

3M Personal Safety Division
Personal Protective Equipment Solutions
for the Mining & Metallurgy Industry



Seeing Beyond the Surface

Tough working conditions in the Mining & Metallurgy industry call for rugged, reliable personal protective equipment. Look to 3M for leading safety solutions backed with training and support to help you keep your site in compliance.

3M

Proven solutions.

3M provides a wide array of solutions and technologies to the mining and metallurgy industry that help you keep your workers safe, keep operational costs down and improve productivity. We understand the pressures you face: enhancing site safety, reducing costs, improving profits and increasing efficiency. And as we focus on the future, we continue to explore new possibilities and solutions.



Reliable, comfortable protection

Unmatched hearing protection

3M Technical Services

3M strives to help our customers to provide a safe working environment for their employees by providing them with current and accurate 3M health and safety solutions to address their specific needs. To help our customers achieve success, our technical services team are comprised of trained health and safety professionals, subject matter experts, and application and industry specialists.

Helping to make your job easier

Whether you are new to health and safety or a seasoned professional, 3M can help you build your expertise. We provide relevant information

and learning opportunities through a number of avenues including seminars, webinars, presentations, written documents, videos, and more. See "3M Support & Services" section for additional information.

We provide assistance in selecting, integrating and maintaining 3M personal safety solutions from phone consultations to on-site visits. We offer to customers at no charge a Technical Helpline to help address immediate technical questions.

Technical Helpline: Monday – Friday, 8 am - 4:30pm (CST)
(Closed on US holidays) Phone: (800) 243-4630



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Visible, dependable

Connecting You to 3M PPE innovation

3M recognizes customer intimacy drives product innovation. To help achieve a deeper level of customer intimacy, our technical service teams link our development teams to the "Voice of Customers," helping to ensure new products meet your needs.

Giving you confidence in 3M PPE products

We actively engaged in laboratory and field research to help drive science based standards, understand real world product performance, and support meaningful product claims.



Productivity, safety

Furthering Science Based Standards and Regulations

Our teams actively participate on standards and industry committees including ANSI and NFPA. What does this level of involvement mean to our customers? It helps build confidence that 3M PPE comply with applicable standards and allows us to gain insight into standard and regulation interpretations.



3M™ Hearing Conservation Products

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3M™ Disposable Filtering Facepiece Respirators



Comfort, quality, reliability, confidence

Workers want respirators that are comfortable, lightweight and convenient. You want quality products from a supplier you can depend on. 3M developed its first filtering facepiece respirator to receive NIOSH approval in 1972. We have created numerous proprietary technologies that have been incorporated throughout our products. Today, our extensive family of respirators offers a full range of comfort, convenience and value. Respiratory protection from a company you can rely on for support and services.

Features of 3M Filtering Facepiece Respirators

3M's wide selection of filtering facepiece respirators helps you match the respirator to your environment.

3M uses a variety of innovative technologies and features to help you meet your respiratory protection and comfort needs. They are all NIOSH 42 CFR 84 approved and include the following features:

- Lightweight and comfortable
- Adjustable noseclips
- Variety of strap types
- Variety of strap attachments
- Some available with carbon filter material for nuisance level organic vapor or acid gas relief¹
- Soft inner materials
- Compatible with a variety of eye and hearing protection

Important

All 3M Filtering Facepieces are NIOSH approved respirators. Before using, employers **must** determine the following:

1. The types of contaminants for which the respirator is being selected and exposure time.
2. The concentration level of the contaminant(s). Do not use for particle concentrations that exceed 10 times the OSHA PEL or applicable occupational exposure limit, whichever is lower.
3. Whether the respirator can be properly fitted to the wearer's face. Do not use with facial hair, or other conditions that prevent a good seal between the face and the sealing surface of the respirator.
4. Before required use of filtering facepiece respirators, a written respiratory protection program must be implemented, meeting all the requirements of OSHA 29 CFR 1910.134 including, but not limited to, medical evaluation, training, and fit testing.

¹3M recommended for relief against nuisance level acid gas or organic vapors. Nuisance levels are less than OSHA PEL or applicable government occupational exposure limits, whichever is lower.

Featured Technologies

3M™ Cool Flow™ Exhalation Valve. Proprietary one-way valve for easy exhalation and cool comfort.



M-Noseclip. Proprietary noseclip adjusts easily for fewer pressure points and greater comfort.



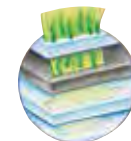
Faceseal. Soft and secure, conforms closely to face for additional comfort.



Advanced Electrostatic Media. Proprietary filter media with electrostatically charged microfibers designed for ease of breathing.



Carbon Filter Material. Carbon filter media helps provide relief against odors, vapors and other gaseous contaminants for greater wearer comfort. For nuisance level organic vapor or acid gas relief only.¹



Cake-Resistant Filter Media. Proprietary filter media with specifically designed filter layers for welding applications helps provide longer respirator life and easier breathing.



Welding Web. Unique filter media incorporating protective layers designed to be flame resistant as demonstrated per modified ASTM D2859-06. (**Not** a substitute for a modified ASTM faceshield.)



Adjustable Buckle Straps. A single tug helps provide a comfortable seal.



Respiratory Protection Information

Particulate filter types

NIOSH approved filters are rated as N95, R95, P95, N99, N100, or P100. The number 95, 99, or 100 indicates the NIOSH percentage filtration efficiency.

N Series – Used in environments free of oil aerosols.

R Series – Resistant to oil mist. Use is restricted to one 8-hour work shift when oil aerosol is present.

P Series – Oil resistant with use restrictions specified by manufacturer.

See 3M.com/PPESafety for more product selection.

Comfort – N95 Respirators



8210 (N95)
UPC: 50051138464573

Features and Benefits

Features Advanced Electrostatic Media (AEM), welded strap attachment, soft nose foam and adjustable noseclip to help provide a custom and secure seal.



8210Plus (N95)
UPC: 50051131529248

Features and Benefits

This model builds on all of the features that have made the 8210 one of the most widely used N95s in industry. The PLUS offers comfortable braided headbands and staple free attachment.



Comfort Plus – N95 Respirators

Comfort Plus respirators all feature the proprietary 3M™ Cool Flow™ Exhalation Valve.



8210V (N95)
UPC: 50051131497110

Features and Benefits

Features Advanced Electrostatic Media (AEM), soft nose foam and adjustable noseclip to help provide a custom and secure seal.



8214 (N95)
UPC:
50051138661927

Features and Benefits

The 8214 is designed for applications such as welding, soldering and other operations where metal fumes may be present, including those with ozone** and nuisance level organic vapors.***



8511 (N95)
UPC: 50051138543438

Features and Benefits

Designed to help provide protection against certain non-oil based particles, the 8511 is well suited for work settings that involve heat, humidity, or long periods of wear.



Comfort Plus – 100 Class Respirators

Comfort Plus respirators all feature the proprietary 3M™ Cool Flow™ Exhalation Valve.



8233 (N100)
UPC: 50011385415434

Features and Benefits

Is well suited for those who want NIOSH's highest rated filtration efficiency in a disposable respirator. It provides a minimum NIOSH filter efficiency of 99.97% against non-oil based particles. Individually packaged.



**3M recommended for ozone protection up to 10 times the OSHA PEL. Not NIOSH approved for ozone.

***3M recommended for relief against nuisance level organic vapors. Nuisance levels are less than OSHA PEL or applicable government occupational exposure limits, whichever is lower.

3M™ Reusable Respirators



Comfort, Trust, Versatility

Hazardous substances are generated in many industries and applications. 3M offers resources to help you select the best respiratory protection solution for your workplace. 3M's reusable respirators can be used with a broad range of cartridges and filters that help reduce exposure to gases, vapors and particles.

To select respiratory protection equipment, employers commonly follow* the following basic procedure:

- **Identify the Hazards**
- **Assess the Risk** – Assess the hazard levels against applicable occupational exposure limits.
- **Select the Right Respirator and Cartridge/Filter** – Visit 3M.com/RespGuide to utilize this software or to view a PDF of the Respirator Selection Guide.
- **Train in Fitting and Use**
- **Develop Cartridge/Filter Replacement Plan** – To help establish how frequently cartridges should be replaced, visit 3M™ Service Life Software at www3.3M.com/SLSWeb/home.html. To establish filter replacement frequency, visit Understanding P-Series Particulate Filters at 3M.com/filterchange. Contact your 3M Sales Representative if you have questions on the timing of cartridge or filter replacements.

Respirator and Filter/Cartridge Matrix

Possible combinations for 3M facepieces, cartridges, filters, retainers and adapters.

