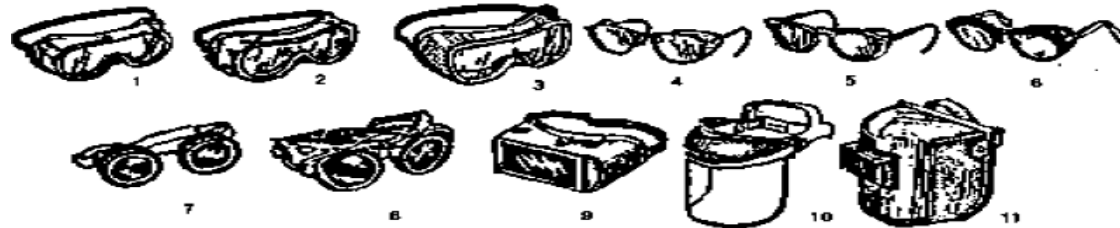


Appendix A

Table 3-1 Eye and Face Protector Selection Guide.



1. Goggles, Flexible Fitting, Regular Ventilation
 2. Goggles, Flexible Fitting, Hooded Ventilation
 3. Goggles, Cushioned Fitting, Rigid Body
 *4. Spectacles, Metal Frame, with Sideshields
 *5. Spectacles, Plastic Frame, with Sideshields
 *6. Spectacles, Metal-Plastic Frame, with Sideshields

- **7. Welding Goggles, Eyecup Type, Tinted Lenses (Illustrated)
 7A. Chipping Goggles, Eyecup Type, Clear Safety Lenses (Not Illustrated)
 *8. Welding Goggles, Coverspec Type Tinted Lenses (Illustrated)
 8A. Chipping Goggles, Coverspec Type, Clear Safety Lenses (Not Illustrated)
 **9. Welding Goggles, Coverspec Type, Tinted Plate Lens
 10. Face Shield (Available with Plastic or Mesh Window)
 **11. Welding Helmets

APPLICATIONS

Operation

Acetylene –Burning
 Acetylene –Cutting
 Particles Chemical Handling
 Chipping
 Sparks, Intense Rays,
 advisable) Furnace Operations
 Flying Particles
 Flying Particles
 Chemical Splash, Glass Breakage

Hazards

Sparks, Harmful Rays,
 Molten Metal,
 Splash, Acid Burns, Fumes
 Flying Particles
 9, 11 (11 in combination with 4, 5, 6, in tinted lenses,
 Glare, Heat, Molten Metal
 1, 3, 4, 5, 6, 10
 1, 3, 7A, 8A (For severe exposure add 10)
 2 (10 when in combination with 4, 5, 6)

Recommended Protectors:

7, 8, 9, Acetylene –Welding Flying
 2, 10 (For severe exposure add 10 over 2)
 1, 3, 4, 5, 6, 7A, 8A Electric (Arc) Welding
 7, 8, 9 (For severe exposure add 10) Molten Metal
 Grinding –Light
 Grinding –Heavy
 Laboratory

Machining
 Molten Metals
 Spot Welding

Flying Particles
 Heat, Glare, Sparks, Splash
 Flying Particles, Sparks

1, 3, 4, 5, 6, 10
 7, 9 (10 in combination with 4, 5, 6, in tinted lenses)
 1, 3, 4, 5, 6, 10

*Non-side shield spectacles are available for limited hazard use requiring only frontal protection.
 **See Table 3-2, in this appendix, Filter Lens Shade Numbers for Protection Against Radiant Energy.

Table 3-2. Filter lens shade numbers for protection against Radiant Energy.

