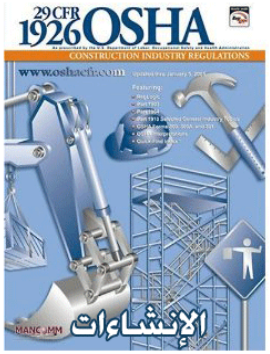
OSHA

إدارة السلامة والصحة المهنية – الأوشا

Signage & Color



يتم تدرس هذا الموضوع في دورات أوشا التالية:

- **OSHA 510:** Occupational Safety and Health Standards for the Construction Industry.
- **OSHA 511:** Occupational Health and Safety Standards for General Industry.

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دورات الاوشا

إذا أردت دورات الاوشا بصيغة بوربوينت، عليك ترجمة موضوعين للغة العربية من دورات المقدمة في موقع "هندسة الإطفاء والسلامة".

للتوصل:

alruwaie@gmail.com

Occupational Safety

Signage & Color

Color and Light

- Should be a major consideration when selecting colors for the facility's interior.
- Include a range of fluorescent and high-intensity discharge lamps, and combinations of illuminants
- Detailed in Table 2–A.
- Effect on light is called the light-reflectance value (LRV) of color.
- LRV of color can contribute significantly to seeing a task
- Surfaces should be finished to provide light-reflectance values within the ranges listed in Table 2–B.

Table 2–A. Color Effects of Light Sources*

Lamp Type	*Appearance on Neutral Surface*	*Effect on "Atmosphere"*	*Colors Strengthened*	*Colors Grayed*	*Effect on Complexions*	*Remarks*
FLUORESCENT						
Cool white°	white	neutral to moderately cool	orange, yellow, blue	red	pale pink	Blends with natural daylight; good color acceptance
Deluxe cool white°	white	neutral to moderately cool	all nearly equal	none appreciably	most natural	Best overall color rendition; simulates natural daylight
Warm white†	yellowish white	warm	orange, yellow	red, green	sallow	Blends with incandescent light
Deluxe warm white†	yellowish white	warm	red, orange, yellow, green	blue	ruddy	Good color rendition; simulates incandescent light
INCANDESCENT						
Filament †	yellowish white	warm	red, orange, yellow	blue	ruddiest	Good color rendering
HIGH INTENSITY DISCHARGE LAMPS						
Deluxe white mercury°	purplish white	warm, purplish	red, yellow, blue	green	ruddy	Color acceptance similar to cool-white fluorescent
Metal halide multi-vapor°	greenish to pinkish white	moderately cool, greenish	yellow, green, blue	red	grayed	Color acceptance similar to cool-white fluorescent
High-pressure sodium	golden white	warm, yellowish	yellow, orange, green	red, blue	golden	Color acceptance approaches that of warm-white fluorescent

*Table based on information from The General Electric Co.
°Greater preference at higher levels.
†Greater preference at lower levels.

Table 2–B. Reflectance Values Recommended for Facility Surfaces

Surface	Reflectance Values: Manufacturing Areas (Percent)	Reflectance Values: Office Areas (Percent)
Ceilings	80-90	80-90
Walls	50-65	60-70
Floors	15-30	25-40
Machinery	30-50	—
Desk tops	—	40-50

Other Factors to Consider

- **Demographics**
  - Men prefer blue, followed by red
  - Women select subtle colors such as peach and mauve
- **Noise**
  - blues, greens, and neutrals lessen the workers' psychological response to the noise
- **Psychological Factors**
  - Dark, saturated colors make surroundings appear cramped and can cause workers to feel depressed.
- **Safety**
  - Table 2–C summarizes the OSHA and ANSI safety color code

Table 2–C. Summary of OSHA and ANSI Safety Color Code Corporate Colors°

Color	Designation
Red	Fire: Protection equipment and apparatus, including fire-alarm boxes, fire-blanket boxes, fire extinguishers, fire-exit signs, fire-hose locations, fire hydrants, and fire pumps. Danger: Safety cans or other portable containers of flammable liquids, lights at barricades and at temporary obstructions, and danger signs. Stop: Stop buttons and emergency stop bars on hazardous machines.
Orange	Dangerous Equipment: Parts of machines and equipment that may cut, crush, shock, or otherwise injure.
Yellow	Caution: Physcial hazards such as stumbling, falling, tripping, striking against, and being caught in between.
Green	Safety: First-aid equipment.
Blue	Warning: Caution limited to warning against starting, using, or moving equipment under repair.
Black on yellow	Radiation: X ray, alpha, beta, gamma, neutron, proton radiation.
Black and white	Boundaries of traffic aisles, stairways (risers, direction, and border limit lines), and directional signs.

°See full text under Section 1910.144 of Occupational Safety and Health standards. For piping colors, see ANSI Standard *Scheme for the Identification of Piping Systems*, A13.1-1981.