

# **PREMIER PPE PROTECTION**

Designed with comfort in mind, this range of lightweight PPE ensures a pleasant wear even after long hours of use. Your safety is our mission.



### HEAD PROTECTION 380

Portwest's head protection range aims to benefit our customers by combining the most up to date styles and standards in head protection, irrespective of job or location. Innovative, comfortable and lightweight hard hats available for multiple uses.



### EYE PROTECTION 388

Portwest's eye protection range includes spectacles, safety goggles and visors, designed to protect the eyes and face of workers from injury during work activities.



### HEARING PROTECTION 396

Portwest's hearing protection range includes PPE with different level sound attenuation, to be adapted to various working environments giving the correct protection from dangerous noise, without isolating the workers. This range of earmuffs offers a variety of models and colors allowing a personalized choice.



### **RESPIRATORY PROTECTION**

Our Biztex<sup>™</sup> brand ensures exceptional quality and performance across our full range of disposable masks. The extensive Biztex<sup>™</sup> range offers a high level of protection and quality safeguarding the wearer against many workplace risks. Certified to both NIOSH and EN 149 standards.

LUGGAGE 402

KNEE PROTECTION 404

LIGHTS 406

# HEAD PROTECTION

Portwest head protection, designed to the latest standards delivers the highest level of protection. Practical and lightweight, this range will ensure a comfortable wear even for long periods of use, irrespective of job or location.



# CHOOSE THE RIGHT ACCESSORIES FOR YOUR HARD HAT

			$\checkmark$		5		60
	HARD HAT	PRODUCT CODES	"2-POINT CHIN STRAP"	SWEATBAND	VISOR CARRIER	VISOR	"CLIP ON EAR MUFF"
	PEAKVIEW	PV60	PW53	/	PS58	PS94, PW99	PW47
	FULL BRIM Future	PS52	/	/	PS68	PS94, PW99	/
	FULL BRIM	PS56	/	PA45, PA55	PS68	PS94, PW99	/
-	Premier	PW52	/	PA45, PA55	PS68	PS94, PW99	/
	HEIGHT ENDURANCE	PS53	/	PA45, PA55	PS58	PS94, PW99	PW47
191		PS63	/	PA45, PA55	PS58	PS94, PW99	PW47
U		PS73	/	PA45, PA55	PS58	PS94, PW99	PW47
<b>P</b>	ENDURANCE	PS54	PW53	PA45, PA55	PS58	PS94, PW99	PW47
	SAFETY PRO	PW02	/	PA45, PA55	/	/	/
	BASE PRO	PW67	/	/	/	/	/
*	FORESTRY COMBI KIT	PW98	/	PA45, PA55	PS58	PS94	PW47

ANSI/ISEA Z89.1 American National Standard for Industrial Head Protection The Occupational Safety and Health Administration (OSHA) guidelines state that employees shall wear protective hard hats when working in areas where there is a potential for injury to the head from falling objects. Protective hard hats designed to reduce electrical shock hazard shall be

worn by each employee when near exposed electrical conductors which could contact the head. The performance criteria for head protection is provided in the American National Standards Institute (ANSI) Z89.1 standard for Industrial Head Protection, updated in 2014.

### Hard hats classification and markings based on ANSI Z89.1

Classification	Marking		Definitions	
IMPACT TYPE	TYPE I	TYPE I	Hard hats designed to reduce the force of impact resulting from a blow only to the top of the head	
	TYPE II	TYPE II	Hard hats designed to reduce the force of impact resulting from a blow to the top or sides of the head	
ELECTRICAL CLASS G (General) Class G Hard hats de		Class G	Hard hats designed to reduce the danger of contact with low-voltage conductors. Tested at 2,200 volts	
CLASS	Class E (Electrical)	Class E	Designed to reduce the danger of contact with conductors at higher voltage levels. Tested at 20,000 volts	
	Class C (Conductive)	Class C	Hard Hats intended to provide no protection against contact with electrical hazards	
OPTIONAL REQUIREMENTS Reverse Donning Arrow Hard hats which can be worn frontward or		0	Hard hats which can be worn frontward or backward. They pass all hard hat testing requirements, whether worn frontward or backward	
REQUIREMENTS	Lower Temperature	LT	Hard hats meet all testing requirements of the standard when preconditioned at a temperature of -22°F (-30°C)	
	High Visibility	HV	Indicate that the hard hat meets all testing requirements of the standard for high visibility colors. This includes tests for chromaticity and luminescence	
	Higher Temperature	HT	Hard hats meet the performance criteria after being preconditioned to higher temperatures of 140°F (60°C)	