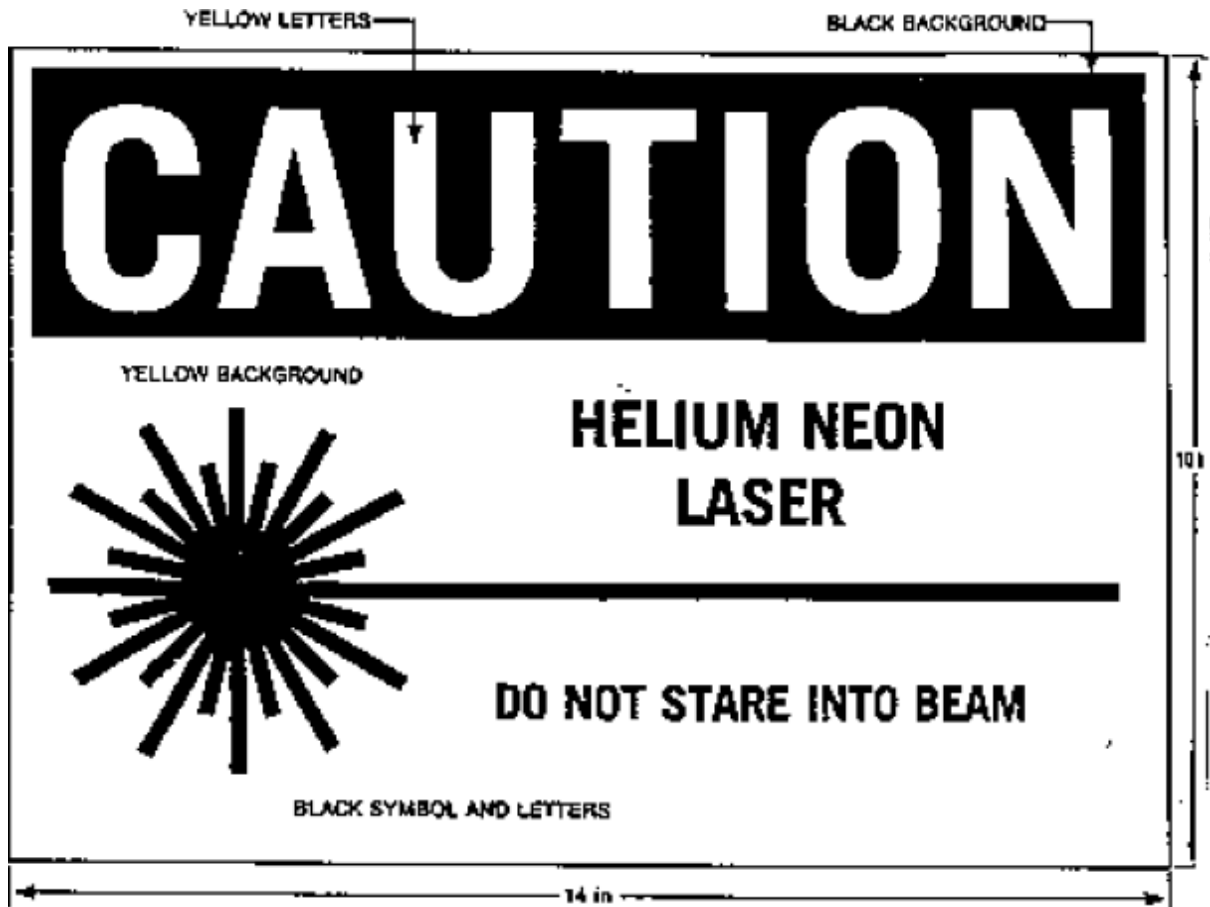
WELDING OPERATION	SHADE NUMBER
Shielded metal-arc welding 1/16-, 3/32-, 1/8-, 5/32-inch diameter electrodes.....	10
Gas-shielded arc welding (nonferrous) 1/16-, 3/32-, 1/8-, 5/32-inch electrodes.....	11
Gas-shielded arc welding (ferrous) 1/16-, 3/32-, 1/8-, 5/32-inch electrodes.....	12
Shielded metal-arc welding 3/16-, 7/32-, 1/4-inch electrodes... ..	12
5/16-, 3/8-inch diameter electrodes.....	14
Atomic hydrogen welding.....	10-14
Carbon-arc welding.....	14
Soldering.....	2
Torch brazing.....	3 or 4
Light cutting, up to 1 inch... ..	3 or 4
Medium cutting, 1 inch to 6 inches.....	4 or 5
Heavy cutting, over 6 inches.....	5 or 6
Gas welding (light), up to 1/8-inch.....	4 or 5
Gas welding (medium), 1/8-inch to 1/2-inch.....	5 or 6
Gas welding (heavy), over 1/2-inch.....	6 or 8

Table 3-3. Selecting laser safety glass.

INTENSITY	ATTENUATION	
CW maximum power density (watts/cm ²)	Optical density (O.D.)	Attenuation factor
10 ⁻²	5	10 ⁵
10 ⁻¹	6	10 ⁶
1.0	7	10 ⁷
10.0	8	10 ⁸

