

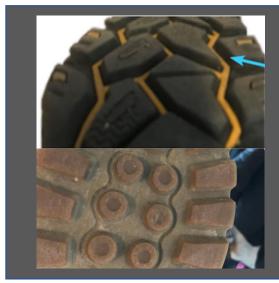
# Best Practices in Slip, Trip, and Fall Prevention Footwear

Helping Industries Prevent Slips, Trips, and Falls

Evidence shows that slip-resistant shoes reduce slip and fall injures and the resulting workers' compensation costs. The effectiveness of slip-resistant shoes is based on design, condition due to wear, type and condition of floor/ground surface, and environmental factors. Consider this information when selecting safe footwear for employees in the workplace.

## **Slip-Resistant Footwear Characteristics**

- Anti-Slip versus Slip-Resistant Anti-slip shoes (e.g., typical athletic shoes) are designed
  to improve traction, versus slip-resistant shoes are designed to improve friction between
  sole and surface while in the presence of possible contaminants.
- Sole material Soft rubber grips floor better; avoid hard plastic or leather.
- Outsole tread patterns
  - o Random patterns perpendicular to travel are more slip resistant.
  - o Patterns that create enclosed areas may cause hydroplaning.
  - o A large contact area is better, except if non-patterned.
  - o Small snips/incisions help move liquid to outer potions of the outsole.
  - o Tread pattern shapes should be spaced at least two millimeters apart.
  - o Tread depth should be at least two-three millimeters from bottom of sole.
- Heel design Should be round with raised tread pattern with edges leading in various directions.



- Good Designs
- Soft flexible construction maintains contact with floor.
- Channel Width allows lubricant dispersal.
- Leading edge in any direction.
- Combination of raised and recessed tread allows for liquid to move out from under the outsole.
- Intertwined pattern allows for flexibility during movement and contact with the walking surface.
- Additional considerations
  - Fit Shoes that are too big or loose can cause instability.
  - Comfort Comfortable shoes increase wearing compliance, normalize gait, and reduce fatigue.
    - Try before buy.
    - Properly measure feet for appropriate size.
    - Try with sock type and/or liner that will normally be worn.
    - Consider material (leather stretches and ventilates more than synthetic).
    - Try on at end of day when feet are most swollen.



# Helping Industries Prevent Slips, Trips, and Falls

- Labeling and advertising
  - Determine activities to be performed and typical conditions.
  - Scrutinize slip-resistance testing methods (coefficient of friction) if indicated (wet testing holds more water than dry testing).
- Other protective features
  - Toe caps (steel vs. synthetic)
  - o Mid-sole (steel or composite) for protection against punctures
  - o Electric shock-resistant
  - Static resistant
  - Conductivity for grounding
  - Metatarsal guards
  - Ankle support
  - o Anti-fatigue
  - o Thermal
  - Chemical resistant
  - o Waterproof/Water-resistant
  - Attachable traction wear for snow/ice

#### **Employee Training**

- Footwear policy should be included in the employee handbook and reviewed at time of hire.
- Inspect daily for wear and presence of contaminants.
  - Shoe treads are like car tires they lack performance and become unsafe with excessive wear.
  - Keep shoes free of contaminants.



- Battery Test for shoe tread wear.
- If a "AA" battery is wider than treads, the shoe fails and should be replaced.
- If the battery is not wider than the treads, the shoe tread is good.
- Shoes shouldn't be worn to/from work if not working outside.
- Provide lockers at workplace for storage.
- Ideally, rotate multiple pairs.
- Supervisor should track age and inspect footwear on routine basis.



## **Footwear Programs**

- Consult your legal department.
- Consider implementing a sample from footwear company after review by legal department.
- Clearly specify what's required and what's not allowed.
- Mandatory or recommended
  - o Employer-purchased footwear allows more control and tracking.
  - o Employee-purchased footwear can include discounts or payroll deductions.
- Enforcement Initiate disciplinary action for non-compliance with policy.
- Some available corporate programs include:

Vendor	Website	Industry	Claim	ASTM
		Selector	Reimbursement	Standards
Shoes for Crews	https://www.shoesforcrews.com/	X	Up to 5K of med	X
SRMAX	https://www.srmax.com/	X	Up to 5K of med	X
Zappos At Work	Zappos Corporate Shoe Program			
SlipGrips	https://www.slipgrips.com/Home	X		
SafeShoes	https://www.safeshoes.com/corporate			