# **Eye Protection Use and Selection**

Protective eyewear guards against different workplace hazards. It must have the Z87 marking. Select the correct product based on American National Standards Institute (ANSI) type and the specific risks associated with the task.

Northwestern **ENVIRONMENTAL HEALTH & SAFETY** 

ANSI Z87



# **Protection** basic impact

#### **Limitations**

- •no high-impact resistance
- •no droplet or splash protection
- no dust or fine particle protection

#### Usage

- construction site walkthroughs
- ·light-duty tasks (e.g. manual sanding, packing boxes)
- · with hand tools

**ANSI Z87+** 



#### **Protection**

# high impact

#### **Limitations**

- •no droplet or splash protection
- no dust or fine particle protection

### Usage

- with drills or power tools
- •with lawn mowers or string trimmers

**ANSI D3** 



# **Protection**

against droplets and splashes

#### Limitations

- •no dust or fine particle protection
- •fogs easily without anti-fog coating

#### Usage

- · with chemicals
- ·when handling bodily fluids
- · with household cleaning products (e.g., bleach)

ANSI D4



# **Protection**

against dust, droplets, and splashes

#### Limitations

- •no fine particle protection
- fogs easily without anti-fog coating

#### Usage

- woodworking
- · dusty environments (e.g., above ceilings)

ANSI D5



# **Protection**

against fine particles, dust, droplets, and splashes

# **Limitations**

·fogs easily without anti-fog coating

# Usage

- abrasive blasting
- buffing

ANSI Z78 **FACE SHIELD** 



# **Protection**

splashes and basic impact

# **Limitations**

- not sufficient eye protection
- must pair with ANSI-approved safety glasses or goggles

# Usage

- welding
- •grinding
- plumbing

# **Prescription Lenses**

Wear ANSI-certified eyewear over your glasses and check for proper fit. For assistance obtaining ANSI-certified prescription eyewear, contact your supervisor or Environmental Health and Safety (EHS).

# **Eye Protection for Welding and Torch Work**

Use eye protection with shaded lenses for tasks like welding, arc cutting, and torch work. Contact EHS to ensure you have the appropriate level of protection. Always use safety glasses with side shields or goggles in addition to a welding helmet or face shield.

# **Maintenance and Care**

Inspect protective eyewear for cracks, scratches, or other damage before each use. Keep eyewear clean and protect from damage. Replace when necessary.

# Resources

Contact Environmental Health and Safety at ehs@northwestern.edu; visit northwestern.edu /environmental-health-safety/facility-safety /personal-protective-equipment.html; or scan the QR code.