#### EN 397: 2012

# European Standard for Industrial Safety Helmets

#### Mandatory tests:

• Impact: Energy spread to the head form must not exceed 5 kN after the fall of an object of 5 kg at 1ft high.

• Penetration: The tip of the test mass used (3 kg from 3.2ft

height) must not come into contact with the skull.

• Flammability: The hard hat is exposed to a flame and it must not burn with flame emission more than 5 seconds after removal of the flame.

**Impact and penetration tests** are performed at room temperature, +122°F and at 14°F.

#### **Optional tests:**

#### Resistance at extreme temperatures:

Testing impact and penetration are performed at 302°F, -4°F, -22°F temperatures.

Electrical properties:

Protects against a short accidental contact with electric leads under voltage up to 440 V.

# **PEAK**VIEW

### TRANSLUCENT HARD HAT

The Peak View hard hat is a Portwest exclusive design and patented model. The translucent shell and see through peak and sides allow the wearer to look upwards without the need to tilt the head. The extra strong yet ultra light weight polycarbonate shell offers UV ray protection. Peakview is the safest and most comfortable solution for your head protection.

PEAKVIEW is a trademark of Portwest.





# **FULL BRIM**



### PW52 FULL BRIM PREMIER HARD HAT VENTED

#### ANSI/ISEA Z89.1 TYPE I, CLASS C

- · Vented hard hat allowing a refreshing airflow around the head
- · Wheel ratchet size adjustment for easy fitting
- · 4-point textile suspension harness for enhanced
- wearer comfort and safety
- · 7 years shelf life

HDPE, PET, PP, LDPE 14oz Blue, White, Yellow 20.5" - 24.8"

### ANSI



### **PS56** FULL BRIM PREMIER HARD HAT

#### ANSI/ISEA Z89.1 TYPE I, CLASS E

- Full brim hard hat: its wide profile provides extra protection against sun, glare, rain, debris and non-toxic splashes
- $\cdot$  Non vented for increased protection against the elements
- 4-point textile suspension harness for enhanced wearer comfort and safety
- · Wheel ratchet size adjustment for easy fitting

HDPE, PET, PP, LDPE 14oz Adjustable 20.5"-24.8"







### **PS52** FULL BRIM FUTURE HARD HAT

### ANSI/ISEA Z89.1 TYPE I, CLASS E

#### EN 397 -10°C/+50°C

- $\cdot~$  Full brim hard hat: its wide profile provides extra protection against sun, glare, rain, debris and non-toxic splashes
- · Non vented for increased protection against the elements
- · Wheel ratchet size adjustment for easy fitting
- · 4 points plastic suspension harness
- · Soft foam sweat band included
- · Up to 7 years lifetime

PP, PE 16oz

20.4"-24.8"





# HEIGHT ENDURANCE HARD HAT



# HARD HAT



### **PS54** ENDURANCE PLUS HARD HAT

ANSI/ISEA Z89.1 TYPE I, CLASS E EN 397 +50°C/-30°C, MM, LD, 440VAC



### EN 50365 CLASS:0

· Unvented hard hat shell for safe use with electrical

- applications 6 point textile harness
- · Wheel ratchet size adjustment for easy fitting
- $\cdot$  Chin strap included
- · Compatible accessories available
- Up to 7 years lifetime

ABS 15oz







# PW02 SAFETY PRO HARD HAT

### ANSI/ISEA Z89.1 TYPE I, CLASS C

- · Vented hard hat allowing a refreshing airflow around the head
- · 4 points textile harness
- · Wheel ratchet size adjustment for easy fitting
- · Lightweight for enhanced wearing comfort · Retail bag which aids presentation for retail
- sales

