisles that could create a hazard. *Permanent aisles and passageways shall be appropriately marked.*

OSHA - General Environmental Controls

1910.144 Red shall be the basic color for the identification of fire protection equipment and apparatus, containers of flammable liquids, stop buttons and electrical switches used for emergency stopping of equipment.

1910.144(a)(3) Yellow shall be the basic color for designating caution and marking physical hazards.

OSHA - Means of Egress

1910.35 OSHA will deem an employer demonstrating compliance with the exit route provisions of NFPA 101, Life Safety Code, or the exit route provisions of the IFC 2009, to be in compliance with 1910.34, 1910.36 and 1910.37.

OSHA - Letter of Interpretation

1910.22(b) The lines used to delineate aisles may be any color so long as they clearly define the area considered as aisle space. The lines may be composed of dots, square, strip or continuous. The recommended width of aisle markings varies from 2" to 6", therefore any width 2" or more is considered acceptable.



CHAPTER 2

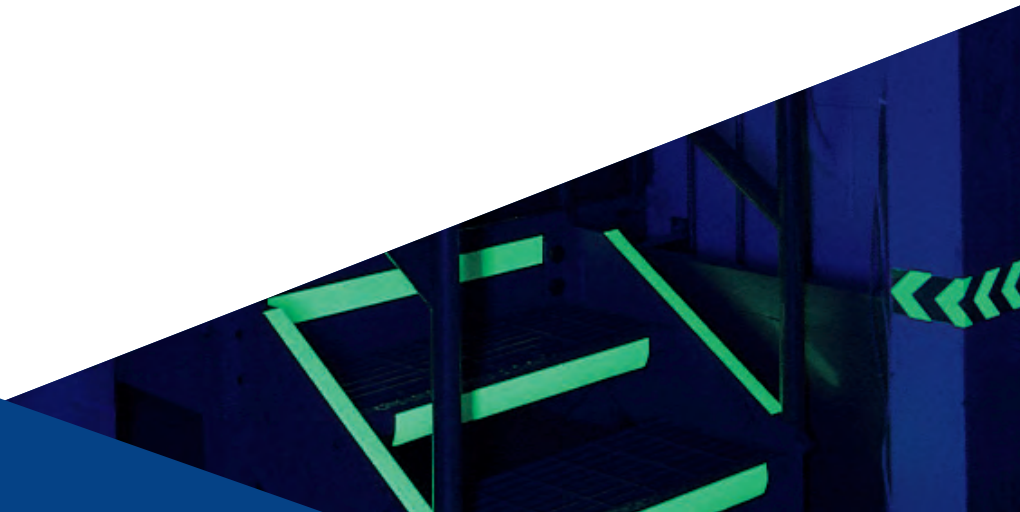
Regulations and Industry Standards

IFC - International Fire Code 2009

1024.1 Approved luminous egress path markings delineating the exit path shall be provided...having occupied floors located more than 75 ft. above the lowest level of fire department vehicle access.

1024.2.1 A solid and continuous stripe shall be applied to the horizontal leading edge of each step and shall extend the full length of each step.

1024.2.4 Perimeter and floor mounted demarcation lines shall be placed within 4" of the wall and extend to within 2" of the markings on the leading edge of landings. Demarcation lines shall be 1" to 2" wide with interruptions not exceeding 4".



CHAPTER 2

Regulations and Industry Standards

While several OSHA regulations dictate that permanent aisles and passageways must be clearly marked, there are no current government-mandated or even widely accepted industry standards that recommend what colors to use when marking floors.

ANSI Color Guide - Safety Signage

Some suppliers reference the ANSI Z535.1 Safety Color Code standard as a guide for floor marking. While earlier versions of the standard (ANSI Z353.1-1998) did include color specifications for specific types of safety hazards and equipment, these specifications were removed from the 2002 edition of the standard and no longer represent ANSI recommended best practices. Section 4.2 of the standard explicitly states that the specifications are intended for use on safety signage, not for floor marking.