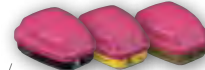
3M™ Half Facepiece Reusable Respirator 6000 Series

3M™ Full Facepiece Reusable Respirator 6000 Series

3M™ Rugged Comfort Half Facepiece Respirator 6500

3M™ Ultimate FX Full Facepiece Reusable Respirator FF-400 Series

3M™ Half Facepiece Reusable Respirator 7500 Series



60921 - P100 OV
60923 - P100 OV/AG
60926 - P100 Multi Gas/Vapor



2000 Series
2071 - P95
2091 - P100
2097 - P100 OV



7093 - P100 OV/AG

For more cartridge and filter selection options please call 800-243-4630 or visit www.3M.com/respiratory

Half Facepiece Respirators

3M™ Rugged Comfort Half Facepiece Respirator 6500

6500 (M) UPC: 50051131370819

6500 QL (M) UPC: 50051131494904

Features and Benefits

- Silicone faceseal
- 3M™ Cool Flow™ Exhalation Valve
- Adjustable head harness
- Quick Latch drop-down mechanism (6500 QL model)



*These recommendations are not a substitute for OSHA prescribed procedures.

See 3M.com/PPESafety for more product selection.

Half Facepiece Respirators

3M™ Half Facepiece Reusable Respirator 7500 Series

7501 (S) UPC: 50051131370819
7502 (M) UPC: 50051131370826
7503 (L) UPC: 50051131370833

Features and Benefits

- Soft feel silicone
- Adjustable head cradle
- Dual-mode head harness
- Unique exhalation valve cover
- 3M™ Cool Flow™ Exhalation Valve
- Available in three sizes



For information on the full range of cartridges and filters, visit 3M.com/PPESafety.

Other Half Facepiece Reusable Respirators

3M™ Half Facepiece Reusable Respirator 6000 Series



6100 (S) UPC:
50051131070245 (07024)
6200 (M) UPC:
50051131070252 (07025)
6300 (L) UPC: 50051131070269
(07026)

Features and Benefits

- Facepiece made from soft, lightweight material
- Available with a standard or drop-down head harness option (6000DD Series)
- Drop-down model allows wearer to lower the respirator without removing hard hat or faceshield
- Head harness assembly and spare parts are available
- Available in three sizes

Full Facepiece Respirators

3M™ Ultimate FX Full Facepiece Reusable Respirator FF-400 Series

FF-401 (S) UPC: 50051135894182
FF-402 (M) UPC: 50051135894212
FF-403 (L) UPC: 5005113589424

Features and Benefits

- Large lens featuring 3M™ Scotchgard™ Protector to help keep lens clean
- Passive speaking diaphragm
- Bonded silicone gaskets
- Easy to use
- Durable, long-lasting head harness
- Comfort cradle
- Soft, silicone nose cup and face seal
- 3M™ Cool Flow™ Exhalation Valve
- Available in three sizes
- Six adjustable straps help provide a secure fit
- May be used in air purifying respirator (APR) and supplied air modes



Other Full Facepiece Reusable Respirators



3M™ Full Facepiece Reusable Respirator 6000 Series

6700 (S) UPC: 50051138541458
6800 (M) UPC: 50051138541465
6900 (L) UPC: 50051138541595

Features and Benefits

- Large lens provides wide field of vision and excellent visibility
- Lightweight, well-balanced design with silicone face seal for enhanced comfort and durability
- 3M™ Cool Flow™ Exhalation Valve
- May be used in air purifying respirator (APR), supplied air and powered air purifying respirator (PAPR) modes
- Available in three sizes

3M™ Powered and Supplied Air Respirators



3M™ Versaflo™ Powered Air Purifying Respirator TR-600*

3M™ Versaflo™ PAPER TR-600

UPC: 00051131 37374 7

Product #:TR-600-HIK

Heavy Industrial Kit Shown Includes:

- M-307 Respiratory Hard Hat
- TR-602N Motor/Blower
- TR-632 High Capacity Battery
- BT-30 Length Adjusting Breathing Tube
- TR-626 High Durability Belt
- TR-6530N (HE/OV/AG/HF) Filter/Cartridge
- TR-6500FC Filter Cover
- TR-641N Single Station Battery Charger
- BT-926 High Temperature Breathing Tube Cover



Features and Benefits

Protection

The evolved 3M™ Versaflo™ Powered Air Purifying Respirator reaches new heights of performance with a lithium-ion battery, adjustable airflow options, and an expanded range of NIOSH approved filters and cartridges to help protect against hazards like particulates, nuisance odors, organic vapors and acid gases.

Compatible with the 3M™ Versaflo™ Respirator Systems family of headgear and breathing tubes, the system provides integrated solutions for eye, hearing, head, face, skin and respiratory protection.

Versatility

The TR-600 is designed to be compatible with multiple configurations of headtops, breathing tubes, batteries, filters, cartridges and more.

Endurance

With battery options that can provide the power and endurance to last up to 19 hours depending on the system configuration, TR-600 users can enjoy longer run time, less charging time and, ultimately, reduced down time.

- LED status lights for battery charge on both the battery and the turbo
- Low-charge warnings, including vibratory, audible and visual alarms
- PAPR alarm provides approximately 15 minutes of warning prior to automatic low-power shutdown



Comfort

- Multiple airflow rate options for user comfort
- Designed for greater movement in tight work spaces
- Heavy-duty belt designed with airflow channels features multiple size adjustments and has belt extender options

Ease of Use

- Easy tool-free maintenance
- Color-indicated touch points
- Low-flow and low-battery alarms
- Battery charge and particulate filter loading status indicators
- Meets IP53 rating while in use in decontamination shower
- Meets IP67 rating when used with cleaning and storage plugs to enable full submersion for easy clean-up and decontamination
- Pre-calibration makes product ready to use, directly out of the box



Other 3M™ Versaflo™ PAPER TR-600 Accessories

BPK-01 Backpack

TR-655 Backpack Adaptor

TR-644N 4-Station Battery Charger Kit

TR-662 Spark Arrestor

* Model is not intrinsically safe



3M™ Versaflo™ TR-300 PAPR

Complete Kit

Product #: TR-300-HIK

Features and Benefits

- M-307 Respiratory Hard Hat†
- TR-306N PAPR with High Durability Leather Belt
- BT-40 Heavy Duty Breathing Tube
- A battery charger, TR-3710N filter, and TR-362 spark arrestor/prefilter are included as part of the TR-306N



†ANSI Z89.1-2009 Type I Class G

See 3M.com/PPESafety for more product selection.

3M™ Airstream™ Headgear-Mounted Powered Air Purifying Respirator

Helmet-mounted PAPRs provide all the features of belt-mounted powered air purifying respirators: increased wearer comfort, no fit test requirements, compatibility with glasses and may help increase wearer productivity without the need to wear a motorized blower unit at the waist. The following systems are popular for mining, smelting, foundry and metal working.

3M™ Airstream™ Mining Headgear-Mounted PAPR System AS-600LBC

Assembly shown:

UPC: 00051138765606

Product #: AS-600LBC

3M ID: 70-0708-4592-3



Features and Benefits

- Up to eight hours of battery life
- Intrinsically safe
- Lightweight and well-balanced
- High efficiency filter
- Hard hat approved
- Anti-fog/anti-scratch lens (miners model)
- Lamp attachment (miners model)

Other 3M™ Airstream™ Headgear-Mounted PAPR Compatible Products

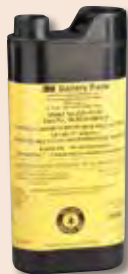
AS-400LBC

Product #: AS-400LBC (shown)



Battery Pack (intrinsically safe)

Product #: 520-01-02R01 (shown)



Filters and Cartridges

High Efficiency Filter (25/pack):

Product #: AS-140-25

Hydrogen Fluoride Cartridge2 (25/pack):

Product #: AS-176-25

Prefilter (10/pack): Product #: AS-120-10

Motor Housing Assembly

Product #: AS-115 (for AS-400LBC and AS-600LBC models)

Visor: Antifog, Scratch Resistant

Product#: AS-131-10 (10/pack)

Comfort Band

Product#: 060-39-01R10(10/pack)

3M™ Powered and Supplied Air Respirators



3M™ Adflo™ Powered Air Purifying Respirator*

- A Filter cover:** holds the user-replaceable spark arrestor (not shown below).
- B Prefilter:** designed to help increase the service life of the particle filter.
- C HE particle filter:** high efficiency particulate filtration.
- D OV/AG cartridge:** OV/AG cartridge captures certain organic vapors and acid gases. OV/AG cartridges are sold separately.
- E Li-ion battery:** charges to 80% capacity in approx. 3 hours and to 100% capacity in approx. 6.5 hours, depending on its residual charge. Approximate operating time up to 12 hours with a new particle filter and new, fully charged battery.
- F Filter/Battery Indicator:** indicates the loading status of the particle filter and remaining battery life.
- G Breathing tube:** breathing tubes available to fit all Speedglas welding helmet models.
- H Airflow pattern:** evenly distributes filtered air throughout the entire breathing zone of the helmet. The intelligent PAPR unit is designed to help keep the airflow at a constant preset level.
- I Soft, flexible face seal (removed here for clarity):** comfortable face seal can be worn with limited facial hair and helps provide respiratory protection.
- J Nuisance odor pad assembly:** optional accessory which helps reduce nuisance odors**. Must be used with HE particle filter and must not be used alone or in combination with the OV/AG cartridge. Nuisance odor pad assemblies are sold separately.