### HDPE, PET, PP, LDPE 13oz

White, Hi-Vis Yellow 20.5" - 24.8"





24

### PW67 BASE PRO HARD HAT

#### ANSI/ISEA Z89.1 TYPE I, CLASS E

- $\cdot$  Unvented hard hat shell for safe use with electrical applications
- 4-point textile suspension harness for enhanced wearer comfort and safety
- · Wheel ratchet size adjustment for easy fitting
- · Light and robust

PP 12oz White, Yellow 21.6"-24.4"





# SPECIALITY HARD HAT



### PW98 FORESTRY COMBI KIT

ANSI/ISEA Z89.1 TYPE I CLASS C ANSI/ISEA Z87.1 (VISOR HOLDER + MESH VISOR) ANSI S3.19 (EAR MUFF) EN 397 -30°C/+50°C, LD EN 1731 F

EN 352-3

- · Vented hard hat allowing a refreshing airflow around the head · 6 point textile harness
- · Wheel ratchet size adjustment for easy fitting
- · Soft foam sweat band included
- · Chin strap included
- · Replacement accessories available

# ABS, Stainless Steel, Polystyrene, PU 28oz

22.1"-24.8"



### ANSI



### PS89 ULTRA LIGHT BUMP CAP

EN 812

- · Lightweight and comfortable
- $\cdot$  4 points plastic suspension harness
- · Soft foam sweat band included
- Buckle size adjustment for easy fitting · Retail bag which aids presentation for retail sales

HDPE, LDPE 8oz

Orange, Royal Blue, White, Yellow 19.7"-23.6"

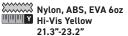








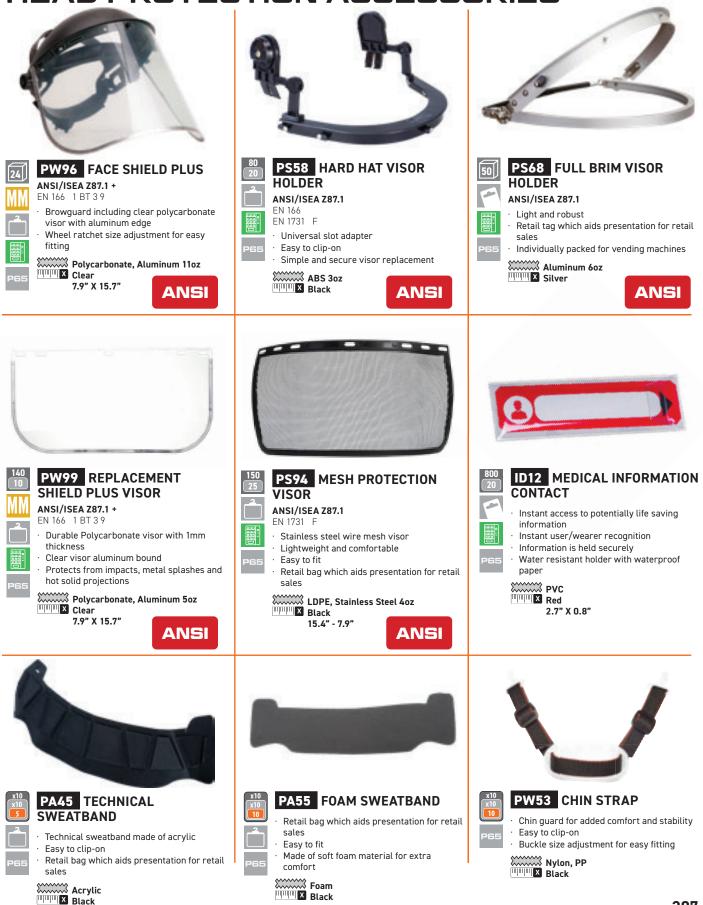
- · Inner ABS shell and soft pad for shock absorption
- · Cooling mesh fabric for increased breathability
- · High visibility color for visibility in daylight
- · Reflective piping for increased visibility
- · Buckle size adjustment for easy fitting
- · Mid peak (2") ideal for all uses







# HEAD PROTECTION ACCESSORIES



# EYE PROTECTION

Portwest's eye protection range includes safety glasses, goggles and visors designed to protect the eyes and face of workers from injury during work activities.