OSHA Color Guide - Hazards

Some resources also reference OSHA standard 29 CFR 1910.144, the Safety Color Code for Marking Physical Hazards. However, these specifications are extremely limited in scope and are not designed to provide guidance on color usage when marking floors either. The standard states that red should be used to identify fire protection equipment, emergency stop devices and containers holding dangerous materials. Yellow should be used for marking physical hazards (such as striking against, stumbling, falling, tripping and caught-in-between hazards).



CHAPTER 3

9 Tips for Effective Floor Marking

1. Use as few colors as possible.

This makes it easier for employees to remember the meaning of each color and reduces the number of floor marking products in inventory. **(Chapter 4 has recommendations on just what colors to use where!)**

2. Color-code workcell and equipment borders.

Some companies choose to mark equipment locations using the same color that's used for aisleways and work-cell boundaries. This has the benefit of simplicity. However, the overall layout of lanes and sectors within the plant is made more visually clear when different colors are used for these purposes.

3. Color-code material storage areas.

Use the same border color for all material storage areas, unless there is an important reason for differentiating between raw materials, work in-progress and finished goods. As an alternative, consider using one border tape or paint color in conjunction with different colored labels to visually distinguish between the various material types.

4. Color-code non-material storage fixtures.

Floor markings for fixtures, such as racks that hold raw materials, work in-progress or finished goods, should be color-coded in green, blue and/or black. Otherwise use white or gray to mark the location of all other fixtures.



CHAPTER 3

9 Tips for Effective Floor Marking

5. Color-code areas to be kept clear for safety and compliance.

Some companies use red or red and white stripes in front of firefighting equipment, and green or green and white stripes in front of safety equipment. For simplicity sake, we recommend using one color for all applications where the intent is to keep the area in front of equipment clear for safety or compliance reasons. We also recommend that the firefighting and safety equipment itself - as well as any associated wall signage - be color-coded to enhance visibility and facilitate easy location of the equipment from a distance.

6. Color-code areas in front of electrical panels.

Red and white should also be used to mark the floor in front of electrical panels. Some facilities use black and yellow to indicate the presence of an electrical hazard, but the primary purpose of the marking is to keep the area in front of the panel clear. Danger labels should be displayed on the outside of the panels to warn employees of potential shock and arc flash hazards.

7. Color-code operational “keep clear” areas.

Use black and white marking to indicate that an area should be kept clear for operational reasons, such as ensuring sufficient clearance for forklifts. As objects without a home tend to naturally congregate in open areas, employ black and white marking to discourage the use of open floor space for unintended purposes.



KEEP CLEAR

CHAPTER 3

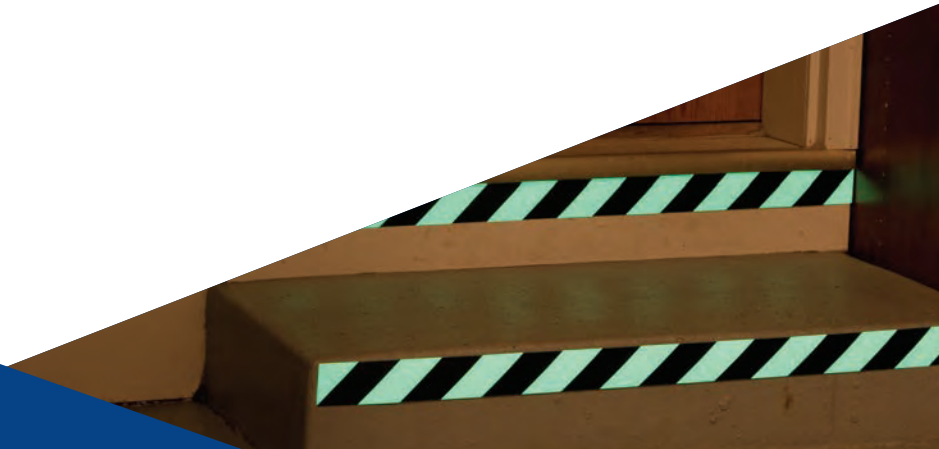
9 Tips for Effective Floor Marking

8. Color-code hazardous areas or equipment.

Black and yellow striped marking should be used as a border around any area or piece of equipment where employees may be inadvertently exposed to a special hazard. For example, use black and yellow borders around flammable material containers. The intent of the black and yellow border is to indicate that special caution should be exercised when entering and working in the area.

