

3M[™] Electric Arc Protective Faceshield WPAF Series



Description

3MTM Electric Arc Protective Faceshield WPAF2-12 is designed to provide limited protection during work where there is a risk of exposure to an electric arc hazard, such as heat, flying debris, and optical radiation. The 3MTM Electric Arc Protective Faceshield WPAF2-12 meets the requirements of ANSI/ISEA Z87.1-2020 and NFPA 70E as a Category 2 PPE*.

Our 3M head protection electrical arc assembly, as tested and approved, consists of a 3MTM SecureFitTM Hard Hat H-700 Series, 3MTM SecureFitTM Elevated Temperature Hard Hat H-700T Series or 3MTM Safety Helmet X5000 Series, a 3MTM faceshield holder, a 3MTM adaptor to attach the faceshield holder to the helmet, and a 3MTM Electric Arc Protective Faceshield WPAF2-12.

Per NFPA 70E Category 2 requirements, an arc-rated balaclava also must be worn with arc-rated faceshields.

Product Range and Approved Configurations

• 3MTM Electric Arc Protective Faceshield WPAF2-12

3M TM Electric Arc Protective Faceshield	rc Protective 3M TM SecureFit Hard Hat, 3M TM Elevated Temperature Hard Hat, or 3M TM SecureFit TM Safety Helmet		3M TM Faceshield Holder	
	H-700 Series or H-700T Series	X5000-ANSI Series	FGF-700 w/included DP3E adapters	U5B-ANSI w/DP3E adapters**
WPAF2-12	X		X	
ATPV 12 cal/cm ²		x		x
NFPA 70E Category 2*				

*This head and face protection assembly meets NFPA 70E Category 2 when worn with an arc-rated balaclava (not sold by 3M)

**Adapters sold separately.

Key Features

• Easy donning and doffing

- "Snap in" faceshield holder connection for fast replacement
- Frameless design helps increase field of vision in all directions
- Designed to allow movement of the head
- Excellent optical performance allows worker to see clearly while performing tasks
- · Features a grey tint allowing for good color recognition
- 2 mm thick polycarbonate faceshield
- 1 mm thick chin guard extends towards the ears, providing additional lateral coverage
- Clear chin guard allowing for unrestricted field of vision
- Features a fog resistant coating meeting the optional Anti-Fog Performance (X) requirement of ANSI/ISEA Z87.1-2020
- Scratch resistant

Typical Applications

- Maintenance and repairs of electrical transmission and distribution networks in the electrical utilities market
- Electrical maintenance and repairs in general industry
- Electrical engineering at construction and civil engineering sites

Regulatory Approvals

The 3MTM Electric Arc Protective Faceshield WPAF2-12 meets the requirements of ANSI/ISEA Z87.1-2020 and NFPA 70E-2024 as a Category 2 PPE¹.

Storage and Cleaning

Temperature range for use and storage: +3° C - +40° C, <85% humidity. Store faceshield in the 3MTM Utility Bag in a clean area protected from contaminants, direct sunlight, chemicals, high heat or extreme cold.

Clean only with mild soap and water, pat dry with a soft cloth. Do not use solvents or chemicals to clean this faceshield – doing so can lessen the protection from impact.

Product Specifications

- Faceshield material: polycarbonate
- Chin guard material: polycarbonate
- Chin guard black edging material: PVC
- Thickness of faceshield material: 2.1 mm
- Thickness of chin guard material: 1 mm
- Height: 9 in. (23 cm)
- Width of faceshield: 10.35 in. (26.3 cm)
- Width of faceshield/chin guard: 11 in. (28 cm)
- Weight: 9 oz. (253 g)
- Outer coating: anti-fog
- Inner coating: anti-fog
- Temperature rating of material: 266° F/130° C

Markings and Light Transmittance

Product Name	Markings	Visible Light Transmitted Range (380-780 nm)	UVA, UVB, UVC Blocked (200-380 nm)	Blue Light Blocked (200-380 nm)
3M TM Electric Arc	NFPA 70E Cat 2	74.4-100%	99.9%	63.3%
Protective Faceshield WPAF2-12	ATPV 12 cal/cm ²			

¹ This head and face protection assembly meets NFPA 70E Category 2 when worn with an arc-rated balaclava (not sold by 3M)

Product Name	Markings	Visible Light Transmitted Range (380-780 nm)	UVA, UVB, UVC Blocked (200-380 nm)	Blue Light Blocked (200-380 nm)
	3M Z87+ U6 R5 L1.7 D3 X			

The faceshields and faceshield holders are marked in accordance with the requirements of ANSI/ISEA Z87.1-2020.

Markings	Explanation of Markings
NFPA 70E Cat 2	Category for arc rated, flame resistant apparel
ATPV 12 cal/cm ²	Arc rating (ASTM F2178)
3М	Manufacturer's Identification
Z87	Product complies to ANSI/ISEA Z87.1-2020 standard
+	Impact-rated (ANSI/ISEA Z87.1-2020)
U6	Scale number for UV Protection (U6 is the highest rating in ANSI/ISEA Z87.1-2020)
R5	Scale number for Infrared Filter (ANSI/ISEA Z87.1-2020)
L1.7	Scale number for Visible Light Filter (ANSI/ISEA Z87.1-2020)
D3	Splash/droplet protection (ANSI/ISEA Z87.1-2020)
X	Passes optional anti-fog lens test (ANSI/ISEA Z87.1-2020)
Made in Taiwan	Country of manufacture

Assembly Instructions

Attaching Faceshield Holder to Hard Hat/Safety Helmet



- 1. Fit the adapters (3MTM Hard Hat Adapter for Faceshields DP3E) or earmuffs into their respective side slots on the hard hat or safety helmet.
- 2. Locate the four holes on the earmuff mount or on the helmet adapter.
- 3. Line the holes up with the four pins on the faceshield holder, press to lock into place.
- 4. Repeat steps 1-3 for the other side.