Shown here: 3M™ Adflo™ Powered Air Purifying Respirator with 3M™ Speedglas™ Welding Helmet 9100 FX-Air.

* Model is not intrinsically safe

** Nuisance odor refers to concentrations of organic vapors not exceeding the OSHA permissible exposure limit (PEL) or applicable occupational exposure limits, whichever is lower.

3M™ Speedglas™ Welding Helmet 9100 MP with 3M™ Adflo™ Powered Air Purifying Respirator

UPC: 00051141558004

Product# 27-1101-10SW



3M™ Speedglas™ Welding Helmet 9100 MP with 3M™ Supplied Air Respirator

UPC: 00051141558059

Product#: 27-5702-20SW



3M™ Speedglas™ Welding Products



3M™ Speedglas™ 9100 Series Welding Helmets

The 3M™ Speedglas™ 9100 Helmet is designed for optimal comfort and protection. The technology behind the highly adjustable head suspension changes how you experience fit, stability and balance. The 9100 helmets have a smooth up-and-down pivot action that gently locks in the 'up' position, and their suspension keeps the helmet closer to user's head – helping make the helmet feel lighter, more stable and balanced. The 9100 helmet is also available with removable "blinders" on Side Window models, to allow you to see others working around you.

The 3M™ Speedglas™ 9100 FX Helmet includes an innovative wide-view grinding visor to give welders an all-in-one solution for more flexibility and precision. The exceptionally clear and large (approx. 8" x 4.25") visor offers a wide field of view in all directions, while a smooth flip-up pivot mechanism allows easy transition from welding to grinding modes. The 9100 FX comes standard with Shade 5 Side Windows and a top-of-head head spark and spatter cover.

3M™ Speedglas™ 9100 and 3M™ Speedglas™ 9100 FX Welding Helmets

Speedglas 9100 Helmet
UPC: 00051135893876
Product #: 06-0100-30SW
3M ID: 70-0715-1046-8

Speedglas 9100 FX Helmet
UPC: 00051131496750
Product #: 06-0600-30SW
3M ID: 70-0716-0631-6

Features and Benefits

- Optical quality
- Viewing area
- Durability
- Extended coverage

Typical Applications

- Welding
- Grinding
- Torch cutting/brazing
- Plasma cutting

For 3M™ Speedglas™ 9100 FX Helmet only

- Flip-up mechanism
- Wide-view grinding visor



3M™ Speedglas™ 9100 Helmet



3M™ Speedglas™ 9100 FX Helmet

Other 3M™ Speedglas™ 9100 Series Welding Helmet Products

ADFs



9100V UPC:
00051135893494
Product #: 06-0000-10
3M ID: 70-0715-1008-8



9100X UPC:
00051135893517
Product #: 06-0000-20
3M ID: 70-0715-1010-4



9100XX UPC:
00051135893524
Product #: 06-0000-30
3M ID: 70-0715-1011-2



Suspension

UPC: 00051131371798
Product #: 06-0400-51
3M ID: 70-0715-1029-4



Extended Protection

UPC: 00051135893760
Product #: 06-0500-52
3M ID: 70-0715-1035-1

3M™ Speedglas™ Welding Products



3M™ Speedglas™ 9100 MP Welding Helmet

UPC: 00051141558103

Product# 27-0099-35SW

3M ID: 70-0716-2156-2

Features and Benefits

- 100% compatible with all of the latest 3M™ Speedglas™ Auto-Darkening Welding Filter Series 9100 including the top-of-the-line 9100XX filter
- A big (approx. 8in x 4.25in), curved, protective visor with excellent views up, down and peripherally
- Meets the requirements of CSA Z94.3 and the high impact requirements of ANSI Z87.1-2010
- Two shade 5 passive Side Windows add peripheral welding vision
- The hard hat shell is made from heat resistant polycarbonate and meets the ANSI Z89.1-2009 requirements for Type 1 Class G hard hats. An optional, aluminum fabric reflects welding heat.
- Designed from inception to work with one of our optional 3M™ Peltor™ Earmuffs: low-profile hearing protection with liquid/foam ear cushions and orange housings.



Performance Data

Type of Protection	According to:
Eye & Face Protection Welding helmet, filter and protection plates	ANSI Z87.1-2010 "+" ; CSA Z94.3
Head Protection Hard hat	ANSI Z89.1-2009 - Type 1 Class G
Hearing Protection 3M™ Peltor™ Earmuffs (optional)	NRR 24 dB/CSA Class A per ANSI S3.19-1974
Assigned Protection Factors 3M™ Adflo™ Powered Air Purifying Respirator 3M™ Speedglas™ Fresh-air III Supplied Air Regulator (V-Series)	APF 25 per OSHA 29CFR1910.134 APF 25 per OSHA 29CFR1910.134

See 3M.com/PPESafety for more product selection.

3M™ Speedglas™ Welding Helmets 100-Series

Safety meets style with 3M™ Speedglas™ 100-Series Welding Helmets.

These helmets provide state-of-the-art eye and face protection while allowing wearers to express their personality with several unique graphic designs. With five new designs recently added to the line, there are more choices than ever to match users' individual tastes.

3M™ Speedglas™ 100V with Variable Shade ADF

UPC: 00051131372320

Product# 07-0012-31BL

3M ID: 70-0715-3372-6



Features and Benefits

- Meets requirements of ANSI Z87.1-2010+
- Light state is shade 3
- Dark state is shade 8-12 (variable)
- Switching time from light to dark is <math><0.1\text{ ms}</math> at 73°F (23°C)
- Battery life of (approx.) 1500 hours
- Switching time from dark to light is 100-250 ms
- Rated for MIG, Stick, TIG>10 amps
- UV/IR Protection shade 12 (permanent)
- 2-year warranty
- Has a viewing area of (approx.) 1.73 x 3.66 in (44 x 93 mm)

Compatible 3M™ Speedglas Welding Helmets 100-Series

Tribute

UPC: 00051141560762
Product #: 01-0012-31TB
3M ID: 70-0716-2293-3



Aces High

UPC: 00051131 37237 5
Product #: 07-0012-31AH
3M ID: 70-0715-3377-5



Razor Dragon

UPC: 00051131 49954 6
Product #: 07-0012-31RD
3M ID: 70-0716-1779-2



Boneyard

UPC: 00051131499508
Product #: 07-0012-31BY
3M ID: 70-0716-1775-0



Xterminator

UPC: 00051131499584
Product #: 07-0012-31XT
3M ID: 70-0716-1783-4



3M™ Speedglas™ Quick Release Welding Helmets



Quickly Connect/Disconnect

Even with a gloved hand, you can easily attach the 3M™ Speedglas™ Welding Helmet 9100 QR or 100 QR. When your welding work is finished, you can detach the welding helmet as quickly as you take off a baseball cap.

You do not need to remove the hard hat from your head as you attach and detach the welding helmet from the rail – Head protection is truly continuous.

If you prefer to keep the welding helmet attached, it is quickly parked in the raised position. This “parked” position creates a low center of gravity, reducing the forces on your neck while letting you move around more easily thanks to the low profile.



Attaches to Many Hard Hats

3M offers a complete welding helmet system that includes the 3M™ Hard Hat H-701R. The H-701R model is a fully-featured hard hat capable of accepting 3M integrated eyewear and earmuffs in addition to the 3M™ Speedglas™ Welding Helmet Series QR.

The 3M™ Speedglas™ Quick Release (QR) Rail allows you to attach a Speedglas auto-darkening welding helmet to many hard hats. See the Hard Hat Compatibility list (below).



