

# PPE- HEAD PROTECTION GUIDE

Source	Assessment of Hazard	Protection
Impact	Falling objects	Hard Hat. Specify type. (See ANSI performance requirements)
	Collision with fixed object	Hard Hat. (See ANSI performance requirements)
Electrical	Contact with exposed electrical wires, conductors	Class A or Class B Hard Hat, depending upon exposure. (See ANSI performance requirements)

## AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) PERFORMANCE REQUIREMENTS FOR OCCUPATIONAL HEAD PROTECTION

	Class A	Class B	Class C
<b>Description</b>	General service, limited voltage protection	Utility service, high voltage protection	General service, metallic, no voltage protection
<b>Material</b>	Water resistant, slow burning	Water resistant, slow burning	Water resistant, slow burning
<b>Insulation Resistance</b>	2200V, 60Hz for 1 min. with 3 mA max. leakage	20,000V, 60Hz for 3 min. with 9 MA max. leakage	N/A
<b>Flammability (Burn Rate)</b>	3 in/min max	3 in/min. max	N/A
<b>Impact Resistance (Transmitted Force)</b>	850 lb average 1000 lb maximum	850 lb average 1000 lb maximum	850 lb average 1000 lb maximum
<b>Penetration Resistance</b>	3/8 in maximum	3/8 in maximum	7/16 in maximum
<b>Standard</b>	Z89.1-1969	Z89.2-1971	Z89.1-1969

## PPE- FOOT PROTECTION GUIDE

Source	Assessment of Hazard	Protection
Impact	Falling objects, parts, heavy tools	Safety shoes. For severe exposure use metatarsal guards (See ANSI performance requirement)
Penetration	Nails, scrap metal, and other sharp objects	Footwear with puncture-resistant soles/steel insert
Compression	Rolling or pinching objects, rolls, carts or vehicles	Safety shoes. For severe exposure use metatarsal guards (See ANSI performance requirement)
Chemicals	Splashing/spilling liquids, i.e., solvents, oils, paints, corrosives, acids, etc.	Leather shoes for mild exposures. Rubber boots or shoes with spats for severe exposure
Electrical	Contact with power lines, conductors, arcing, sparks or static discharges.	Footwear with special conductive/insulated soles
Heat	Splash from molten metal	Safety shoes with metatarsal guards or spats
	Flying sparks, flux, and metal from cutting/welding operations	Leather safety shoes. For severe exposure, use metatarsal guards or spats.
Water	Wetness/moisture from prolonged exposure	Insulated shoes or boots
	Slipping hazard	Footwear with slip-resistant soles
Temperature	Exposure to extreme cold	Insulated shoes/boots

### ANSI PERFORMANCE REQUIREMENTS FOR OCCUPATIONAL FOOT PROTECTION

Class	Compression Resistance (pounds)	Impact Resistance (foot-pounds)
75	2,500	75
50	1,750	50
30	1,000	30

Source: State of Wisconsin DOE