Mounting Faceshield to Faceshield Holder



- 1. Locate the star-shaped hole on the faceshield and the same raised shape on the faceshield holder.
- 2. With the faceshield tilted, align the star-shaped holes with the same raised shapes on the faceshield holder.
- 3. Manually pivot the faceshield lens until the center hole snaps into the center faceshield holder latch.
- 4. (For FGF-700 holder only) Tighten screws on each side until tension holds the visor in the position needed for your application.

Product List

Product ID SKU	Description	Availability US	Availability Canada
WPAF2-12	3M TM Electric Arc Protective Faceshield WPAF2-12,	v	v
7100304818	Category 2, Grey, with Chin Guard, 5 ea/cs	^	^

Faceshield Holders and Related Products

Product ID SKU	Description	Availability US	Availability Canada
FGF-700	3M TM FGF-700 Faceshield Holder for 3M TM SecureFit TM	x	x
7100301230	H-700 Series Hard Hat		^
U5B	U5B-ANSI Faceshield Holder 10/cs		
7100179142	Note: need to order DP3E separately when using this faceshield holder	X	X
DP3E	DP3E Hard Hat Faceshield Adapter 20/cs	x	x
7010413649		^	~

Inspection and Replacement Recommendations

- Inspect faceshield and headgear/adapter before each use. Replace the faceshield immediately if you notice any signs of wear, damage, abuse or degradation as this may be a sign that protection is reduced.
- Even with no visible signs of wear, 3M recommends replacing within five years from the date of manufacturing.
- Never alter, puncture, modify, or engrave faceshield or change this product or its intended use.
- Always replace the faceshield, faceshield holder and hard hat/safety helmet after it has withstood an arc flash incident.

• Always replace the faceshield after it has withstood an impact and re-inspect the faceshield holder and hard hat/safety helmet according to user instructions.

Instructions for Use

READ ALL INSTRUCTIONS BEFORE USE. When properly installed with faceshield holder and hard har or safety helmet, the 3MTM Electric Arc Protective Faceshields help provide LIMITED head and face protection against the hazards of an electrical arc flash, such as radiant heat, flying debris and UV radiation. For whole body arc flash protection, additional personal protective equipment (PPE) will be required. Misuse may result in serious injury or death.

- A balaclava must be worn with an NFPA 70E Category 2 rated arc flash faceshield.
- This product should not be used as a substitute for machine guards or other engineering controls.
- This product meets specific standards and ratings, which can be found on the product markings.
- Impact-rated eye and face protection worn over standard ophthalmic spectacles may transmit impact energy, creating a hazard to the wearer.
- Earmuff hearing protectors have not been tested to ASTM F2178 and do not provide protection against an electrical arc flash.
- Faceshields are impact resistant but not unbreakable.
- It is the responsibility of the employer to determine if the faceshield and ATPV is suitable for the application based on the worksite hazard assessment and applicable standards.
- Ensure faceshield and faceshield holder is assembled correctly to the hard hat/safety helmet, fits securely, and is not easily dislodged.
- Always wear suitable protective eyewear under faceshields.
- For whole body arc flash protection, additional personal protective equipment (PPE) will be required.
- Always replace the faceshield, faceshield holder and hard hat/safety helmet after it has withstood an arc flash incident.
- Always replace the faceshield after it has withstood an impact and re-inspect the faceshield holder and hard hat/safety helmet according to user instructions.
- Products are tested as sold. Never alter, puncture, modify, or engrave faceshield or change this product or its intended use
- Materials which may come into contact with the wearer's skin are not known to cause allergic reactions to the majority of individuals.
- Do not use paints, solvents, chemicals, adhesives, gasoline, or like substances on this faceshield doing so can lessen the protection from impact.
- Faceshield may fog in certain environments; if fogging occurs, stop task or operation. When safe to do so, exit area and contact supervisor.
- Do not use for protection from larger objects or severe impacts, such as explosions or fragmenting grinding/abrasive wheels.
- Do not use for welding applications.
- Do not use for athletic sports, paintball, or recreational simulated combat games.

Only 3M hard hat adapters used in conjunction with 3MTM SecureFitTM Hard Hat H-700 Series, 3MTM SecureFitTM Elevated Temperature Hard Hat H-700T Series or 3MTM Safety Helmet X5000 Series have been tested to applicable safety standards as part of a complete ASTM F2178 electrical arc flash kit with the 3MTM Electric Arc Protective Faceshields.

For correct use, consult supervisor and all relevant User Instructions, or contact 3M Technical Service in the USA at 1-800-243-4630 or in Canada at 1-800-267-4414.



Personal Safety Division 3M Center, Building 235-2W-70 St. Paul, MN 55144-1000

3M PSD products are occupational use only.

3M Canada P.O. Box 5757 London, Ontario N6A 4T1 In United States of America Technical Service 1-800-243-4630 Customer Service 1-800-328-1667 3M.com/workersafety

In Canada Technical Service 1-800-267-4414 Customer Service 1-800-364-3577 3M.ca/Safety © 3M 2025. All rights reserved. 3M and Secure Click are trademarks of 3M Company and its affiliates.

Used under license in Canada. All other trademarks are property of their respective owners. Please recycle.