Hard Hat Compatibility*		
Manufacturer	Hard Hat Model	Hard Hat Part No.
3M	H-701R	70-0716-2145-5
MSA	V-gard® w/Fas-trac Suspension	475358 thru 475365 & 488146
Bullard®	Classic Series w/6pt. Ratchet Suspension	C30R
Jackson Safety®	SC6 w/ Ratchet Suspension 391	3001987 thru 3001996

* Refer to User Instructions for additional details

All trademarks, service marks, product names and company names cited here are the property of their respective owners.

3M™ Hard Hats



H-800 Series Hard Hats: Lightweight Comfort, Tough Performance

3M™ H-800 Series Hard Hat with Uvicator™ Sensor is the newest addition to the H-800 series hard hat family. This award-winning, lightweight hard hat offers extended comfort and protection, and also features a sensor that changes color as the hard hat is exposed to UV light.

The sun's UV rays can cause a hard hat shell to become brittle and compromise its ability to help protect the wearer. With the Uvicator sensor, wearers know it's time for a replacement when the sensor changes from red to white. The H-800 hard hat with Uvicator sensor is available with a 4-point ratchet suspension and an optional 6 point strap.

3M™ H-800 Series Hard Hat with Uvicator™ Sensor

UPC: 10078371657984 (yellow)

10078371657977 (white)

Product #: H-807R-UV (yellow)

H-801R-UV (white)

With the Uvicator™ Sensor, you'll know when your hard hat has been in the sun too long.

Features and Benefits

All H-800 series hard hats include:

- Low-profile design for stability and balance
- Replaceable brow pad
- 4-point Ratchet suspension system with height adjustment
- Vented and non-vented models



NEW



Red

WORN



Fading to
White

REPLACE



White

3M™ Hard Hats



3M™ H-700 Series Hard Hat

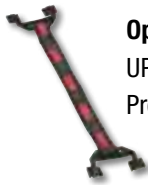
UPC: 10078371 65551 5

Product #: H-703R



Features and Benefits

- Comfortable when worn for extended periods of time
- The 3M™ H-700 Series Hard Hat is available with a 4-point ratchet or pinlock suspension or an optional 6-point strap
- Short brim for better upward visibility
- Slots to accommodate 3M's accessories, such as earmuffs, headgear, faceshields and welding helmets



Optional 6-point Strap

UPC: 10078371654921

Product #: H-700-S6



Colors Available for H-800 and H-700:

Red		Orange	
Yellow		Gray	
Blue		Bright Yellow	
Green		Navy Blue	
White		Bright Orange	

Contact Customer Service for latest color/options.

Suspension Replacement

UPC: 10078371642119

Product #: H-700-RS4

Replacement Brow Pad

UPC: 10078371654914

Product #: H-700-BP

Suspension 6-point Strap

UPC: 10078371654921

Product #: H-700-S6

Custom Logo and Reflective Program

The Custom Logo Program for 3M™ H-700 and H-800 Series Hard Hats makes it easy to imprint a logo or add 3M™ Scotchlite™ Reflective Material for enhanced visibility to on your next hard hat. Visit 3M.com/customlogo to learn more.



Additional Head & Face Products

3M also offers a range of faceshields and headgear. Visit 3M.com/PPESafety to view products.



3M™ Detection Products



Environmental and Occupational Assessment

3M™ The Edge™ Cable Free Noise Dosimeters

UPC: 00051131485297

Product #: eg5

The Edge eg5 personal noise dosimeter offers advanced technology packaged in an intrinsically safe, cable-free, compact frame for a lighter, more ergonomic way to monitor noise levels.

Features and Benefits

- Thin, contoured mount hugs the shoulder; compact frame helps to make The Edge comfortable to wear
- Intrinsic safety certifications
- Rechargeable lithium polymer battery
- Kit includes eg5 model and standard accessories
- With 3M™ Detection Management Software (DMS) software, users can activate a third independent dosimeter



3M™ Sound Examiner SE-400 Sound Level Meter

UPC: 00051131498594

Product #: SE-402

The Sound Examiner SE-400 series of sound meters are engineered to accurately measure noise levels in highly variable environments. These advanced instruments compute the average sound pressure level (LEQ/LAVG) over the run time and feature user-selectable data logging intervals, helping you to more accurately assess occupational and environmental noise levels.

Features and Benefits

- Complies with IEC and ANSI standards
- All models ship ready-to-use, no setup necessary
- Use 3M™ Detection Management Software (DMS) for the analysis, management and measurement of data



Other 3M™ Detection Products

3M™ Noise Indicator NI-100

UPC: 00051131174535

Product #: NI-100

Features and Benefits

- Alerts users to potentially dangerous noise levels
- LED light provides real-time noise detection, signaling when noise levels are above 85db
- Small size and lightweight, durable design



3M™ Sound Detector SD-200

UPC: 00051131496323

Product #: SD-200

Features and Benefits

- LED indicators that flash green, yellow and/or red when preset thresholds have been reached
- User friendly interface, easy to operate
- Includes Sound Detector Kit, USB Cable and Windscreen
- Rechargeable, lithium battery



3M™ Sound Pro™ Sound Level Meter

UPC: 00051131485747

Product #: SP-DL-2-1/1

Features and Benefits

- Easily document and analyze noise exposures
- Two virtual sound level meters to take full or third octave band real-time measurements while simultaneously measuring broadband sound
- Kit includes Class/Type 2 unit with 1/1 Octave RTA, QC-10 calibrator and standard accessories



3M™ Hearing Conservation Products



3M™ E-A-Rfit™ Validation System

Fit Testing for hearing protectors that is fast, quantitative and objective.

- The system is comprised of hardware and software that enables the Safety Professional to test and record the individual's Personal Attenuation Rating (PAR) for many earplugs produced by 3M
- Based on the proven technique know as Field Microphone in Real Ear or F-MIRE
- Quantitive fit testing independent of employee's hearing sensitivity
- Does not require a quiet test space
- FAST - Takes only seconds to measure the noise reduction at 7 different frequencies
- Provides measures of variability



For more information and to see a video please contact your 3M sales Representative or visit www.E-A-Rfit.com

Push-to-Fit Earplugs

3M™ E-A-R™ Express™ Pod Plugs™ † Earplugs

Corded, Pillow Pack, Assorted Grips

UPC: 10080529110111

Product #: 311-1115

Features and Benefits

- Comfort and protection in hygienic, push-to-fit design
- Paddle-style grips provide quick, clean, and consistent earplug fitting
- Noise Reduction Rating (NRR) 25 dB*
- Metal detectable version available



NRR footnote:

*Research suggests that many users will receive less noise reduction than indicated by the NRR due to variation in earplug fit and wearing time. It is recommended the the NRR be reduced by 50% for estimating the average amount of noise reduction provided

Other 3M™ Push-to-Fit Earplugs



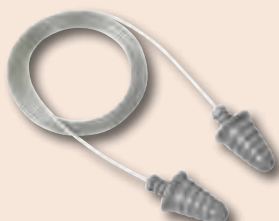
Pistonz™

UPC: 10093045934024

Product #: P1401

Features and Benefits

- Corded
- NRR 29 dB*



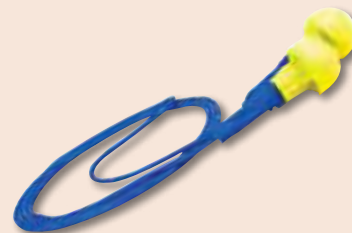
Skull Screws™

UPC: 10093045929525

Product #: P1301

Features and Benefits

- Corded
- NRR 32 dB*



E-A-R™ Push-Ins™ †

UPC: 10080529180039

Product #: 318-1003

Features and Benefits

- Corded
- NRR 28 dB*
- Metal detectable version available

See 3M.com/PPESafety for more product selection.

Foam Earplugs

3M™ E-A-R™ Classic™ Foam Earplugs†

Uncorded, Pillow Pack

UPC: 10080529100006

Product #: 310-1001

3M™ E-A-R™ Classic™ Earplugs set the standard in hearing protection as the world's first foam earplugs. Constructed from slow-recovery foam, the disposable earplug is an economical, reliable choice in hearing protection.

