



· user manual ·



Helmet for structural firefighting

CERTIFICATES: EN 443 | EN 16471 | EN 16473 | EN 14458

# **THINKING AHEAD**

firefighting & safety helmet series

www.pab.hr

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Thank you for choosing a PAB Akrapović product.

**PAB Fire 05** helmet is a safety helmet for the head intended for firefighting in buildings and other structures, as for other typical tasks and interventions of fire brigades.

The **PAB Fire 05** is in conformity with Regulation (EU) 2016/425, with reference to standards EN 443:2008, EN 16471:2014 and EN 16473:2014.

Made of impact and high-temperature resistant thermoplastic, this helmet offers an optimal protection and maximum wear comfort. The helmet is very light and can be equipped with a wide range of accessories.

#### OVERVIEW

#### **SAFETY NOTICE**

Warning:

Read these instructions carefully before using the helmet.

For adequate protection, this helmet must fit or be adjusted to the size of the user's head.

Inappropriate use, maintenance or servicing can affect the function of the helmet and can seriously endanger the user's life. The helmet's operability must be checked and verified before each use. The helmet is not to be used if the operability test is unsuccessful, if the helmet is damaged, if proper servicing or maintenance has not been made, or if PAB Akrapović original spare parts have not been used.

The length of the useable life of this helmet will be affected by the types of materials used in its construction and the environments in which the helmet is used and stored. Recommendations on this topic should be sought from the manufacturer.

The intended protection provided by the helmet can only be ensured when it is properly assembled and correctly fitted. Any removable part must not be worn separately.

When fitted with another item of personal protective equipment or with an accessory (other than as supplied by the helmet manufacturer for use with this helmet) a helmet marked as complying with EN 443 might no longer satisfy all clauses of the standard. Refer to information provided by the helmet manufacturer.

The helmet provides protection of the head and face against shock, sharp objects, splatters of corrosive chemicals (Sulphuric acid, Sodium hydroxide, p-Xylene, Butan-1-ol, n-Heptane), molten metals, radiating heat, flames, electric current. The user's protection is not guaranteed in situations where the conditions exceed those described in the specifications above.

This helmet complies with the retention requirements of EN 443:2008, EN 16471:2014 and EN 16473:2014 only when the chin strap supplied by PAB Akrapović is worn and adjusted in accordance with these instructions.

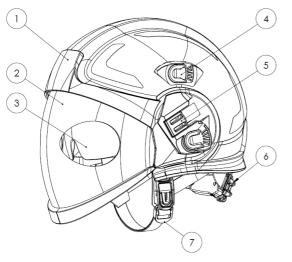
The helmet absorbs the energy of a blow by partial destruction of, or damage to, the helmet. Even though such damage may not be readily apparent, any helmet subjected to severe impact should be replaced.

Replace any damaged parts only with original PAB Akrapović parts, as only these original parts are authorised and ensure the performance of the helmet.

Warning: The validity of the EC type-examination certificate might no longer be satisfied if a helmet marked as conforming to EN 16471:2014, EN 16473:2014 and EN 443:2008 is fitted with another item of personal protective equipment or with an accessory (other than as supplied by the manufacturer for use with this helmet).

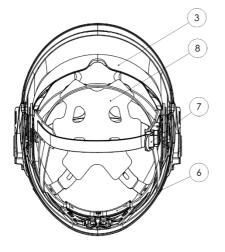
The user's attention is also drawn to the danger of modifying or removing any of the original component parts of the helmet, other than as recommended by PAB Akrapović. Helmets should not be adapted for fitting attachments in a way not recommended by PAB Akrapović.

## NOMENCLATURE OF PARTS

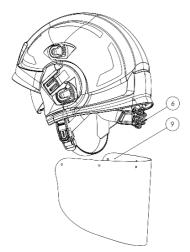


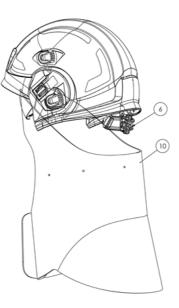
Shell
Visor (face guard) PAB Fire 05
Clear, Gold or Silver
Goggles (eye guard) model
Goggles 05

- 4 Lamp holder
- 5 SCBA mask attachment
- 6 Headband with ratchet
- knob for size adjustment
- ⑦ Chin strap with quick
- release buckle



- 6 Headband with ratchet knob for size adjustment
- 8 Chin strap with quick release buckle
- (9) Headband with leather/fabric padding





- 6 Headband with ratchet knob for size adjustment
- (9) Neck protector (ALU)
- (1) Holland type neck protector

# PAB FIRE 05

## **TECHNICAL DATA**

Helmet sizes	For head sizes from 52 to 64 cm (20.5 to 25.2 inches)
Weight	1445 g ± 30 g
(helmet with face shield and without	The weight may vary depending on the shell colour and helmet
optional accessories)	configuration.

