



# **MSA Face Protection Selection Guide**

Face Protection... Simplified





## Face Facts: MSA Makes It Easy to Meet Your Needs for High-Quality Face Protection

**W**hen you asked us for a way to wear a visor with a protective hard hat to shield you from the sun's damaging rays, MSA listened. When you asked us for a visor to protect you from dangerous arc flashes, MSA listened. When you asked us to provide you with a visor for elevated temperatures, MSA listened.

In response to your requests, our face protection product line has expanded rapidly over the past few years. In fact, MSA now offers hundreds of customized solutions for our customers' needs.

Having so many choices may seem overwhelming. That's why we've developed this new guide to help make selecting face protection simpler and easier than ever before.

# How to Use This Guide

1

## Conduct a Workplace Hazard Assessment.

- OSHA requires employers to conduct a workplace hazard assessment to determine the most appropriate personal protective equipment for employees.
- Knowing the hazards you might face will make it easier to select the right protection.
- If there is a question of whether a basic-or high-impact product should be used always use a high-impact product.

2

## Select a Faceshield Assembly or Faceshield Frame.

- Decide whether you want to wear a faceshield assembly or a hard hat plus faceshield frame with your visor.
- Determine the types of special features you need, such as protection from elevated temperatures or chemical splash, according to your hazard assessment.
- Use the **General Guidelines for Assembly/Frame Selection** chart (see inside) to help you choose the assembly or frame that best suits you.
- For more specific information, read the detailed product descriptions inside this bulletin.

3

## Select a Visor.

- Read the descriptions of MSA's special-purpose visors. A visor may have been developed specifically for your application or work environment.
- If you need a visor for general purposes, review the **General Guidelines for Visor Selection** chart (see inside). It provides information on the characteristics of the two types of plastics used to manufacture MSA's general-purpose visors. Using the chart, decide which visor material best suits your needs.

4

## Place Your Order.

- Look at the back cover of this bulletin for the specific sizes and options available for the visor and faceshield assembly or frame of your choice. You'll find the part numbers you need to place an order with your MSA-authorized distributor.
- Contact your MSA-authorized distributor and complete your order.

# MSA Faceshield Assemblies and Frames

You must first select a faceshield assembly or frame, because these devices hold the protective visor in place over your face. The most important selection criterion is whether you will require a protective hard hat when using your visor:

- **Faceshield assemblies are stand-alone devices and do not have to be worn with a protective hard hat.**

- **Faceshield frames must be worn with a protective hard hat.**

For a quick overview of the features and benefits of MSA's Defender® Plus Faceshield Assemblies and Faceshield Frames, please review the chart below.

## Defender + (Plus) Faceshield Assemblies – For Use Without a Hard Hat

If you need face protection but do not wear a protective hard hat, select an MSA Defender+ (Plus) Faceshield Assembly. Faceshield Assemblies are lightweight, with flexible headbands that adjust to head sizes 6 1/2 to 8.



**Economical Protection**  
Defender+ (Plus) Faceshield Assembly  
With Pin-Lock Suspension

**Easily Adjustable Protection**  
Defender+ (Plus) Faceshield Assembly  
With Ratchet Suspension



**Elevated Temperature Protection**  
Defender+ (Plus) Faceshield Assembly With  
Large Polycarbonate Sparkgard  
MSA's Sparkgard Faceshields protect the crown of your head from airborne particles and provide enhanced protection in temperatures up to 250° F when grinding or drilling. Features comfortable and easily adjustable nylon ratchet suspension with large tension knob.

**Important: Use only MSA visors with MSA frames and assemblies. Goggles or spectacles that meet 287.1 2003 must be worn with faceshield frames, assemblies and visors.**

## Faceshield Frames – For Use With a Hard Hat

If you must wear a protective hard hat and also require face protection, select an MSA Faceshield Frame.



**Universal Dielectric Plastic Foldback Faceshield Frame** — Available in both cap and hat models  
Attaches to hard hat with a channel that fastens to the brim and an elastic band, which wraps around the back of the hard hat.

### For Use With Slotted or Non-Slotted Hats and Caps

**Heavy Use and Elevated Temperatures Metal Foldback Faceshield Frame** — Available in both cap and hat models  
Attaches to hard hat with a channel that fastens to the brim and a metal spring, which wraps around the back of the hard hat. This model is non-dielectric.