CA101 90

PW52 383

PS12 391

A625 337

### **USA STANDARDS**

### ANSI Z87.1: Markings

Marking	Meaning	Position
PW: Portwest	Manufacturer identification	Frame and lens
Z87	Non Impact protector	Frame and lens
OPTIONAL MARKINGS Required only when impact rating is claimed by the manufacturer	Meaning	Position
Z87+	Impact protector	Frames used for an impact-rated protector are marked with Z87 + (lenses show just a "+" symbol)
OPTIONAL MARKINGS Required only when special lens/ use is claimed by the manufacturer	Meaning	Position
-(no marking)	Lens type - Clear	
W - followed by shade number	Lens type - Welding	Lens
U and scale number	Lens type - UV Filter	Lens
L and scale number	Lens type - Visible Light Filter	Lens
R and scale number	Lens type - IR Filter	Lens
V	Lens type - Variable Tint	Lens
S	Lens type - Special Purpose	Lens
D3	Splash/Droplet	Frame
D4	Dust	Frame
D5	Fine Dust	Frame

### PREMIUM PROTECTION

\* = see tables below for more details on U marking (UV filters performances) and L marking (Visible Light Filters performances)

#### Transmittance Requirements for Visible Light Filters:

Scale (Marking)	Maximum %	Nominal %	Minimum %
L1.3	85	74.5	67
L1.5	67	61.5	55
L1.7	55	50.1	43
L2	43	37.3	29
L2.5	29	22.8	18
L3	18	13.9	8.5
L4	8.5	5.18	3.16
L5	3.16	1.93	1.18
L6	1.18	0.72	0.44
L7	0.44	0.27	0.164
L8	0.164	0.1	0.061
L9	0.061	0.037	0.023
L10	0.023	0.0139	0.0085

### Transmittance Requirements for Ultraviolet Filters:

Scale (Marking)	Maximum effective Far-Ultra- Violet (200-315nm)Average transmittance %	Maximum effective Near-Ultra- Violet (325-380nm)Average transmittance %
U2	0.1	3.7
U2.5	0.1	2.3
U3	0.07	1.4
U4	0.04	0.5
U5	0.02	0.2
U6	0.01	0.1

### **EUROPEAN STANDARDS**

#### EN 166: 2001 Personal Eye Protection

Applying to all types of individual protection of the eye which protects from hazards likely to damage the eye, except for nuclear radiation, x-rays, laser emissions and infrared emitted by low-temperature sources. Does not apply to eye protection for which separate standards exist (e.g. anti-laser eye protection, sunglasses for general use).

#### EN 170:2002 European Standard for Ultraviolet Filters

Specifies the scale numbers and transmittance requirements for filters for protection against ultraviolet radiation.

#### EN 172 European Standard for sunglare filters for industrial use

Specification for sunglare filters used in personal eye-protection for industrial use.