## HELMET MARKING

CE	CE conformity marking
0497	Notified body number
EN 443:2008, EN 16471:2014, EN 16473:2014	European standard for: Helmets for firefighting in buildings and other structures, Helmets for wildland firefighting, Helmets for technical rescue
B3b	Indicates the protection zone assured by the helmet (protects the dome of the skull and the frontal chin region)
***	Indicates protection at low temperatures down to -30°C
E2/E3	Indicates the electrical insulation of the wet helmet
C	Indicates resistance to liquid chemicals (Sulphuric acid, Sodium hydroxide, p-Xylene, Butan-1-ol, n-Heptane)
	Recyclable
52–64	Size range (head circumference in cm)
[]i	See manufacturer's information
PA 6.6	Shell material – Polyamide 6.6
PAB FIRE 05	Model identification
2021	Year of manufacture
1 2 3 4 5 6 7 8 9 10 11 12	Month of manufacture
	Manufacturer's trademark
<b>Ø</b>	Marking of conformity with DIRECTIVE 2014/90/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 23 July 2014 on marine equipment

### ACCESSORIES MARKINGS

#### Visor PAB FIRE 05 CLEAR CE CE conformity marking 0497 Notified body number European standard for Personal eye-equipment – High performance visors EN 14458:2018 intended only for use with protective helmets Manufacturer's trademark PAB Akrapović d.o.o. Name of the manufacturer Most 26, 52420 Buzet, Address of the manufacturer Croatia PAB FIRE 05 CLEAR Model identification 2021 Year of manufacture 123456789101112 Month of manufacture Increased thermal performance use + (<u>..</u>) Visor type - face guard R1 Radiant heat protection level for increased thermal performance AT Resistance to high speed particles (medium energy impact) at extremes of temperature E1/E3 Electrical properties (conductive headform and surface resistance) (-30 °C/ + 50 °C) Extremes of temperature to which the visor has been tested See manufacturer's information i PC Material - Polycarbonate Recyclable

Visor PAB FIRE 05 GOLD	
CE	CE conformity marking
0497	Notified body number
EN 14458:2018	European standard for Personal eye-equipment – High performance visors intended only for use with protective helmets
PAB Akrapović	Manufacturer's trademark
PAB Akrapović d.o.o.	Name of the manufacturer
Most 26, 52420 Buzet, Croatia	Address of the manufacturer
PAB FIRE 05 CLEAR	Model identification
2021	Year of manufacture
1 2 3 4 5 6 7 8 9 10 11 12	Month of manufacture
+	Increased thermal performance use
	Visor type - face guard
R2	Radiant heat protection level for increased thermal performance
AT	Resistance to high speed particles (high energy impact) at extremes of temperature
E1/E3	Electrical properties (conductive headform and surface resistance)
(-30 °C/ + 50 °C)	Extremes of temperature to which the visor has been tested
Ĩ	See manufacturer's information
PC	Material - Polycarbonate
c3	Recyclable

# PAB FIRE 05

## Eye guard GOGGLES 05 (EN 14458:2018 marking)

CE	CE conformity marking
0497	Notified body number
EN 14458:2018	European standard for Personal eye-equipment – High performance visors intended only for use with protective helmets
PBA Akrapović	Manufacturer's trademark
PAB Akrapović d.o.o.	Name of the manufacturer
Most 26, 52420 Buzet, Croatia	Address of the manufacturer
PAB GOGGLES 05	Model identification
2021	Year of manufacture
1 2 3 4 5 6 7 8 9 10 11 12	Month of manufacture
=	General thermal performance use
۲	Visor type - eye guard
BT	Resistance to high speed particles (medium energy impact) at extremes of temperature
E1/E3	Electrical properties (conductive headform and surface resistance)
(-30 °C /+ 50 °C)	Extremes of temperature to which the visor has been tested
l	See manufacturer's information
PC	Material - Polycarbonate
G	Recyclable

## INSTRUCTIONS FOR USE AND CARE

#### ADJUSTING THE HELMET

Loosen the helmet headband by rotating the ratchet knob (6) counter-clockwise. Place the helmet on the head and rotate the ratchet knob (6) clockwise to adjust the size. The headband should be tight around the crown of the head, but still comfortable. To secure the helmet on the head, connect the two ends of the chinstrap (7) and insert one piece of the buckle into the other. The buckle is locked when you hear a click. Adjust the straps under the chin and on the cheeks; pull or loosen the straps to get a firm but comfortable fit. Fix the loose end of the strap with the appropriate plastic rings. To facilitate this step, unfasten the chin strap and remove the helmet from the head.