Features and Benefits

- Conforms to the shape of the ear canal to help create a comfortable, snug noise barrier
- Slow-recovery earplug foam is flame-resistant and moisture-resistant
- Multiple sizes available
- NRR 29 dB*



Other 3M™ Foam Earplugs



E-A-R™ Classic™ SuperFit™ 33†

UPC: 10080529100617

Product #: 310-1008

Features and Benefits

- Orange ring provides a quick visual compliance check
- Uncorded, Pillow Pack
- NRR 33 dB*



E-A-Rsoft™ Yellow Neons™ †

UPC: 10080529120639

Product #: 312-1250

Features and Benefits

- Excellent noise reduction and comfort
- Easy to roll down and fit
- Uncorded, Poly Bag
- NRR 33 dB*



E-A-Rsoft™ SuperFit™ †

UPC: 10080529120837

Product #: 312-1256

Features and Benefits

- Slow recovery foam provides a comfortable, secure fit
- Uncorded, Poly Bag
- NRR 33 dB*



E-A-Rsoft™ FX™ †

UPC: 10080529120868

Product #: 312-1261

Features and Benefits

- Bell shape allows easy fitting and removal
- Uncorded, Poly Bag
- NRR 33 dB*



1100†

UPC: 50051138290080

Product #: 1100

Features and Benefits

- Soft hypo allergenic foam, tapered design
- Uncorded, Poly Bag
- NRR 29 dB*



E-A-R™ One Touch™ Dispenser and Refill Bottles

UPC: 10080529910001

Product #: 391-1000

Features and Benefits

- Dispenser Unit with Stand
- Holds a range of earplug refill bottles: E-A-R™ Classic™, SuperFit™, SuperFit 30™, E-A-Rsoft™ Regular, E-A-Rsoft™ Large and E-A-Rsoft™ Blast™ earplugs. (Order earplugs separately.)

†Test compatible with 3M™ E-A-Rfit™ Validation System

NRR footnote:

*Research suggests that many users will receive less noise reduction than indicated by the NRR due to variation in earplug fit and wearing time. It is recommended the the NRR be reduced by 50% for estimating the average amount of noise reduction provided

3M™ Hearing Conservation Products

Reusable Earplugs

3M™ E-A-R™ UltraFit™†

Corded, Poly Bag

UPC: 10080529400038

Product #: 340-4004



Features and Benefits

These durable, reusable corded earplugs are easy to use again and again, helping to reduce waste

- Proprietary, premolded, triple-flange earplug design fits easily and comfortably in most ears
- No rolling needed to get a comfortable, protective fit
- Available with pocket-size plastic storage case
- NRR 25dB*

†Test compatible with 3M™ E-A-Rfit™ Validation System

NRR footnote:

*Research suggests that many users will receive less noise reduction than indicated by the NRR due to variation in earplug fit and wearing time. It is recommended the the NRR be reduced by 50% for estimating the average amount of noise reduction provided

Earmuffs

3M™ Peltor™ X Series Earmuff

UPC: 10093045937247

Product #: X2A



Features and Benefits

The X Series features a newly-designed spacer to improve attenuation without excess bulk or weight.

What makes the X Series so special?

- Earmuffs easily mount into slots on wide variety of hard hats.
- Lightweight and compact compared with other high attenuation earmuffs.
- Ear cushion foam technology for an effective acoustic seal and reliable protection.
- NRR rating for the X Series range from 21dB to 31dB

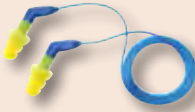


Other 3M™ Reusable Earplugs

E-A-R™ UltraFit™ 27

UPC: 10080529400557

Product #: 340-8002



Features and Benefits

- Corded
- NRR 27 dB*

Tri-Flange™†

UPC: 10093045980175

Product #: P3001



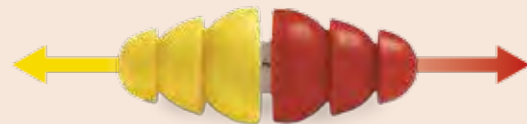
Features and Benefits

- Cloth Cord
- NRR 26 dB*

E-A-R™ ARC Plug™

UPC: 10080529700121

Product #: 370-2000



Features and Benefits

- Uncorded with carrying case
- Hear-Through™ design, when yellow tips are worn (NRR 0 dB*), allows workers to hear conversations, signals, or other critical sounds clearly, while instantly filtering very loud impulse noise from an arc flash
- Continuous protection mode when red tips are worn (NRR 22 dB*) to help protect against continuous noise

Insert yellow end for Hear-Through™ and instant protection

Washable and reusable

Insert red end for protection against constant hazardous noise

Other 3M™ Earmuffs



3M™ Peltor™ Optime™ 105

UPC: 10093045081025

Product #: H10B

Features and Benefits

- Behind the head design allows for easy use with hard hats.
- Noise Reduction Rating (NRR)*: 29 dB



3M™ Peltor™ Optime™ 101

UPC: 10093045080721

Product #: H7B

Features and Benefits

- Durable stainless steel band comfortably holds earcups in place for consistent protection.
- Noise Reduction Rating (NRR)*: 26 dB



3M™ Peltor™ Welding Earmuff

UPC: 10093045936400

Product #: H505B

Features and Benefits

- Low-profile design for use with 3M Welding Helmets, like the 3M Speedglas™ 9100 Welding Helmet.
- Noise Reduction Rating (NRR)*: 17 dB

UHF Two-Way Headset Radios



3M™ Peltor™ Lite-Com Pro II Headset

Intrinsically Safe and Programmable

The 3M™ Peltor™ Lite-Com Pro II Headset radio offers an intrinsically safe and convenient way to help your team communicate in high noise environments. It features software programmability in order to tailor settings to your specific workplace needs.

Features and Benefits

- Factory Mutual (FM) Approvals certified intrinsically safe**
- UHF two-way radio circuitry integrated into the headset
- Ghost voice menu prompts for easy mode selections
- Up to 30 programmable channels in the 403-470 MHz band
- Programmable CTCSS sub-channels
- Push-to-Talk (PTT) or hands-free Voice-Activated (VOX) transmit functions
- Rechargeable lithium-ion battery included with headset purchase
- External earcup microphones help provide situational awareness
- FCC Narrow band mandate compliant



Lite-Com Pro II Headband Model (NRR 25 dB*)
Product Number: MT7H7F4010-NA-50

Other 3M™ Peltor™ Lite-Com Pro II Products and Accessories



Lite-Com Pro II Neckband Model (NRR 25 dB*)
Product Number: MT7H7B4010-NA-50



Remote Push-to-Talk Button, Shoulder Mount
Product Number: FL5206-50



Lite-Com Pro II Hard Hat Mount Model (NRR 24 dB*)
Product Number: MT7H7P3E4010-NA-50



Throat Microphone
Product Number: MT90-02



Rechargeable Lithium-ion Battery
Product Number: ACK08-50

*The Noise Reduction Rating (NRR) may overstate the hearing protection provided during typical use. 3M recommends reducing the NRR by 50% for estimating the amount of noise reduction provided.



**Intrinsically safe, Class I, II, III, Division 1, applicable Groups A through G, T4, -20°C≤Ta≤50°C;
Intrinsically safe, Class I, Zone 0, AEx ia IIC, T4, -20°C≤Ta≤50°C, hazardous locations.

Two-Way Portable Radio Accessories

3M™ Peltor™ ORA TAC In-Ear Communications Headset

Intelligent Hearing Protection for Improved Situational Awareness

3M™ Peltor™ ORA TAC Headset is for users who need to communicate clearly while wearing an in-ear hearing protection headset. Two external microphones located on the backside of the earbud housing are powered by talk-thru technology that electronically reproduces sounds and conversations from outside the headset back into the ear canal. An in-ear transmit microphone transmits voice commands back over the radio when the Push-to-Talk (PTT) button on the ORA-BASE is activated. Hearing protection is not compromised since users do not need to remove the earbuds in order to communicate and listen.

Features and Benefits

- Lightweight, compact design can be worn with eyewear, respirators, hard hats and welding helmets
- Comfortable hearing protection: Soft earplug tips are comfortable and help protect workers from impulse and other hazardous noises
- Tactile user interface: 2 radio Push-to-Talk (PTT) buttons and talk-thru volume up/down
- Communicate clearly: No need to remove the earplugs and compromise hearing protection
 - Talk-thru function for face-to-face conversations
 - In-ear microphone pickup for clear radio communication

In-Ear Communications Headset

Product Number: ORA-BASE-BB*



3M™ Peltor™ ORA TAC Radio Connector Assemblies and Accessories



For Motorola HT750 Radios, and Similar

Product Number: CON-HT750

For Motorola HT1000 Radios, and Similar

Product Number: CON-HT1000

For Motorola TRBO Radios, and Similar

Product Number: CON-TRBO

For Kenwood Multi-Pin Radio Style

Product Number: CON-KNW300

For Motorola CP200 Radios, and Similar

Product Number: CON-CP200

For Kenwood 2-Prong Radio Style

Product Number: CON-KNWTK



Replacement Tips, Gray Skull Screws Foam Tips (NRR 29 dB**)

Product Number: 370-1019-10

Replacement Tips, Yellow Classic Foam Tips (NRR 31 dB**)

Product Number: 420-2097-50

Replacement Tips, Gray UltraFit Triple-Flange Tips (NRR 20 dB**)

Product Number: 420-2096-25A



Remote Big Button Push-to-Talk (PTT)

Product Number: CON-SDBB



Remote Finger Push-to-Talk (PTT)

Product Number: TK56

*Includes 1 pr. ORA-LOOPS, 3 pr. Gray UltraFit Tips, 3 pr. Yellow Classics, 2 AAA batteries and input jack for CON-SDBB. Radio connector assembly sold separately.