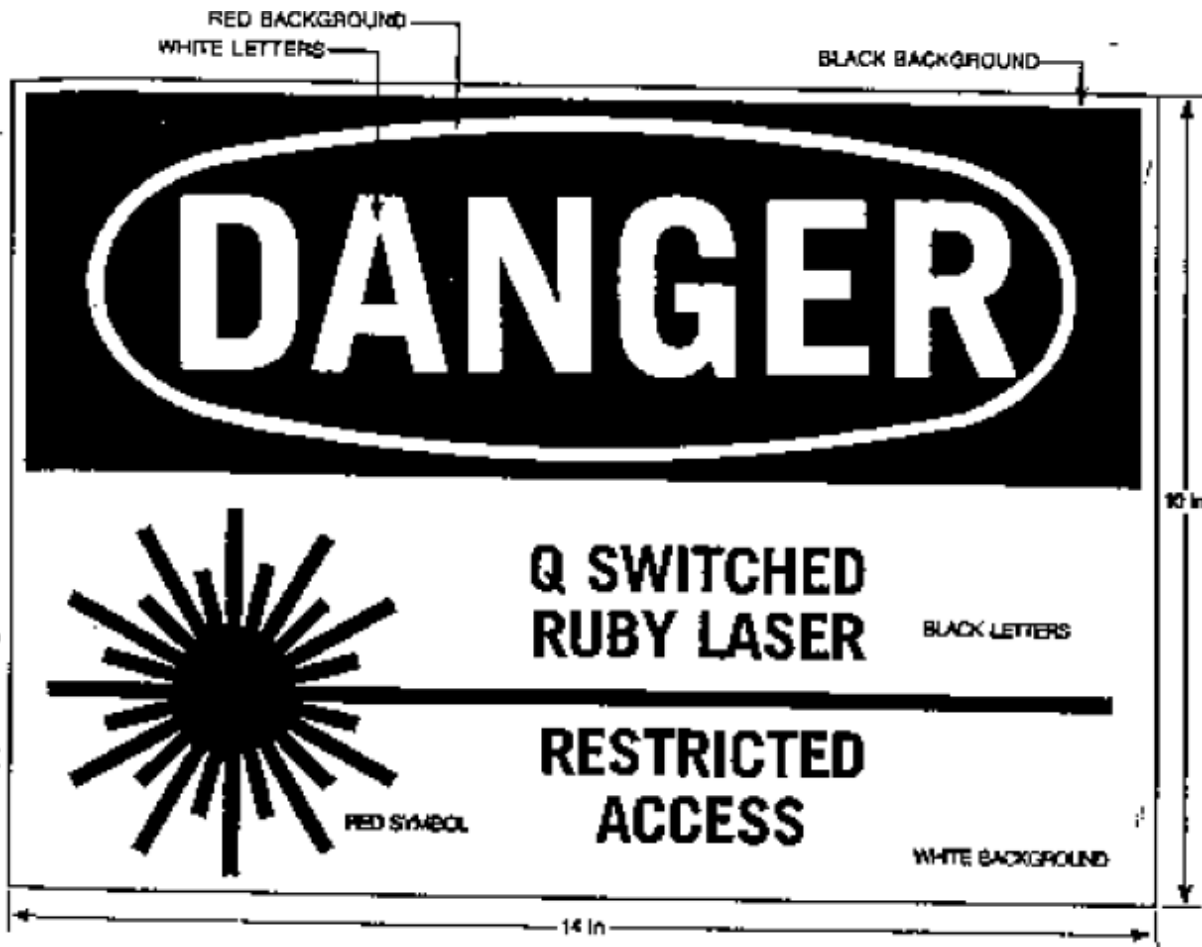
APPENDIX TO RULE 4123:1-3-03 – continued

EXAMPLE 3-A. SAMPLE WARNING SIGN FOR LASER USE.



APPENDIX TO RULE 4123:1-3-03 – continued

EXAMPLE 3-B. SAMPLE WARNING SIGN FOR LASER USE.



APPENDIX TO RULE 4123:1-3-03 – continued

Table 3-4. Guide for Selection of Respirators.

Hazard	GUIDE FOR SELECTION OF RESPIRATORS	Respirator
OXYGEN DEFICIENCY		Self-contained breathing apparatus. Hose mask with blower. Combination air-line respirator with auxiliary self-contained air supply or an air-storage receiver with alarm.
GAS AND VAPOR CONTAMINANTS Immediately dangerous to life or health.		Self-contained breathing apparatus. Hose mask with blower. Air-purifying, full facepiece respirator with chemical canister (gas mask) Self-rescue mouthpiece respirator (for escape only). Combination air-line respirator with auxiliary self-contained air supply or an air-storage receiver with alarm.
Not immediately dangerous to life or health.		Air-line respirator. Hose mask without blower. Air-purifying, half-mask or mouthpiece respirator with chemical cartridge.
PARTICULATE CONTAMINANTS Immediately dangerous to life or health.		Self-contained breathing apparatus. Hose mask with blower. Air-purifying, full facepiece respirator with appropriate filter. Self-rescue mouthpiece respirator (for escape only). Combination air-line respirator with auxiliary self-contained air supply or an air-storage receiver with alarm.
Not immediately dangerous to life or health.		Air-purifying, half-mask or mouthpiece respirator with filter pad or cartridge. Air-line respirator. Air-line abrasive-blasting respirator. Hose mask without blower.
COMBINATION GAS, VAPOR, AND PARTICULATE CONTAMINANTS Immediately dangerous to life or health.		Self-contained breathing apparatus. Hose mask with blower. Air-purifying, full facepiece respirator with chemical canister and appropriate filter (gas mask with filter). self-rescue mouthpiece respirator (for escape only). Combination air-line respirator with auxiliary self-contained air supply or an air-storage receiver with alarm.
Not immediately Hose mask without blower.or health.		Air-line respirator. dangerous to life Air-purifying, half-mask or mouthpiece respirator with chemical cartridge and appropriate filter.

Table 3-5. Outline for selecting respiratory protective devices.