To remove the helmet from the head, loosen the headband by rotating the ratchet knob (6) anticlockwise, unfasten the buckle by pressing the red tab (7), and remove the helmet from the head.

#### USING THE ACCESSORIES

#### Adjusting the visor PAB Fire 05

The helmet is equipped with a face guard (2) PAB FIRE 05 (available in versions CLEAR or GOLD) that meets the requirements of European standard EN 14458:2018 and is intended to protect the wearer's eyes and face from flying particles, dust, and splashes of liquids.

When not needed, the visor is stored in standby position under the helmet's shell. To move the visor into in-use position, pull it down over the face until you hear a click sound. When the visor is not needed anymore push it back under the shell into stand-by position.

#### Adjusting the eye guard Goggles 05

Eye guards will offer little or no protection to substantial areas of the face. They should only be used where an adequate risk assessment indicates that facial protection is not required.

The eye protector is intended to protect the wearer's eyes from flying particles, dust and splashes of liquids.

When not needed the eye guard (3) is stored in stand-by position under the helmet's shell. To move the eye guard into in-use position pull the tabs on the bottom part of the goggles and adjust their position. To move the goggles back into stand-by position push them up under the helmet shell.

The visor PAB FIRE 05 in versions CLEAR or GOLD and the eye-guard Goggles 05 have been designed and developed for and are designated for use with helmet model PAB FIRE 05.

## PAB FIRE 05



Users should ensure to have fitted a visor marked with "+" when using an EN 443 helmet for structural firefighting.

Please note that any scratched or damaged lenses should be replaced.

Visors or goggles worn over non-designated corrective frames may transmit impacts which may damage the corrective eye-wear thus creating a hazard to the wearer.

The visor and the goggles meet the requirements for electrical properties (brief accidental unintended contact with live low voltage conductors) and provide limited protection. In order to achieve this all component parts of the visor and helmet assembly shall have the marking for electrical properties.

The stated levels of protection are only provided when the visor and/or goggles are fully in the in-use protective position.

Materials that may come into contact with the wearer's skin could cause allergic reactions in susceptible individuals.

The visor PAB FIRE 05 has been tested for resistance to the following liquid chemicals: Sulphuric acid, Sodium hydroxide, p-Xylene, Butan-1-ol, n-Heptane.

The eye guard Goggles 05 is intended for use with firefighting helmet model PAB FIRE 05. The eye guard can be used against various hazards as encountered in industry or during rescue activities which are likely to damage the eye. The eye guard provides protection against impacts, high-speed particles, short circuit electric arc, molten metals and hot solids.

The eye guard Goggles 05 and visors PAB Fire 05 Clear and PAB Fire 05 Gold are resistant to abrasion. They meet the requirements of Clause 5.5.5 - Abrasion resistance of EN 14458:2018 and have been tested in accordance with EN 168:2001, Clause 15.

The eye guard Goggles 05 and visors PAB Fire 05 Clear and PAB Fire 05 Gold also meet the requirements of EN 14458:2018, Clause 5.5.4, about resistance to fogging and have been tested in accordance with EN 168:2001, Clause 16.

#### Using the neck protection (ALU, Nomex, Holland)

If your helmet configuration includes the neck protector (ALU, Nomex or "Holland" type) (9,10), you can attach it to the helmet with two hooks on both sides of the neck protector and with a Velcro fastener on the helmet shell and on the neck protector. To attach the neck protector, first attach the two hooks on both sides and then align the Velcro fastener on the neck protector with the fastener on the helmet shell and press on it to fix it. To remove the neck protector, gently pull it away from the helmet shell starting at the middle with the Velcro fastener and then remove the two hooks.

## **CLEANING AND DISINFECTION**

For cleaning, maintenance, or disinfection, use only substances that have no adverse effect on the helmet and are not known to be likely to have any adverse effect upon the wearer when applied in accordance with these instructions and information.

Do not apply hydrocarbon-based cleaning products, solvents, paint, or stickers to the helmet or visors to prevent damage to the materials of the helmet, except in accordance with instructions given from PAB Akrapović.