9. Mark means of egress.

For buildings 75 ft. and higher above ground level, use luminous egress path markings on steps and floors to delineate exit pathways. That way workers and visitors can locate exit paths in low light if an emergency occurs.












CHAPTER 4

Color Standards Guide

With the right colors in the right places, you can easily keep workers on the right path, identify equipment and storage areas, hazardous flooring and forklift traffic and more.

Implement this useful guideline to establish floor marking consistency in your workplace:

Color		Area
Yellow		Aisle ways, traffic lanes and work cells
White		Equipment and fixtures not otherwise color coded (workstations, carts, floor stand displays, racks, etc.)
Blue, Green and/or Black		Materials and components, including raw materials, work-in-progress and finished goods
Orange		Materials or products held for inspection
Red		Defects, scrap, rework and red tag areas
Photoluminescent		Steps and perimeter demarcation to identify egress routes in a lights-out emergency
Red and White		Areas to be kept clear for safety/compliance reasons (areas in front of electrical panels, firefighting equipment and safety equipment, such as eyewash stations, safety showers and first aid stations)
Black and White		Areas to be kept clear for operational purposes (not related to safety and compliance)
Black and Yellow		Areas that may expose employees to special physical or health hazards



CHAPTER 5

Floor Marking Examples

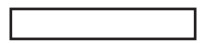
Aisleways and traffic lanes



Work cells



Equipment



Material storage areas



Material storage areas



Material storage areas



QA inspection



Defects/ scrap/rework



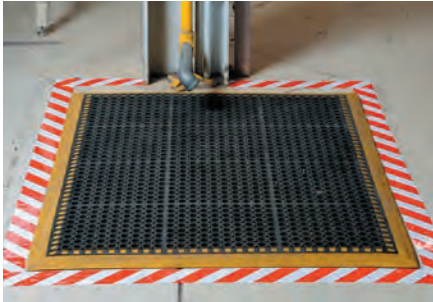
Photoluminescent stair marking



CHAPTER 5

Floor Marking Examples

Keep clear - safety



Keep clear - operational



Hazard area



Paint masking



Forklift durability



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DID YOU KNOW?

People make a subconscious decision about their environment within **90 seconds** of initial viewing – 62-90% of that assessment is **based on color** alone.*

* Morton, J. (2010). Why Color Matters. Retrieved from Colorcom: www.colorcom.com/research/why-color-matters

CHAPTER 6

Getting the Job Done Right!

Armed with the knowledge of which floor marking colors to use for what areas, the next step is finding the products to get the job done right. Here are a few features to consider when selecting your materials:

- **Durability:** When you have durable floor marking tape or paint, you spend less time and money replacing damaged or worn lines. Look for a tape or paint product that can withstand forklift traffic, has a low-profile design to minimize tears and scratches from skids, pallets and other threats. Rugged polyester tape and ultra-aggressive adhesive are key features for durability, while paint is another durable option.
- **Easy Application:** The right tape and paint can easily be applied in smooth, straight lines without the help of co-workers. Stiff polyester tape with liners helps to prevent tape from stretching, which reduces wrinkles, waves and lines. Also, look for a material that allows for clean removal without any adhesive residue or damage to the floor. Using paint and stencils also enables easy, effective application.
- **Visibility:** Tape and paint can provide effective visibility with a bright protected finish, a variety of high-impact colors and a surface that resists marks and smudges.
- **Shape Options:** Floor tape and paint are not always one-size fits all. Find a tape option or stencils that allow for dots, arrows, dashes, footprints, corners and other die-cut shapes. This gives you the flexibility and variety you need for any floor marking application.

Brady offers floor marking solutions to meet your durability, application and budget needs. These include ToughStripe® Max, ToughStripe and B-726 vinyl marking tape, as well as PaintStripe™ Floor Marking Stencils.

To learn more, visit BradyID.com/toughstripe



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