

## Village of Bloomingdale Protective Footwear Guidelines

### I. PURPOSE

To protect the health, safety and welfare of our employees by reducing slip, trip and fall accidents caused in full or in part by improper footwear. To establish standards for protective footwear to be worn by Village employees whose primary work functions are performed outside of an office work environment.

### II. OVERVIEW

Slips and falls represent nearly 11% of all work related accidents and over 13% of all claim costs nationwide. In Bloomingdale, slips, trips and falls have been the leading cause of accidents, with the majority of falls resulting from slips.

### III. RESPONSIBILITY

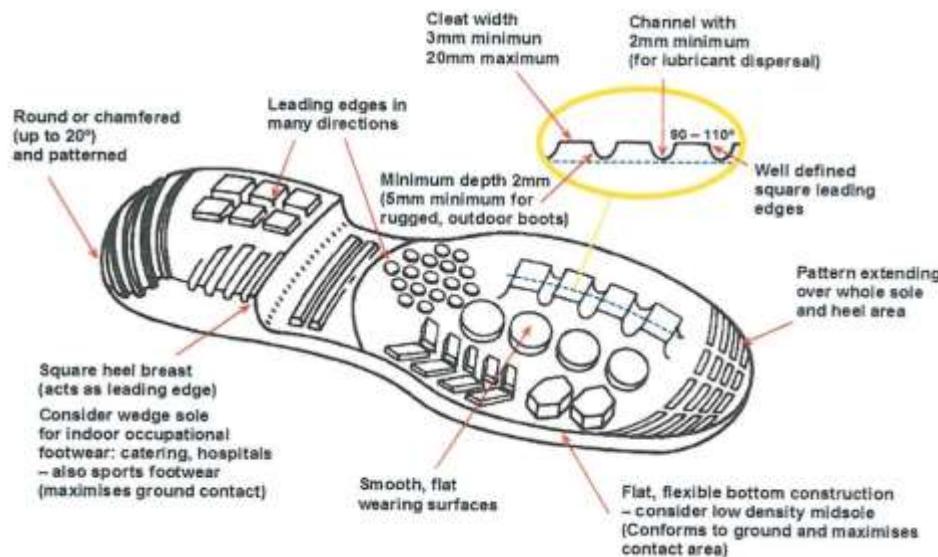
- A. **Assistant Village Administrator** - To maintain and update this policy, and to ensure employees receive a copy of this policy, and any substantive revisions.
- B. **Supervisor** -To reinforce the importance of wearing footwear appropriate for the work environment. To examine and document the footwear worn by an employee following any slip, trip or fall accident.
- C. **Employee** - To wear footwear appropriate for the working environment and weather conditions, as set forth in these guidelines..

### IV. APPROPRIATE FOOTWEAR

- A. Appropriate footwear protects the foot and ankle from injury, and also reduces the risk of slips, trips and falls that can result in injury to multiple areas of the body.
- B. What footwear is appropriate depends on the hazards present in the work environment. In preparing these guidelines OSHA standards and the following work environment risks and exposures were taken into consideration:
  1. Objects falling onto, striking, rolling over, cutting, and/or penetrating the feet
  2. Exposure to corrosive or irritating substances
  3. Exposure to rotating or abrasive machinery (e.g., chainsaws or grinders)
  4. Potential exposure to static electrical discharges or coming into contact with energized conductors of low to moderate voltage (e.g., 220 volts or less)
  5. Uneven walking surfaces or rough terrain
  6. Wet, ice and/or snow covered walking surfaces
  7. Water or other liquids penetrating footwear
- C. Appropriate footwear protects the foot from injury and reduces the likelihood of slipping. When purchasing footwear for work, the following tread design, tread material and construction and fit standards should be taken into consideration.
  1. Slip Resistant Sole - The objective of a slip resistant sole is to maximize contact between the outsole and the walkway surface through tread design and material.

Footwear with a specific tread design and material are typically labeled as "Slip Resistant", as defined below. Terms such as oil resistant, fat resistant, acid resistant, alkaline resistant or skid resistant do not mean "slip resistant".

a. **Tread Design** - The general recommended tread design, published by the Shoe and Allied Trade Association, (pictured below) is intended to maximize contact with the walkway surface by pushing or squeezing water and contaminants away from the sole at the heel strike, mid stance and toe-off phases of the gait cycle. Tread designs that include several of these tread design features is recommended.



b. **Tread Material** - The proper tread material is dependent on work environment, task and weather conditions.

- 1) **Summer** - A softer rubber material with slip-resistance benefit arising from the heel and shoe sole conforming to the surface of the floor. Styrene butadiene rubber (SBR), nitrile-butadiene rubber (NBR), and polyurethanes are some of the more commonly used footwear soling materials. If a tread material is too hard it will not conform to the floor surface and may not provide maximum slip resistance protection.
- 2) **Winter** - Footwear worn in wet icy conditions should be insulated, waterproof and consist of harder materials, preferably studded heels and soles. Under such conditions, the use of slip-on slip resistant overshoes may be appropriate.

## 2. Construction & Fit

- a. The construction and fit of footwear impacts the stability of the foot placement, balance, and the ability to navigate through slippery and/or uneven terrain. The inner-side of the shoe should be straight from the heel to the end of the big toe and the forepart should allow freedom of movement for the toes.
- b. Shoes should have a low, wide-based heel, grip at the heel firmly and fasten across the instep to prevent the foot from slipping when walking.

#### **D. OSHA Protective Footwear Requirements**

OSHA ([29 CFR 1910.132](#) and [29 CFR 1910.136](#)) requires employees to wear protective footwear when working in areas where there is a **danger of foot injuries due to falling or rolling objects, or objects piercing the sole, and where such employee's feet are exposed to electrical hazards**. In reviewing these standards, the Village has determined that:

1. The protective footwear required for all employees who are exposed to the above listed hazards, (excluding electrical), is a steel toed work boot that complies with the American Society of Testing Material [ASTM F2413-05](#) standard regarding specific impact, compression and puncture resistant standards.
2. The protective footwear required for all employees who are exposed to the above hazards listed, (including electrical), are required to wear protective footwear that complies with [ASTM 2413-EH](#). This standard encompasses the same compression and puncture resistance standards set forth in ASTM F2413-05, plus conductive properties that reduce hazards that may result from static electricity buildup, possible ignition of explosives/volatile chemicals; electric shock resistance; and static dissipative (SD) properties.
3. All footwear manufactured to the above ASTM standards must be clearly and legibly marked (stitched in, stamped on, pressure sensitive label, etc.) on either the surface of the tongue, gusset, shaft or quarter lining.
4. In addition to the above ASTM standards, all protective footwear should be insulated, waterproof, with a harder polyurethane oil resistant sole with a raised tread pattern.

#### **E. Recommended Footwear Vendors**

While employees are free to purchase slip resistant footwear that complies with the Village and ASTM standards, for employee convenience, acceptable slip resistant and ASTM compliant footwear is available from the following online vendors:

<a href="#">Shoes For Crews</a>	<a href="#">Bates</a>
<a href="#">Red Wing Shoes</a>	<a href="#">Danner</a>
<a href="#">Carhartt</a>	<a href="#">Rocky Boots</a>
	<a href="#">5-11</a>