**New! Defender+ Easy Release Faceshield Frame**  
Easy Release Defender® + Faceshield Frames

allow users to wear faceshields and cap-mounted muffs simultaneously, rather than bolting earmuffs onto helmets. Features include front drip-edge splash protection, unlimited number of stop positions, long-lasting O-ring pivot joint design, easy-in easy-out visor replacement, and an optional cap lock-down clip for V-Gard®, Topgard® and SmoothDome® Cap models. Optional Chip Arrestor is available.  
\* See Bulletin 0616-11 for more details

### For Use With Slotted Caps



**Easy to Raise and Lower Visor**

**Defender+ (Plus) Faceshield Frame**  
It's easy to raise and lower a visor on this frame, because of its ratcheting pivot joint that is formed by attachment arms that fasten the frame to both sides of slotted, standard-size V-Gard®, Advance®, Topgard® and Thermalgard® Caps. This model is dielectric.

**Enhanced Protection Against Chemical Splashes**  
**Defender+ (Plus) Faceshield Frame With Lockdown Device**

If you need protection from chemical splashes, wear a Defender+ (Plus) Faceshield Frame with Lockdown Device and the appropriate visor and/or chin guard. To protect you from splashes near your forehead, the Defender Faceshield Frame has a special locking mechanism that locks the top of your frame tightly to the brim of your hard hat. This helps prevent a chemical splash from dripping through a gap between the brim of your hard hat and your faceshield frame. Can be worn only with slotted, standard-size V-Gard or Topgard Caps. This model is dielectric.

*A lockdown device secures the frame to the brim of the cap*



## ⚠ CAUTION

The selection recommendations in this guide are general guidelines only. Your unique needs dictate the most appropriate visor and/or faceshield frame or assembly for your application. Contact your local MSA distributor or MSA at 1-800-MSA-2222 for more details.

## General Guidelines for Assembly/Frame Selection

	No Hard Hat Needed	Slotted Caps	Non-Slotted Caps	Non-Slotted Hats	Elevated Temp	Chemical Splash
Defender+ (Plus) Faceshield Assembly/Pin Lock						
Defender+ (Plus) Faceshield Assembly/Ratchet						
Defender+ (Plus) Faceshield Assembly/Sparkgard						
Plastic Foldback Faceshield Frame						
Metal Foldback Faceshield Frame						
Defender+ (Plus) Faceshield Frame						
Defender+ (standard or Easy Release) Faceshield Frame/Lockdown						

## ⚠ WARNING

When worn with an appropriate visor, these Defender Faceshield Assemblies and Frames provide limited impact protection for the eyes and face but are not unbreakable. They must be used in conjunction with eyewear as outlined in ANSI Z87.1, such as spectacles or goggles, and additional safety equipment as required. Failure to follow this warning can result in severe personal injury or death.

# MSA Visors

Few manufacturers can match MSA's wide selection of special-purpose and general-purpose visors. It's easy to combine an assembly or frame with the visor of your choice, because they have an exclusive hole pattern designed to fit all MSA assemblies and frames.

## Special-Purpose Visors

MSA offers a full line of special-purpose visors for specific applications, including:



### Electric Utilities Arc Visor

The highest-rated stand-alone visor available to help protect against an arc flash.

#### WARNING

*Do not use this visor where energy levels may exceed 10 cal/cm<sup>2</sup> recommended by MSA. Additional personal protective equipment must be used in conjunction with this visor. Failure to follow this warning may result in severe personal injury or death.*



### Hazardous Splash Nitrometer Visor and Chin Guard

Provides additional protection for the chin and neck against particles and splash. Nitrometer Visors have special holes around the bottom edge to attach the chin guard. Chin guards are available in lightweight black polypropylene or clear polycarbonate for downward vision.



### Elevated Temperature or Molten Metal Casting Elevated Temperature Visor

Gold coating reflects up to 80 percent radiant heat, keeping you comfortable in hot working environments, such as manufacturing plants with blast furnaces. For added protection against glare, gold-coated visors with a green tint are also available.



### High Humidity or Tree Trimming Wire Screen Basic Visor

Maximum ventilation keeps you comfortable in humid working conditions. Not for use in areas where a splash could occur.



**Gas Welding, Cutting or Torch Brazing and Soldering Shade 5 Visor**

Special dark green Shade 5 protects against vision damage from infrared radiation.



**Glare Reduction Medium or Dark Green Tinted Visor**

Enhances vision and reduces glare by blocking light transmission. Several MSA visors are available with green tint. **Not for IR or UV protection.**

**General-Purpose Visors**

Visors constructed of polycarbonate and propionate are available for general-purpose applications. Each visor meets the appropriate part of the ANSI Z87.1 2003 standard. However, they each have unique characteristics, and some are better suited for particular working conditions than others. The chart below will help you select the MSA visor that best fits your needs.