NRR footnote:

**Research suggests that many users will receive less noise reduction than indicated by the NRR due to variation in earplug fit and wearing time. It is recommended the the NRR be reduced by 50% for estimating the average amount of noise reduction provided

3M™ Protective Eyewear



Eye Injuries are Prevalent in the Workplace

Every day, approximately 2,000 U.S. workers sustain a work-related eye injury that requires medical treatment.¹ This is a problem for both employers and their workers, because about 1 in 10 injuries require one or more missed workdays to recover.²

Eye injuries occur for two main reasons:

- **Not wearing eye protection.**

Nearly three out of every five workers injured are not wearing eye protection at the time of the accident.³

- **Wearing the wrong eye protection for the job.**

40% of the injured workers were wearing some form of eye protection when the accident occurred. However, these workers were most likely wearing protective eyewear that offered inadequate eye protection.³

Most Eye Injuries are Preventable

Experts believe that the correct eye protection could lessen the severity of or even prevent 90% of eye injuries.³ Compliance and education play a major role in preventing these injuries.

- **Compliance**

In jobs where eye protection is required, to be effective, the eyewear must be of the appropriate type for the hazard encountered and properly fitted.³

- **Education**

Even though the vast majority of employers furnished eye protection at no cost to employees, about 40% of the workers received no information on where and what kind of eyewear should be used.³

3M Protective Eyewear

3M protective eyewear features the comfort and adjustability that professionals need for extended wear. With over 400 options in a wide range of styles, lens tints, coatings and shades, 3M protective eyewear offers solutions for almost every environment.

Multiple Lens Tints and Coatings

3M offers a variety of task specific lenses and tints to help reduce glare, eye stress and fatigue, as well as a range of lens coatings—from standard Hard Coat and Anti-Fog to 3M's exclusive coatings, such as Rugged Anti-Scratch (RAS), Scotchgard™ Anti-Fog Coating and DX™ Anti-Fog Coating.

Cool and Contemporary Styles

Style is a critical factor when it comes to raising the acceptance of the user to wear personal protective equipment (PPE). 3M's range of eyewear offers a variety of modern and stylish products.

Extensive Eyewear Line

3M's extensive full line of protective eyewear includes economical and value-oriented models, as well as unique premium products. Some models are available in readers and goggles. 3M also offers eyewear that is compatible with some personal protective equipment, such as earmuffs and hard hats.

Compliant

All 3M protective eyewear and goggles meet the requirements of ANSI Z87.1-2010 and provide UV protection—polycarbonate lenses absorb 99.9% UVA and UVB.

¹cdc.gov/niosh © 2012 National Institute for Occupational Safety and Health.

²preventblindness.org © 2011 Prevent Blindness America.

³Bureau of Labor Statistics. Fact sheet no. OSHA 92-03

Announcing 3M™ Total Eyewear Solutions

A comprehensive program focused on helping you keep workers protected and comfortable with a wide variety of prescription and non-prescription safety eyewear professionally fitted for your employees.



3M™ Protective Eyewear



Economy Protective Eyewear

3M™ SecureFit™ Protective Eyewear, Clear Anti-Fog Lens

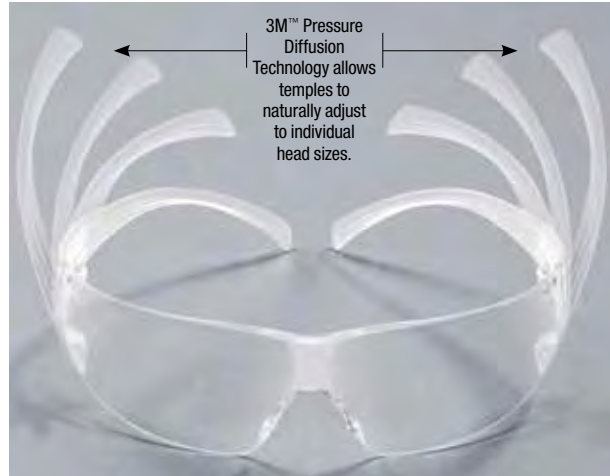
UPC:100-78371-65717-5

Product #: SF201AF

Features and Benefits

3M™ Pressure Diffusion Temple Technology:

- Self-adjusts to a wide array of head sizes
- Provides a snug fit without compromising comfort
- Helps reduce eyewear/frame slippage during head movements



3M™ SecureFit™ Protective Eyewear, Gray Anti-Fog Lens

UPC: 100-78371-65718-2

Product #: SF202AF

3M™ SecureFit™ Protective Eyewear, Gray Anti-Scratch Lens

UPC: 100-78371-65721-2

Product #: SF202AS



3M™ Virtua™ CCS Protective Eyewear w/Foam Gasket, Clear Anti-Fog Lens

UPC: 100-78371-11872-0

Product #: 11872-00000-20

Features and Benefits

- Removable, foam-lined gasket
- Anti-fog coated polycarbonate lenses
- Corded earplug Control System (CCS)
- Vented
- Meets requirements of ANSI Z87.1-2010

3M™ Virtua™ CCS Protective Eyewear w/Foam Gasket, Gray Anti-Fog Lens

UPC: 100-78371-11873-7

Product #: 11873-00000-20

3M™ Virtua™ CCS Protective Eyewear w/Foam Gasket, Indoor/Outdoor Mirrored Anti-Fog Lens

UPC: 100-78371-11874-4

Product #: 11874-00000-20

See 3M.com/PPESafety for more product selection.

Premium Protective Eyewear

Changing outdoor light conditions doesn't require changing eyewear anymore.

3M™ Smart Lens™ Protective Eyewear

UPC: 10078371620339

Product #: 13407-00000-5



Features and Benefits

- Photochromic lens lightens and darkens with changing outdoor light conditions
 - Light to dark in less than 20 seconds
 - Dark to light in less than 3 minutes
- Anti-fog lens
- Soft, adjustable nose bridge
- Durable frame with nylon brow and magnesium alloy temples
- Spring-hinged temples for narrow or wide fit
- Includes microfiber storage bag and lanyard

Other 3M™ Premium Protective Eyewear

Safety Sunwear 1300-Series

UPC: 10078371658882

Product #: SS1302AF-G



UPC: 10078371658899

Product #: SS1329AS-G



UPC: 10078371658905

Product #: SS1330AS-G



Features and Benefits

- Lightweight and sport-styled
- Soft nose pads
- Combines clarity and comfort
- Impact-resistant polycarbonate lenses
- Sleek wraparound frame

Safety Sunwear 1400-Series

UPC: 10078371658912

Product #: SS1428AS-S



Features and Benefits

- Wraparound aluminum frame
- Impact-resistant polycarbonate lenses
- Adjustable nosebridge
- Spring-hinged temples

Safety Sunwear 1500-Series

UPC: 10078371658929

Product #: SS1502AF-W



Features and Benefits

- Streamlined frame design
- Removable foam gasket
- Impact-resistant polycarbonate lenses
- 4 colors to choose from

Safety Sunwear 1600-Series

UPC: 10078371658974

Product #: SS1629AS-B



Features and Benefits

- Connects comfort, coverage, and clarity
- Wraparound frame
- Soft nose pads
- Impact-resistant polycarbonate lenses
- Color-accented temples

3M™ Prescription (SRx) Eyewear



3M™ Prescription Eyewear (SRx)

3M's safety prescription eyewear is engineered to help provide employees who have prescriptions with the eye protection they need to work in a wide variety of environments. Using the latest in lens and coating technologies, 3M safety prescription eyewear is durable and helps improve visual acuity.

A Comprehensive Selection of Frame Styles

With over 60 choices, 3M's frame collection features a variety of fitting characteristics to improve comfort, including soft adjustable nose pads, comfort nose bridges, spring hinge flex temples and adjustable length temples.



All products feature lateral coverage either integrated into the frame design or as separately attached sideshields.

ANSI Compliant

All 3M prescription eyewear frames meet the requirements of ANSI Z87.1-2003 or ANSI Z87.1-2010, depending on the model.