### EN 166 Markings

EN 166 Markings						
MANUFACTURER SYMBOL	Lens / Visor	Frame / Holder	Glasses	Goggles	Visors	
PW: Portwest	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	AF N
OPTICAL CLASS						- AF = Anti-F
1: Permanent wear (distortion free)						treatment
2: Occasional wear	<b>~</b>		<ul> <li>Image: A second s</li></ul>	<b>~</b>	<b>~</b>	(correspond: to N - when t
3: Brief wear						treatment is
MECHANICAL RESISTANCE						certified by tl notified body
S: Minimal impact resistance (5,1 m/sec)			<b>~</b>	✓	<b>~</b>	and marked
F: Low energy impact (45 m/sec)			<ul> <li>Image: A second s</li></ul>	<b>~</b>	<b>~</b>	the lens).
B: Medium energy impact (120 m/sec)	×	<b>~</b>		<b>~</b>	<b>~</b>	
A: High energy impact (190 m/sec)					<ul> <li>Image: A second s</li></ul>	AC V
T: Impact test at extreme temperature (23°F/+131°F) OPTIONAL			<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	<b>~</b>	<b>Y</b> A2
CHEMICAL RISKS (OPTIONAL)						- AS = Anti-Scratch
3: Resistance to liquid droplets				<b>~</b>		treatment
3: Resistance to liquid splashes					<b>~</b>	(corresponds
4: Resistance to large dust particles (with > 5µm grain size)	~	~		<b>~</b>		to K - when t treatment is
5: Resistance to gases and fine dust particles (with $<$ 5µm grain size)				<ul> <li>Image: A set of the set of the</li></ul>		certified by t
ELECTRICAL RISKS (OPTIONAL)						notified body and marked
8: Short circuit ARC resistance		<b>~</b>			<b>~</b>	the lens).
THERMAL RISKS (OPTIONAL)						
9: Molten metal splashes and hot solids projections		<b>~</b>			<b>~</b>	
LENS TREATMENTS (OPTIONAL)						
K: Resistance to surface damage by fine particles (anti-scratch treatment)						
N: Resistance to fogging of oculars (anti-fog treatment)	<b>~</b>			<ul> <li></li></ul>	<b>~</b>	

389











# Polycarbonate











394

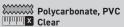
## **GOGGLES AND EYE PROTECTION** ACCESSORIES



### **PW20** DIRECT VENT GOGGLES ANSI/ISEA Z87.1 +

#### EN 166 1 B

- · Flexible PVC frame for ultra comfort
- · Direct ventilation
- · Lightweight wrap-around design
- 99% UV protection
- · Adjustable elastic headband for a perfect fit · Excellent side protection





### ANSI



- · Ultra lightweight for long uses
- Adjustable elastic headband for a perfect fit
- · Protects from fluid and splashes
- Excellent side protection

Polycarbonate, PVC



### ANSI



# HEARING PROTECTION

Portwest's hearing protection range includes PPE with different level sound attenuation, to be adapted to various working environments giving the correct protection from dangerous noise, without isolating the workers. This range of earmuffs offers a variety of models and colors allowing a personalized choice.

### **USA STANDARDS**

### ANSI (US American National Standards Institute)

#### S3.19 - 1974

This standard specifies the test method for determining the level of noise attenuation (NRR Noise Reduction Rating) of the hearing protection, as recommended by the EPA (U.S. Environmental Protection Agency) and in accordance with the Occupational Safety and Health Administration (OSHA).

#### Noise Reduction Rating (NRR)

This is a unit of measurement used to determine the effectiveness of hearing protection devices to decrease sound exposure within a given working environment, classified by their potential to reduce noise in decibels (dB).

Excessive noise is generally defined as exposure to 85 or more decibels of sound over an 8 hour period. According to OSHA, hearing protection is required for all employees at this degree of exposure. In all cases where the sound levels exceed the values shown below, a continuing, effective hearing conservation program should be implemented. Example: if a worker is exposed to 100dB in a 2 hour period, he is also required to wear hearing protection.

OSHA'S Permissible Noise Exposures						
Duration per day, hours	Sound level dBA slow response					
8	90					
6	92					
4	95					
2	100					
1	105					
0.5	110					
<0.25	115					

