COLOR CODING IN HSE

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DEFINATION

Color Coding is an essential visual tool in HSE to ensure safety, prevent accidents and enhance awareness in the workplace. The construction worker in relies on standardized color codes for hazard communication, safety signs, equipment identification and work zone demarcation.

1. **Safety Sign Colour (As per International Standards like ISO 7010, OSHA and ANSI**

Red- Danger, Prohibition and Fire Safety

Red is associated with immediate danger, prohibitions and firefighting equipment. It is used to indicate that specific actions are prohibited or to mark fire-related safety equipment.

Examples:

- Prohibition Signs: “No Smoking,” “No Entry,” “Do Not Operate”
- Firefighting Equipment: Fire extinguishers, hose reels, alarms, fire hydrants
- Emergency Stop Buttons: Machinery stop buttons, emergency shutdown controls

Yellow/Amber- Caution and Warning

Yellow (or amber) is used to indicate general hazards and warnings. It alerts workers about potential dangers that may cause injuries if precautions are not taken.

Examples:

- Warning Signs: “Caution: Slippery Floor,” “High Voltage Area,” “Falling Objects”
- Trip & Fall Hazards: Uneven surfaces, step edges, trenches
- Moving Vehicles & Equipment: Forklift operation zones,

Blue- Mandatory Actions

Blue indicates mandatory actions that workers must follow to ensure safety. These signs provide specific instructions or requirements for PPE and safe operations.

Examples:

- PPE Requirements: “Wear Safety Helmets” “Use Ear Protection,” “Eye Protection Required”

- Workplace Safety Instructions: “Only Authorized Personnel Allowed,” “Keep Clear of Machinery”

Green- Safety and Emergency Escape

Green is used to indicate safety, emergency exits and first aid stations. It reassured workers about safe conditions and directions for evacuation.

Examples:

- First Aid Stations: First Aid Kits, medical rooms
- Workplace Safety Instructions: Exit routes, emergency assembly points
- Safety Equipment Locations: Emergency showers, eyewash stations

2. Colour Coding for Pipes and Equipment Identification

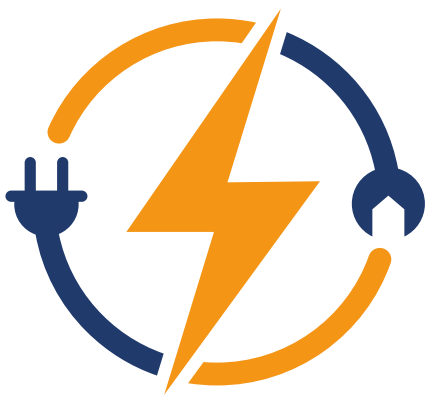
In construction and industrial sites, pipes and machinery are colour coded for easy identification of contents and potential hazards.

Colour	Application
Red	Fire Protection systems (sprinklers, hydrants)
Yellow	Flammable gases, acids and hazardous chemicals
Blue	Compressed air
Green	substances (e.g., potable water)
Black	Oil and waste lines
White	Steam
Purple	Radioactive materials

3. Electrical Safety and Lockout Tagout (LOTO) Colour Coding

Electrical Safety and energy isolation procedures also follow specific colour codes.

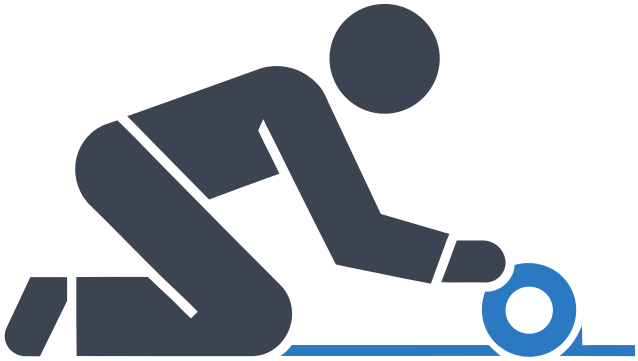
Colour	Meaning
Red	Danger-- Do not operate (LOTO tags, high-risk electrical hazards)
Yellow	Caution - Restricted operation (e.g., machinery under maintenance)
Green	Safe- Equipment is operational and safe to use
Black	General electrical hazards



4. Workplace Zoning and Floor Markings

Construction sites and workplaces use floor markings and zone demarcation for safe movement and hazard awareness.

Colour	Usage
Red	Restricted areas, fire lanes
Yellow	Caution areas, pedestrian walkways
Green	Safe walkways, exit points
Black/ White strips	Work zones, caution markings



Conclusion

Using colour codes effectively in HS improves safety awareness, reduces workplace accidents and ensures compliance with safety regulations. Construction professionals should be trained to recognize and respond to colour-coded safety signals to maintain a safe work environment.