Lens Materials, Options and Coatings

3M offers many lens material options, which offer a wide range of impact protection. They include Polycarbonate, Trivex®, plastic and glass.

You can choose from a variety of lens options, including Progressive Addition Lens designs. For sun protection, we offer Transitions® and Life Rx® photochromic lenses, as well as Polarized lenses. Coating options include 3M™ SuperCote™, Anti-Reflective and Anti-Fog coatings.

Popular 3M™ Prescription Eyewear Styles

ZT200

Features and Benefits

- Plastic construction for consideration in non-conductive applications
- Computer designed to help provide a comfortable fit for a wide range of head shapes and facial features
- Removable lens carriers with integrated side protectors
- High visibility reflective temples for greater visibility at dusk and night
- Replaceable foam brow protector to help shield the eyes from particulates, perspiration and wind



Other 3M™ Prescription Eyewear

ZT 35

Features and Benefits

- Comes in matte gray/black trim or shiny black/blue trim
- Sideshields integrated
- Removable temples and head strap
- Removable flexible seals



V1000

Wraparound styling and close-fitting comfort, for indoor and outdoor tasks. Offered in jet, snow and wine fade.



3M™ Protective Coveralls

The 3M™ Protective Coverall 4530 Difference

Three panel hood design on most models for compatibility with complementary PPE

Hooded and collared options available on most models

Contains no components made from natural rubber latex

Seamless shoulder and sleeve tops for increased comfort and fewer entry points for contaminants

Two-way zipper for on/off convenience

Storm flap on all coveralls to help provide additional protection

Extra material in arms and legs for more freedom of movement

Available in a variety of sizes

Knit cuffs and elasticized waist and ankles on most models for increased comfort and mobility

Backed by 3M global technical capabilities and support
Opportunities for customization

3M™ Protective Coverall 4530

(M) UPC: 00051131498006

(L) UPC: 00051131498013

(XL) UPC: 00051131498020

(XXL) UPC: 00051131498037

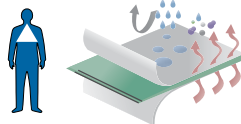
(3XL) UPC: 00051131498044

(4XL) UPC: 00051131498051



Features and Benefits

- Treated to help provide secondary flame resistance against heat and flames*
- Helps protect against certain light liquid splashes and hazardous dusts
- Reinforced gusset for increased durability



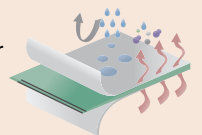
*Coverall must be worn over primary Flame Resistant (FR) garment and is not to be worn next to skin when true FR is required. **Warning:** cuffs are not flame resistant and must be worn under gloves.

SMS Fabrics

Advanced, breathable, lightweight materials that reduce heat build-up and promote comfortable wear are a key feature of these coveralls. The 3M™ Protective Coverall 4530 is available in hooded and collared versions, have anti-static treatment on both sides and have knit cuffs and elastic waist and ankles for increased comfort and mobility.

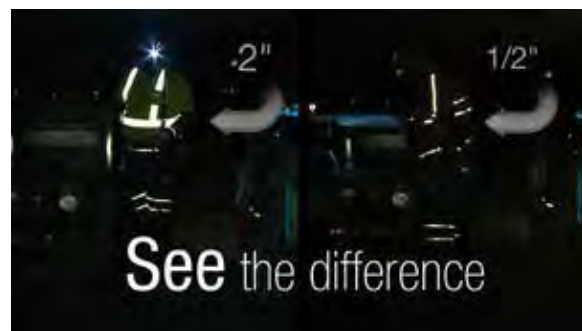
SMMS

Breathable fabric that offers a good barrier against certain limited liquid splashes and hazardous particles.



3M™ Scotchlite™ Reflective Material

Four things you need to know about reflectivity



1

Increase your chance of being seen.

3M can advise you on the proper amount and placement of 3M™ Scotchlite™ Reflective Material to help you attain maximum visibility in your mining environment.

2

When it comes to safety, don't skimp on quality.

The compliant, trusted, and quality reflective technology you use on your vehicles also can help keep you safe when incorporated onto your uniform. 3M's proven durability ensures you're getting a quality product that will help you be noticed.

3

Be proactive in the care of your garments.

Even with durable products, your reflective clothing will wear out and become dull due to harsh environments, industrial washings, and time. Be aware of your garment's life span. Communication is key: make sure to let your launderer or uniform company know if your garment needs a retrofit or full replacement, and be sure to properly fill out garment forms when sending your workwear for cleaning.

4

Know your options.

The easiest way to consistently wear high visibility apparel is to make it a part of your everyday wardrobe. That's why there are many exciting new options for incorporating 3M™ Scotchlite™ Reflective Material in high visibility workwear such as T-Shirts, sweatshirts, rainwear, bibs, pants, and other work clothing. See all your options at Scotchlitestore.3M.com and select your reflective gear today.

Did you know?

Fluorescence helps with aboveground daytime visibility only — NOT in the dark. Make sure your work apparel is appropriate for light or dark situations.



3M™ Scotchlite™ Reflective Products



Flame Resistant (FR) Products

More solutions...to meet your need for FR compliant workwear

As demand for high performance safety apparel grows, 3M is responding with an ever-expanding portfolio of retroreflective components with FR features built in.

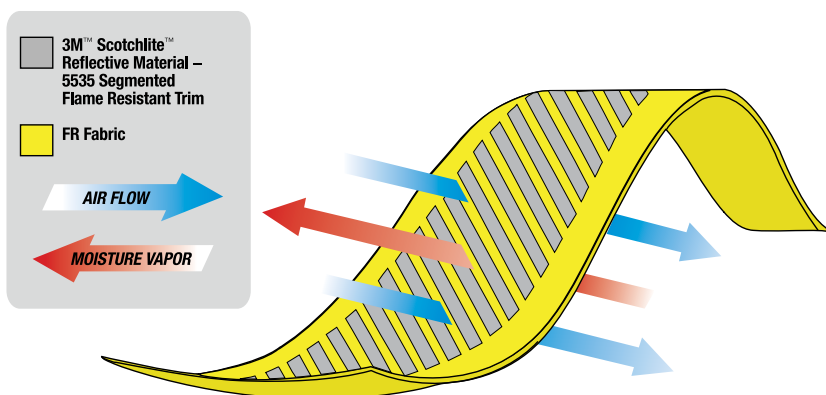
Make sure your garment providers are using genuine 3M™ Scotchlite™ Reflective Material!

For more information on new flame resistant solutions and/or other products in the Scotchlite reflective material portfolio, contact your 3M representative.

3M™ Scotchlite™ Reflective Material – 5535 Segmented Flame Resistant Trim

Features and Benefits

- Delivers advanced comfort capabilities to broaden your workwear options and enable employees to function their best
- Provides enhanced comfort as defined by moisture vapor transmission and drape compared to solid trim over the area where the trim is applied



Order and Product Information

To order 3M™ Scotchlite™ Reflective Material Products, contact 3M Personal Safety Apparel Customer Service at 800-328-7098.

3M Support & Services



Product-Related Seminars & Support

Respiratory Fit Testing & Training Information

The Occupational Safety and Health Administration (OSHA) General Industry Standard for Respiratory Protection 29 CFR 1910.134 requires employers to have a written respiratory protection program in place.

3M helps you achieve regulatory compliance with a range of services focused on OSHA requirements. These include customized online respiratory medical evaluations to help optimize compliance testing and tracking; product selection tools; instructional tools for conducting OSHA-required product usage training; and cartridge service life software to help keep you in compliance with respiratory regulations. Visit respexam.com to order or call: 800-383-3393.

Powered & Supplied Air Training Tools

Gain a fuller understanding of how to use and care for your powered and supplied air respiratory protection equipment. This series includes training videos, posters and literature providing information on how to clean, assemble and maintain your system.

Hearing Conservation Seminars

3M Hearing Loss Prevention Seminars are full-day educational courses for hearing conservation program administrators and occupational health and safety professionals. Presented in various cities around the country, these seminars cover topics critical to effective hearing conservation program management and how to properly protect your employees from hazardous noise.

3M offers free on-site employee educational seminars focused on hearing conservation. Topics include current regulations, equipment choices, employee training programs, and issues related to noise hazards and hearing protection. Content is provided for both plant managers and workers. Seminars are conducted nationwide by 3M's team of HearForce™ CAOHC certified trainers.

Hearing conservation technicians and occupational health professionals seeking certification as an Occupational Hearing Conservationist (OHC) can also attend Hearing Conservation courses that 3M helps facilitate at Minnesota's Midwest Center for Occupational Health and Safety.