SHELL AND PLASTIC COMPONENTS: use soapy water and a soft cloth. Do not use detergents, solvent-based products, or abrasive materials.

FACE GUARD: use soapy water and a soft cloth. Do not use detergents, solvent-based products, or abrasive materials.

**EYE GUARD:** use soapy water and a soft cloth. Do not use detergents, solvent-based products, or abrasive materials.

CHIN STRAP: use soapy water and a soft cloth.

**HEAD PADDING AND HEADBAND PADDING:** you can remove these parts for easier cleaning. Wash the head padding in cold water with a mild detergent. Rinse with water and let dry.

Open the Velcro fasteners and clean the headband padding with soapy water and a soft cloth.

## SERVICING AND MAINTENANCE

After using the helmet, you should perform a detailed inspection of the helmet and check that all its components are in place and properly fixed.

During inspection, pay special attention to the components listed below that are critical for the safety of the product, and replace the product or the component if any of the conditions described below are evident:

- Suspension: check for cut or broken stiches, abrasions on straps, or discoloration;
- Chin strap: check for any missing or broken parts, discoloration, cut or broken stitches, worn out straps, or broken or missing quick-release buckle;
- Shell: check for any cracks or deep scratches, deformations from mechanical impact, or exposure to heat;
- · Headband: check if cracked or broken; check that the adjustment system works properly;
- Goggles: check for any cracks, scratches, bubbles, or deformations, or if they do not stay in position.
- Visor: check for any cracks, scratches, bubbles, or deformations, or if it does not stay in position.
- Check all fixing points: all the components must be in place and fixed firmly;
- No evident wear should be visible;
- Check for any visible cracks or fractures; none should be evident;
- Check that the helmet fit is always correct.

Replace any damaged parts only with original PAB parts. Only original PAB parts are permitted for replacement, and only these ensure the performance of the helmet.

If the eye protector needs to be replaced, use a screwdriver to unscrew the two screws that secure the protector (the screws are positioned behind the headband). Remove the damaged eye protector and put the new eye protector in position. Secure it by tightening the two screws behind the headband.

If significant damage (broken parts, deep scratches, torn straps or paddings, missing components, etc.) is identified during a regular check, the helmet should be replaced. The helmet should not be used if it is clearly damaged, if proper servicing or maintenance has not been performed, or if PAB original spare parts have not been used. Inappropriate use, maintenance, or servicing can affect the function of the helmet and can seriously endanger the user's life. The helmet's operability must be checked and verified before each use.



Do not drop the helmet. Prevent impacts to the helmet that could damage (scratch or crack) the visor or the goggles.

Check the helmet regularly for cracks on the parts in contact with the skin. Such damage could cause discomfort.

## STORAGE AND TRANSPORT

Store the helmet in a closed cabinet to prevent extended exposure to cold, heat, humidity, light, fumes...To extend the lifetime of the helmet to the maximum clean it after each use and before storing.

Before transport put the visor and the goggles in standby position and place the helmet in its PAB protective textile bag.

## SERVICE LIFE AND DISCARD

PAB helmets and their components (including visors and goggles) are very resistant to ageing, with an expected service life of 10 years, but only if provided that they are used, stored, maintained and serviced properly. Exposure to extreme temperatures, strong impacts, corrosive chemicals, flames or aggressive environments have a significant impact on the shelf life of the product.

Inspect and clean carefully the helmet after each use and replace any damaged parts or products. To ensure a lifetime as long as possible please follow the instructions, information and recommendations stated in this user manual.

When the helmet or its parts become obsolete or irreparably damaged, the helmet and its parts shall be treated as ordinary non-hazardous industrial waste according to local regulations.

## WARRANTY

The product warranty period for PAB helmets and optional helmet accessories produced by PAB Akrapović is two (2) years.

PAB Akrapović guarantees that the PAB products delivered will conform to their technical specifications and will be free from defects in materials and workmanship. This warranty does not apply to helmets and optional accessories that are misused, abused, or damaged from installation of accessories not produced by PAB Akrapović, or not used in accordance with the user manual.

The PAB Akrapović product warranty does not cover and does not make any warranty for any defect, failure, deficiency, or error that is:

- Not reported to the producer in a timely manner; or
- Due to misapplication or modification; or
- Due to dirt or exposure to extreme conditions; or
- Due to use, either intentional or otherwise, in an improper manner.

For more information, please contact PAB Akrapović.



# CE

Certified by: **CSI S.p.A.** Viale Lombardia 20/B, 20021 Bollate (MI), Italy Notified Body No.: 0497

Produced by:

## PAB Akrapović

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