**General Guidelines for Visor Selection**

	Polycarbonate	Propionate
Impact (Blunt Object) Resistance	Z87+	Z87+*
Penetration (Sharp Object) Resistance	Z87+	Z87+
Cold Temperature Resistance	Best	Good
UV Radiation (Sunlight) Resistance	Best	Fair
Chemical Resistance	Poor	Good
Scratch Resistance	Good	Good
Heat Resistance	Best	Good
Visual Clarity	Z87+	Z87+
Acids	Good	Fair
Alkalines	Good	Fair
Solvents	Good	Poor

\*All propionate visors except Shade 5 and 14 CAL Arc Shield meet high impact requirements of Z87.1-2003.

**⚠ WARNING**

*Do not use MSA general-purpose visors for welding, elevated-temperature applications, or protection against other infrared radiation sources, unless specified for such use. Do not use for sports, simulated war games, paintball games, or similar activities. A pitted or scratched lens reduces eye protection and vision. Inspect routinely and replace worn or damaged parts immediately. Do not alter or modify this product. Do not use near open flame. Use only MSA visors with MSA frames. Failure to follow this warning can result in permanent impairment of sight, other serious personal injury, or death.*

**⚠ CAUTION**

*Maintenance: Remove visor and frame in reverse procedure of installation. Clean visor with mild soap and water. Cleaning dry or with coarse cloth will scratch the visor.*

# Ordering Information

All visors except Wire Screen Shade 5 and 14 CAL Arc Shield meet Z87+ (High Impact) when used on any MSA Defender+ Series or any plastic or metal Universal Foldback Faceshield Frame.

## Stand-Alone Plus Defender+ Faceshield Assemblies

Suspension	Sparkgard	Part No.
pin lock	standard	10021610
ratchet	standard	*10021611
elevated temp Sparkgard Ratchet	large	10021612

## Foldback Faceshield Frames

Type	Use With	Part No.
plastic	cap	10016742
plastic	hat	*10005383
metal	cap	488160
metal	hat	488159
metal	Skullgard Cap ONLY	10079072

## Polycarbonate Visors

Color	Size (inches)	Part No.
Clear (molded)	10 x 20 x .060	10063106
Clear (formed)	8 x 16 x .040	488131
Clear (formed)	8 x 16 x .060	488132
Clear (flat)	8 x 15½ x .040	*10017934
Clear (formed)	8 x 19 x .060	488138
Clear (formed)	6 x 16 x .060	491908
Clear (fog-free)	8 x 16 x .040	802337

## Propionate Visor

Color	Size (inches)	Part No.
Clear	8 x 15½ x .060	*10005883
Dark green	8 x 15½ x .060	1005885
Shade 5 (green) - basic Z87.1	8 x 15½ x .060	1005882
Shade 3	8 x 15½ x .060	10086996
Med green	8 x 15½ x .060	10086994
Clear (molded)	9½ x 19½ x .060	10087000

## Defender+ (Plus) Faceshield Frames - Cap Mounted

Lockdown Device	Use With	Part No.
yes	slotted V-Gard	*10021614
yes	slotted Topgard	10021615
no	V-Gard, Advance®, Topgard, Thermalgard®	10021616
no	elevated temperatures	10031191

## Chin Guards

Use With	Color	Type	Part No.
Nitrometer	Black	polypropylene	10022242
Nitrometer	Clear	polycarbonate	10022241
Nitrometer for Shade 5 visor	Blue/green	polycarbonate	10013631

## Nitrometer Visors

Color	Size (inches)	Part No.
Clear polycarbonate	6 x 16 x .040	488126
Clear polycarbonate (fog-free)	8 x 19 x .060	494916
Shade 5 (green) propionate - basic Z87.1	6 x 16 x .060	10013631
Chingard, polycarbonate (for use only with visor P/N 10005881)		10013631

## Wire Screen Visors (Basic Z87.1)

Color	Size (inches)	Part No.
Plastic edge, 20 mesh (not for use in elevated temperatures)	6½ x 14	476356
Aluminum edge, 20 mesh	8 x 17½	457409

## Elevated Temperature Visors

Color	Coating	Size (inches)	Material	Part No.
Clear	Gold	9½ x 20 x .070	polycarbonate	10005879
Med. green tint	Gold	9½ x 20 x .070	polycarbonate	10005880
4" gradient-tinted strip	Gold	9½ x 18½ x .060	polycarbonate	10090325

## Arc Shield Visor

For protection from electric arcing. Call for protection level. Meets ANSI Z87 and NFPA 70E, Class 2

Color	Size - (inches)	Material	Part No.
Tinted (light green/brown) HIGH IMPACT, 10 Cal	10 x 20 x .060	propionate	10006024
Tinted (light green/brown) complete with chingard 14 Cal - basic Z87.1	6 x 20 x .060	propionate	10063107

\*Meets CSA Z94.3

**Note:** This Bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only they contain the complete and detailed information concerning proper use and care of these products.



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