Noise and Heat Stress Measurement Seminars:

- Occupational Noise Exposure Measurement (1 day)
- Noise and Heat Stress Measurements, A Best Practice Approach (1/2 day)
- Heat Stress Management and Control (1/2 day)
- Detection University – Noise, Heat Stress and Indoor Air Quality Instrumentation Training (4 days)

Calibration and Repair Services

3M also offers calibration and repair service for our line of occupational and industrial hygiene instrumentation. Many of our products are used in potentially explosive atmospheres and require strict adherence to our original proprietary design specifications for service and repairs. Accredited calibrations are important as they provide validation of data if challenged by third parties. They also ensure that intrinsic safety has not been compromised, and offer confidence in the technical sufficiency of the calibration.

3M Welding Hazard Seminars & Educational Information

Attend a local seminar to increase your knowledge of worker safety and hazards pertaining to welders. These seminars will build your awareness of safety standards and employer responsibilities and can support your efforts to stay in compliance with OSHA regulations. Topics include regulations and standards, respiratory hazards and protection, engineering controls, benefits of auto-darkening filters, eye and face impacts, fall protection, and productivity considerations; as well as arc radiation, noise and heat stress hazards.

Welding instructors and students can also access customized training materials including videos and ready-to-use presentations at our website. Visit 3M.com/WeldingSafety.

Occupational Prescription Eyewear (SRx)


Equip your workers with prescription safety eyewear that is professionally fitted for maximum comfort. 3M offers industry leading SRx programs backed with innovative administrative tools and a nationwide dispensing services network. We'll help you establish a program customized to your needs. Workers can choose from a comprehensive selection of frame styles and lens materials as well as the latest lens and coating technologies, including popular Progressive Addition Lenses (PALs).

Visit our website to find more information on:

- Training and Tools
- Tech Bulletins
- Where to Buy
- MSDS
- What's New
- User Instructions

3M.com/PPESafety

See 3M.com/PPESafety for more product selection.

	<p align="center">⚠WARNING</p> <p>Respiratory Products (see pages 2-8)</p>	<p align="center">⚠WARNING</p> <p>Eye and Face Products (see pages 21-24)</p>
	<p>These respirators help protect against certain airborne contaminants. Before use, the wearer must read and understand the <i>User Instructions</i> provided as a part of the product packaging. A written respiratory protection program must be implemented meeting all the requirements of OSHA 1910.134 including, but not limited to, training, fit testing and medical evaluation. In Canada, CSA standards Z94.4 requirements must be met and/or requirements of the applicable jurisdiction, as appropriate. Misuse may result in sickness or death. For proper use, see packaging instructions, supervisor, or call 3M PSD Technical Service in the USA at 800-243-4630. In Canada, call Technical Service at 800-267-4414.</p>	<p>These eye and face protection products help provide limited eye and face protection. Misuse or failure to follow warnings and <i>User Instructions</i> may result in serious potential injury, including blindness or death. For proper use, selection, and applications against flying particles, optical radiation and/or splash, see supervisor, read <i>User Instructions</i> and warnings on the package or call 3M PSD Technical Service in the USA at 800-243-4630. In Canada, call Technical Service at 800-267-4414.</p>
		<p align="center">⚠WARNING</p> <p>Hard Hats (see pages 13 & 14)</p> <p>3M™ H-700 and H-800 Series Hard Hats provide limited protection only. Misuse or failure to follow warnings and <i>User Instructions</i> may result in serious personal injury or death. For proper use, see Supervisor, <i>User Instructions</i>, or call 3M PSD Technical Service in the USA at 800-243-4630. In Canada, call Technical Service at 800-267-4414.</p>
	<p align="center">⚠WARNING</p> <p>Hearing Protection Products* (see pages 15-20)</p> <p>Choking Hazard—Keep away from infants and small children. These hearing protectors help reduce exposure to hazardous noise and other loud sounds. Misuse or failure to wear hearing protectors at all times that you are exposed to noise may result in hearing loss or injury. For proper use, see supervisor, <i>User Instructions</i>, or call 3M PSD Technical Service in the USA at 800-243-4630. In Canada, call Technical Service at 800-267-4414. If there is any drainage from your ear or you have an ear infection, consult with your physician before wearing earplugs. Failure to do so may result in hearing loss or injury.</p>	<p align="center">⚠WARNING</p> <p>Welding Helmets (see pages 9-12)</p> <p>This product is designed to help protect the wearer's eyes and face from harmful radiation including visible light, ultra-violet radiation (UV), infra-red radiation (IR), sparks and spatter resulting from welding processes. These products must be used only by qualified persons who are properly trained in their use and maintenance. Misuse may result in permanent eye injury and vision loss. Always wear ANSI Z87.1 compliant safety spectacles in addition to any welding helmet. For proper use, see supervisor, or <i>User Instructions</i> or call 3M PSD Technical Service in the USA at 800-243-4630. In Canada, call Technical Service at 800-267-4414.</p>
		<p align="center">⚠WARNING</p> <p>Protective Coveralls (see page 29)</p> <p>These protective coveralls help protect against certain liquid splashes and hazardous dusts. Before use wearer must read and understand the User Instructions provided as part of the product packaging. Failure to follow all instructions on the use of these protective clothing products and/or failure to wear the complete product during all periods of exposure may adversely affect the wearer's health, or lead to severe or life threatening illness or permanent disability. Final determination as to the suitability of these products for a particular use is the employer's responsibility. For proper use and selection see Supervisor, <i>User Instructions</i> or call 3M in USA at 1-800-243-4630. In Canada, call 1-800-267-4414.</p>

Important Notice

WARRANTY, LIMITED REMEDY AND DISCLAIMER: 3M warrants that 3M™ Scotchlite™ Reflective Material that is stored, maintained and used in accordance with 3M's written instructions will meet the applicable 3M product specifications. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. If any Scotchlite reflective material does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

LIMITATION OF LIABILITY: Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract or strict liability.

PRODUCT USE: Because of the variety of factors that can affect the use and performance of Scotchlite reflective material, user is solely responsible for evaluating the product and determining whether it is fit for a particular purpose and suitable for user's method of application. User is solely responsible for determining the proper amount and placement of the product. While reflective products enhance visibility, no reflective product can ensure visibility or safety under all possible conditions. 3M may change the product, specification and availability of the product as improvements are made; therefore, user should contact 3M for latest information before specifying the product.

Website & Online Resources



3M.com/USMining.com

3M.com/PPESafety or m.3M.com/PPESafety

3M's websites are available 24/7 and provide extensive information, resources, video and technical data for you and your customers.

Distributor Portal: 3M.com/Infohut

Other direct links to product specific web pages:

Scotchlite Reflective Material

scotchlite.com

Respiratory

3M.com/Respiratory

Resources on this site include: Six-Step Respiratory Protection Program, Respirator Selection Guide Software, Cartridge Replacement Program Documents and Information, Hazards In The News, Filter Replacement Program, and more.

Hearing Conservation

3M.com/Hearing

Resources on this site include: 3M™ E-A-R Log™ Technical Monographs Series, Audio Demonstration Webinars, Noise Navigator™ Sound Level Database, Training Audios and Hearing Conservation Clinics, information about the EPA's new NRR standard, and more.

Welding

3M™ Speedglas™ Products Homepage: 3M.com/Speedglas
Welding Student & Educator Portal: 3M.com/WeldingSafety

Detection & Monitoring

3M.com/Detection

Powered and Supplied Air Respirators

3M.com/Versaflo

Occupational Health Construction Page

3M.com/WorkerSafety

YouTube®

youtube.com/3MPPEsafetySolutions

Facebook® – 3M™ Speedglas™ Welding

facebook.com/Speedglas

Twitter®

twitter.com/3MSafetyUS

JobHealth Highlights Newsletter

3M.com/JHH

Additional PPE Training Courses

3M Technical Service may also be able to offer larger audiences half or full-day training on a variety of topics related to respiratory, hearing, eye and welding protective equipment applications and regulations. Contact your 3M Sales Representative for more information.

For more information about these training programs and others, visit 3M.com/USMining or call 800-328-1667. Or call 3M PSD Technical Service at 800-243-4630.



Mining and Metallurgy Solutions

3M Center
Building 223-2W-16
St. Paul, MN 55144-1000

Personal Safety Division

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

For more information:

In U.S.

Technical Assistance 1-800-243-4630
Customer Care Center 1-866-279-1281
3M.com/PPESafety or m.3M.com/PPESafety
3M.com/USMining

In Canada

Technical Assistance 1-800-267-4414
Customer Care 1-800-364-3577
3M.ca/PPESafety

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