### **EUROPEAN STANDARDS**

PV60 382

S346 55 -

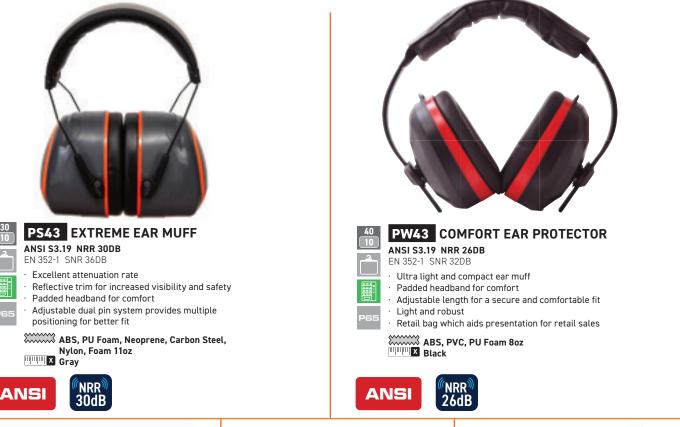
EN 352-1: 2020 Hearing Protectors - Ear Muffs EN 352-2: 2020 Hearing Protectors - Ear Plugs EN 352-3: 2020 Hearing Protectors - Hard Hat Mounted Ear Muffs EN 352-4: 2020 Hearing Protectors - Level Dependent Ear Muffs EN 352-8: 2020 Earmuffs with Entertainment Radio All these standards establish requirements with regards to the manufacture, design, performances and test methods.

SNR (Single Number Rating): Single average value of attenuation HML: Attenuation values expressed in terms of average levels of frequencies H: Attenuation of PPE at high frequencies (pitched noises) M: Attenuation of PPE at medium frequencies

L: Attenuation of PPE at low frequencies (bass sounds)

### ULTIMATE PROTECTION AGAINST HARMFUL NOISES

# HEADBAND AND HARD HAT MOUNTED EAR DEFENDERS







### PW41 SUPER EAR PROTECTOR

ANSI S3.19 NRR 25DB EN 352-1 SNR 30DB

 Folds to palm size for better carriage and to keep clean

- Adjustable dual pin system provides
   multiple positioning for better fit
- · Lightweight and comfortable
- · Excellent attenuation rate

HIPS (High Impact Polystyrene), PU Foam, Polyoxymethylene, Stainless Steel 9oz

Red







ABS, Polycarbonate, PVC 6oz

### ANSI (NRR) 22dB





ABS, Polystyrene, PU, Stainless Steel 10oz Black, Red



# EAR PLUGS



# EAR PLUGS

ANSI



# RESPIRATORY

# BIZTEX

Our Biztex<sup>™</sup> brand ensures exceptional quality and performance across our full range of disposable masks. The extensive Biztex<sup>™</sup> range offers a high level of protection and quality safeguarding the wearer against many workplace risks including liquid chemicals, static electricity, dry particles and radioactive contamination.

BIZTEX is a trademark of Portwest.



#### **NIOSH Standard:**

42 CFR Part 84 classifies particulate respirators into nine different classes broken down into three levels of filter efficiency (95, 99 and 99.97%) and three categories of filter degradation (N, R and P). The selection of N-, R- and P-series filters depends on the presence or absence of oil particles. If no oil particles are present then any series filters (N-, R- or P-series) may be used. If oil particles are present then either R- or P-series filters may be used. If oil particles are present and the filter is to be used for more than one work shift, then only a P-series filter may be used. N-series filters cannot be used if oil particles are present.

The table below summarizes the difference between the NIOSH 42 CFR Part 84 and CE EN 149:2001 + A1:2009 standards.

Standard	Classification of the Filters	Efficiency Level	Breathing Resistance (Inhalation)	Total Inward Leakage	Categories of Resistance		
	N95/R95/P95	95%		Not tested	N Series - Used in particulate environments free of oil aerosols		
NIOSH 42CFR-84	N99/R99/P99	99%	85L/Min 3,42 mbar		R Series - Used for oil & non-oily particles aerosol (with time use limitations specified by NIOSH)		
	N100/R100/P100	99.97%			P Series - Used for oil & non-oily particles aerosol ( with time use limitations specified by manufacturer)		
	FFP1	≥80%	95L/Min	P1 = 78%			
EN149:2001 + A1:2009	FFP2	<b>≽9</b> 4%	FFP1: 2,1 mbar FFP2: 2.4 mbar	P2 = 92%	All masks can be used against oil & non-oily particulate aerosols		
	FFP3	<b>≽99%</b>	FFP3: 3,0 mbar	P3 = 98%			







